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SBIR and STTR Phase III Guidebook For Program Managers, Contracting Officers And Small Business Professionals

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Department of the Navy Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Phase III Guidebook

Phase III Guidance for Program Managers and Deputy Program Managers, Procuring and Administrative Contracting Officers, and Small Business Professionals on Using the SBIR/STTR Phase III Vehicle to Realize Mission Objectives, Program Requirements and Small Business Goals

Version 1.1

December 2015

This document is a compendium of and desk reference to known authorities and instructions related to Phase III SBIR/STTR efforts. It is not intended as formal DON guidance, and your comments are welcomed at http://guidebook@navysbir.com.

Best regards,

Rolf FS

Robert L. Smith Director, Dept. of the Navy SBIR/STTR Program

SUMMARY OF 2015 REVISIONS TO THE 2014 DON SBIR/STTR PHASE III GUIDEBOOK December 1, 2015

| ACTION | 2014 Guid | ebook | 2015 Guidebook | | |
|---|-------------------------|-------|------------------------------|-------|--|
| | Chapter, Sub-chapter | Pages | Chapter, Sub-chapter | Pages | |
| Grammatical/typographical error correction | | S. | Entire doo | ument | |
| Formatting revisions as necessary | | | Entire doo | ument | |
| Updated Table of Contents | | 1-3 | () - + + + + - + - + - + + + | 1-4 | |
| Graphical Figures | | | | | |
| Figure 2: SBIR/STTR Notional Timeline deleted; replaced by Figure 2: SBIR/STTR Process Visualization | 1 | 9 | ,Ľ | 9 | |
| Figure 3: DON SBIR/STTR Organizational Chart deleted; replaced with updated chart | L. | 10 | 1 | 12 | |
| Figure 5: SBIR/STTR Goal Setting By Milestone (NEW) inserted | | 2 | IV, IV.3.1 | 22 | |
| Figure 5: Retitled Probability of Program Success (PoPS) SBIR/STTR Checklist (notional) | IV, IV.3.3 | 21 | I, IV.3.3 | 25 | |
| Figure 7: Quad Chart Template moved and retitled as Figure 8 | IV, IV.3.5 | 23 | IV, IV.3.5 | 29 | |
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EXECUTIVE SUMMARY

This Department of the Navy (DON) SBIR/STTR Phase III Guidebook is a desk reference providing guidance to Program Managers (PMs) and Deputy Program Managers (DPMs), Heads of Contracting Activity (HCAs) and Contracting Officers (KOs), and Small Business Professionals (SBPs) on using SBIR/STTR technologies to:

- implement SBIR/STTR requirements cited in Department of Defense (DoD) Instruction 5000.02¹ and related memoranda from the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN (RDA))².
- realize Better Buying Power 3.0 goals and objectives described in Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) memoranda³ to increase competition, reduce fielding cost, deliver more innovation, and curb vendor lock..
- expand SBIR/STTR transitions as required by the National Defense Authorization Act of 2012⁴.
- realize ASN (RDA)'s DON small business goals⁵.

For DON acquisition and procurement purposes, SBIR/STTR's Phase III recapitalizes naval research and development investment, provides innovative technology that satisfied competition requirements, and gives the Federal Government a royalty-free right to use SBIR/STTR data worldwide. (Phase III is "Work that derives from, extends, or completes an effort made under prior SBIR/STTR funding agreements ...,"⁶). Phase III contracting is an essential Better Buying Power tool. (Throughout this document, the use of Phase I, II, or III refers to SBIR/STTR awards unless otherwise noted.)

As a Phase III desk reference, this Guidebook focuses on SBIR/STTR technology use to realize mission cost savings and technology objectives, and describes SBIR/STTR inclusion in program planning and management over program life cycles. Since enactment in 1982⁷ and 1992, respectively, SBIR/STTR has comprised five basic principles that support DON acquisition and procurement:

- 1. SBIR/STTR is a key research and development (R&D) program, providing increased competition, technological innovation, affordability, elimination of vendor lock, and strengthening of the industrial base.
- 2. Acquisition personnel must give priority consideration to making Phase III awards in accord with statute and regulations governing SBIR/STTR procedures, which ensure that competition requirements are met.
- 3. In accordance with Defense Federal Acquisition Regulation Supplement (DFARS) 252.227-7018(b), SBIR/STTR gives PMs a royalty-free right to use the SBIR/STTR data worldwide, but cannot disclose the technical data for five years after completion of the project from which data were generated without the innovator's permission.
- 4. Phase III contracting supports maturation of SBIR/STTR technology for integration into acquisition programs throughout their life cycles, or into other innovative DoD processes needing innovative technologies.
- 5. Specific guidance to support PMs', DPMs' and KOs' use of SBIR/STTR already exists in the Small Business Administration's (SBA) SBIR Policy Directive⁸, DFARS 252.227-7018, and Navy Marine Corps Acquisition Regulation Supplement (NMCARS) 5206.302-5 (b) and Annex 13. These documents provide clarity and authority to issuance of Phase III contract awards, including information pertaining to data rights, competition, Justification and Approvals (J&A) requirements, and contract reporting.

¹ USD (AT&L); *DoD Instruction 5000.02* (7 JAN 2015); Table 2. Milestone and Phase Information Requirements (Enclosure 1, pg. 48) ² ASN (RDA); *Tapping Into Small Business in a Big Way* (12 JAN 2015)

³ USD (AT&L); Better Buying Power 3.0 Guidance and Actions (9 APR 2015)

⁴ Section 5001 Division E of FY 2012 NDAA SBIR/STTR Reauthorization: Section 5108(4) – SBIR-STTR Special Acquisition Preference, Section 5122 – Goal for SBIR-STTR Technology Insertion, and Section 5138 – Technology Insertion Reporting Requirements.

⁵ ASN (RDA); *Meeting Small Business Goals for 2013* (13 DEC 2012).

⁶SBA; SBIR and STTR Policy Directives; February 4, 2014; Sec. 4(c).

⁷ In 2010, SBIR/STTR reauthorization extended the program first enacted in 1982 through 2017 via the 2012 National Defense Authorization Act. ⁸ <u>http://www.sbir.gov/about/sbir-policy-directive</u>.

GENERAL INFORMATION

Purpose. This Guidebook will support acquisition management compliance with DoDI 5000.02 requirements regarding SBIR/STTR by describing why and how SBIR/STTR technology products may be contracted or subcontracted, citing current and recommended future policies, procedures, and references for contracting and subcontracting. The Instruction states:

"Program managers will establish goals for applying SBIR and STTR technologies in programs of record and incentivize primes to meet those goals. For contracts with a value at or above \$100 million, program managers will establish goals for the transition of Phase III technologies in subcontracting plans and require primes to report the number and dollar amount of Phase III SBIR or STTR contracts. Not required at Milestone B."

| | PR | PROGRAM TYPE ¹ | | | LIFE-CYCLE EVENT ^{1,2,3} | | | | | | ,3 | | 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - | |
|---|------------------|---------------------------|----------|-------------|-----------------------------------|-----------|------------|-------------------|----------------------|---------|---------------|--------------------|---|-----------------------------|
| INFORMATION REQUIREMENT | MDAP | MAIS | AC II | AT ≤ III | MDD | MS A | CDD Val | Dev RFP Rel | MS B ⁵ | MS C | FRP/FD Dec | OTHER | SOURCE APPRO | |
| ACQUISITION STRATEGY, continued | ., | | | | | | | | | | | | | |
| <u>GENERAL EQUIPMENT VALUATION</u>: STATUTORY; a pro- equipment requiring capitalization is serially identified and va Navy general fund assets, and unit costs at or above \$250 th Federal Financial Accounting Standards 23 (Ref. (o)) | alued. Only req | uired at M | lilestor | ne C; ı | updated | as neo | essary | for the F | RP/FD [| Decisio | n. The ca | pitalization thre | sholds are unit costs at or above \$ | 1 million for Air Force and |
| INDUSTRIAL BASE CAPABILITIES CONSIDERATIONS: S | TATUTORY fo | MDAPs; | Regul | atory f | for othe | rs. Sun | nmarize | s the res | ults of t | he indu | ustrial base | e capabilities' a | nalysis. SOURCE(S): 10 U.S.C. 2 | 440 (Ref. (g)) |
| INTELLECTUAL PROPERTY (IP) STRATEGY: STATUTOF considerations associated with the award and administration to urgent needs, due at the Development Milestone. SOURI | of all contracts | througho | ut the | syster | m life cy | cle. Be | comes | part of th | ie Life-C | Cycle S | | | | |
| <u>MARKET RESEARCH</u>: STATUTORY. A stand-alone, Reg thereafter. Conducted to reduce the duplication of existing t concerns, and possible strategies to acquire them. For prog (Ref. (i)). This instruction | echnologies an | d products | , and | to und | lerstand | potent | ial mate | riel solut | ions, ter | chnolog | gy maturity | y, and potential | sources, to assure maximum parti | cipation of small business |
| <u>SMALL BUSINESS INNOVATION RESEARCH (SBIR)/SMA</u> technologies in programs of record and incentivize primes to plans and require primes to report the number and dollar arr | meet those go | als. For c | ontrac | ts with | h a valu | e at or a | above \$ | 100 milli | on, prog | gram m | anagers v | rill establish goa | als for the transition of Phase III teo | |

Figure 1: Milestone and Phase Information Requirements

<u>TERMINATION LIABILITY ESTIMATE</u>: STATUTORY. Only for MDAPs. Must be documented in the ACQUISITION STRATEGY for any contract for the development or production of an MDAP for which potential termination liability could reasonably be expected to exceed \$100 million. Updates may therefore be required at other than the marked events. The estimate must include how such termination liability is likely to increase or decrease over the period of performance. The Program Manager must consider the estimate before making recommendations on decisions to enter into or terminate such contracts. SOURCE(S): SEC. 812, P.L. 112–239 (Ref. (I))

User Guidance. This Guidebook describes actions recommended to PMs and DPMs to comply with current legislation and DoD and DON policy and guidance. It includes SBIR/STTR requirements from DoDI 5000.02, and guidance language recommended to KOs for Phase III contracts and for existing and new program solicitations issued by DoD and DON Service organizations, such as Requests For Proposals (RFP), Broad Agency Announcements (BAAs), or other solicitations for efforts supporting DON acquisition and procurement. It also recommends standard Phase III procedures to increase accurate and comprehensive tracking and reporting of Phase III actions, as new legislation and related studies have identified⁹. Throughout this document, the use of the words "agencies" or "agency" refers to agencies, their Government-owned contractor-operated facilities, or Federally Funded Research and Development Centers (FFRDCs) unless otherwise noted. The National Research Council has published a recent authoritative DoD-wide study of SBIR/STTR.¹⁰

DON acquisition PMs and DPMs are highly encouraged to develop an effective SBIR/STTR strategy to achieve mission cost savings and technological innovation objectives, consistent with DoD/DON directives, Congressional legislation, SBA regulations, and required DON strategic asset management practices¹¹. In fact, the ASN (RDA) memo "Tapping Into Small Business in a Big Way" specifically links SBIR/STTR management by DON acquisition programs to required Small Business

⁹ See, for example, Inspector General – Dept. of Defense; DoD Considered Small Business Innovation Research Intellectual Property Protections in Phase III Contracts, but Program Improvements are Needed; March 27, 2014.

¹⁰ National Research Council; SBIR at the Department of Defense; 2014

¹¹ Appropriate references may be found in the Executive Summary and in Chapters IV and V.

Plans. Therefore, SBIR/STTR should be a major component in program planning, development, testing, and management processes across the entire life cycle of a program. This SBIR/STTR strategy should describe a business and technical end state for SBIR/STTR products and services. When executed, this strategy will also help ensure DON and DON Senior Executive Service attainment of small business goals. Anticipated future guidance from DON Office of Small Business Programs will help the DON acquisition community focus its small business and SBIR/STTR work.

Although the Guidebook was developed for acquisition programs with mixed systems consisting of hardware, middleware, and software elements, Guidebook language can easily be tailored for hardware-only or software-only.

Organization. The Guidebook is organized so as to provide SBIR/STTR information for three DON audiences: PMs and DPMs, HCAs and KOs, and SBPs, with emphasis on acquisition personnel new to SBIR/STTR.

- Chapter I provides an overview of Phases I, II, and III, including SBIR/STTR strategic use and personnel.
- Chapter II addresses questions about SBIR/STTR frequently asked by acquisition personnel.
- Chapter III summarizes Phase III and explains how to use this valuable SBIR/STTR tool.
- Chapters IV and V focus respectively on the roles of PMs and DPMs, and of KOs, regarding SBIR/STTR. Both chapters also contain useful document templates and language for inclusion in core transactions.
- Chapter VI discusses incentives and their potential use in supporting SBIR/STTR goals.
- Appendices include suggested SBIR/STTR language for inclusion into RFPs, and support documents

Providing Comments. Development and maintenance of this Guidebook are interactive processes involving a "build-test-build" method by which inputs from the DON user community may be incorporated into the electronic version of this document. With DON approval for public distribution, Guidebook updates shall be posted at www.navysbir.com. Internal DON comments on the working draft prior to public distribution can be submitted via email to <u>Guidebook@NavySBIR.com</u>.

Chapter I: Overview of the SBIR/STTR Programs

The SBIR Program was established by Congress in 1982 as a three-phased process, uniform throughout the Federal Government, of soliciting proposals and awarding funding agreements for Research/Research and Development (R/R&D), production, services, or any combination of these to meet stated agency needs or missions. In 2006 Congress piloted and in 2011 formalized with DoD, a Commercialization Readiness Program specifically designed to aid transitions between Phases II and III, and insertions of SBIR/STTR products and processes into Major Defense Acquisition Programs (MDAPs).

On December 31, 2011, the President signed into law the National Defense Authorization Act for Fiscal Year 2012, Public Law 112-81. Section 5001, Division E of this Act contains the SBIR/STTR Reauthorization Act of 2011, which amends prior legislation as codified in 15 USC §638. The Reauthorization Act contains significant SBIR/STTR reforms including a focus on increased and expanded commercialization¹² of SBIR/STTR technologies, and a mandate for the Secretary of Defense (SECDEF) to establish SBIR/STTR commercialization goals that include increased numbers of SBIR/STTR contracts and subcontracts (i.e., Phase III actions) and increased insertions of SBIR/STTR products and processes into MDAPs, with annual reporting to Congress by participating Executive Departments and Agencies.

¹² "Commercialization" is defined in the SBA SBIR and STTR Policy Directives at § 3(f) as "The process of developing products, processes, technologies, or services and the production and delivery (whether by the originating party or others) of the products, processes, technologies, or services for sale to or use by the Federal Government or commercial markets."

Although the DON SBIR and STTR programs are but one effort among other DoD component SBIR/STTR programs, the DON effort is targeted at addressing the needs and areas of interest to Navy and Marine Corps Program Executive Offices (PEOs). The SBIR and STTR programs allot a portion of the DON's extramural research dollars¹³ for award to small businesses with the goal of stimulating and fostering scientific and technological innovation and increasing commercialization of Federal research and development (R&D) for Phase I and Phase II only.

The SBIR program is highly competitive, encouraging domestic small businesses to engage in Federal R/R&D that has the potential for commercialization. Through competition, SBIR enables small businesses to explore their potential and provides incentive to profit from commercialization. By including qualified small businesses in the Nation's R&D arena, high-tech innovation is stimulated, and the United States gains entrepreneurial spirit as it meets its specific R&D needs.

The parallel STTR program was established by Congress in 1992 with a similar statutory purpose as SBIR. A major difference in the two programs is that STTR requires the small business to have a research partner consisting of a university, FFRDC, or a qualified non-profit research institution. In STTR, the small business must be the prime contractor and perform at least 40% of the work, with the research partner performing at least 30% of the work. The balance can be performed by either party and/or a third party.

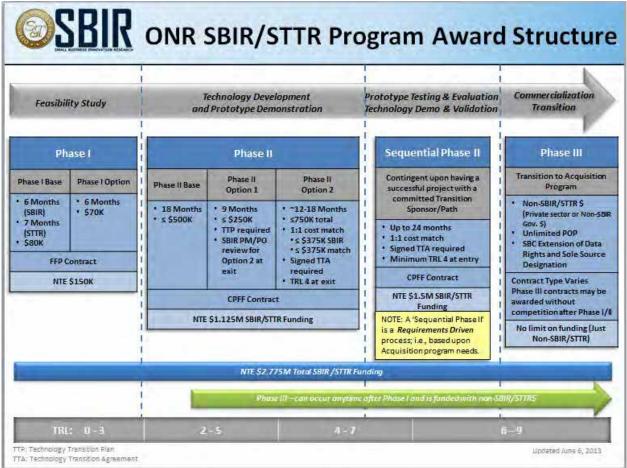


Figure 2: SBIR/STTR Process Visualization (ONR example)

¹³ "Extramural research" is defined in the SBA's SBIR and STTR Policy Directives (8 FEB 2014) at § 3(K) as "The sum of the total obligations for R/R&D minus amounts obligated for R/R&D activities by employees of a Federal agency in or through Government-owned, Government-operated facilities."

