

Advanced Manufacturing National Program Office

**Public Comments Received for Draft
Guidance on Intellectual Property Rights
for the
National Network for
Manufacturing Innovation**

Edited by
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http://www.manufacturing.gov/docs/nnmi_draft_IP_comments.pdf

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Foreword

The interagency Advanced Manufacturing National Program Office (NPO) is hosted by the National Institute of Standards and Technology (NIST). Creation of the Advanced Manufacturing NPO flows from the recommendation of the President's Council of Advisors on Science and Technology (PCAST), in its June 2011 Report to the President on Ensuring American Leadership in Advanced Manufacturing,¹ that the Federal government launch a concerted, whole-of-government Advanced Manufacturing Initiative. To that end, this interagency office is charged with:

- Convening and enabling industry-led, private-public partnerships focused on manufacturing innovation and engaging U.S. universities, and
- Designing and implementing an integrated whole-of-government advanced manufacturing initiative to facilitate collaboration and information sharing across federal agencies.

By coordinating federal resources and programs, the Advanced Manufacturing NPO seeks to enhance technology transfer in U.S. manufacturing industries and help companies overcome technical obstacles to scaling up production of new technologies.

The National Network for Manufacturing Innovation (NNMI) proposed by President Obama has the goal of advancing American domestic manufacturing² by creating a robust national innovation ecosystem anchored by a network of Manufacturing Innovation Institutes (Institutes). The NNMI will fill a gap in the innovation infrastructure, allowing new manufacturing processes and technologies to progress more smoothly from basic research to implementation in manufacturing. The NNMI program will have a scale and focus that is unique, and it is built upon concepts of a strong public-private partnership.

Abstract

Using a strategy of broad public engagement, in April 2012, the Advanced Manufacturing NPO began collecting input on the National Network for Manufacturing Innovation (NNMI or Network) program design. The collection of information from the public was initiated by a NIST Request for Information (RFI), published in the Federal Register,³ followed by a series of regional workshops sponsored by Advanced Manufacturing NPO partner agencies and focused on the issues presented in the RFI. Reports summarizing the findings from the RFI and each workshop were published.⁴ In January 2013, the *National Network for Manufacturing Innovation: A Preliminary Design* report was published, built upon public input received.⁵

The Advanced Manufacturing NPO task team focused on Intellectual Property for the NNMI was formed to develop and recommend policy for the NNMI. A draft set of institute Intellectual Property principles, intended to guide Institute applicants, was published on November 13, 2013. The current document presents public comments received in response to that document.

¹ Available at <http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-advanced-manufacturing-june2011.pdf>.

² President Obama to Announce New Efforts to Support Manufacturing Innovation, Encourage Insourcing; <http://www.whitehouse.gov/the-press-office/2012/03/09/president-obama-announce-new-efforts-support-manufacturing-innovation-en>.

³ "Request for Information on Proposed New Program: National Network for Manufacturing Innovation (NNMI)," 77 FR 26509, May 4, 2012. Available at <https://federalregister.gov/a/2012-10809>.

⁴ Reports are available at http://www.manufacturing.gov/pubs_resources.html, under the AMNPO heading.

⁵ Available at http://www.manufacturing.gov/pubs_resources.html.

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The team that compiled, formatted and reviewed the public comments included:

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To learn more about the interagency Advanced Manufacturing NPO, visit www.manufacturing.gov

Disclaimer

Certain commercial entities, equipment, or materials may be identified in this document in order to describe an activity, procedure, or concept adequately. Such identification is not intended to imply recommendation or endorsement by the National Institute of Standards and Technology (NIST) or the Advanced Manufacturing NPO, nor is it intended to imply that the entities, materials, or equipment are necessarily the best available for the purpose.

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A. BACKGROUND

The “Draft Guidance on Intellectual Property Rights for the National Network for Manufacturing Innovation” (attached as an Appendix below) was published on November 13, 2013, as part of a Request for Comment from the public. The draft guidance on intellectual property (IP) listed in the report are intended to be used to address key issues associated with IP, especially as it relates to the sustainability and industry impact of the Manufacturing Innovation Institutes (Institutes) that will comprise the National Network for Manufacturing Innovation (NNMI) or Network. This set of principles would allow Institute applicants to propose their plans for how IP rights for a specific Institute would be optimally protected, shared and allocated. These would apply to the NNMI and the Institutes that are created once appropriate legislation has been enacted.⁶

This document is one of a series of documents generated to inform and seek feedback from the public on various elements that go into the creation and growth of the Network.

