Leveraging SBIR to Address Technology Needs

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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