

Leveraging SBIR to Address Technology Needs

Mr. Paul Koskey

Innovation Team Lead
MDA Advanced Technology

How Does MDA SBIR Define Technology Needs?

- **Topics are grouped under Research Areas, defined by MDA System Engineering and the National Team Identified System Needs (GAPs)..**
 - MDA has 10 Research Areas and 54 Topics for the 7.3 solicitation
- Research Area “Leads” work with the MDA program elements and offices, which co-author topics.
 - Process solicits proposals addressing GAPs (These are MDA Tech needs.)
 - Individual topics are usually co-sponsored and co-authored by several program elements.
 - Each co-sponsor provides evaluators to the process when proposals are received.
 - Sponsors work together as one team to enhance the capabilities of the Ballistic Missile Defense System (BMDS) ---which is one System
- A Relatively New Process (3 Years Old)
 - Established by MDA Director to increase transition of technology into the BMDS.

What Impact Does The SBIR Timeline Have On Use Of Program Innovation?

- 4 years (at least) From Topic generation to project end,
 - More often Longer (Added time for Ph2 Enhancements, no-cost ext., Phase III projects, etc.).
 - SBIR contracts linked to Mainline programs which can be reduced or cut
 - Evolving needs change based on threat or unforeseen developments
 - Re-engineering and BRAC can affect “champions” for technology
- MDA’s “co-sponsorship” approach
 - If a need changes in one program element or office, the technology may still serve another that is actively tracking the success of this work
- The new “evolving” process has yet to be proven
 - No Projects awarded under the first solicitation have been completed.
- Success is not readily apparent.
 - Long SBIR Timeline makes it difficult to expeditiously track the effectiveness of new processes.
 - Value may not be assessed for several or even many years.

Do You Use SBIR as Risk Reduction ?

Yes and No

- MDA has also aligned multiple Phase II SBIR projects with the prime contractor on both competing and synergistic efforts, developing technologies or components for large programs. (HAA is an example)
- Encouraging relationships between the small businesses and the Prime contractor base has provided alternative approaches/ technologies to resolve technical issues.
- Conversely, MDA SBIR is experimenting with use in higher-risk-high payoff projects that could be revolutionary solutions for the BMDS.

How Do You Handle "Success" ?

- The key is in defining and identifying success.
 - Success can be:
 - Transition to a program element
 - Transition through an Advanced Technology mainline program.
 - Series of Successes can also lead to overall failure
 - Failure can teach very valuable lessons
 - Success can be through the Prime contractors, who can restrict volume of information due to the proprietary nature of the work. (How much Learned?)
 - Sometimes not succeeding is success. Success can be learning that a class of options does NOT work.
 - BMDS knows to redirect effort to alternative path.

How do You Identify Success

- MDA recently began a rigorous tracking survey for recently completed SBIRs begun in 2002
 - Projects just completed were based on topics written several years ago. (6 or 7 years ago)
 - MDA experience is that success is often only visible in long hind sight

How to publicize success

- Outreach