B. COMMENTS RECEIVED

Public comments were requested through December 13, 2013. There were 29 individual comments submitted by 7 organizations — including industry, academia, nonprofits, and government — which are presented below in the current report.

The table that follows presents the comments received in response to the request for public review and comment on *Draft Guidance on Intellectual Property Rights for the National Network for Manufacturing Innovation*. Comments are presented verbatim, and without attribution as to the sources. Grammatical and other minor edits for clarity are contained within square brackets [·].

C. NEXT STEPS

The public comments and other sources will be used along with other input to develop a revision of the Guidance on Intellectual Property Rights policy document.

⁶ Current proposed legislation includes: H.R.2996 entitled “Revitalize American Manufacturing and Innovation Act of 2013,” found at <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:HR02996>, and the corresponding “Revitalize American Manufacturing and Innovation Act of 2013” introduced on August 1, 2013 by U.S. Sens. Sherrod Brown (D-OH) and Roy Blunt (R-MO).

D. PUBLIC COMMENTS RECEIVED – General Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|---|
| Table | 1 | Required that IP Rights do not negatively impact [Small and Medium-Sized Establishments (JSMEs)]. | Care must be taken to prevent tiered membership benefits from providing a[n] IP License advantage to the Large [c]ompany over Small [c]ompanies. Small [c]ompanies at lower tiers that provide IP could see no revenues from [L]arge companies with top tier membership benefits that result in royalty free IP rights. |
| Table | 1, 6 | [This space was left blank.] | Principles 1 and 6 indicate the Institute may own IP that its own employees make. However, the successful awardee institution may set up the Institute differently in terms of legal status that may affect the outcome of IP rights. The IP may be owned by the awardee institution or other collaborators, or by a separate 501(c)3 institution. |
| Table | 2 | Use market[-]proven value to appropriately value IP. Forcing a market- generated valuation for IP will prevent IP being left on the shelf. | IP Valuation should be based on proven market value not perceived or potential value. Our concept to establish Market Value to IP through Crowd Sourcing is advantageous to all parties by placing a market[-]driven value on the IP. In addition, it should help small business broker IP value into big businesses. This will prevent overvaluing IP and IP being credited and left on the shelf. |
| Table | 8 | In parentheses, add "at fair-market value", so reads, "[...] Solely with industry funds (at fair-market value including full overhead) should not create[...]" | Agree that use of facility/equipment if solely paid for by sponsor should not trigger gov't use right but only if fair market value is paid. |