In the above graphic, the SBIR/STTR process is depicted for individual projects – a process that may be repeated over and again as a Program Manager chooses multiple SBIR/STTR projects to meet varied acquisition needs as successive Mile Stones (MS) in the acquisition life cycle, with emphasis on MS A and C.

On a schedule coordinated by the DoD, DON annually releases three SBIR/STTR solicitations that contain a series of "Technical Topics" that describe areas of interest and need for DON Systems Commands (SYSCOMs), with about 80% of topics coming from PEOs and the Future Naval Capabilities (FNC) program. A "Call for Topics" is issued to SYSCOMs about six months prior to solicitation release, giving PMs and DPMs opportunities to submit candidate topics that address component-level needs for innovative technology solutions. Small businesses can submit proposals targeted at one or more of the technical topics listed in the solicitation. Following submission of proposals, DON makes SBIR or STTR awards based on small business qualification, degree of innovation, technical merit, and future market potential. Time of award from topic release varies across SYSCOMs, but the goal is to make awards not later than six months after topics are available in Solicitation Pre-release. (For a notional SBIR/STTR timeline, see Figure 2.)

DON SBIR/STTR is primarily mission-oriented, providing small firms the opportunity to become part of the national technology base that can feed both the military and private sectors. To that end, in its Phase II activity, DON incorporates information about small business marketing of SBIR/STTR technology to both military and private sectors.

- **Phase I**¹⁴ A feasibility study to determine the scientific or technical merit of an idea or technology that may provide a solution to DON needs or requirements.
 - SBIR Phase I base periods are typically up to six months with a base amount not to exceed \$80,000 and a Phase I option not to exceed \$70,000 for up to six months, with some SYSCOM variance.
 - STTR Phase I base periods are typically seven months with a base amount not to exceed \$80,000, and a Phase I option not to exceed \$70,000 for six months.
- **Phase II** A demonstration phase in which prototypes are typically built and tested. If the Phase I effort is successful, a company may apply for Phase II funding according to provisions detailed in SBIR/STTR solicitations.
 - SBIR and STTR Phase II base periods and option awards vary across SYSCOMs using a gated process.
 Awards are typically \$500,000 to \$1,500,000 and the period of performance is generally 24 months.¹⁵
 - 20% of SBIR funds are dedicated to expand transition funding to selected existing Phase II projects, thus accelerating transition.
- Phase III Work that derives from, extends, or completes an effort made under prior SBIR funding agreements, but is funded by sources other than SBIR/STTR; and the goal of SBIR/STTR programs. Although no Government SBIR/STTR set-aside funds are involved, Phase III funding can come from the Government and/or the private sector. The purpose is to transition a company's SBIR/STTR effort into hardware or software products, processes or services that benefit the DON acquisition community. A key SBIR/STTR strength is that once a company has received a Phase I award, Phase III awards can be made using a non-competitive process since competition requirements were satisfied under Phase I and II. KOs should document that non-competitive process by using the streamlined SBIR Phase III J&A template in NMCARS Annex 13, in accordance with Navy-Marine Corps Acquisition Supplement (NMCARS) 5206.302-5 (b) not by using the "only known source" exemption.

¹⁴ Descriptions of SBIR/STTR phases are found on the SBA SBIR/STTR website, <u>www.sbir.gov</u>; the DoD SBIR/STTR website, https://sbir.defensebusiness.org; and the DON SBIR/STTR website, <u>www.navysbir.com</u>.

¹⁵ For detailed Phase II period of performance and funding structure at the SYSCOM level, see <u>http://www.navysbir.com</u> "Phase II".

I.1 Strategic DON Use of the SBIR/STTR Programs, SBIR/STTR Award Structure, and Organization

At the highest level, the Chief of Naval Operations and Commandant of the Marine Corps can champion acquisition program management use of SBIR/STTR capabilities in anticipating potential changes to risk, performance, cost, schedule, resources or capabilities for these programs. Similarly, when Resource Sponsors and Requirements Officers confront program funding adjustments, engaging with SBIR/STTR gives access to an inventory of technology innovations already in development and also to forward-funded topic development.

Following the DON acquisition community practice of "up front and early" engagement, PMs and DPMs may – and often do – play an influential role in the DON SBIR/STTR programs in topic development, technical oversight of Phase I and Phase II projects, and planning use of the Phase III tool to anticipate integration of a new technology into a Program of Record (PoR) or other program, as described in Chapter IV. SBIR/STTR project development extends over a minimum of three years, as described in Figure 2. Since some technologies mature more rapidly than others, PMs and DPMs should plan a different transition strategy for an SBIR/STTR avionics or communication technology, for example, than for an SBIR/STTR engine propulsion technology, to ensure a desirable Technology Readiness Level (TRL). PMs and DPMs may also work with their KOs to ensure SBIR/STTR inclusion in RFPs for platforms or technologies, as described in the Appendices to this document. DON SBIR/STTR best transition practices are described in two unlimited distribution publications: *SBIR Best Technology Transition Practices* and *Defense Contractors SBIR/STTR Partnering Manual.*¹⁶ Overall DON guidance is provided in the DoD SBIR Desk Reference.¹⁷

Further, the SBIR and STTR Reauthorization Act states, "Federal agencies, to the greatest extent practicable, shall issue Phase III awards to the SBIR/STTR awardee that developed the technology."¹⁸ This language falls short of a right to a preference for a qualified SBIR/STTR firm for any requirement issued (or intended to be issued) that "derives from, extends, or completes prior SBIR effort and is funded with non-SBIR funds."¹⁹ – i.e., it is *not* a right to a contract for the SBIR/STTR firm responsible for the prior SBIR/STTR effort. But the language does confer a preferential status on the SBIR/STTR firm that leads directly to a J&A process whereby a DON KO, supported by a PM, determines whether the SBIR/STTR firm is (1) available and (2) capable of performing the requirement. This necessitates an assessment; the pre/post-business clearances for negotiation with an SBIR/STTR firm should contain a documented assessment, based on price comparisons, past performance, and related evidence of competency needed to support a Phase III contract.²⁰

An accurately performed and documented determination that the requirement is not a Phase III opportunity, or that the small firm at issue is not available or capable, eliminates the need for further action and also creates an information trail for use in case of a challenge. It should be noted, however, that agencies are required to report to the SBA all instances in which an agency pursues research, development or production of a technology developed by an SBIR/STTR awardee, with a business concern or entity other than the one that developed the SBIR/STTR technology.²¹

The SBIR/STTR award structure is depicted in Figure 2: SBIR/STTR Process Visualization, above.

¹⁶ Best Technology Transition Practices: The Navy SBIR Program; April 2008 and Defense Contractors SBIR/STTR Partnering Manual – A Primer on Technology Risk Management; August 2008, are both available at http://www.navysbir.com.

¹⁷ See http://www.acq.osd.mil/osbp/sbir/sb/resources/deskreference/index

¹⁸ Section 638, title 15, United States Code (15 U.S.C. § 638 [2012]), 1 subsection r(4).

¹⁹ SBA SBIR and STTR Policy Directives (8 FEB 2014); § 4(c)(6).

²⁰ For a detailed instruction on how to perform a "Phase III preference" evaluation, see Chapter II Frequently Asked Questions, pp. 10 – 11.

²¹ SBA SBIR and STTR Policy Directives (8 FEB 2014); § 4(c)(7).

DON SBIR/STTR is embedded in SYSCOMs, the Marine Corps, and other organizations, with some variety in management practices. (See Figure 4 and http://www.navysbir.com/pm-poc.htm.) SYSCOM-level SBIR PMs are supported by PEO-level Technical Liaisons, who work with acquisition program office Technical Directors and Technology Warrant Holders. SBIR Transition Managers at the PEOs or acquisition program offices liaise with both SBIR/STTR awardees and acquisition personnel to support timely transition of SBIR/STTR technologies. Technical management of SBIR/STTR projects is supported by engineers from DON acquisition or R&D programs, or from DON warfare centers and other laboratories.

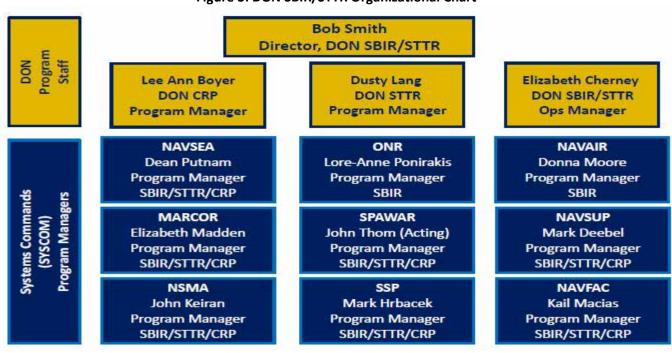


Figure 3: DON SBIR/STTR Organizational Chart²²

Chapter II: Frequently Asked Questions Regarding SBIR/STTR

The following questions have been posed to the DON SBIR/STTR Program by PMs and DPMs, and KOs.

1. Can an SBIR/STTR Phase III contract be awarded to a company which has either outgrown the small business size standard or which has been acquired by a large business?

Yes – per the SBA Policy Directives, a Phase III contract may be awarded to a firm that has outgrown the small business size standard, to a novated awardee, or to a successor in interest such as an acquiring company. There are no NAICS code²³ size limits applicable to Phase III, and no limits on company or contract size, contract duration, type/color of money or number of Phase III awards on a topic, or time between awards. In cases of "successor in interest" or novation, an original awardee may be required to relinquish its rights and interests in an SBIR/STTR project in favor of another applicant as a condition for that applicant's eligibility to participate in the SBIR/STTR programs for a particular project.²⁴

²² For a detailed matrix of DON SBIR/STTR points of contact, see http://www.navysbir.com/pm-poc.htm.

²³ NAICS codes relevant to SBIR/STTR are 541711 - Professional, Scientific, and Technical Services/ -- R&D in Biotechnology, and 541712 -

Professional, Scientific, and Technical Services/ -- R&D in the Physical, Engineering, and Life Sciences (except Biotechnology)

²⁴ See footnotes 14 and 16 - 18 above.

2. Are non-profit concerns eligible for SBIR/STTR awards?

No – the prime contractor must be a small business. However, non-profit concerns (i.e., universities, federally funded research and development centers, or research institutions) are required participants as subcontractors on STTR awards and may be subcontractors on SBIR awards.

3. Can a Phase III contract be initiated before the Phase II effort is complete?

Yes –the SBA SBIR and STTR Policy Directives indicate that a Federal agency may enter into a Phase III agreement at any time with a Phase I or Phase II awardee.

4. Can non-SBIR funding be added to a Phase II contract?

Yes –non-SBIR/STTR funds can be added to a Phase II contract to accomplish additional work. However, if the new work would significantly increase the value of the contract or is outside the scope of the tasks proposed under the competitive Phase II contract, a new contract would be more appropriate. A Phase III contract is preferred in this case so that DON receives credit for the Phase III award.

5. Can a Phase III requirement be procured using simplified acquisition techniques?

Yes – if the dollar value of the Phase III effort is below the Simplified Acquisition Threshold or if the procurement meets the requirements of Federal Acquisition Regulation (FAR) 13.5 for commercial items, the simplified process may be utilized.

6. Must an RFP or BAA be issued for a Phase III effort?

No – a Phase III contract could result from an unsolicited proposal, simplified acquisition solicitation, ordering process allowed under IDIQ or multiple award contracts, or a non-competitive award. No J&A is required if the award is based on any competitive solicitation (RFP, BAA, etc.). In all cases (competitive or non-competitive), the contract award must include the SBIR/STTR data rights clause (DFARS 252.227-7018).

7. Can a Phase III contract include options for additional work or additional quantities?

Yes – however, the use of options needs to be justified in accordance with FAR 17.205.

8. Must a Phase III contract be approved by the SBIR/STTR Program Office?

No – the DON SBIR/STTR Program does not approve Phase III contracts, though the SBIR/STTR Program Office should be informed of the procurement, and may provide advice and support. However, the contract must be correctly reported as a Phase III in the Federal Procurement Data System (FPDS-Next Generation), under the "Competition Information" category.

9. How do I know if a proposed effort is an SBIR/STTR derived product or process?

The product must extend, derive from, or complete efforts developed under a previously awarded Phase I or Phase II funding agreement, described in Chapter III below. The SYSCOM SBIR/STTR Program Office for the topic/award for Phase I/II can assist you in determining whether or not the work is appropriate for Phase III.

10. How long after the completion of a Phase I or Phase II contract can a Phase III be issued?

There is no statutory time limit for the issuance of a Phase III contract. However, under DFARS²⁵ the DoD SBIR/STTR awardee retains exclusive data rights for only five years after the completion of the Phase II effort.

²⁵ DFARS 252.227-7018 Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program Section (b)(4) *"SBIR data rights*. Except for technical data, including computer software documentation, or computer software in which the Government has unlimited rights under paragraph (b)(1) of this clause, the Government shall have SBIR data rights in all technical data or computer

(Note that the data rights clock restarts with each successive Phase III contract.) Thereafter, it would be reasonable to question whether the technology is exclusive to the SBIR/STTR firm. Also, given the rapid pace of technological development in many industries, it is possible that SBIR/STTR technology that is more than five years old may no longer be the most advanced technology available.

As a general rule, the longer the period of time since the completion of the Phase II, the more carefully you should review the status of the technology and other products available in the open market. As a minimum guideline, if five years have passed since the completion of the Phase II effort or most recent Phase III effort, a market survey should be performed to ensure that other sources are not available. However, the principal guidance for deciding to make a Phase III award is the statute language "... to the greatest extent practicable." (See pg. 17, below, on the SBIR/STTR reauthorization statute.)

11. Can multiple Phase III contracts be awarded to the same firm?

Yes – there is no limit in the number of Phase III contracts awarded to the same firm.

12. What data rights issues need to be addressed in a Phase III contract?

Data rights issues will vary. In some cases, the Phase III contract will be for the procurement of a commercialized product. In that case, the data rights provisions used in commercial contracts would apply. (See FAR 12.211 for data rights provisions under commercial contracts.)

Recent Congressional reauthorization of SBIR/STTR includes provisions clarifying that Congress intends to have the special "Rights in Data - SBIR Program" clause at FAR 52.227-20 apply to all three phases of the program. The SBA addresses this in its revised *SBIR Policy Directive* and clearly indicates that SBIR data rights apply to Phase IIIs as well as the first two phases of the program.

13. Is use of a Phase III contract mandatory if I am aware of other firms with similar capabilities as the former SBIR/STTR contractor?

No. If multiple sources are available for an item or if similar technologies are available on the open market, the Government's needs may best be met through a competitive procurement – which could be a small business set-aside. In general, the longer the period of time since the completion of the Phase II, the greater the likelihood that the technology is no longer unique. If more than five years have passed since the completion of the Phase II award or most recent Phase III award, a market survey should be performed to determine if the same or similar technology is available from multiple sources. The contract file should be documented regarding market survey results, and SBA notified if a competition is planned.

14. Are Phase III sole source awards permissible?

Yes – because the competition for SBIR/STTR Phase I and Phase II awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act. The Phase III award is made directly to the SBIR/STTR firm, but *not made under the Sole Source provisions of part FAR 6*. Therefore, an agency that wishes to fund an SBIR/STTR Phase III project is not required to conduct another competition in order to satisfy those statutory provisions. As such, in conducting actions relative to a Phase III SBIR award, in accordance with NMCARS 5206.302-5 (b), KOs may use the streamlined SBIR Phase III J&A template in Annex 13 of the NMCARS²⁶.

software generated under this contract during the period commencing with contract award and ending upon the date five years after completion of the project from which such data were generated."

²⁶ http://www.secnav.navy.mil/rda/Policy/nmcars1302r1.docx.

Phase III provides an opportunity for a directed award, which will bypass formal solicitation, evaluation, and award procedures. While a protest may be filed against such an award, it challenges clear authority in the SBIR/STTR statute and Policy Directives. Many DON acquisition program offices have successfully used directed Phase III awards as an efficient and cost-effective way to deliver innovative technologies. An unusual aspect of Phase III is that no size limits apply to the awardee, unlike Phase I and II. As a result, these directed award rights accrue to acquirers of SBIR/STTR firms and to firms that receive SBIR/STTR technology rights through novations.

15. Do SBIR/STTR data rights make it difficult to get out of an SBIR/STTR engagement?

No – you can conduct a competition using a performance-based specification and not using the SBIR/STTR Technical Data Package to predefine a specific implementation. A build-to-print award is not allowed unless agreed to by the SBIR/STTR company within five years or can be open beyond five years upon completion of the project. One can develop a second source for production competition by paying the SBIR/STTR company to qualify a second source similar to what has been done by a large business, to keep prices low or to ensure a surge production capacity. Creative methods for introducing competition include (1) selecting a second source and paying the SBIR/STTR company to qualify them, and (2) having the SBIR/STTR company find and qualify a second source and then compete between the SBIR/STTR and the second source in 50-50 or 60-40 splits based on price and performance.

