DRAFT – Proposal for NACIE ratification regarding the SBIR/STTR program as part of the continuum of capital – Submitted by Michael Burcham, Tiffany Karp, David Kenney, Stephen Tang, and Rohit Shukla

OBJECTIVE: Enhance the SBIR/STTR program, a critical piece in the capital continuum from R&D to market.

- Put greater emphasis on commercialization in award selection and oversight;
- Fund commercialization activities to a greater extent commensurate with its importance to market entry and success; and
- Broaden the engagement with intermediary S&T organizations that play a critical role in translation of science to business.

Billed as "America's Seed Fund," the SBIR/STTR program provides over \$2 billion per year to small businesses to fund research and development activities through multiple federal agencies.

The National Advisory Council on Innovation & Entrepreneurship (NACIE) recognizes the important role that the SBIR/STTR program plays, filling a gap between basic science research funding and traditional sources of private capital (including angel and venture capital, debt, and corporate strategic funding).

This gap is especially acute for science-based startups, which often have long, capital-intensive, and/or regulated pathways to market. While angel and venture funding has grown significantly to be an important source of early capital for many internet/IT and companies with faster development cycles, scientific research-based startups are more likely to have significant shortfalls, impeding them in their market-facing efforts. Examples of companies facing these challenges include startups developing important technologies like batteries, new materials for extreme environment energy generation, medical devices, pharmaceuticals and agricultural products.

While many agencies offering the SBIR/STTR program consider commercial potential and planning an important factor in making award decisions, NACIE believes that some changes to the SBIR program should be considered to ensure a greater likelihood of commercialization success on the part of awardees. NACIE is seriously considering recommendations in the following areas and will consult with key stakeholders in federal government, regional intermediary organizations, and small business in further refining its recommendations:

Recommendation 1: Significantly increase the allocation of agencies' SBIR project budgets to commercialization activities; and enable the use of SBIR/STTR grant funds for commercialization activities.

Grantees are prohibited from utilizing their grants to fund critical commercialization efforts that enable them to attract private capital and accelerate their market entry. SBIR/STTR grantees should be allowed to fund activities such as marketing, intellectual property assessments and filings and recruitment of team members dedicated to commercialization, including using federal funds to pay for activities conducted by company employees.

In addition, though some of the participating agencies offer SBIR/STTR award "supplements" to grantees to select their own vendors, or offer commercialization programs conducted by outside vendors, these are capped at \$5000 per year per awardee for commercialization activities and cannot be used to fund company employees specifically devoted to these activities. In addition, the amount allocated is a small fraction of the overall SBIR/STTR grant allocation; more significant funding would accelerate the opportunity for awardees to conduct activities that are as crucial as their research results in attracting private capital and gaining market entry.

Also, agencies are constrained in their ability to allocate more agency resources to commercialization. We believe that increasing the allocation of their SBIR project funding to commercialization is also important to ensure that monitoring and oversight of commercialization efforts is encouraged, instituted and/or augmented. Expanding federal support for commercialization in conjunction with private or state/local matching would be one avenue to ensure that these resources are going to the companies with existing commercialization traction and would be leveraging non-federal dollars.

Recommendation 2: Change the criteria and composition of review panels to make commercialization potential a more prominent factor in funding decisions.

All participating agencies consider commercialization potential and plans in their grant funding decisions. But, reflecting the prominent allocation to research activities versus commercialization efforts, the latter is emphasized far less in the selection process than is necessary to meet the objective of optimizing market entry for SBIR/STTR grantees. We believe that a significant portion of the merit review evaluation criteria and scoring at all SBIR/STTR award granting agencies should include commercialization factors like the company's understanding of and ability to address the market opportunity, target customers, competitive landscape, commercialization risks, and product development timelines and needed resources. Further, to evaluate these important criteria, SBIR/STTR review panels should mandate the use of industry experts, investors with relevant industry or technology expertise, and/or representatives from commercialization intermediary organizations or venture development organizations, while addressing any concerns about conflict of interest.

Recommendation 3: Encourage or require engagement of intermediary organizations in supporting the development of startups.

While agencies have expanded their commercialization programs through funding services offered by third party organizations (as noted above), the SBIR/STTR program should encourage the engagement and participation of science- and technology-oriented intermediary organizations that have been effective in translating science-based plans into commercial opportunity in regions around the country. As a key pillar of economic development, these organizations could more effectively leverage federal funding, engage local resources in various functions, and generate local interest in awardees. Startups should utilize the expert knowledge and resources provided by proven support organizations. SBIR/STTR investments that are

coupled with guidance from regional intermediaries experienced in helping innovators have greater likelihood for success and long term stability. Currently, ad hoc consultations occur across the board, but this recommendation would focus on creating formal pathways that would link myriad efforts that have grown in the past few years to the program itself and add a level of higher-touch support to companies than the federal agencies are able to provide.

Using already scheduled events held over the next few months, including the National SBIR Conference (June 15-17, 2015 in National Harbor, MD), regional SBIR Road Tour stops (ongoing through August 2015), regional events like Oregon BEST FEST (Sept 9-10, 2015 in Portland, OR), and other SBIR/STTR conferences presented by individual agencies, NACIE members and Department of Commerce staff will convene feedback sessions to gather feedback specific to these ideas, refining them as NACIE recommendations.