D. PUBLIC COMMENTS RECEIVED – General Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|---|---|
| Table | 9 | Delete section on Patents in HR 2996 dated 8/2/13 (p. 18, lines 11-15) and S. 1468 dated 8/1/13 (p. 18, lines 6-10) | We applaud the regulatory recommendation of Bayh-Dole rights to all participants who can then determine how best to manage those inventions consistent with the institution's and the [I]nstitute's policies. We are rather confused, however, that the authorizing legislation would preclude Bayh-Dole rights. |
| Table | 13 | Add a second sentence to this principle that reads, "The Plan should accommodate data submitted by educational institutions that are covered under the Fundamental Research Exclusion (FRE)." | We agree that the Data Management Plan should address the issue of export control laws. However, educational institutions need to have a mechanism to maintain protections afforded under the Fundamental Research Exclusion (FRE). |
| Table | 13 | While this is included in Point #13 under "Government Rights and Interests," it may also be worth adding under Institute Rights. | We agree that Institutes/proposers should develop a plan regarding data management (to be incorporated in the IP Management Plan) to ensure security, trust, and the legal exchange of sensitive information within and between NNMI Institutes. While this is included in Point #13 under "Government Rights and Interests," it may also be worth adding under Institute Rights. |
| Table | 15 | Move "X" to required column. | The principle should be required (not discretionary). While time-limited publication delay can be made discretionary, the requirement for public dissemination should be required. |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|---|---|
| Table | 1 | An Institute shall receive a royalty-free, non-exclusive research license to IP generated with Institute or federal funding. Institutes shall have a continued ability to conduct research using such IP for research purposes and to the extent legally able, can grant commercial license to third parties. | "An Institute shall receive a royalty-free, non-exclusive research license to IP generated with Institute or federal funding. Institutes shall have a continued ability to conduct research using such IP for research purposes and can grant commercial license to third parties." The way this is written may be interpreted to be any federally funded IP, available anywhere. The government does get a royalty free license to use for government purposes, but what happens when the organization who retained rights to a piece(s) of federally funded IP under Bayh-Dole has already exclusively licensed the IP to another? |
| Table | 1 | We recommend the second sentence of Princip[le] 1 be changed to read "Institutes shall have a continued ability to conduct research using IP for research purposes only and can grant research licenses to third parties for research purposes only. Institutes shall not have the right to grant commercial licenses to IP jointly developed with a commercial partner." | However, we strongly disagree with one that would create considerable difficulty for commercial businesses to accept. Specifically, the statement "An Institute shall receive a royalty-free, non-exclusive research license to IP generated with Institute or federal funding. Institutes shall have a continued ability to conduct research using IP for research purposes and can grant commercial licenses to third parties." An Institute should certainly receive a royalty-free, nonexclusive research license to IP generated with Institute or federal funding. However, the Institute should not have the right to grant commercial licenses to third parties. IP developed with Institute or federal funding was almost certainly developed with partial (cost[-]shared) funding from the Institute's commercial partners. Commercial entities must have unencumbered commercial IP rights to technology they develop under an NNMI program. If a company jointly funds and develops joint IP with an Institute, then the commercial entity must have the first right to commercialize the IP. |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|--|
| Table | 2 | <p>Institutes should be able to accommodate through a tier[-]structured membership companies that are able to provide “in kind” contributions only, including IP. A membership of "Affiliate Member" status, having lesser privileges than fee-paid members, should be considered by each Institute.</p> | <p>Allowing members to bring owned IP in lieu of a monetary membership fee, it will dilute the effort and campaign to increase membership; also, may set up a process that is difficult to justify to other members that pay the fee. In addition, it is often very difficult, in general, to assess the real value of IP. Companies wishing to contribute "in-kind" only contributions (including IP) to the Institute can join as "Affiliate Members" receiving some lower[-]value privileges from fee-paid members.</p> |
| Table | 5 | <p>Contents of the IP Management Plan should be determined by the proposers/Institutes, but it should consist at minimum of two parts. Part-I - General Principles applying to all Institutes and Part-II - Specific Requirements applying to the mission of the Institute applying for admission. The Part-I plan shall address, at minimum, items 1, 3, 6, 7, 8, 9, 10, 13, and 15 in this Table. In addition, shall address: 1)- The treatment of confidential information between the Institute members; 2)- The treatment of background IP (for example, any requirements for identifying it or making it available); 3)- The technology transfer and commercialization requirements arrangements between the members; 4)- The handling of disputes related to intellectual property between the Institute members[.]</p> | <p>The NNMI at large, IP management plan should have two parts. Part-I is general and applies to all NNMI Institutes, Part-II is tailored to the mission (or technology focus) of each Institute. In that way, there is some nominal uniformity (not absolute) among all member Institutes in the network.</p> |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|--|
| Table | 5 | To minimize confusion and reduce ‘transactional cost’ it is recommended that a common IP framework and basic policies be developed for use by all NNMI Institutes. This framework would include patent, data rights, and confidentiality policies. | The public document provides a good basic framework concerning the IP rights for the Manufacturing Innovation Institutes but fails to present a viable path forward. |
| Table | 7 | The Institute must be free to pursue non-government funded contract research for industry as a route to sustainability. To maximize success, an IP management policy that is friendly to [I]ndustry must be practiced. For example, a policy allowing a Company to have IP royalty-free exclusivity for some period of time (depending on the value of the Industry monetary involvement) could be such an avenue. | The Institute must apply an IP management plan that is friendly to Industry and makes it easy for the Industry to do business with the Institute. |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|---|
| Table | 7 | <p>The proposal should take a more balanced approach to the topics of Institute sustainability and member rights to use the technology. The emphasis must be on driving innovation into the market with as little friction as possible.</p> <p>The Institutes cannot be founded upon IP royalties ensuring the sustainability of the Institute. Rather, industry participation in the Institute and rapid translation of advances into the market must be where value is created. Creation of value will ensure the sustainability of the Institutes. A focus on IP royalties will lead to contentious negotiations, will limit membership, and reduce the scope of the Institute.</p> | <p>The public document provides a good basic framework concerning the IP rights for the Manufacturing Innovation Institutes but fails to present a viable path forward. The main focus of the guidance and principles is on the sustainability of the Institute and government rights. A primary goal of the Institutes must be to promote the use of Institute-generated IP for use in the private sector to invigorate domestic manufacturing; though this goal is stated it is not supported by the Recommendations or the Table of Principles. Meeting the needs of the commercial manufacturing members is critical to creating a sustainable Institute.</p> |
| Table | 9 | <p>The Bayh-Dole Act and regulations will apply to medium []and large businesses, and all contractors regardless of type, giving them the same IP ownership election rights (inventor's institution may request to retain title to generated IP that was federally funded, and not the government sponsor) as small businesses and non-profits."</p> | <p>The Bayh-Dole Act and regulations will apply to medium and large businesses, and all contractors regardless of type, giving them the same IP ownership election rights (inventor may retain title to generated IP, not funder) as small businesses and non-profits." Under Bayh-Dole, inventor's institution may request to elect title to federally funded/ generated IP.</p> |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|--|
| Table | 12 | The language used in the proposal for an Institute addressing impact on domestic manufacturing must contain justifiable data and metrics, and/or indicators, with which progress towards that goal can be quantified with objectivity. The Institute must compile the data, evaluate these metrics/ indicators, and provide periodically to the contracting officer a report towards that goal. The government reserves the right to terminate any funding in the Institute[] if progress towards that goal is not satisfactory. | This provision may not be contractually enforceable as written, since most of these type of awards are "best efforts." In fact grants, have even more loose contractual restrictions. Furthermore, the success of an Institute regarding its economic impact depends on many factors affecting the economy, and especially, regional demographics. However, metrics and indicators can be defined, and progress towards these metrics/indicators can be periodically assessed (e.g., quarterly or bi-annual[ly]). If determined that progress is not as expected, the Government has the right to terminate any investment in the Institute. |
| Table | 15 | There should be a mechanism whereby background IP and proprietary information can be brought into the Institute without risking general disclosure (the company providing the IP can control access and confidentiality is maintained). | SMEs are a critical part of the infrastructure and vital to the success of the NNMI Institutes. Companies will not share manufacturing know-how within the NNMI without assurances that their closely held innovation will be kept confidential. This highlights that maintaining Proprietary Information and Data Rights is very important part of the IP Management Plan. [Organization Z] proposes that principles related to data rights and proprietary data be included. |