16. Must a Phase III contract be a fixed price effort?

No – any type of contract can be used, with the KO making the final determination of contract type.

17. What happens if the Government is not happy with the performance of the company?

The company should be treated like any poor performing contractor: document the problem and terminate the contract if not resolved. The <u>Contractor Performance Assessment Reporting System (CPARS, at www.cpars.gov)</u> applies to Phase III contracts. Cost, schedule, and performance are all measures applied to SBIR/STTR contracts. In the event of contract termination or follow-on award to another company, SBA should be notified and a justification provided, following a procedure detailed in the aforementioned Policy Directives.²⁷

18. What funding should be used for Phase III contracts?

Government or industry funds – any color of money except SBIR/STTR funds.

19. How does a DON KO perform a Phase III status evaluation?

Phase III candidacy is rooted in statute language: "Federal agencies, to the greatest extent practicable, shall issue Phase III awards to the SBIR/STTR awardee that developed the technology."²⁸ Although an SBIR/STTR awardee is eligible for contract work that "derives from, extends, or completes prior SBIR effort and is funded with non-SBIR funds" – if that firm developed the subject SBIR/STTR technology – there is no right to a contract. Rather, that firm's Phase III eligibility imposes an obligation to engage in a J&A process whereby a DON KO, supported by the PM, determines whether the SBIR firm is (1) available to perform the requirement and (2) capable of doing so.

The pre/post-business clearances for negotiation with an SBIR/STTR firm should contain a documented assessment, based on price comparisons, past performance, and related evidence of competency needed to support a Phase III contract.²⁹ Although an SBIR/STTR awardee may request Phase III preference prior to or after

²⁷ SBA SBIR and STTR Policy Directives (February 2014); §4(c)(8). Also, see FAR 49402.

²⁸ Section 638, title 15, United States Code (15 U.S.C. § 638 [2012]), 1 subsection r(4).

²⁹ For a detailed instruction on how to perform a "Phase III preference" evaluation, see Chapter II Frequently Asked Questions, pp. 10–11.

an RFP, Request for Information or BAA has been issued, it is the KO's responsibility to determine Phase III status and execute contracts, with full documentation.

In one conceptual Phase III assessment scenario, the first step is to determine if the work that the SBIR/STTR firm would do to achieve a solicitation's requirement set meets the Phase III definition. If it does, the second step is to evaluate whether the firm could meet all or part of the requirement set. It is possible to split the requirement if the SBIR/STTR firm can only complete a portion, but that may not be an acceptable approach. (If it is determined that a single contract is needed and the SBIR/STTR firm is not proposing an approach that would meet the entire requirement, such as teaming or subcontracting, a KO would move forward with the open solicitation and notify bidders of the SBIR/STTR firm's capability as a potential subcontractor.)

The third step is to determine whether the firm has the capability to perform the work. (It would not need to have the capability prior to award, but would need to be able to show how it would develop that capability.) The KO should evaluate whether the proposal is competitive through rate comparisons, reviewing past performance, and executing market assessments. If the proposal meets required performance parameters, it can be approved. A solicitation to receive other bids for comparison could be published, but this should be a last resort and the KO must be extremely careful not to release any SBIR/STTR-protected data. If it is determined that the requirement is not a Phase III, or that the firm is not available or capable, that would end an SBIR/STTR firm's assertion of Phase III rights. All of this must be clearly documented in the DON SBIR/STTR Program Managers Database and the FPDS-NG.

Finally, agencies are required to report to the SBA – prior to the award -- all instances in which an agency awards research, development or production of a technology developed by an SBIR/STTR awardee to a business concern or entity other than the one that developed the SBIR/STTR technology.³⁰

For more information on Phase III contracting, contact:

Robert L. Smith Director, DON SBIR/STTR Programs 703-696-7954 <u>robert.l.smith6@navy.mil</u> Bradley D. Taylor SECNAV OSBP, SBIR Liaison 202-685-6486 brad.taylor@navy.mil

Chapter III: Overview of SBIR/STTR Phase III

III.1 Phase III Basics

The Phase III vehicle provides PMs, DPMs, and KOs with a powerful tool to address key affordability, innovation, and other DON strategic asset objectives. Phase III, discussed in the SBIR/STTR statute and Policy Directives, aligns with many DON technology transition functions and meets DON mission needs from research and services to production.³¹ Importantly, a Phase III contract may be awarded to a firm that has outgrown the small business size standard, to a novated awardee, or to a successor in interest such as a large acquiring company³².

³⁰ SBA SBIR and STTR Policy Directives (February 2014); § 4(c)(7). For reporting process and content, see § 4(c)(8).

³¹ SBA SBIR and STTR Policy Directives (February 2014); § 4(c)(4). This section is quoted at pg. 22, below.

³² Ibid; § 4(c)(6) and § 6(a)(5).

Phase III refers to "Work that derives from, extends, or completes an effort made under prior SBIR/STTR funding agreements ...,"³³ but is funded by sources other than SBIR/STTR set-aside funding. "Derives from" is a very broad test that refers to work that traces back to SBIR/STTR efforts performed under prior funding agreements. "Extends" means the work can be for *other applications* not researched or performed in prior SBIR/STTR efforts. "Completes" means commercialization of the prior SBIR/STTR research into a commercial product or application.³⁴ A Phase III may look like a regular procurement because it can be funded by procurement, Operations and Management? (O&M), construction, research, or any other type of agency funds (except SBIR Program funds); however, a Phase III can be any type of contract, including a subcontract, and may result from competition. But, as the SBA Policy Directives state, "A Phase III award is, by its nature, an SBIR award, has SBIR status, and must be accorded SBIR data rights..."³⁵

Phase III work is typically oriented toward commercialization of SBIR/STTR hardware or software technology. The competition for SBIR/STTR Phase I and Phase II awards satisfies any competition requirement of the Competition in Contracting Act³⁶. *Therefore, a PM who has identified a desirable Phase I or II SBIR/STTR product or process is not required to conduct another competition in order to satisfy these statutory provisions*. As such, in conducting actions relative to a Phase III SBIR award, in accordance with NMCARS 5206.302-5 (b), KOs may use the streamlined SBIR Phase III J&A template in Annex 13 of the NMCARS.³⁷

The SBIR/STTR reauthorization statute states Congress' intent that Phase III awards be made to the SBIR/STTR firms that created the technology so that these small businesses can commercialize it: "Federal agencies, to the greatest extent practicable, shall issue Phase III awards to the SBIR/STTR awardee that developed the technology."³⁸ Similarly, Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) first issued guidance recommending acquisition program use of Phase III in December 2008³⁹, with the requirement appearing in Interim DoDI 5000.02 in November 2013.

Each of the following types of activity, described with the same wording below in both SBA's *SBIR Policy Directive* and *STTR Policy Directive*⁴⁰, constitutes SBIR/STTR Phase III work:

- i. Commercial application (including testing and evaluation of products, services or technologies for use in technical or weapons systems) of SBIR/STTR-funded R/R&D financed by non-Federal sources of capital⁴¹;
- ii. SBIR-derived products or services intended for use by the Federal Government and funded by non-SBIR/STTR sources of Federal funding; and
- iii. Continuation of SBIR/STTR R/R&D that has been competitively selected using peer review or merit-based selection procedures and funded by non-SBIR/STTR Federal funding sources.

III.2 Phase III Contracts and SBIR/STTR Data Rights

SBIR/STTR data rights, addressed in detail in Chapter IV, convey to Phase III awards, as stated in SBA's current SBIR and STTR Policy Directives. SBIR/STTR data rights are established in the SBIR/STTR Reauthorization Act, described in FAR 52.227-20, FAR 27.709(h) dealing with data rights extension and DFARS 252.227-7018, and discussed in the Policy

³³ Ibid. Identical language is also found in the SBIR and STTR Reauthorization Act (see footnote below) at §5125.

³⁴ These definitions are found at Arnold & Porter LLP; *SBIR Data Rights: Making Sense of the SBIR Laws for the DoD SBIR Training Conference;* June 12, 2014.

³⁵ SBA SBIR and STTR Policy Directives (February 2014); § 4(c)(2).

³⁶ Competition in Contracting Act of 1984 (CICA), 41 U.S.C. 253.

³⁷ http://www.secnav.navy.mil/rda/Policy/nmcars1302r1.docx.

³⁸ P.L. 112-81 Division E; SBIR and STTR Reauthorization Act; §5108; pg. 1069.

³⁹ USD(AT&L); Small Business Innovation Research (SBIR) Program Phase III Guidance; 8 December 2008.

⁴⁰ SBA SBIR and STTR Policy Directives (February 2014); § 4(c)(1) in each separate Directive.

⁴¹ Guidance herein regarding SBIR/STTR Phase III pertains to the non-SBIR Federally-funded work described in (ii) and (iii). It does not address private agreements an SBIR/STTR firm may make, except for a subcontract to a Federal contract that may be a Phase III.

Directives. DoD contracts must include the DFARS clause 252.227-7018 subsection (b)(4), Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program:

"Except for technical data, including computer software documentation, or computer software in which the Government has unlimited rights under paragraph (b)(1) of this clause, the Government shall have SBIR data rights in all technical data or computer software generated under this contract during the period commencing with contract award and ending upon the date five years after completion of the project from which such data were generated."

The companion section in FAR 52.227-20 states:

"For a period of 4 years unless extended in accordance with FAR 27.409(h), after acceptance of all items to be delivered under this contract, the Government will use these data for Government purposes only, and they shall not be disclosed outside the Government (including disclosure for procurement purposes) during such period without permission of the Contractor, except that, subject to the foregoing use and disclosure prohibitions, these data may be disclosed for use by support Contractors. After the protection period the Government has a paid-up license to use, and to authorize others to use on its behalf, these data for Government purposes, but is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties."

One section of DFARS 252.227-7018, describing the use of an assertions table that specifically identifies intellectual property (IP), merits special attention. This clause requires the small business contractor to identify, in an attachment to the contract, its IP assertions on any technical data or software to be furnished to the Government with restrictions on use, release or disclosure. The assertions table identifies data the contractor or subcontractor will provide, plus the accompanying restrictions, the basis for assertion, the type of rights being asserted, and the source of the assertion.

The Department of Defense Inspector General (DoDIG), in its 2014 SBIR Report⁴², also noted an inconsistency between the Policy Directives and DFARS 252.227-7018 regarding IP protection with respect to the start date and length of the protection period afforded to SBIR/STTR data. Proposed updates to DFARS 252.227-7018, addressing such SBIR/STTR inconsistencies, are included in open DFARS case 2010-D001, "Patents, Data, and Copyrights," which was proposed on September 27, 2010, by the Defense Procurement Acquisition and Policy Directorate in the Office of the USD(AT&L).

Regarding acquisition program management of data rights, select DON documents highlight the role of PMs in performing data rights assessments as part of overall data management.⁴³ Overall, however, no negotiation of data rights can be made as a condition for award. Further, DFARS 252.227-7018 should be cited in appropriate subcontracts.

Chapter IV: SBIR/STTR Use by Program Executive Officers, Acquisition Program Managers, and Deputy Program Managers

IV.1 Requirements and Authorities

IV.1.1 DoD Instruction (DoDI) 5000.02 (7 JAN 2015) This Instruction states:

⁴³ See NAVSEA Acquisition Strategy Guide; April 2010; pg. A29, and NAVAIR Acquisition Guide 2014; October 2013; pg. 109.

"Program managers will establish goals for applying SBIR and STTR technologies in programs of record and incentivize primes to meet those goals. For contracts with a value at or above \$100 million, program managers will establish goals for the transition of Phase III technologies in subcontracting plans and require primes to report the number and dollar amount of Phase III SBIR or STTR contracts."⁴⁴

To review the relevant Phase Information Requirement in the Instruction, see Figure 1.

IV.1.2 SBIR/STTR Reauthorization Act Section 5122

Section 5122 states in pertinent part:

"INSERTION INCENTIVES - For any contract with a value of not less than \$100,000,000, the Secretary of Defense is authorized to (A) establish goals for the transition of Phase III technologies in subcontracting plans; and (B) require a prime contractor on such a contract to report the number and dollar amount of contracts entered into by that prime contractor for Phase III SBIR or STTR projects.

GOAL FOR SBIR AND STTR TECHNOLOGY INSERTION - The Secretary of Defense shall (A) set a goal to increase the number of Phase II SBIR contracts and the number of Phase II STTR contracts awarded by the Secretary that lead to technology transition into programs of record or fielded systems; (B) use incentives in effect on the date of enactment of the SBIR/STTR Reauthorization Act of 2011, or create new incentives, to encourage agency program managers and prime contractors to meet the goal under subparagraph (A); and (C) submit to the Administrator for inclusion in the annual report under subsection (b)(7)(i) the number and percentage of Phase II SBIR and STTR contracts awarded by the Secretary that led to technology transition into programs of record or fielded systems; (ii) information on the status of each project that received funding through the Commercialization Readiness Program and efforts to transition those projects into programs of record or fielded systems; and (iii) a description of each incentive that has been used by the Secretary under subparagraph (B) and the effectiveness of that incentive with respect to meeting the goal under subparagraph (A)."⁴⁵

IV.1.3 USD(AT&L) Memo "Implementation Directive for Better Buying Power 3.0" (9 APR 2015)

This USD(AT&L) memo addresses return on and access to small business research and development:

"Several actions will be taken to enhance access to and utilization of small business R&D by DoD. The Small Business Innovation Research (SBIR) program has been very successful in helping small creative businesses make progress in early stage technology development. It has been moderately successful in helping businesses transition from development to production The focus of this initiative will be to ensure DoD makes it as easy as possible for small businesses with creative and innovative technologies to work with DoD and have their technologies included in the products that DoD acquires.⁴⁶

IV.1.4 USD(AT&L) Memos "FY 2014-2018 Defense Planning Guidance" (11 APR 2012, 16 NOV 2012) The first USD(AT&L) memo in this series, dated 11 APR 2012, states:

⁴⁴ USD(AT&L); DoD Instruction 5000.02 (7 JAN 2015); Table 2. Milestone and Phase Information Requirements (Enclosure 1, pg. 48)

⁴⁵ National Defense Authorization Act of 2012; Title XVI SBIR and STTR Reauthorization Act; Sec. 5122, Public Law 112-81, 125 Stat. 1298.

⁴⁶ USD(AT&L) Memo "Implementation Directive for Better Buying Power 3.0" (9 APR 2015); pp. 15 - 16.

"... requires the Secretaries of the Military Departments and the Directors of the Defense Agencies to submit information regarding their plans to integrate and use SBIR/STTR technologies in programs of record under their cognizance with a contract over \$100M ... Populate (a) data chart summary of allocations and technologies that details how SBIR/STTR programs are planned for use in your Major Defense Acquisition Programs, or any program of record with a total obligation authority of over \$100 million in RDT&E or Procurement in any single year over the Defense budget. Provide a viewgraph which depicts existing and planned procurements (Phase III) of SBIR/STTR technology in your programs meeting the above reporting requirements."⁴⁷

IV.1.5 ASN(RDA) Memo "Tapping Into Small Business in a Big Way" (12 JAN 2015)

This memo states:

"...I am directing each Head of Contracts Activity (HCA) and Program Executive Office (PEO) to formulate their Small Business strategy for 2015 and 2016, clearly identifying how they will incorporate and promote Small Business participation as prime contractors and through sub-contract provisions across the breadth of contracts under their purview. This Small Business strategy should include measurable performance objectives, such as contract type, estimated value, schedule for award, and plan for competitionTo support this effort, within each program I am formally assigning each Deputy Program Manager as the Small Business Advocate responsible for identifying opportunities within the program for Small Business participation, serving as technical Point of Contact for Small Businesses interested in pursuing these opportunities, and for management of SBIR and STTR within their cognizance.

I look forward to reviewing PEO (and SSP) Small Business strategies in concert with quarterly program updates and will separately schedule reviews with HCA's on distribution commencing next quarter."⁴⁸

IV.1.6 ASN(RDA) Memo "Increased Use of Small Business Concerns" (19 JUL 2011)

This memo states:

"Subcontracting: Acquisition strategies for all ACAT I and ACAT II programs must address Small Business and SBIR/STTR engagement through the next milestone decision or during program sustainment, as applicable. The Technology Insertion Plan should identify specific SBIR/STTR technologies to be transitioned to meet program capability gaps and a schedule to deploy these capabilities. Program Managers and contracting officers should include a Small Business Incentive Fee for meeting specific small business and SBIR subcontracting levels in contracts where incentives are used."⁴⁹

IV.2 How Can SBIR/STTR and Phase III Awards Benefit My Program?

