



United States Manufacturing Council

January 20, 2016

The Honorable Penny Pritzker
Secretary of Commerce
United States Department of Commerce
Washington, DC 20230

Dear Madam Secretary,

The Manufacturing Council (Council) strongly endorses the establishment of a National Network for Manufacturing Innovation (NNMI) as well as the concept of the Open Source call articulated in the Revitalize American Manufacturing and Innovation (RAMI) Act of 2014. Manufacturing serves as the wellspring of U.S. competitiveness through the value it creates in direct and indirect employment and the innovation ecosystem it fosters in our industrial commons. We recommend that the Department of Commerce (Commerce) move expeditiously to foster the Network and its constituent Centers for Manufacturing Innovation (Centers) as outlined in the RAMI Act.

While the existing institutes have succeeded in establishing Centers around technologies emphasized by the advanced manufacturing communities in the Department of Defense and the Department of Energy, there are constituencies outside these communities (e.g., bio-manufacturing) that we believe have significant manufacturing innovation potential yet may be unfamiliar with federal acquisition processes. As a result, they may not respond to a targeted acquisition through conventional channels.

This letter provides recommendations to establish new Centers that will expand the reach of the existing Centers through “an open process that will allow for the consideration of all applications relevant to advanced manufacturing regardless of technology area”,ⁱ as called for in the RAMI legislation. A future letter will focus on recommendations related to management of the overall Network.

These new Centers have the potential to augment the existing Centers by diversifying the communities engaged in the process and broadening the range of technologies to be advanced. Providing wider advertisement through multiple channels, transparency in terms of expectations and resources available, a short-form idea submission template, a diverse set of peer reviewers for the initial down select, and ultimately funding to maximize impact will be critical for success.

Recommendations

Our recommendations to support Open Source Centers are based on an extensive series of interviews with the leadership, membership, and stakeholders of the existing Centers.ⁱⁱ

Phase One: Call for Ideas

- The call for ideas should reach deeply into all possible innovation communities and include expectations for a strong proposal (e.g., evaluation criteria, governance, small and medium-sized enterprise (SME) outreach, workforce development requirements) and a view of available resources that could be leveraged (e.g., federal or regional assets). Solicitation response requirements should be simplified to have a low “barrier-to-entry” including clear instructions, a short form response, and sufficient response lead time to encourage ideas from non-traditional respondents that have fewer resources and less experience in response development.
- Solicitations should leverage existing communication channels, including channels that reach SMEs and a broad variety of manufacturers. Commerce organizations and channels that could be leveraged include the U.S. Manufacturing Council, the Hollings Manufacturing Extension Partnership (MEP) network, trade associations such as the National Association of Manufacturers (NAM), Small Business Association (SBA), Minority Business Development Agency (MBDA), and manufacturing.gov. Additionally, industry specific trade associations could be tapped for communications.ⁱⁱⁱ
- Commerce should provide a summary of Center best practices as gleaned from the existing Centers in terms of structure, governance, intellectual property (IP) policy, SME outreach, workforce programs, member recruitment, etc.
- Commerce should implement and communicate during the call for ideas a membership and IP structure that is favorable to manufacturers, encourages wide participation by the U.S. supply chain, and promotes private sector commercialization by manufacturers in the U.S. IP ownership is a critical component of the NNMI governance model, which will be addressed in depth in a future letter of recommendation.
- Technologies identified by the Advanced Manufacturing Partnership (AMP) 2.0 that are not already embodied in an existing Center should be highlighted in the initial call as being of priority interest.

Phase Two: Initial Filtering and Topic Prioritization

- Inputs should be evaluated and prioritized by a review panel drawn from industry, academia, and the government subject to the restrictions in the RAMI Act. Examples of organizations representing the targeted expertise for a review panel include:
 - Cross-industry subject matter experts from manufacturing and engineering organizations such as the Alliance for Manufacturing Foresight (MForesight) established recently by the National Science Foundation and the National Institute of Science and Technology.
 - Other candidate groups with a suitable network include the National Academy of Engineering and associations such as the Council on Competitiveness.

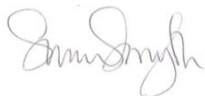
- Highest priorities emerging from the filtering and evaluation process should be identified, documented in appropriate public forums, and widely communicated as topic priorities for the full proposal call.

Phase Three: Full Proposal Call and Final Evaluation

- Based on priorities established by the initial review panel, the full proposals should then be solicited and vetted through the normal Commerce acquisition process.
- Proposals should be objectively evaluated for relative merit across published criteria^{iv} in RAMI, AMP 2.0 and validated best practices as identified in the future by recognized thought leaders in accelerating National Advanced Manufacturing, e.g., Department of Commerce Manufacturing Council, MFOresight, National Academies of Science and Engineering, Society of Manufacturing Engineers and similar international programs such as Fraunhofer.

Implementing these recommendations would increase U.S. competitiveness by accelerating the maturation and commercialization of highest value manufacturing technologies for the U.S. manufacturing sector. The Council therefore strongly recommends that the Department of Commerce place a priority on establishing these new Centers by engaging the community as outlined above and then integrating future Centers with the existing Network.

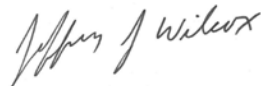
Respectfully submitted,



Susan Smyth
Chair, Manufacturing Council



Claudine Martinez
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Jeffrey Wilcox
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Development Subcommittee



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ⁱ H.R.2996 - Revitalize American Manufacturing and Innovation Act of 2014, 113th Congress (2013-2014)

ⁱⁱ Data sources utilized include final reports from AMP and AMP2.0, Manufacturing Council letters of recommendation, Manufacturing.gov, and interviews with AMP2.0 NNMI working group members, Institute Directors and Operations leaders, Department of Energy (DoE) agency leaders, Department of Defense (DoD) agency leaders, Advanced Manufacturing National Program Office (AMNPO) leaders, National Economic Council (NEC), and Industry members of NNMI's.

ⁱⁱⁱ Industry Trade Associations could include a mix of National or Regional manufacturing focused entities (for example, Arizona Manufacturers Council, National Association of Manufacturers, National Center for Manufacturing Science) and sector-specific entities (for example, Automotive Industry Action Group, National Marine Manufacturers Association).

^{iv} Examples of published recommended criteria include industry and market pull including plans for commercialization, cross-cutting impact across multiple industry sectors, importance to national security and competitiveness, and leverage of current U.S. strengths and competencies.