E. PUBLIC COMMENTS RECEIVED – Technical Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|-----------------|----------------------|---|--|
| Recommendations | 3rd Bullet | Replace the existing with: IP rights and licensing terms should be structured by Institutes to support rapid commercialization of discoveries by U.S.[-] based industry partners. | Encouraging Institutes to structure IP rights and licensing terms in order to promote Institute sustainability may slow technology transfer and undermine efforts to forge strong research alliances between Institutes and industry. Institutes should be encouraged to structure IP rights and licensing terms to promote research partnerships and technology transfer. For example, Institutes might offer exclusive royalty[-]free licenses to U.S.[-]based industry partners, with appropriate conditions. Institutes should be encouraged to position themselves for sustainability through fee-based research and technology development services, not through revenue from licensed technology[.] |

F. PUBLIC COMMENTS RECEIVED – Editorial Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|--|
| Table | 1 | [T]he [I]nstitute should also have the right of enforcement. | Item 1 in the Table of Principles outlines the license rights of the [I]nstitute. Enforcement is usually the responsibility of the patent owner; however, the owner may not have the incentive or resources to enforce the patent. The guidance calls for the [I]nstitute to be a licensee with right to sub-license; the [I]nstitute should also have the right of enforcement. |

F. PUBLIC COMMENTS RECEIVED – Editorial Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|---------|----------------------|--|--|
| Table | 6 | Add one bullet (after point #6): "Revenue that may be generated from commercialization activities related to Institute-derived IP may be reinvested in research projects or used to support the ongoing operations of the Institute." | While keeping the spirit of Point #1, we also suggest that the Institute Rights section provides for the flexibility of using any revenue from Institute-derived IP for new research activities or to help sustain Institute operations. |
| Table | 9 | Replace last sentence with "Appropriate legislation may be necessary to provide Bayh-Dole rights consistently to all participants under all Federal agencies under this program." | The note associated with Recommendation 9 is confusing as the Bayh-Dole Act and its implementing regulations are applicable to all Federal agencies. Bayh-Dole rights would provide an incentive for universities to participate in these [I]nstitutes. |
| Table | 13 | A Data Management Plan that defines and differentiates the type of data (Limited Rights, Institute Protected, Project Protected, Unlimited Rights, etc.) and defines access and control to maintain confidentiality must be developed. | [Organization Z] proposes that principles related to data rights and proprietary data be included. |
| Table | 16 | Member Rights section should be developed which recognizes their rights. | The Table of Principles has two main sections (Institute Rights and Government Rights and Interests) and a small section titled "Project Specific." In order to be successful and sustainable the [I]nstitutes must be industry driven. A section on Member Rights should be developed which recognizes their rights. |
| Table | 11, 12 | Potential broad economic impact of the Institute's activities on domestic manufacturing must be evaluated as part of any application to become an Institute or join the NNMI program. | The requirement for demonstrating an application's potential economic impact is supremely important, but it is unclear from the current wording provided in the draft guidance document if the government is referring specifically to impact derived from IP/commercialization, versus impact more broadly. We recommend emphasizing impact more broadly, and not confining it to IP. |