SBIR/STTR is a unique asset for PMs and DPMs: an assessment taken from an acquisition program's Research, Development, Technology and Evaluation (RDT&E) lines and returned as SBIR/STTR topics to generate innovative, costeffective solutions to program technology needs at component and system levels, addressing Key Performance Parameters (KPPs) and Key System Attributes (KSAs). Further, the SBIR/STTR Phase II practice of using decision gates to

⁴⁷ USD(AT&L); *FY 2014-2018 Defense Planning Guidance (Transition Planning for SBIR/STTR;* April 11, 2012.

⁴⁸ ASN(RDA); *Tapping Into Small Business in a Big Way* (12 JAN 2015)

⁴⁹ ASN(RDA); Increased Use of Small Business Concerns (19 JUL 2011)

advance and mature the technology means that SBIR/STTR can wring risk from innovative technologies. USD(AT&L) and ASN(RDA) have, therefore, cited SBIR/STTR capabilities in serial memos on acquisition improvement cited elsewhere in this document, and encouraged PMs and DPMs to champion SBIR/STTR use.

IV.2.1 How Does SBIR/STTR Align With Overall Acquisition Improvement?

DoD's policy for acquisition improvement is stated in the USD(AT&L) memo "Better Buying Power 3.0: Achieving Dominant Capabilities through Technical Excellence and Innovation"⁵⁰, which is organized into eight focus areas. SBIR/STTR relevance to four of these focus areas is summarized as follows:

- Achieve Dominant Capabilities While Controlling Lifecycle Costs SBIR/STTR agility and cost effectiveness vice large business has been well established in large Acquisition Category (ACAT) programs such as F-35 Joint Strike Fighter, SSN-774 Virginia-class submarine, MQ-8 Fire Scout, and also in expeditionary energy systems⁵¹.
- Incentivize Innovation in Industry and Government PMs have used new performance baselines achieved by SBIR/STTR technology innovations as examples for prime contractors and their vendors to follow.
- **Promote Effective Competition** SBIR/STTR firms' ability to serve as reliable second source providers establishes viability of small firms as competitors, and improves solution performance.
- Improve Tradecraft in Acquisition of Services SBIR/STTR firms can create tradecraft-related optimization solutions for institutional users, such as shipyards.

IV.2.2 What Kinds of Acquisition Program Problems Can SBIR/STTR Remedy?

Beginning with NAVSEA PEO Submarine (PEO SUB) in the 1990s, acquisition PMs have turned to SBIR/STTR to provide solutions to form, fit, cost, and schedule obstacles confronted in their programs, addressing, for example:

- **Risk reduction** SBIR/STTR funding can be used to buy down risk by using a gated Phase II approach and developing additional sources or approaches to the current funded prime effort.
- **Obsolete equipment replacement** SBIR/STTR can often provide alternate, cheaper innovative solutions to obsolescence than an Original Equipment Manufacturer.
- **Technology insertion** SBIR/STTR innovations can improve system or component performance, reduce costs, and address smaller-faster-cheaper KPPs and KSAs.
- Increase competition SBIR/STTR solutions can motivate mainstream suppliers to match SBIR/STTR performance.

IV.2.3 What Are Some Examples of Successful Acquisition Program Use of SBIR/STTR?

(see Figure 4, below)

⁵⁰ USD (AT&L); *Better Buying Power 3.0 Guidance and Actions* (9 APR 2015)

⁵¹ For SBIR/STTR examples in these ACAT programs, see Figure 4.

| Issue | Specific Problem | SBIR/STTR Firm & Solution | Results |
|---------------------------|-------------------------------|--------------------------------|---------------------------------|
| Excessive O&M costs | Numerous core fluids: excess | METSS – synthetic oils and | Reduced hydraulic system |
| NAVSEA PEO SUB | cost and maintenance | fluids | maintenance |
| Need NextGen algorithms | Limited imaging and mine | Arete – algorithms | COTS solution delivered |
| PEO LCS | detection | | quickly, cost-effectively |
| Reliability delta | Marginal component | TRI – accelerated life testing | Enabled system/component |
| NAVSEA PEO SUB | reliability, system problem | | reliability projection |
| Total Ownership Cost | LPT doublet vane accrues | DVTI – thermal barrier coating | Coating process saves \$62M |
| NAVAIR JPO F-35 | excessive wear | | on 2,400 engines |
| Reduced force capability | Deployed force lacks a light, | Magnum PI – towable trailer | Light, unitary solution exceeds |
| MARCOR PEO | power and environmental | combining power generation | field power and HVAC needs; |
| | control unit | and HVAC management | increases force capability |
| Urgent operational need | Inadequate counter-pirate | RDRT – radar system upgrade | JUON 0364 met with upgrade |
| NAVAIR PEO U&W | tracking capability | | to MQ-8 and MH-60R |
| Obsolete ops capability | Ineffective joint anti-terror | Ticom Geo – sensor grid | DON SBIR technology |
| SPAWAR PEO C4I | sensing capability | network suite | deployed per JROC decision |
| Acquisition materiel cost | T-AKE cargo hold stanchions | KaZak – composite stanchions | \$10M procurement savings |
| NAVSEA PEO Ships | too heavy and costly | | per hull, 20% weight savings |

In addition to this list⁵², other examples can be found at <u>www.navysbir.com</u> under "Success Stories".

IV.2.4 Summary of SBIR/STTR Benefits to Acquisition Programs

In addition to addressing immediate technology needs of acquisition programs, use of SBIR/STTR has other benefits:

- Successful use of SBIR/STTR responds to the requirements of DoDI 5000.02 and supports USD(AT&L) and ASD(RDA) guidance on small firm contributions and use of SBIR/STTR.
- Many SBIR/STTR firms have the skills to build complex components for a ship, amphibious vehicle, helicopter or aircraft, with efficiencies of cost, schedule, and performance supporting KPPs and KSAs.
- Successful use of SBIR/STTR builds confidence for the PM or DPM to offer SBIR/STTR firms a bigger role throughout an acquisition program's development, operational, and obsolescence phases for efficiencies noted above.
- SBIR/STTR policy supports Government-only use of IP owned by SBIR/STTR awardees, with rights reverting to Government after the number of years specified in the SBIR/STTR contract.
- Experience with SBIR/STTR topic development, Phase I and Phase II awards, and "test driving" SBIR/STTR firm collaboration builds PM and DPM confidence in the utility of the SBIR/STTR programs and their awardees.

IV.3 How Do I Respond to Statutory and Legislative Requirements for Use of SBIR/STTR Technologies?

IV.3.1 Goal Setting⁵³

The SBIR/STTR Reauthorization Act authorizes SECDEF to set the following SBIR/STTR goal⁵⁴:

⁵² DON SBIR/STTR Program Office; SBIR/STTR As An Acquisition Program Management Tool; January 2013.

⁵³ OSD's Office of Small Business Programs (OSBP) commenced SBIR/STTR goal setting with USD(AT&L) memo "FY2014-2018 Defense Planning Guidance (Transition Planning Information for SBIR and STTR)", 16 November 2012.

⁵⁴ See footnote #6; Title XVI *SBIR and STTR Reauthorization Act;* Sec. 5122.

"For any contract with a value of not less than \$100,000,000, the Secretary of Defense is authorized to (A) establish goals for the transition of Phase III technologies in subcontracting plans..."

The Act also requires SECDEF to set a related SBIR/STTR goal⁵⁵:

"The Secretary of Defense shall (A) set a goal to increase the number of Phase II SBIR contracts and the number of Phase II STTR contracts awarded by the Secretary that lead to technology transition into programs of record or fielded systems."

For example:

- 15% of those Phase II contracts supported by the Command, PEO or Acquisition Program and tracked by a Plan of Record should receive Phase III contracts within five years
- ... or,
 - Within five years, the number of dollars applied to SBIR/STTR technologies should be five times the program's SBIR + STTR assessment, including prime contracts and subcontracts.

DoDI 5000.02, however, requires SBIR/STTR goal setting by ACAT PMs⁵⁶:

"For contracts with a value at or above \$100 million, program managers will establish goals for the transition of Phase III technologies in subcontracting plans and require primes to report the number and dollar amount of Phase III SBIR or STTR contracts. Not required at Milestone B."

In this case, goal setting options could include PM/DPM collaboration with a Prime contractor to:

• establish an SBIR/STTR Phase III performance baseline of not less than 20% of the total dollar value of the prime contractor's Small Business Subcontracting Plan.

... or,

• establish that SBIR/STTR participation will represent 10% of the total small business goal of 20% participation in the program contract, by total dollar volume.

Alternatively, using an innovative approach tried by some PEOs, the PM/DPM may set SBIR/STTR goals for each Milestone as a percentage of program RDT&E, production, and post-LRIP technology insertion. In this scenario, SBIR/STTR participation is proposed and broken out by purpose, as in the following simulation:

| Purpose | MS 0 (%) | MS A (%) | MS B (%) | MS C (%) | | |
|---|----------|----------|----------|----------|--|--|
| Risk reduction | 70 | 40 | 10 | 0 | | |
| Technology insertion | 0 | 30 | 50 | 30 | | |
| Obsolete equipment replacement/tech refresh | 0 | 0 | 10 | 50 | | |
| Competition or second source | 30 | 30 | 30 | 20 | | |

| Figure 5: SBIR | /STTR Goal | Setting By | Milestone | (MS) |
|----------------|--------------|------------|-----------|--------|
| inguic 3. 3Din | / 51 111 000 | Secting Dy | The score | (1113) |

Note: Figure 5 illustrates how risk reduction needs are addressed using SBIR/STTR at the start of a program, shrinking as the program progresses through the acquisition life cycle. Later in a program, obsolete replacement needs can be addressed by SBIR/STTR as obsolete equipment becomes a bigger issue.

⁵⁵ Ibid.

⁵⁶ USD (AT&L); *DoD Instruction 5000.02* (7 JAN 2015); Table 2. Milestone and Phase Information Requirements (Enclosure 1, pg. 48). OSD Office of Small Business Programs began designing a resonant pilot program in January 2014, but did not complete the effort.

In this goal-setting scenario, there is a further breakout of proposed SBIR/STTR participation by Milestone and by purpose, according to three contracting avenues: Government Furnished Equipment (GFE/GFI including lab facilities), Field Activity, and Prime Contractors. As decisions are made by the PM/DPM, these goal statements are then fleshed out in SBIR/STTR factual and budget detail, with this detailed information then entered into the Acquisition Strategy, Acquisition Plan and related documents. (See IV.3.3 Incorporating SBIR/STTR Use into Key Acquisition Documents, below.)

In summary, a common sense approach to goal setting is recommended, using readily measured metrics.

IV.3.2 Finding Potential SBIR/STTR Solutions

Most DON ACAT I, II, and III programs submit proposed SBIR/STTR topics in response to program needs. These topics, if approved for solicitation publication and then awarded, are a PM's or DPM's first choice for finding potential SBIR/STTR solutions. Further, the SBIR/STTR database caches thousands of developed technologies.

An alternate "reachback" strategy, devised and used by various PMs and DPMs, entails use of a context-based search engine, www.navysbirsearch.com, to search the SBIR/STTR inventory of projects already developed and potentially adaptable to meet program needs. (Note that SBA's SBIR and STTR Policy Directives describe award limitations including award of one Phase II award and one sequential Phase II award per SBIR/STTR topic, per company. However, unlimited Phase III contracts can be made to Phase I or Phase II projects.⁵⁷) This tool, at www.navysbirsearch.com and also found on the homepage of www.navysbir.com under "Search Awards Database", supports efficient search of the DON SBIR/STTR database, as well as SBIR/STTR projects originated by other DoD components. Search filters and a concept cloud enable fast, accurate searching of a very large cache of SBIR/STTR projects. Many project files are supplemented by information about the awarded firm's capability.

IV.3.3 Incorporating SBIR/STTR Use into Key Acquisition Documents

DoDI 5000.02 requires:

*"For contracts with a value at or above \$100 million, program managers will establish goals for the transition of Phase III technologies in subcontracting plans Not required at Milestone B."*⁵⁸

Further, as noted above, the ASN(RDA) memo Tapping Into Small Business in a Big Way states:

"...I am directing each Head of Contracts Activity (HCA) and Program Executive Office (PEO) to formulate their Small Business strategy for 2015 and 2016, clearly identifying how they will incorporate and promote Small Business participation as prime contractors and through sub-contract provisions across the breadth of contracts under their purviewTo support this effort, within each program I am formally assigning each Deputy Program Manager as the Small Business Advocate responsible for identifying opportunities within the program for Small Business participation, serving as technical Point of Contact for Small Businesses interested in pursuing these opportunities, and for management of SBIR and STTR within their cognizance."

One compliance approach for HCAs and PEOs, and for DPMs in acquisition programs, is to develop the required Small Business strategy, inclusive of SBIR/STTR content (see Sec. IV.3.8 below), by using a template that DON

⁵⁷ SBA SBIR and STTR Policy Directives (February 2014); § 4(b)(5) and § 4(c).

⁵⁸ See footnote #1.

Office of Small Business Programs is expected to make available in 2016. DPMs can also track progress of an SBIR/STTR portfolio using optional tools described below in sections IV. 3.4 through IV.3.7.

Further, SBIR/STTR detail can be captured in program health reporting required across a program life cycle by using DON's Probability of Program Success (PoPS) briefing templates⁵⁹, specially designed for ACAT I-II programs' "Two-Pass/Six-Gate" system for Gate Reviews, Acquisition Milestone Reviews, and other program reviews. PoPS templates identify all key plans across the life cycle from the Analysis of Alternatives (AoA) in pre-MS A to the Life Cycle Sustainment Plan (post-MS C), successive iterations of these plans at key MSs, and asset obsolescence plans. One strength of this SBIR/STTR management approach is that it builds on an already required ACAT I-II effort.

Further, PMs and DPMs can develop a notional PoPS SBIR/STTR checklist (see Figure 6, below) to ensure sufficient SBIR/STTR content in each of these key plans, including a list of specific SBIR/STTR technologies to be transitioned – such as SBIR/STTR projects emanating from topics devised by an acquisition program or from "reachback" projects.

| AT&L Plan Sequence | SBIR/STTR Projects List (Y/N) | Projects Quad Charts (Y/N) |
|-------------------------------|----------------------------------|-------------------------------|
| Analysis of Alternatives | | |
| Acquisition Strategy or Plan | | |
| Initial Capabilities Document | | |
| Initial Technical Review | | |
| Capability Development Doc | | |
| Tech Development Strategy | | |
| Corrosion Prevention Strategy | | |
| T&E Strategy | | |
| Technology Insertion Plan | | |
| System Design Spec's Plan | | |
| T&E Evaluation Master Plan | | |
| Life Cycle Sustainment Plan | | |
| Obsolescence Plan | | |

Figure 6: Probability of Program Success (PoPS) SBIR/STTR Checklist (notional)

IV.3.3.1 SBIR/STTR Inclusion in the Acquisition Strategy and Acquisition Plan

Regarding preparation of Acquisition Strategy (AS) and Acquisition Plan (AP) documents, the Small Business Concern (SBC) and SBIR/STTR inclusion recommendations below are based on a 2015 AS exercise with NAVSEA's LCS and *Ohio*-class Replacement programs, a 2012 AS exercise with NAVAIR's S-92 Presidential Helicopter Replacement Program, and a 2008 AP exercise with NAVSEA's DDG-1000 program, then known as DD(X).

The **Acquisition Strategy** provides acquisition management an opportunity to satisfy a major DON Requirement with efficiencies of practice, economies of scale, and technical achievement, utilizing large and small business – and more specifically SBIR/STTR contractors. Regarding AS development, mission planning requirements for

⁵⁹ ASN Acquisition Policy (AP); *Naval PoPS V2.3 Guidebook;* July 2011.

Defense Acquisition Programs (DAPs) generally employ the Joint Mission Planning System. That said, three new factors support SBIR/STTR inclusion in AS and AP documents – although such inclusion is not mandatory.

- Open Systems Acquisition innovations such as the Acoustic Rapid COTS Insertion (ARCI) and Open Group Future Airborne Capability Environment (FACET) models⁶⁰ and related open system architecture/design practices have created SBIR/STTR on-ramps at component and subsystem levels for air, surface, underwater and unmanned platforms.
- Small Business Goals New emphasis on Small Business and SBIR/STTR goals, including subcontracting goals, necessitate an SBIR/STTR inclusion strategy for acquisition programs contracted at >\$100M.
- SBIR/STTR Success DAP pilots with platforms as diverse as SSN-774, MQ-8, DDG-51 and F-18 have demonstrated SBIR/STTR capability, not just at pre-MS A but across all stages of a platform's life cycle.