F. PUBLIC COMMENTS RECEIVED – Editorial Comments

| Section | Para, Fig, Tab, Note | Proposed Change | Comment (justification for change and associated verbiage) |
|-----------------|----------------------|--|--|
| Recommendations | Add Bullet | Add one bullet: "Institute should embrace flexible, attractive IP agreements that drive commercialization of new products and processes." | The considerations provided in Part B (Recommendations) are useful in promoting an IP policy that will benefit the Institute, its members, and the government. We recommend adding another bullet point to stress the importance of commercializing new products and processes based upon Institute activities. |
| Recommendations | Add Bullet | Add one bullet: "The Institute will establish a plan to periodically review its portfolio of IP and current projects to ensure optimal commercialization and licensing potential of technologies developed at the Institute (and ensure that IP is not simply "sitting on the shelf.") IP not being utilized should be released into the public domain." | The Institute should establish a review mechanism (e.g., on an annual basis) to assess its IP portfolio, including all open projects, to optimize the commercialization and licensing potential of technologies developed at the Institute and ensure that IP is not simply "sitting on the shelf." |
| C | Para 2 | Delete "and can grant commercial license to third parties" in the second sentence. | The second sentence suggests that the Institute itself has the ability to grant commercial licenses to third parties under its non-exclusive, royalty-free research license. This is inconsistent with how licenses are usually written. Since the Institute will be developing an IP Management Plan under Principle 4, the commercial licensing should be consistent with that plan based on the nature of the Institute, who are the collaborating parties, and likely commercial pathway as determined by the collaborating parties. |

G. PUBLIC COMMENTS RECEIVED - in Non-Tabulated Form

[Some comments that were not in the requested format were received, and they are presented here after the tables. Two organizations placed names within the comments. One organization used the name often and placed text in paragraph form and will hereafter be designated as respondent Organization Z.]

[Organization Z] would like to thank the AMNPO for generating this draft guidance document and providing the opportunity to comment. The National Network for Manufacturing Innovation must play a very important role in advancing American domestic manufacturing and this goal can only be accomplished through effective public and private partnership. [Organization Z] is fully committed to promoting domestic manufacturing and is actively partnering with the current administration to foster Advanced Manufacturing. [Organization Z] looks forward to potential future involvement with the NNMI.

The public document provides a good basic framework concerning the IP rights for the Manufacturing Innovation Institutes but fails to present a viable path forward. The main focus of the guidance and principles is on the sustainability of the Institute and government rights. A primary goal of the Institutes must be to promote the use of Institute-generated IP for use in the private sector to invigorate domestic manufacturing; though this goal is stated it is not supported by the Recommendations or the Table of Principles. Meeting the needs of the commercial manufacturing members is critical to creating a sustainable Institute. With that in mind, [Organization Z] would like to make the following comments and proposed changes.

To minimize confusion and reduce ‘transactional cost’ it is recommended that a common IP framework and basic policies be developed for use by all NNMI Institutes. This framework would include patent, data rights, and confidentiality policies.

The document advocates the Bayh-Dole Act (35 USC 202) as a starting point for the framework on IP rights. Though the Act has enabled the commercialization of technology developed with federal funds from U.S. universities, it has also contributed to serious issues around intellectual property rights which have negatively impacted research collaborations between universities and industry. (Testimony of Susan B. Butts, Senior Director, External Science and Technology Programs, The Dow Chemical Company, Before the Subcommittee on Technology and Innovation Committee on Science and Technology U.S. House of Representatives, Bayh-Dole – The Next 25 Years, July 17, 2007.)

A further shortcoming of Bayh-Dole is the focus on patents. Trade secrets are important in manufacturing. Innovations at especially small- and medium-sized manufacturers (SMEs) are often not based on patents.