The Acquisition Strategy is a core platform plan of Key Elements that is periodically refreshed to ensure platform performance across its life cycle. The AS is a required, essential document in planning for SBIR/STTR success and financing technology maturation to guarantee that success. There are several DAP Key Elements where SBIR/STTR inclusion could be specified in the AS, as cited in Sec. IV.2.2, above:

- **Risk reduction** SBIR/STTR can buy down risk by using a gated Phase II approach.
- **Obsolete equipment replacement** SBIR/STTR can often provide alternate, cheaper innovative solutions to obsolescence than an Original Equipment Manufacturer can provide.
- **Technology insertion** SBIR/STTR innovations can improve system or component performance, reduce costs, and address smaller-faster-cheaper KPPs and KSAs.
- Increase competition SBIR/STTR solutions can motivate mainstream suppliers to match SBIR/STTR performance.

AS sections suitable for SBIR/STTR inclusion are cited in italics, below, with candidate guidance in bullets:

Executive Summary

- A DAP Small Business strategy, or "Utilization Strategy", should be referenced.
- A companion Small Business strategy should be required of the DAP contractor with consequences specified for non-compliance with participation targets established by that contractor.
- Small business and SBIR/STTR participation should be preplanned, in both systems engineering design of the program's software/hardware architecture and entailed testing and evaluation (T&E) and logistics design of program training and Operations and Support (O&S).
- The targeted percentage of Government content for small business accomplishment, and the SBIR/STTR target within that small business target, should be cited; these targets should be specified for retention throughout DAP O&S.
- SBIR/STTR data rights should be recognized, cited, and planned to be honored.

Acquisition Approach

- Small business use should be a Key Element with SBCs admitted to all "full and open competition" opportunities, to SBC set-asides, and to the SBIR/STTR program.
- The Analysis of Alternatives (AoA) should identify the SBIR/STTR inventory as a potential technology resource for offerors seeking solutions that meet Initial Capabilities Document (ICD) requirements. "Reach backs" are encouraged, and multiple SBIR/STTR Phase II awards supported.

⁶⁰ https://www.opengroup.us/face/indes.php

- All contracted design data should be made available early and often, including the Preliminary and Critical Design Reviews (PDR, CDR).
- Government Systems Integration Laboratory (SIL) simulation and simulation systems should be developed by SBCs.
- Industry should manage integration of GFE i.e., focus on anticipating and mitigating GFE integration risk -- and mine SBIR/STTR resources to ensure competition and affordability. DPMs should be selective in establishing what products can be managed and developed as GFE.
- If the Government manages integration of GFE, an SBC should do independent Verification & Validation (VV) work to assess DoN labs' schedule and technical performance.
- A new risk reduction initiative should be devised, such as an "alternative module" approach using Modular Open Systems Architecture (MOSA) precepts, focused on a priority system vulnerable to risk, through a "full and open" competition that incentivizes small business participation.

Evolutionary Acquisition Approach

• Absent capability spirals or block upgrades, Pre-Planned Product Improvements (P3I) may be identified for mission modules in the Capability Development Document (CDD). SBIR/STTR should be considered as a P3I resource for both technology refreshment and insertion to ensure cost control and related KPPs.

Preliminary Program Schedule

• Evaluation of activity associated with the DAP Small Business Strategy – including contracting and T&E -- should be included in the pre-MS A In-Progress Review (IPR) and at all subsequent decision points along the acquisition path.

Risk and Risk Management Approach

• DAP will observe the SYSCOM Instructions for Risk Management (ISR), which should be amended to include reference to the SBIR/STTR role in DAP technology risk mitigation.

Principal Programmatic Risks

- SBIR/STTR should be identified as a technology resource for risk mitigation in the government component via the communications suite development plan, to ensure flexibility to accommodate periodic communications technology upgrades.
- SBIR/STTR should be identified as a technology resource for risk mitigation in the industry component via the weight management plan documented in the CDD and required of offerors in the Engineering and Manufacturing Development (EMD) RFP.

Competition Strategy

• SBIR/STTR should be identified and utilized to solve obsolete equipment issues, to establish second sources where none exist, and for other business strategies useful to the Program Office.

Analysis of Alternatives (AoA) Results

• At AoA outset, emergent SBIR/STTR and other SBC technologies should be considered at the component, subsystem, support or system level of the primary solution.

Sustainment Strategy

• SBIR/STTR should be identified as an opportunity to use SBCs and SBIR/STTR to automate sustainment depots, establish training and trainers, and reduce personnel.

- SBIR/STTR should be specified as a source of new technologies for tech refresh work, and for tech insertion of mechanical components with prognostic and monitoring capabilities.
- For long-term sustainment, a Performance-Based Logistics (PBL) contract should be competed with opportunity for SBCs to propose lowest-cost.

Major Contracts Planned (by prime contractor)

- The industry Subcontracting Plan should be included in the required Major Contracts Table, along with identification of the role small business and SBIR/STTR technologies are to play in the AS, as lower-tier vendors, via a Small Business Subcontracting Plan.
- Sub-Contract Competition should summarize the small business requirement, including the role of SBIR/STTR awardees. Reporting on the latter by industry should be cited as part of the small business participation reporting requirement.
- A chart should be provided showing what percentage of the DAP fiscal total is projected to go to small business based on small business participation requirements across the major contracts.

For reference, NAVSEA's "Acquisition Strategy For Ohio Replacement (OR) Program"⁶¹ states:

"As the OR Program matures, maximized competition at the Tier 1 level for subcontracts will continue to be pursued. The Navy Small Business Innovation Research (SBIR) Program will also be used to develop new technology options to address requirements for the OR SSBN through a competitive process.

The OR Program intends to use the SBIR and Small Business Technology Transfer (STTR) Programs, both managed by the Office of Naval Research (ONR), to identify alternative technologies and processes that may provide improved performance and affordability. The Program will also leverage SBIRs and STTRs issued and managed by other programs within the Navy and DoD to the maximum extent practical, with particular emphasis on PEO Submarines, SSP, NAVSEA, and ONR.

Where feasible (in accordance with 15 U.S.C § 638), the OR Program will include performance incentives on future contracts to encourage the contractor to increase small business contracting, including Small Business, Woman Owned Small Business, Small Disadvantaged Business, and Minority Owned Small Business. Additionally, contracts will continue to include specific goals, as approved by the NAVSEA Small Business Office (NAVSEA 02X)."

Planned Contract Initiatives: Incentive Structure

• Small business incentive fees should be identified in conjunction with subcontractor requirements for small business participation, with specific reference to firms with SBIR/STTR technologies.

Source Selection Evaluation

- Participation of SBIR/STTR awardees in the Small Business Subcontracting Plan and Small Business strategy should be cited as an evaluated technical source selection criteria in the DAP Source Selection Plan. Criteria are then enforced by incentives or penalties during contract execution.
- "Early and often" design disclosure which can enable SBIR/STTR participation, and validate openness of major system design can be evaluated, and cited as a contract award consideration.

Sources and Considerations for Small Business Participation

• As DAP small business participation targets are prescribed here, SBIR/STTR participation thresholds and targets within the SBC targets should be cited, with consequences specified for non-compliance.

⁶¹ NAVSEA PEO Sub PMS397; June 15, 2015; pg. 16

- Small business prioritization should be cited regarding future contracted support for hardware and software procurements, with appropriate participation targets.
- Industry and the PMO should target all SBC categories for achievement. Establishing an SBC demand for the prime contractor might offer broad but focused coverage of each SBC subcategory.

Subcontracting Plan/Small Business Participation

• Searching of SBIR/STTR project inventories should be cited as a preferred method used to identify potential small business sources, in implementing the contractor's Small Business strategy. This should be done continuously throughout the program lifecycle.

Technical Data Rights Strategy

• SBIR/STTR data rights should be qualified as compliant with the DAP technical data rights strategy.

The **Acquisition Plan** (AP) provides requirements for any particular procurement, and SBIR/STTR procurements can be specified in APs. These APs may be specific to one acquisition program; or, a PEO-wide AP for all related SBIR/STTR procurements may be issued. Separate APs, open to SBIR/STTR bidding, should be considered for DAP procurements apart from the prime contract or by each individual SBIR/STTR procurement to avoid cumbersome preparation of SAMPs for each procurement. J&Ss are required for each SBIR/STTR procurement.

IV.3.3.2 Developing an SBIR/STTR Plan to Supplement a Small Business Strategy

As previously noted, the ASN(RDA) memo *Tapping Into Small Business in a Big Way* requires PEO-level formulation of a Small Business strategy, with DPM support as "... *the Small Business Advocate responsible for identifying opportunities within the program for Small Business participation, serving as technical Point of Contact for Small Businesses interested in pursuing these opportunities, and for management of SBIR and STTR within their cognizance."* If an SBIR/STTR plan is to be embedded in the Small Business strategy, PEO-level content could be modeled on the following:

- Describe your approach to balanced pursuit of small business and SBIR/STTR goals.
- Describe your working relationship with SBIR/STTR transition management.
- Describe modifications or CLINs added to your Contracting Plan to support increased use of SBIR/STTR technologies.
- Describe your SBIR/STTR goal setting process as required by DoD Instruction 5000.02.
- Describe how you gather from your Prime information re SBIR/STTR subcontracting on contracts valued at over \$100M.
- Describe your approach to ensure against deferral of SBIR/STTR transitions by reason of conflict over SBIR/STTR data rights.

For an Acquisition program-level SBIR/STTR plan, content could be modeled on the following:

- Describe how SBIR/STTR goals align with your program's Acquisition Strategy.
- Describe incorporation of SBIR/STTR technologies into your Systems Engineering Plan, using Open Systems Architecture or related precepts.
- Describe incorporation of SBIR/STTR technologies into program logistics, including Testing and Evaluation work, and program sustainment across its life cycle.
- Describe your SBIR/STTR portfolio planning process for up to two subsequent years, balancing the number of contracts to be awarded with benefits accrued over the life of the program.

Using a table format for the same content yields a template that simplifies SBIR/STTR planning:

Alignment of small business and SBIR/STTR goals, assurance of execution to meet goals.

| Action | Small Business | SBIR/STTR |
|---|--------------------------|--------------------------------|
| Goal setting as required | (y/n plus summary) | (y/n plus summary) |
| Citation in PoR Acquisition Strategy and | (y/n plus summary) | (y/n plus summary) |
| Acquisition Plan | | |
| - in Systems Engineering Plan | " | (y/n plus summary) |
| - in T&E Plan | " | (y/n plus summary) |
| in sustainment strategy | " | (y/n plus summary) |
| Linkage with key SB and SBIR/STTR staff | (y/n plus Small Business | (y/n plus SBIR/STTR Transition |
| | Professional name) | Manager name) |
| Industry reporting re subcontracts to | х | (y/n plus summary) |
| SBIR/STTR awardees | | |
| Budget projections for two+ years | (y/n plus summary) | (y/n plus summary) |

Contracting Plan mods to support use of small business and SBIR/STTR technologies.

| Additional CLINs | Other Modifications | | | | | | |
|------------------|---------------------|--|--|--|--|--|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Such an Acquisition-level SBIR/STTR plan could be presented in an ACAT Milestone Review, along with a platform graphic (see Figure 9: Platform Graphic of Focal SBIR/STTR Technologies) and a list of focal SBIR/STTR projects, to comply with *Tapping Into Small Business in a Big Way*.

Alternatively, an SBIR/STTR plan based on content described above could be required in Section L of an offeror's response to a Request for Proposals (RFP) and evaluated for award consideration, with a post-award penalty for non-compliance plus incentive for compliance. (See Appendices, below.)

IV.3.4 Incorporating SBIR/STTR Projects in System/Component Technology Roadmaps

Profiling SBIR/STTR projects in technology roadmaps – while not required -- is a practice designed to help ensure program-focused maturation and its insertion. SBIR/STTR project references should minimally include the project topic number, title, firm name, current Phase, current contract start and end date, transition-insertion funding/budget/delta data against a timeline, platform system and component, and the transition-insertion window for the subject technology. The template displayed in Figure 7 allows for visualization of multiple technologies addressing various Enabling Capabilities across a program's life cycle, with fiscal support detail.

Figure 7: Technology Transition Roadmap Template

| CATEGORIES | FY-1 | FY | FY+2 | FY+3 | FY+ | 4 FY+5 | FY+6 | FY+7 | FY+8 | FY+9 | FY+10 FY+11 | GA | PS | | |
|--|--------------------------------|--------|-------|----------|---------|-----------|----------|-------------|------|-----------|-------------|-------------|------------|--|--|
| COMBAT SYSTEMS ELEMENT(S): | | | | | | | | | | | | - | | | |
| | | * | P | roductio | nl | | | | | | - | 2 | Secondary | | |
| ELEMENT 1 | | | | TL | *** | Deve | elopment | t of Events | | uction II | | Primary | | | |
| | Element I Operations & Support | | | | | | | à | Sec | | | | | | |
| PROGRAM FOCUS AREA (PFA): Title of PFA | A of Ele | ment 1 | | 1 | Ш | | | | | | | - | 100 | | |
| Enabling Capability 1 of PFA A | | | | | | | | | | | | | | | |
| SBIR (Nxx-xxx) "Title" - Company A | 0.30 | 0.15 | | | | | | | | | | PR xx-vv | PR xx-x | | |
| Enabling Capability 2 of PFA A | | | | | | | | | | | | | | | |
| FNC PIllar(YYY-FYxx-xx) "Title)" - DNR Code AA | 0.00 | T | | | | | | | | | | PR xx-yy | | | |
| SBIR (Nxx-xxx) *Title* - Company B | 0.08 | TBD | TBD | Transi | tion Ti | BD upon . | PH II DO | ownselec | t | | | PR xx-yy | | | |
| SBIR (Nxx-xxx) "Title" - Company C | 0.08 | TBD | 10000 | | | 9D upon | | | | | | PR xx-yy | | | |
| Enabling Capability 3 of PFA A | | | | | Ш | 12 | | | | | | | | | |
| FNC PIller(YYY-FYxx-xx) "Title)" - ONR Code BB | 5.20 | 5,35 | 4.09 | | μII | | 1 | | | | | PR xx-yy | | | |
| Enabling Capability 4 of PFA A | | | | F | | | | | | | | | | | |
| IWS 3A Insensitive Munitions Integration | 5.00 | TBD | TBD | TBD | 16 | D TBD |) | | | | | | | | |
| SBIR (Nxx-xxx) *Title* - Company D | 0.08 | 0.30 | 0.30 | 0.15 | | | | | 1.5 | | | STO 1 | | | |
| Enabling Capability 5 of PFA A | | | | | | | 12 | | | | | | | | |
| FNC Pillar(YYY-FYxx-xx) "Title)" - ONR Code CC | 4.91 | 5.87 | 4.39 | | | | 12 | 1 | 157 | | | PR xx-yy | | | |
| PROGRAM BUDGET (\$M) | 10.74 | | 8.78 | | | | | | | | | | - | | |
| REQUIRED (\$M) | 10.74 | 11.67 | 8,78 | 1 | 1 | | | | 1 | | V | GA | PS | | |
| DELTA (\$M) | 0.00 | 0.00 | 0.00 | | - | | | | 1 - | | | | | | |

A template for this chart is available on www.navysbir.com.

IV.3.5 Quad Charts As Tracking Tools

While DoDI 5000.02 does not provide plan and funding templates for PM and DPM use, the DON SBIR/STTR Transition Program (STP) provides a quad chart that can be adapted to track individual SBIR/STTR projects listed in a Technology Roadmap. The quad chart in Figure 8 is based on OPNAV N80 practice, but other versions exist and there is no single DON-approved format.

| Figure 8: Quad Chart Template | | | | | | |
|---|---|--|--|--|--|--|
| SBIR/STTR Project Title | | | | | | |
| Topic #: Awarded | | | | | | |
| Proposed Transition Action | Funding – Proposed Changes | | | | | |
| Detailed description of proposed action (Examples: Action reduces procurement by X in FY08 and X through FYDP; delays IOC X years; requires sustainment of legacy system costing \$X in FYXX) | (TY\$M) - RDTE FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FYDP BES09 investment 50.0 50.0 50.0 50.0 50.0 50.0 50.0 300.0 Revised Investment 45.0 45.0 80.0 45.0 60.0 45.0 45.0 320.0 Proposed Savings (5.0) (5.0) 30.0 (5.0) 10.0 (5.0) (5.0) 20.0 | | | | | |
| Should include stakeholder position (concur / non-concur and why) | | | | | | |
| Broject Description | Cost to Complete: \$XXM / QTY to Complete: XX (for proc programs) Investment to date: \$XXM – Entire program funding from budget currently in execution and all prior program years Pros / Cons | | | | | |
| Project Description | | | | | | |
| Description of technology deliverable Requirement OPNAV Sponsor Technical Sponsor Technology Warrant Holder | Risk Technical Schedule Cost Business capability Acquisition Warfighting Impact Pros Pro 1 (Business related: preserves MYP, maintains MSR, etc) Cons | | | | | |
| | Con 1 (Business related: violates MSR, increased unit cost, etc) | | | | | |

IV.3.6 Developing a PEO Operating Instruction

A highest-level method of ensuring acquisition program inclusion of SBIR/STTR technologies entails signing out a PEO Operating Instruction (see example in Appendix 1) that prescribes the details of such inclusion.

IV.3.7 Enabling SBIR/STTR Transition Managers

Increasingly, PEOs are benefiting from support by SBIR/STTR Transition Managers tasked with fully documenting project transition and assisting development and execution of project transition plans. SYSCOM SBIR/STTR PMs should be consulted about funding alternatives to support appointment of Transition Managers at PEO and ACAT PMO levels.

IV.3.8 Reporting

The SBIR/STTR statute not only requires technology transition goal-setting (see IV.3.1), but also requires annual, special SECDEF reporting of Phase III contracting, as well as subcontracting to SBIR/STTR firms and a description

of incentives used to accomplish such subcontracting. The Office of the Secretary of Defense's Office of Small Business Programs (OSD OSBP) is responsible for development and execution of new reporting protocols.

DD Form 2579 (Small Business Coordination Record), currently in use throughout the DoD acquisition enterprise, provides an SBIR/STTR contracts recordation venue in a simplified template that offers administrative efficiencies. If Phase III contracts are recorded using this form, in addition to being entered accurately in FPDS-NG, more accurate reporting of SBIR/STTR-related contracts could result.

An innovative form of SBIR/STTR recordation using data visualization precepts is reflected in the following platform graphic, developed by NAVSEA PEO Submarine for its *Virginia*-class program:

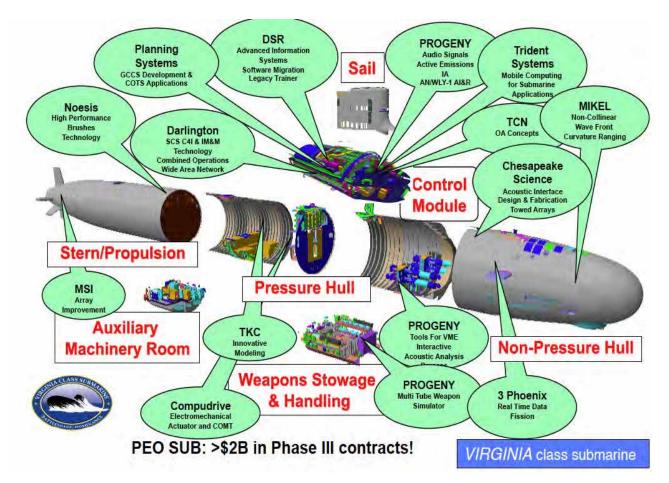


Figure 9: Platform Graphic of Focal SBIR/STTR Technologies

IV.4 How Do I Work With My KOs and SBP to Take Advantage of SBIR/STTR?

IV.4.1 Making SBIR/STTR Phase III Awards – The Phase III Package

When an SBIR/STTR technology has been identified for use in addressing a component- or system-level need, but the technology needs further development and testing through mission funding, a PM or DPM can prepare a "Phase III Package" to review with the pre-award procurement KO or post-award administrating KO and the SBP

to develop an appropriate acquisition strategy that will result in a Phase III contract. The components of a Phase III Package are:

- A brief rationale that the program product or process to be procured is in fact SBIR/STTR-developed, explaining how this is an extension of or derivation from prior SBIR/STTR efforts and the context of how

 as a Phase III it will be applied in the program, for example, as a risk reduction effort that can be readied via RDT&E to be produced if needed, or be dedicated to building preproduction units prior to production, or as the object of production funding.
- A draft Single Acquisition Management Plan (SAMP) or Acquisition Plan (AP) revision that adds this SBIR/STTR Phase III to the current program document, and once approved authorizes the actual Phase III procurement. The SAMP/AP would authorize a Phase III and define the anticipated contract type - for example, a Technical Instruction Contract, with "to be defined" ordering options, that accepts all colors of anticipated funding.
- A J&A Document (NMCARS 5206.302-5(b)/Annex 13⁶²) wherein the funding level is consistent with the SAMP/AP and the sourcing justification is documented by noting as per the SBIR/STTR Reauthorization Act that the requirement for competition has been satisfied in Phases I and II, and citing SBIR/STTR statute language on Phase III: "To the greatest extent practicable, Federal agencies and Federal prime contractors shall issue Phase III awards relating to technology, including sole source awards, to the SBIR and STTR award recipients that developed the technology."⁶³

Once a PM's or DPM's dialogue with KOs on the Phase III package is successfully concluded with SBP concurrence, then a Procurement Request – like for any other contract – is prepared by the PM or DPM and submitted to the KO for contracting, as a Phase III contract is similar to any other contract with some exceptions such as inclusion of technical data deliverables. For a comprehensive list of Frequently Asked Questions about Phase III, see Chapter II.

Also, note that NAVAIR and NAVSEA guidance specifies the role of PMs in performing data rights assessments as part of overall data management.⁶⁴

IV.4.2 Government Furnished Equipment (GFE) and Government Furnished Information (GFI)

GFE and GFI, or use of Government facilities, are handled like any other contract. In an RFP, DON includes what GFE/GFI /Government Facilities are needed and expected to be provided. When an offeror responds to an RFP's GFE/GFI/Government Facilities content, it must agree to Government terms or modify what it needs in its response.

IV.5 How Do I Get My Prime Contractor to Engage SBIR/STTR Firms?

While a PM or DPM may choose to use the Phase III option to contract directly with an SBIR/STTR awardee, PMs, DPMs, and KOs should also encourage their prime contractor and its supply chain vendors to subcontract with SBIR/STTR firms. Increased subcontracting to small businesses in general and SBIR/STTR firms in particular is required in various official documents, as discussed in Chapter III, including DoDI 5000.02, the SBIR/STTR Reauthorization Act, memos in the

⁶² http://www.secnav.navy.mil/rda/Policy/nmcars1302r1.docx.

⁶³ 15 USC 638(r)(4) Phase III Awards; SBA SBIR and STTR Policy Directives (February 2014), §4(c)(8), §10(h)(4).

⁶⁴ See NAVSEA Acquisition Strategy Guide; April 2010; pg. A30, and NAVAIR Acquisition Guide 2014; October 2013; pg. 109.

USD(AT&L) "Better Buying Power 3.0" series and their ASN(RDA) guidance equivalents, and dedicated sections in the FY13 National Defense Authorization Act⁶⁵.

RFPs, with their required Small Business Subcontracting Plans, present a unique opportunity to build SBIR/STTR projects into a PoR or other DON program from the outset. While the contracting community exercises authority over RFP drafting, acquisition management should be familiar with the practices of SBIR/STTR inclusion. (See Chapter V.)

IV.5.1 Current Use of Incentives and Proposed Incentives

For information on incentives, see Chapter VI – Incentives.

Chapter V: SBIR/STTR Use by Heads of Contracting Activity, Contracting Officers, and Small Business Professionals

V.1 Requirements and Authorities

V.1.1 SBIR/STTR Reauthorization Act 66

- Section 5108(4) establishes special acquisition preference for SBIR/STTR, requiring Federal agencies and prime contractors to issue Phase III awards to appropriate SBIR/STTR awardees "to the greatest extent practicable."⁶⁷
- Section 5125 states that Phase III commercialization shall go toward production and delivery of products or services for sale to or use by Federal agencies.
- Section 5138 requires DoD to report Phase III data annually to the SBA.
- Section 5122 requires DoD to use or create incentives to meet the goal of increasing the number of Phase III awards, and to report annually to the SBA on use of specific incentives and their effective impact.

V.1.2 DoD Instruction 5000.02 (7 JAN 2015)⁶⁸ requires that for PoRs PMs must report the number and dollar amount of contracts entered into for Phase III SBIR or STTR projects and associated planned funding profile (Phases I, II, and III) for inclusion of SBIR/STTR technologies at each Milestone. KOs and Contracting Officer Representatives (CORs) should support PMs in this tasking by making fiscal data available.

V.1.3 USD(AT&L) Memo "Implementation Directive for Better Buying Power 2.0 (24 APR 2013)"⁶⁹

requires CAEs to apply incentives in contracts over \$100M to meet goals in transitioning SBIR/STTR technology plans. KOs and/or CORs should support PMs, PEOs, and CAEs in responding to this requirement.

V.1.4 ASN(RDA) Memo "Meeting Small Business Goals in FY 2013" (13 DEC 2012)⁷⁰ requests HCAs to develop strategies to achieve established small business targets and consider tangible actions to promote the

⁶⁵ P.L. 112-239; §1611 – 1615, 1622 – 1623, and 1632 – 1633.

⁶⁶ See footnote #6; Title XVI SBIR and STTR Reauthorization Act. Pub. Law 112-81, 125 Stat. 1298.

⁶⁷ P.L. 112-81 Division E; SBIR and STTR Reauthorization Act; §5108; pg. 1069.

⁶⁸ USD(AT&L) DoDI 5000.02 (& JAN 2015); Table 2. Milestone and Phase Information Requirements (Enclosure 1, pg. 48).

⁶⁹ USD(AT&L) *Better Buying Power 3.0 Guidance and Actions* (9 April 2015).

⁷⁰ ASN(RDA); *Meeting Small Business Goals for 2013* (12 December 2012).

use of SBIR/STTR awards. In developing these strategies, HCAs should work with PMs to ensure that ACAT I and II programs are participating in SBIR/STTR topic development and consider SBIR/STTR technologies as solutions for innovation needs.

V.2 Recommended Response Strategy and Actions

Generally, HCAs and KOs should consider five actions in responding to these requirements, and then consult more specific guidance provided in subsequent sections of this chapter, or explore with other KOs and PMs/DPMs ways of accomplishing these actions.

- 1. Ensure explicit SBIR/STTR requirements are levied upon competitive and sole source contracts to the extent permitted by the SBIR/STTR Reauthorization Act or other legal authority. Make sure APs and SAMPs are inclusive of SBIR contracts.
- 2. Ask if there are SBIR/STTR technologies that can satisfy this requirement either as a prime or sub to a prime and ask whether or not GFE is a viable strategy.
- 3. Develop a method to count the number and value of SBIR/STTR Phase III contracts or agree that the PEO or acquisition program office will do so.
- 4. Coordinate with the Command SBP to ensure allocated goals are satisfied.
- 5. Ensure that any SBIR/STTR-related clauses inserted into a contract are up-to-date and accurate.

V.3 Phase III Guidance on Phase III Agreements

The SBA, which administers Federal SBIR/STTR Programs, has issued Policy Directives for both programs available at <u>www.sbir.gov/about/about-sbir</u>. The following Phase III guidance, from the *SBIR Policy Directive* updated February 24, 2014, states:

"4.(c) <u>PHASE III</u>. SBIR Phase III refers to work that derives from, extends, or completes an effort made under prior SBIR funding agreements, but is funded by sources other than the SBIR Program. Phase III work is typically oriented towards commercialization of SBIR research or technology.

- (1) Each of the following types of activity constitutes SBIR Phase III work:
 - i. commercial application of SBIR-funded R/R&D financed by non-Federal sources of capital (Note: The guidance in this Policy Directive regarding SBIR Phase III pertains to the non-SBIR federally-funded work described in (ii) and (iii) below. It does not address the nature of private agreements an SBIR firm may make in the commercialization of its technology.);
 - *ii.* SBIR-derived products or services intended for use by the Federal Government, funded by non-SBIR sources of Federal funding;
 - *iii.* Continuation of R/R&D that has been competitively selected using peer review or merit-based selection procedures, funded by non-SBIR Federal funding sources.

(2) A Phase III award is, by its nature, an SBIR/STTR award, has SBIR/STTR status, and must be accorded SBIR data rights. If an SBIR/STTR awardee wins a competition for work that derives from, extends, or completes efforts made

under prior SBIR funding agreements, then the funding agreement for the new, competed work must have all SBIR Phase III status and data rights

(3) The competition for SBIR/STTR Phase I and Phase II awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act. Therefore, an agency that wishes to fund an SBIR Phase III project is not required to conduct another competition in order to satisfy those statutory provisions. As a result, in conducting actions relative to a Phase III SBIR award, it is sufficient to state for purposes of a Justification and Approval pursuant to FAR 6.302-5, that the project is a SBIR Phase III award that is derived from, extends, or completes efforts made under prior SBIR funding agreements and is authorized under 10 U.S.C. 2304(b)(2) or 41 U.S.C. 3303(b).

(4) Phase III work may be for products, production, services, R/R&D, or any combination thereof.

(5) There is no limit on the number, duration, type, or dollar value of Phase III awards made to a business concern. There is no limit on the time that may elapse between a Phase I or Phase II award and Phase III award, or between a Phase III award and any subsequent Phase III award. A Federal agency may enter into a Phase III SBIR/STTR agreement at any time with a Phase II awardee. Similarly, a Federal agency may enter into a Phase III SBIR/STTR agreement at any time with a Phase I awardee. A subcontract to a Federally-funded prime contract may be a Phase III award.

(6) The small business size limits for Phase I and Phase II awards do not apply to Phase III awards.

(7) To the greatest extent practicable, agencies or their Government-owned, contractor-operated facilities, Federally-funded research and development centers, or Government prime contractors that pursue R/R&D or production developed under the SBIR Program, shall issue Phase III awards relating to technology, including sole source awards, to the SBIR awardee that developed the technology. Agencies shall document how they provided this preference to the SBIR awardee that developed the technology. In fact, the Act requires SBA report all instances in which an agency pursues research, development, or production of a technology developed by an SBIR awardee, with a business concern or entity other than the one that developed the SBIR technology. (See §4(c)(8) immediately below for agency notification to SBA prior to award of such a funding agreement and §10(h)(4) regarding agency reporting of the issuance of such award.) SBA will report such instances, including those discovered independently by SBA, to Congress.

(8) Agencies, their Government-owned, contractor-operated facilities, or Federally-funded research and development centers, that intend to pursue R/R&D, production, services, or any combination thereof of a technology developed under an SBIR award, with an entity other than that SBIR awardee, must notify SBA in writing prior to such an award. This notification must include, at a minimum:

(i) The reasons why the follow-on funding agreement with the SBIR awardee is not practicable;

(ii) the identity of the entity with which the agency intends to make an award to perform research, development, or production; and

(iii) a description of the type of funding award under which the research, development, or production will be obtained. SBA may appeal an agency decision to pursue Phase III work with a business concern other than the SBIR awardee that developed the technology to the head of the contracting activity. If SBA decides to appeal the decision, it must file a notice of intent to appeal with the funding agreement officer no later than 5 business days after receiving the agency's notice of intent to make award. Upon receipt of SBA's notice of intent to appeal, the funding agreement officer must suspend further action on the acquisition until the head of the contracting activity issues a written decision on the appeal. The funding agreement officer may proceed with award if he or she determines in writing that the award must be made to protect the public interest. The funding agreement officer must include a statement of the facts justifying that determination and provide a copy of its determination to SBA. Within 30 days of receiving SBA's appeal, the head of the contracting activity must render a written decision setting forth the basis of his or her determination. During this period, the agency should consult with SBA and review any case-specific information SBA believes to be pertinent."

V.3.1 Phase III Competition Requirements

Following the SBA Policy Directives, SBIR/STTR competition for Phase I and Phase II awards satisfies any competition requirement of the Competition in Contracting Act. This means that a Phase III contract can be awarded to an SBIR/STTR firm without seeking further competition. The Policy Directive also states that agencies pursuing R/R&D or production developed under the SBIR/STTR programs will give special acquisition preference to the SBIR/STTR company that developed a subject technology. A Federal agency may enter into a Phase III agreement at any time with a Phase I or Phase II awardee.

Use of other sources for the procurement of products or R/R&D originally developed under an SBIR/STTR contract should be strongly discouraged, as the SBA *SBIR Policy Directive* indicates in 4.(c) and (8), both quoted above, and in 10(h)(4) regarding agency reporting of the issuance of such award to SBA, which will report such instances, including those discovered independently by SBA, to Congress.⁷¹

In conducting actions relative to a Phase III SBIR award, in accordance with NMCARS 5206.302-5 (b), KOs may use the streamlined SBIR Phase III J&A template in Annex 13 of the NMCARS.

V.3.2 Procurement Procedures

V.3.2.1 Direct Awards

Prior to initiating a purchase request for a Phase III contract, a technical requester should contact the appropriate procurement office to discuss the particular requirement. The dollar value and complexity of the effort will determine the appropriate procurement instrument to be used and the type of contract. In most cases, a formal solicitation will not be required as either an unsolicited proposal or a letter RFP will be the method used to obtain a proposal from the SBIR/STTR contractor. In the event of a formal RFP, a synopsis of the contract award is not required, in accordance with FAR 5.202(a)(7). A synopsis of the contract award is also not required for SBIR contracts [Ref: FAR 5.301(b)(2)].