The Institutes cannot be founded upon IP royalties ensuring the sustainability of the Institute. Rather, industry participation in the Institute and rapid translation of advances into the market must be where value is created. Creation of value will ensure the sustainability of the Institutes. A focus on IP royalties will lead to contentious negotiations, will limit membership, and reduce

the scope of the Institute. [Organization Z] proposes that the proposal take a more balanced approach to the topics of Institute sustainability and member rights to use the technology. The emphasis must be on driving innovation into the market with as little friction as possible. (S. Berger, *Making in America: From Innovation to Market*, Cambridge, MA: MIT Press 2013).

- The Institute should be able to act as a vehicle for different organizations to work together in propriety projects using Institute equipment and facilities while maintain confidentiality with the project partners and with the IP (patented and un-patented) being shared only with the project participants.
- SMEs are a critical part of the infrastructure and vital to the success of the NNMI Institutes. Companies will not share manufacturing know-how within the NNMI without assurances that their closely held innovation will be kept confidential. This highlights that maintaining Proprietary Information and Data Rights is very important part of the IP Management Plan. There is very little guidance related to these items in the document.

[Organization Z] proposes that principles related to data rights and proprietary data be included:

- There should be a mechanism whereby background IP and proprietary information can be brought into the Institute without risking general disclosure (the company providing the IP can control access and confidentiality is maintained).
- A Data Management Plan that defines and differentiates the type of data (Limited Rights, Institute Protected, Project Protected, Unlimited Rights, etc.) and defines access and control to maintain confidentiality must be developed.

Item 1 in the Table of Principles outlines the license rights of the Institute. Enforcement is usually the responsibility of the patent owner; however, the owner may not have the incentive or resources to enforce the patent. The guidance calls for the Institute to be a licensee with right to sub-license; the Institute should also have the right of enforcement.

Item 3 in the Table of Principles proposes increased rights to founding members versus those that join later. However, many organizations do not have the financial flexibility or resource capacity to be involved at a high level up front. This is especially true of many SMEs whose membership is critical to the success and sustainability of the Institutes. [Organization Z] proposes that item 3 be expanded to recommend a tiered approach to the membership where contributions and rights would be defined at different levels. Availability to government and Institute funds as well as the ability to participate in Institute governance would vary with membership tier. The founding membership could be one tier.

The Table of Principles has two main sections (Institute Rights and Government Rights and Interests) and a small section titled “Project Specific.” In order to be successful and sustainable the Institutes must be industry driven. A section on Member Rights should be developed which recognizes their rights.

H. LIST OF ABBREVIATIONS

| | |
|-------------------|---|
| · IMI or MII | Manufacturing Innovation Institute (or simply Institute) |
| · IP | Intellectual Property |
| · MRL | Manufacturing Readiness Level |
| · NIST | National Institute of Standards and Technology |
| · NNMI or Network | National Network for Manufacturing Innovation |
| · NPO | National Program Office |
| · PCAST | President's Council of Advisors on Science and Technology |
| · RFI | Request for Information |
| · SME | Small and Medium-sized Establishment |
| · TRL | Technology Readiness Level |

I. APPENDIX- Draft Guidance on Intellectual Property Rights

**“Draft Guidance on Intellectual Property Rights for
the National Network for Manufacturing Innovation”**

as presented for public comment

Advanced Manufacturing National Program Office

**Draft Guidance on
Intellectual Property Rights for the
National Network for
Manufacturing Innovation**

Edited by
Michael F. Molnar, Director
Advanced Manufacturing National Program Office

http://www.manufacturing.gov/docs/nnmi_draft_ip.pdf

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Foreward

The interagency Advanced Manufacturing National Program Office (AMNPO) is hosted by the National Institute of Standards and Technology (NIST). Creation of the AMNPO flows from the recommendation of the President's Council of Advisors on Science and Technology (PCAST), in its June, 2011, Report to the President on Ensuring American Leadership in Advanced Manufacturing,¹ that the Federal government launch a concerted, whole-of-government Advanced Manufacturing Initiative. To that end, this interagency office is charged with:

- Convening and enabling industry-led, private-public partnerships focused on manufacturing innovation and engaging U.S. universities, and
- Designing and implementing an integrated whole-of-government advanced manufacturing initiative to facilitate collaboration and information sharing across federal agencies.

By coordinating federal resources and programs, the AMNPO seeks to enhance technology transfer in U.S. manufacturing industries and help companies overcome technical obstacles to scaling up production of new technologies.