V.3.2.2 Competed Awards

A KO may always decide to compete a requirement for a technology developed under a Phase I or II award or even a previous Phase III award; this may be done, for example, to verify that other more affordable or effective technologies are available to satisfy the requirement. However, that KO may not release any protected SBIR/STTR information and data in pursuing this course of action. That KO should also review the SBA SBIR and STTR Policy Directives' §4.(c)(7) and (8) and §10(h)(4), as noted above, and then discuss their intention with their SBIR/STTR PM, local Counsel, and a procurement representative.

⁷¹ SBA SBIR and STTR Policy Directives (February 2014), www.sbir.gov; Sec. 4(c)(7).

A direct Phase III award to an SBIR/STTR awardee may not be appropriate in all cases. If multiple sources are available for an item or if similar technologies are available on the open market, the Government's needs may best be met through a competitive procurement. In general, the longer the period of time since the completion of the Phase II, the greater the likelihood that the technology is no longer unique. If more than five years have passed since the completion of the Phase II, a market survey should be performed to determine if the same or similar technology is available from multiple sources. The contract file should be documented to indicate the results of the market survey.

For an overview of how SBIR/STTR may be included in key RFP sections, and referenced in particular in Small Business Subcontracting Plans, see the Appendices to this document.

V.3.3.3 Data Rights

As discussed in Chapter II: Overview of SBIR/STTR Phase III, SBIR/STTR data rights convey to Phase III awards. SBIR/STTR data rights are established in the SBIR/STTR Reauthorization Act, described in FAR 52.227-20 and DFARS 252.227-7018, and discussed in SBA's current *SBIR Policy Directive*. Although there are specific data rights for SBIR/STTR, it is not uncommon for non-SBIR/STTR contracts to have data rights restrictions. It is important not to assume that these rights will create or pose a greater risk than that which would exist with large companies. While some FAR clauses are superseded by DFARS clauses, **a**ll Phase I, II, and III contracts must include the "Rights in Data – SBIR Program" clause set forth in FAR 52.227-20:

"For a period of 4 years, unless extended in accordance with FAR 27.409(h), after acceptance of all items to be delivered under this contract, the Government agrees to use these data for Government purposes only, and they shall not be disclosed outside the Government (including disclosure for procurement purposes) during such period without permission of the Contractor, except that, subject to the foregoing use and disclosure prohibitions, these data may be disclosed for use by support Contractors. After the protection period the Government has a paid-up license to use, and to authorize others to use on its behalf, these data for Government purposes, but is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties."

These contracts must also include DFARS 252.227-7018 clause "Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program " subsection (b)(4))":

"Except for technical data, including computer software documentation, or computer software in which the Government has unlimited rights under paragraph (b)(1) of this clause, the Government shall have SBIR data rights in all technical data or computer software generated under this contract during the period commencing with contract award and ending upon the date five years after completion of the project from which such data were generated."

In the event an SBIR/STTR awardee is acquired by a large firm, data rights convey with the acquisition. Further, a subsequent award made in response to an RFP or BAA must be considered a Phase III SBIR/STTR contract so long as the work derives from, extends or completes efforts made under prior funding agreements under the SBIR or STTR programs.⁷²The contract award must include the SBIR/STTR data rights clause, DFARS 252.227-7018.

⁷² 15 U.S.C. 638 § (e)(4) and (6).

V.3.3.4 Phase III Reporting

As previously discussed, DoDI 5000.02 requires reporting of the number and dollar amount of contracts entered into for Phase III SBIR or STTR projects for PoRs.⁷³ The KO should report all Phase III awards as such in the FPDS-NG, referencing them in the Contract Action Report under "Competition Information", using the drop-down menu for SBIR/STTR. Because the number and size of Phase III awards are one metric used to gauge the success of DON's SBIR/STTR programs, it is critical that Phase III awards are marked appropriately in the FPDS-NG. The Navy SBIR/STTR Program Office reports Phase III data annually to the DoD and Congress to address the requirement for Phase III.

Chapter VI: Current and Proposed Incentives

The SBIR/STTR Reauthorization Act emphasizes the role of incentives in achieving SBIR/STTR commercialization, including new or existing incentives.⁷⁴This chapter reviews current DoD guidance on incentives, provides examples of an innovative small business-focused incentive with SBIR/STTR impact, and describes new SBIR/STTR-specific incentives proposed by Government or industry but not yet approved for DON use.

VI.1 USD(AT&L): Annual Report on Performance of the Defense Acquisition System

The 2014 annual report on the Defense Acquisition System by USD(AT&L)⁷⁵ focused on the key role incentives play in driving cost, schedule, and technical performance by industry under contract to Government, with findings and recommendations that may be applied as an incentives baseline in meeting DoDI 5000.02 requirements for SBIR/STTR inclusion in PoRs at or above \$100M. The 2014 annual report, tying its analysis back to the Improve Acquisition Act of 2010 and the Weapons System Acquisition Reform Act of 2009, states:

"As our body of analysis grows, we are finding more practical insights from their results. Of particular note, this year's report shows that the prevalent debate of cost-type versus fixed-price contracting is misguided. The real issue is how effective the incentives are for each contract type within each of those groupings."⁷⁶

..... Thus, a key element for improving acquisition performance is improving how contract incentives are aligned with our performance objectives, and how effective those incentives are when measured against those performance objectives. Without effective alignment our contractors will not make their best effort to deliver the quality products and services are warfighters and taxpayers expect and deserve. We have a wide range of incentive structures available for motivating contractor performance, including:

- Incentive fees tied to performance objectives of importance to the government
- Award fees tied to subjective measures of performance
- Execution of options for continued work in lieu of competition when in the interest of the government
- Payments tied to specific performance objectives
- Event-based contract obligations tied to successful completion of work scope⁷⁷

⁷³ USD AT&L DoDI Instruction 5000.02 (7 JAN 2015); Table 2. Milestone and Phase Information Requirements (Enclosure 1, pg. 48).

⁷⁴ In response, DoD SBIR/STTR incentives planning commenced at OSD Office of Small Business Programs in November, 2013.

⁷⁵ USD(AT&L); *Performance of the Defense Acquisition System, 2014 Annual Report*; 13 June 2014.

⁷⁶ USD(AT&L); Performance of the Defense Acquisition System, 2014 Annual Report; 13 June 2014; pg. iii.

⁷⁷ Ibid.; pg. 81.

..... Combined with the results from last year's report, these analyses have produced a number of insights we are acting upon. Not all incentives work. Contractual incentives are effective if (1) we use them; (2) they are significant, stable, and predictable; and (3) they are tied directly to our objectives.

The distinction between cost-plus and fixed-price contracts is not the divide on effectiveness. Rather, the emphasis should be on matching incentives to the situation at hand instead of expecting fixed-price contracting to be a magic bullet. Fixed-price contracts have lower costs because they are used in lower risk situations, not because they control costs better. Moreover, prices on fixed-price contracts are only 'fixed' if the contractual work content and deliverables remain fixed, which is often not the case. Our analysis showed that objectively determined incentives were the factors that controlled costs, not selecting cost-plus or fixed-price contract types.

We pay for the technical risks on our developmental systems-unlike the private sector, where companies pay for R&D on new products. This is partly due to the fact that we are, to some degree, the only customer for new military products (i.e., a monopsony-type market). Thus, it makes sense to use incentives that (1) link profit to performance, (2) control price, and (3) share in cost savings, especially in production when the risks are low. Professional judgment is needed as always in matching contract type and incentives to the desired outcome.⁷⁸

..... Another area important to defense acquisition relates to the acquisition workforce. Apart from the qualitative Procurement Management Reviews (overseen by the Defense Contract Management Agency) and the Procurement Management Reviews/Assessment (conducted by the military departments), we are seeking data to link our data on individuals in our human capital databases to the programs and activities that they perform."⁷⁹

VI.2 Current DoD Incentives: Manager's Guide to Technology Transition In An Evolutionary Acquisition Environment

The updated DoD *Manager's Guide to Technology Transition in an Evolutionary Acquisition Environment* (www.dau.mil/publications/publicationsDocs/Managers_Guide.pdf) addresses cash and non-cash incentives, and cost-based incentives⁸⁰, which could be adapted to meet SBIR/STTR commercialization goals, with appropriate language inserted in RFP Sections L and M.

VI.3 Current DoD Incentives: Open Systems Architecture Contract Guidebook for Program Managers

Version 1.1⁸¹ (https://acc.dau.mil/adl/en-US/631578/file/73333/OSAGuidebook%20v%201_1%20final.pdf) focuses on cost-based incentives for development contracts, which could be adapted to meet SBIR/STTR commercialization goals. These cost-based incentives include the Cost Plus Incentive Fee (CPIF), Cost Plus Award Fee (CPAF), and Cost Plus Award Term (CPAT).

⁷⁸ Ibid.; pp. 101-102.

⁷⁹ Ibid,; pg. 103.

⁸⁰ DoD Defense Acquisition University; *Manager's Guide to Technology Transition in an Evolutionary Acquisition Environment Version 2.0; June 2005*; pg. 2-24 et seq.

⁸¹ DoD OSA Data Rights Team; *DoD OSA Contract Guidebook for Program Managers v.1.1;* June 2013; pp. 77-80.

VI.4 Current DON Incentives: ASN(RDA) Guidance

Promotion of PM and COR use of the DON SBIR/STTR resource for program enhancement has been addressed in DoD and DON memoranda since 1991.⁸² In 2011, ASN(RDA) wrote, "Acquisition Strategies for all ACAT I and ACAT II programs must address Small Business and SBIR/STTR engagement through the next milestone decision or during program sustainment, as applicable... Program managers and contracting officers should include a Small Business SBIR transitioning Incentive Fee for meeting specific small business and SBIR subcontracting levels in contracts where incentives are used."⁸³

VI.5 Potential Innovations in DON Small Business Incentives

VI.5.1 NAVSEA Incentive Practice

An innovative approach to using cash incentives to expand small business and SBIR/STTR roles in an MDAP has been practiced at NAVSEA PEO SUB in its *Virginia*-class program. Beginning in 2002, PEO SUB offered a small business subcontracting incentive in its *Virginia*-class program – with SBIR/STTR projects serving as a candidate pool – through a formal plan incorporated as clauses in the *Virginia*-class construction contract. See the Appendices for details.

VI.5.2 NAVSEA Incentive Concept

An untested incentive approach is to award a contractor up to 1% of the value of a subcontract greater than \$500,000 with an SBIR/STTR firm, provided that (1) it is the first Phase III transition of that innovation; (2) the SBIR fee pool is limited to 50% of the small business incentive fee pool, and (3) the contractor could earn double credit against subcontract goals. Specifically, the practice for incentive qualification would be to count the SBIR/STTR firms with first-time Phase III transition awards, for companies meeting the SBA small business standard of <500 people, and eligible for new SBIR/STTR awards. (A Phase III transition award can be verified by the project Technical Point of Contact or cognizant SBIR/STTR lead at the sponsoring Command as deriving from, extending or completing SBIR/STTR Phase I or II work.) Thus, SBIR/STTR transition is both an RFP-evaluated requirement *and* an evaluated criteria – both in the selection process and post-award during contract execution – separate from small business criteria. Incentive fee determination may best occur at one point in the contract, such as the end of the third year in a five-year contract, after all subcontracts have been awarded.

VI.6 SBIR/STTR Incentives Proposed by Industry

The following incentive concepts derive from a meeting held with major prime contractors in 2012 to obtain their thoughts on what would incentivize them to increase their SBIR/STTR subcontracting. These represent the views of those industry participants and have not been specifically approved for DON use.

VI.6.1 Use of Award Fee or Incentive Fee (Above the Base Fee)

Add award fee or incentive fee (above the base fee) on competitively awarded contracts with an incentive for contractors to include SBIR/STTR technologies in the proposed solution or incorporated during the contract period of performance.

⁸² See, for example, ASN(RDA); *The Navy SBIR Program*; 7 November 1991. ASN(RDA); *Navy SBIR Program*; 6 May 1998. USD A&T; *Plan to Facilitate the Transition of SBIR Technologies Into Acquisition Programs*; 2 February 1999.

⁸³ ASN(RDA); Increased Use of Small Business Concerns; 19 July 2011.

The purpose of this recommendation is to go beyond small business participation in large DoD contract efforts to incentivize and reward DoD prime contractors who collaborate with SBIR/STTR firms to plan for and transition SBIR/STTR technologies into their proposed solutions.

- The RFP should clearly define the size of the incentive fee (e.g., up to 3%) and the set of criteria for determining how the fee is earned, and should be proportional to the level of SBIR/STTR involvement.
- Award/incentive fees should be tied to identifiable interim outcomes, discrete events or milestones related to SBIR/STTR technologies.
- The proposer should state the technical area in which the SBIR technology will be used and the level of support to be provided by the SBIR/STTR firm, as well as the SBIR/STTR topic number and contract number from which the SBIR/STTR technology derives.
- Fee provisions should clearly explain how a contractor's performance will be evaluated and be commensurate with contractor performance over a range from satisfactory to excellent performance. (USD(AT&L); *Memorandum on Award Fee Contracts, FAR 16, DFARS 215-216*; March 9 2006)

VI.6.2 Development and Use of Proposal Criteria Language

Develop and use proposal criteria language that gives weight to and/or favors SBIR/STTR technology involvement in proposed solutions to RDT&E solicitations.

This recommendation would encourage prime contractors to incorporate SBIR/STTR technologies and SBIR/STTR firms into their strategic opportunity planning by rewarding SBIR/STTR firm partnering, and transitioning SBIR/STTR technologies by assigning a higher rating on the evaluation. This should be used to achieve the highest rating for Small Business Subcontracting proposal evaluation criteria.

Strategically, this approach incentivizes prime offerors to plan and have established a pipeline of partnerships with SBIR/STTR firms and identified SBIR/STTR technologies that align with their core product and service offerings prior to solicitation release; and encourages the offeror's proposal team to look beyond the normal small business types (e.g., Women-owned Small Businesses (WOSB), Service-disabled Veteran-owned Small Businesses (SDVOSB), Historically Underutilized Business Zone (HUBZone) small business) to focus on the technologies the SBIR/STTR firms bring to the proposal and work with their organization's SBIR/STTR liaison.

VI.6.3 Goal: 2.5% of RDT&E Funding To Be Contracted to SBIR/STTR Firms for Phase III Follow-ons

Establish a goal to contract 2.5% of RDT&E funding to SBIR/STTR firms for Phase III follow-ons.

This recommendation encourages PMs and senior acquisition personnel to adopt, mature, and transition SBIR/STTR technologies into their PoRs and fielded systems through direct SBIR/STTR Phase III awards. This aligns well with Better Buying Power 2.0's push to increase small business dollars competitively awarded by DoD military departments and agencies.

It supports current DoD efforts to identify proposed solicitations involving bundling of contract requirements and revise the procurement strategy to be suitable for award to a small business, in this case an SBIR/STTR company. Consistent with DoD policy, this goal would encourage PMs/PEOs to include, as part of ongoing program planning processes and ACAT programs, insertion of SBIR/STTR technologies at milestone reviews.

Progress toward the SBIR/STTR Prime Contracting goal would be tracked through the FPDS-NG, where all Phase III contract actions are currently required to be coded as SBIR/STTR Phase III awards.

VI.6.4 SBIR Fee Pool

Award 1% of the subcontract's value, up to \$50K, to a contractor giving an SBIR firm a notional \$500K+ subcontract, provided (1) it is for that technology; (2) the SBIR fee pool is limited to 50% of the small business incentive fee pool; and (3) the contractor could earn double credit against subcontract goals. Thus, SBIR transition is both an RFP-evaluated requirement and an evaluated criterion – both in the selection process and post-award during contract execution – separate from small business criteria. Incentive fee determination may best occur at a single point in the contract, such as the end of the third year in a five-year contract, after all subcontracts have been awarded.

VI.6.5 Matching Funds Incentive

Provide DoD PMs with matching R&D funds for each dollar of Program R&D committed to a Phase III contract with an SBIR company to continue development and/or insertion of SBIR-developed technology.

- The matching funds incentive should include a limit of not more than \$2 million in matching R&D funds for any single SBIR effort.
- The second element of the Phase III SBIR transition incentive would provide matching procurement funds (up to a limit of perhaps \$5 million per SBIR effort) for procurement of SBIR-developed technology end items through direct contracts with an SBIR company or for SBIR-developed items procured under an SBIR company's GSA schedule.

VI.6.6 IRAD Incentive

Offer eligibility for an Independent Research and Development (IRAD) incentive to a prime subcontracting at least 1% of the contract to a small business.

- The IRAD incentive would be in the form of a credit of 10% of its DoD-audited IRAD expenses.
- For every acquisition contract in excess of \$100M, the prime contractor would subcontract not less than 5% of the contract value to small businesses that have completed relevant SBIR/STTR Phase IIs and can meet or exceed the technical requirements of the prime contract.
- For every 1% of the prime contract subcontracted to small businesses to meet or exceed this goal, the prime contractor would be entitled to a credit of 10% of its audited IRAD expenses, with a total accumulated credit up to 50% of IRAD expenses.