The National Network for Manufacturing Innovation (NNMI) program proposed by President Obama has the goal of advancing American domestic manufacturing.² The program will seek to accomplish this by creating a robust national innovation ecosystem anchored by a network of ~~Institutes for~~ Manufacturing Innovation [Institutes] (Institutes). The NNMI will fill a gap in the innovation infrastructure, allowing new manufacturing processes and technologies to progress more smoothly from basic research to implementation in manufacturing. The NNMI program will have a scale and focus that is unique, and it is built upon concepts of a strong public-private partnership.

Abstract

Using a strategy of broad public engagement, in April 2012, the Advanced Manufacturing National Program Office (AMNPO) began collecting input on the National Network for Manufacturing Innovation (NNMI) program design. The collection of information from the public was initiated by a NIST Request for Information (RFI), published in the *Federal Register*,³ followed by a series of regional workshops sponsored by AMNPO partner agencies and focused on the issues presented in the RFI. Reports summarizing the responses to the RFI and the comments received at each workshop were published.⁴ In January 2013, the *National Network for Manufacturing Innovation: A Preliminary Design* report was published, built upon public input received.⁵ This AMNPO document utilizes the information gathered and puts forth draft guidance associated with Intellectual Property (IP) as it relates to the proposed NNMI program, especially as it relates to the sustainability and industry impact of the individual Institutes that will comprise the NNMI.

¹ Report available at <http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-advanced-manufacturing-june2011.pdf>.

² President Obama to Announce New Efforts to Support Manufacturing Innovation, Encourage Insourcing ; <http://www.whitehouse.gov/the-press-office/2012/03/09/president-obama-announce-new-efforts-support-manufacturing-innovation-en>.

³ "Request for Information on Proposed New Program: National Network for Manufacturing Innovation (NNMI)," 77 FR 26509, May 4, 2012. Available at <https://federalregister.gov/a/2012-10809>.

⁴ Reports are available at http://www.manufacturing.gov/pubs_resources.html, under the "Advanced Manufacturing National Program Office (AMNPO)" heading.

⁵ Available at http://www.manufacturing.gov/pubs_resources.html.

Report

A. BACKGROUND

The Advanced Manufacturing National Program Office (AMNPO) Intellectual Property (IP) task team was formed to investigate IP matters as they relate to the proposed National Network for Manufacturing Innovation (NNMI or Network) program and develop draft performance-based principles that would govern IP for the NNMI and at the Institutes of Manufacturing Innovation (Institutes) that are created once appropriate legislation has been enacted.¹ The NNMI program intends to establish a network of Institutes intended to anchor a region and the Nation's innovative infrastructure and maximize impact on American manufacturing. This set of principles would allow Institute applicants to propose their plans for how IP rights for a specific Institute would be optimally protected, shared and allocated.

B. RECOMMENDATIONS

This document addresses key issues associated with IP, especially as related to Institute sustainability and industry impact. The IP provisions of the Bayh-Dole Act are a proven framework for promoting the commercialization and public availability of federally funded research, and are thus the starting point for NNMI IP discussions. Additional considerations are presented here to further promote performance metrics and establish the IP rights of government, Institute and partners, such as:

- IP rights should encourage sustained Institute membership starting from Institute formation, and should discourage members from “fence sitting” or delaying their involvement.
- IP rights should be structured to encourage smaller firms to participate, since small to medium-sized enterprise (SME) involvement in the Institutes is essential.
- IP rights and licensing terms should promote Institute sustainability beyond initial Federal funding.
- Federal Government rights in IP resulting from federally funded research and development awards should be treated in accordance with existing legislation and regulation.
- Publication, data management and export control issues need to be defined.

The draft recommendations herein rely heavily on existing statutes, administrative practices and federal policies regarding funded research. This document makes general recommendations for the program elements related to IP while considering performance metrics. It separates issues into two categories: those that are thought to be important enough to receive attention in the program formulation (Institute Required²); and other topics that are thought to be suitable for Institutes to develop their own practices (Institute Discretionary³). The draft recommendations are presented in the following table.

¹ Current proposed legislation includes H.R.2996 entitled “*Revitalize American Manufacturing and Innovation Act of 2013*,” found at <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:HR02996>;, and the corresponding “*Revitalize American Manufacturing and Innovation Act of 2013*” introduced on August 1, 2013 by U.S. Sens. Sherrod Brown (D-OH) and Roy Blunt (R-MO).

² “Required” corresponds to a principle that is considered critical for Institute sustainability and maximizing the industry impact of resulting technology.

³ “Discretionary” corresponds to a principle that is recommended but is left to the discretion of each individual Institute to determine if such a principle better serves its members in protecting their IP while maximizing the likelihood of IP commercialization.

| | Principle | Institute | |
|-----------------------|--|-----------|---------------|
| | | Required | Discretionary |
| Institute Rights | 1. *An Institute shall receive a royalty-free, non-exclusive research license to IP generated with Institute or federal funding. Institutes shall have a continued ability to conduct research using such IP for research purposes and can grant commercial license to third parties. Institutes shall determine the terms of distribution of IP (free or royalty bearing license; license limitations; tiered rates or constant; share of royalties to inventors) and negotiate assignment and/or licensing to Institute members. | X | |
| | 2. Institutes should be able to decide for themselves whether any Institute member can provide “in-kind” contributions, including IP, in lieu of membership fees, and should be able to determine the monetary value for such contributions. | | X |
| | 3. The rights and obligations regarding IP sharing and IP ownership of initial members of an Institute as opposed to organizations or companies that join later should be defined by the Institutes | | X |
| | 4. There must be an IP Management Plan submitted to the NNMI program as part of any application to become an Institute or join the NNMI program. | X | |
| | 5. Contents of the IP Management Plan should be determined by the proposers/Institutes. | | X |
| | 6. *Upon the dissolution of an Institute, existing IP licenses must be treated according to the particular terms stated in the license agreements and the Institute’s IP Management Plan. IP for which title is not owned by the Institute, but which is licensed by the Institute and sublicensed to its member(s) must have the sublicense survive Institute dissolution. Should an Institute cease to exist due to bankruptcy, IP for which title is owned by the Institute must be treated as an asset by a bankruptcy judge. | X | |
| Project Specific | 7. The Institute must be free to pursue non-government funded contract research for industry as a route to sustainability. | X | |
| | 8. The use of government-funded Institute equipment and facilities during research conducted at an Institute solely with industry funds (including full overhead) should not create a government use right or “march in right” for resultant IP. | X | |
| Government Rights and | 9. *The Bayh-Dole Act and regulations will apply to medium and large businesses, and all contractors regardless of type, giving them the same IP ownership election rights (inventor may retain title to generated IP, not funder) as small businesses and non-profits. | X | |
| | 10. Foreign companies may become a member of an Institute and/or may participate in Institute activities when it is in the economic interest of the United States. The national impacts of the proposed membership and/or participation on domestic manufacturing must be evaluated as part of any application to become an Institute or join the NNMI program, or while an Institute is part of the Network. | X | |

| | | | |
|--|--|---|---|
| | 11. Impact on domestic manufacturing must be evaluated as part of any application to become an Institute or join the NNMI program. | X | |
| | 12. The language used in the proposal for an Institute addressing impact on domestic manufacturing must be written into the Institute award and be a requirement for eligibility for subsequent competitive grant funding described in the January 2013 NNMI Preliminary Design. ² | X | |
| | 13. A Data Management Plan must be submitted that screens companies and data for export control. All proposals must have a plan to comply with export control law. | X | |
| | 14. The Federal government has the right to select any application to become an Institute or join the NNMI network, in whole or in part, as a part of any award or agreement negotiation. | X | |
| | 15. An Institute within the NNMI shall have policies that allow for the results of federally funded research to be made publicly available through publication. However, some data may have significant proprietary value, and it is permitted to require waiting a reasonable period of time before publishing. Each application should establish procedures for publication review prior to publication. | | X |

*Note: It is recognized that some of these principles may conflict with existing technology transfer law and regulations for some Federal agencies, particularly the Bayh Dole Act and its implementing regulations. Appropriate legislative action would be necessary if it were desired to implement those recommendations consistently for all Federal agencies.

C. CONCLUSIONS

The draft IP recommendations that are open for public comment and contained in this document are intended to address the primary IP issues that Institutes created once appropriate legislation has been enacted will need to address. This document presents items of focus for the Federal Government and Institutes, and classifies them as either required or discretionary for the Institutes. With guidance, it is intended that Institutes will develop specific IP rules.

The intent of this draft guidance is to provide great flexibility to the Institutes in designing their IP plans while preserving key IP rights. Chief among these rights are: the government’s right to practice IP developed through federally funded research and development awards; an Institute shall receive a royalty-free, non-exclusive research license to IP generated with Institute or federal funding and can grant commercial license to third parties; the right for Institutes to establish a tiered royalty system for members and for non-members (if IP is to be licensed to non-members); the ability of Institutes to enter into contracts to perform research; and the need for evaluation criteria that emphasize American manufacturing impact.