VI.6.7 Increase the Incentive for Prime Contractors to Achieve Their Small Business Subcontracting Goals

Increase the incentives for prime contractors to achieve their small business subcontracting goals.

Whereas small business subcontracting goals are set by the DoD program office in the RFP as an explicit percentage of the total contracted effort, penalties such as fee reduction or incentives such as award fee

increases should be employed to encourage prime contractor fulfillment of those goals. For example, the prime contract could require that at least 75% of the small business subcontracting goals be met in each year of the contract or fee reduction of 25% would be triggered for that period.

VI.6.8 Cash Reward Incentive

Implement a cash reward incentive for PMs exceeding SBIR/STTR transition and insertion goals. PMs and their PEO Directors should be eligible for a \$5,000 cash award upon meeting or exceeding the SBIR/STTR transition goals that the SECDEF is required to establish by the SBIR/STTR Reauthorization Act, and the related goal established by the SECDEF under this law for insertion of SBIR/STTR technologies into MDAPs.

END OF DOCUMENT

Office of the Deputy Secretary of the Navy, Acquisition and Procurement Mr. Elliott Branch, DASN(AP)

Department of the Navy SBIR and STTR Programs Office

Robert L. Smith, Director

Department of the Navy, Office of Small Business Programs

Emily Harman, Director Bradley D. Taylor, SBIR/STTR Liaison Theresa Garnes, DASN(AP) Liaison Appendices

Appendix 1. PEO Operating Instruction- NAVSEA PEO Submarine 23 August 2011

TEAM SUBMARINE OPERATING INSTRUCTION NO. 44 rev A

From: Program Executive Office, Submarines (PEO-SUB-B)

- Subj: INCENTIVIZING LARGE BUSINESS CONTRACTORS TO INCREASE PARTICIPATION OF SMALL BUSINESSES IN SUBMARINE PROGRAM PROCUREMENTS
- Ref: (a) 15 U.S.C. 644, Aid to Small Business, Awards or Contracts
 - (b) 10 U.S.C. 2323, Contract Goal for Small Disadvantaged Businesses and Certain Institutions of Higher Education
 - (c) 15 U.S.C. 638, Research and Development, Commerce and Trade, Aid to Small Business

1. <u>Purpose.</u> To establish a policy and common process within Team Submarine for offering incentives in contracts with large business concerns and to increase the participation of small business in submarine research, development, production and support. The objective of this policy is for Team Submarine to aggressively pursue the attainment of Department of Defense (DoD) small business subcontracting goals and to reward large businesses for the identification, transition and utilization of Small Business Innovation Research (SBIR) – funded technologies. DoD's and small business subcontracting goals for FY2011 are identified in the table (1) below. Program Executive Officer, Submarines (PEO SUB) FY2012 goals are shown in table (2) Additional information and goals in subsequent years can be found at DoD's Office of Small Business Programs website http://www.acq.osd.mil/osbp/statistics/goals.htm.

| Subcontracting Goals | FY2011 |
|---|--------|
| Small Business | 31.7% |
| HUBZone Small Business | 3.0% |
| Service-Disabled Veteran-Owned Small Business | 3.0% |
| Small Disadvantaged Business * | 5.0% |
| Women-Owned Small Business | 5.0% |
| Historically Black Colleges & Universities and Minority Institutions** | ** |
| Base for measurement is total subcontract dollar obligations | |
| * Small disadvantaged business awards include 8(a) awards. | |
| ** Defense Components are not required by DoD to establish separate HBCU/MI subcontracting goals. Instead these awards should be included when developing the subcontracting goals for Small Disadvantaged Business | |

Table (1) DoD Subcontracting Goals FY2011

Subj: INCENTIVIZING LARGE BUSINESS CONTRACTORS TO INCREASE PARTICIPATION OF SMALL BUSINESSES IN SUBMARINE PROGRAM PROCUREMENTS

| Subcontracting Goals | FY2012 |
|---|--------|
| Small Business * | 32.0% |
| HUBZone Small Business | 3.0% |
| Service-Disabled Veteran-Owned Small Business | 3.0% |
| Small Disadvantaged Business ** | 5.0% |
| Women-Owned Small Business | 5.0% |
| Historically Black Colleges & Universities and Minority Institutions*** | 3.5% |
| Base for measurement is total subcontract dollar obligations | |
| * This is a Team Submarine specified goal and exceeds DoD goal | |
| * * Small Disadvantaged Business awards include 8(a) awards. | |
| *** Defense Components are not required by DoD to establish separate HBCU/MI subcontracting goals. This is PEO SUB specified goal. | |

 <u>Applicability.</u> This Operating Instruction is applicable to all organizations that constitute Team Submarine. Wherever the term "small business" appears in this Operating Instruction, it also includes Historically Underutilized Business zone (HUBzone) small business concerns, Service-Disabled Veteran-Owned, Small Business (SDVO) concerns, Small Disadvantaged Business (SDB) concerns, Women-Owned Small Business (WOSB) concerns, and Historically Black Colleges and Universities and Minority Institutions (HBCU/MIs).

3. <u>Background.</u> References (a) and (b) impose statutory requirements that all agencies involved in the procurement of goods and services shall facilitate the maximum participation of small business concerns as prime contractors, subcontractors, and suppliers. Reference (c) established the SBIR Program framework for advancing small business technologies from research through commercialization. Team Submarine has aggressively pursued strategies for increasing small business technologies from research through commercialization. Team Submarine has aggressively pursued strategies for increasing small business participation in submarine programs by transitioning small business research into active programs through the SBIR Program, sponsoring Women-Owned Small Business Conferences, performing outreach activities at programs, and including special incentive provisions in contracts with large prime contractors. Team Submarine experience has proven that small businesses bring innovation, ingenuity and efficiency to problem identification and solutions that have allowed submarine programs to realize significant cost savings. This policy requires the application of special contract incentive provisions to all new contracts with large businesses to further increase opportunities for small business participation.

4. <u>Process.</u> All new Team Submarine contracts, including new Task Orders under a SeaPort Multiple Award Contract, when consistent with cost/benefit considerations and attainment of the

Subj: INCENTIVIZING LARGE BUSINESS CONTRACTORS TO INCREASE PARTICIPATION OF SMALL BUSINESSES IN SUBMARINE PROGRAM PROCUREMENTS

contract objectives, will contain provisions to reward the contractor for increasing the level of small business subcontracting participation under the contract. In addition, special incentive provisions will be included for rewarding the transition of SBIR technologies from SBIR-qualified small businesses from SBIR Phase II to Phase III. The small business incentive requirement will be addressed in Acquisition Strategies, Acquisition Plans, Solicitations and resulting contracts. For competitive procurements, the offeror's approach to increasing participation will be included as an evaluation factor for award.

5. <u>Responsibility</u>. The following parties will be responsible for adhering to this Operating Instruction in the following manner:

a. Each Program Manager and Directorate Head shall:

(1) Include provisions for incentivizing large businesses in Acquisition Strategies, Acquisition Plans and Procurement Requests, and include the offeror's approach to increasing small business, HBCU/MI participation as an evaluation factor in competitive procurements.

(2) Provide the Standard Form 294, Subcontracting report for Individual Contracts, submitted by the contractor under each covered contract to the Executive Director PEO Submarines and Executive Director Undersea Warfare no later than 60 days after the close of each fiscal year.

b. The Executive Director, PEO Submarines shall:

 Review and approve incentive provisions in Team Submarine acquisition strategies and plans.

(2) Provide periodic updates on the results achieved under this policy to the Program Offices and Directorates.

c. The Contracting Officer will authorize the payment of the incentive fee funding in accordance with the criteria set forth in the contract.

6. <u>Conclusion</u>. This Operating Instruction is effective immediately. This Operating Instruction will be reviewed annually to ensure it is current and to incorporate lessons learned.

JOHN J. EVANS Executive Director

Appendix 2. RFP: DON Candidate Language for Sections C, I, L, and M

Candidate SBIR/STTR-related language for inclusion in standard DoD RFP sections⁸⁴, below, derives in part from earlier SYSCOM/PEO initiatives to expand the inclusion of SBIR/STTR technologies in acquisition programs. *However, this language – which in effect identifies SBIR/STTR as a small business category – deviates from FAR 52.219-9, and cannot be used without obtaining a waiver for its use.* While the contracting community exercises authority over RFP drafting, acquisition management should be familiar with the practices of SBIR/STTR inclusion. Such recommended language below may be adapted for use in DoD Broad Agency Announcements (BAAs) and other programmatic announcements, if a waiver is obtained for its use.

Section C – Statement of Work. Section C of the RFP contains the description of products to be delivered or work performed under the contract, including a Government Statement of Objectives (SOO) or Statement of Work (SOW). Section C language such as the following provides for SBIR/STTR opportunity:

"PEO XXX is committed to increasing small business participation, including SBIR/STTR awardee participation, throughout the acquisition lifecycle. Therefore, of the total dollars the Government plans to obligate each contract year under this contract, the Contractor is encouraged to award xx% or more to small businesses, with at least xx% of that xx% awarded to SBIR/STTR firms⁸⁵ to demonstrate SBIR/STTR value." The offeror should be encouraged, in particular, to specify small business participation in individual SOO objectives and individual SOW tasks.

SBIR/STTR firms are often not considered for testing and evaluation (T&E) work including decision analysis, T&E planning, assessment, test plans, reports, data requirements, and risk and configuration management. The SOO addresses a program's Testing and Evaluation (T&E) approach through a Testing and Evaluation Master Plan (TEMP), which could include small business participation.

Section I - Contract Clauses. (Contract clauses relevant to SBIR/STTR are discussed in Chapter IV, below.)

Section L – Instructions, Notices, and Conditions. Section L provides information not cited elsewhere to guide RFP respondents, including the Small Business Subcontracting Plan (governed by FAR 52.219-9) which should be required to specify SBIR/STTR participation. The following language is recommended for that part of Section L which addresses the Small Business Subcontracting Plan:

"PEO XXX is committed to increasing small business participation, including SBIR/STTR awardee participation, in platform system and subsystem development, testing and evaluation, production and support efforts consistent with cost/benefit considerations and attainment of acquisition objectives. Therefore, of the total dollars the Government plans to obligate each contract year under this contract, the Contractor is encouraged to award xx% or more to small businesses, with at least xx% of that xx% awarded to SBIR/STTR firms."

Further, if the program sponsor provides an incentive to encourage small business and SBIR/STTR participation in the offeror's response, it should be cited briefly in Section L and in detail in Section M – Evaluation Criteria, regarding the evaluation process. An example of Section L language on incentives is as follows:

"The Contractor may earn a Small Business Subcontracting Incentive Fee (SBSIF) under 52.219-10, including SBIRs as small businesses, for exceeding the Small Business Subcontracting Goals in SBA-mandated small

⁸⁴ Candidate language cited here is under review by DASN (AP), to be formalized in a subsequent draft of this document.

⁸⁵ This notional calculation aligns, generally, with the SBIR/STTR set-aside calculation.

business categories and the goal for the additional category of SBIR/STTR firms (xx%), except that SBIR/STTR firms in the four SBA categories (HUBZone, Service-Disabled Veteran-Owned, Disadvantaged, Women-Owned) may also be counted as SBIR/STTR firms to achieve the SBSIF incentive. No SBSIF will be earned unless the Contractor is making timely deliveries and is in compliance with the specifications for the software and hardware being acquired. The PCO/ACO) will make the determination of whether the Contractor has met this prerequisite to be considered for the SBSIF. In the event that the PCO determines that the Contractor's performance is not satisfactory, the Contractor will not be eligible for the SBSIF. SBSIF evaluations will be accomplished annually based on the value of small business subcontracting during that year. The SBSIF pool contingency in each year will be x% of the total amount obligated against target cost or established contract cost on the engineering services CLINs/SLINs."

Section M – Evaluation Criteria. Section M sets proposal evaluation standards, including reference to small business – especially, SBIR/STTR) – participation in the Small Business Subcontracting Plan. Language derived from the SBSIF incentive described in Section L should be added to Section M to increase attention to SBIR/STTR as an evaluation criteria.

Appendix 3. RFP: Missile Defense Agency (MDA) Language Used in Section C, L and M

MDA recommends the following language for inclusion in RFP Section C:

(If requiring a CDRL) The Contractor shall submit semiannually IAW CDRL XXXX to the Missile Defense Agency Office of Small Business Programs (MDA/SB), the following small business performance information on the {MDA or BMDS program} procurement effort to include the following specific activities to maximize small business participation:

- Efforts to expand the pool of small businesses that are candidates for qualification for production of components and piece parts (includes hardware and software) in MDA acquired systems.
- Efforts to engage small businesses to serve as backup or alternative sources in order to mitigate the risks of single source suppliers in the supply chain and increase the quality of supplies or services.
- Efforts to identify and leverage Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program funded technologies with high potential for transition into the {MDA or BMDS program} procurement effort.

(If NOT requiring a CDRL) The Contractor shall submit small business performance data on {MDA or BMDS program} in the FY20XX Comprehensive Subcontracting Plan (CSP) to include the following specific activities to maximize small business participation:

• Efforts to expand the pool of small businesses that are candidates for qualification for production of components and piece parts in MDA acquired systems.

- Efforts to engage small businesses to serve as backup or alternative sources in order to mitigate the risks of single source suppliers in the supply chain and increase the quality of supplies or services.
- Efforts to identify and leverage Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program funded technologies with high potential for transition into the {MDA or BMDS program} procurement effort.

The additional data will be included in the Contractor's CSP Activity report in conjunction with the standard small business report data, and the DCMA Program Level Reporting to the Missile Defense Agency Office of Small Business Programs.

Note: The above small business participation language will be a requirement in the SOW.

Performance related to this requirement is subject to the MDA Contracting Officer's commentary in CPARS, and it is separate from the CSP negotiated with DCMA.

Rationale:

- CSP participants negotiate a Comprehensive Small business Subcontracting Plan (CSP) with DCMA. The CSP covers DoD contracts. In the CSP, the CSP participant is required to take initiatives to improve small business subcontracting performance, identify small business sources to ensure equitable participation and consider possibilities for inclusion of small businesses for development work likely to lead to production.
- 2. CSP participants should incur minimum additional cost when accomplishing the small business SOW requirement and reporting this information to MDA because the CSP participant is required to perform like task and report small business subcontracting performance to DCMA. A copy provided to MDA that includes the information requested by the small business SOW requirement will not add measurably to labor or cost.

MDA recommends the following language for inclusion in RFP Sections L and M:

"The contractor shall identify the top 5 major component cost drivers that have the capability to qualify small business vendors. Cost drivers are defined as components that have some type of direct or indirect significant (>.40% of the material cost of the end item) impact on the cost of the end item. The contractor shall maximize small business participation to qualify one or more additional sources for the cost driver components where effective competition can be used to drive down the cost to purchase the component over its life cycle of use in the end item. After additional sources are identified, the contractor shall perform an analysis to demonstrate that effective competition will successfully reduce cost without degradation of component or system performance. This information shall be submitted to the Government for review in accordance with CDRL XXXX.

The contractor shall identify the top 5 components or piece parts that represent single point failures in the supporting supply chain and offer the opportunity to qualify small business vendors. A single point failure is defined as a part of a component or end item having only one source of supply that, if it is not available, will require a delivery schedule for the end item to slip by more than I month or require more than I month to qualify an additional source of supply. The contractor shall identify potential additional small business sources of supply for the identified components or piece parts and develop a cost estimate and timeline for qualification of these additional sources. After additional sources are identified, the contractor shall perform an analysis to demonstrate the cost savings resulting from developing and maintaining an additional source to mitigate the risk of a single point failure over the component's life cycle. The contractor shall maximize small business participation to develop and maintain one or more additional sources for the identified components or piece parts to successfully mitigate the risk of interruption of contractor performance due to failure of the single point. This information shall be submitted to the Government for review and approval in accordance with CDRL XXXX.

The contractor shall utilize Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STRR) developed technology to the maximum extent possible to assist in the mitigation of obsolete parts and report SBIR/STTR projects considered and the reasons for use or non-use to mitigate obsolescence. This information shall be submitted to the Government for review in accordance with CDRL XXXX."

Appendix 4. in progress

Appendix 5. Incentive: PEO Submarine's Virginia-class Program

"(a) The Virginia-class Program Office is committed to increasing small business subcontracting participation in submarine construction efforts consistent with cost/benefit considerations and attainment of acquisition objectives. Therefore, the Contractor may earn a Small Business Subcontracting Incentive Fee (SBSIF) for increasing the level of small business subcontracting participation under this contract.

(b) (The Program Office shall identify) the percentages against which the Contractor's performance for the purposes of the SBSIF will be measured for each evaluation period.

(c) The Contractor's SBSIF percentage score for each period will be determined (by using a formula devised by the Program Office).

For the purposes of this clause, small business contractors who graduate to large business size status during the execution of Phases I/II under an SBIR Program topic are considered to be Small Businesses for the follow-on SBIR Phase III under that topic.

(d) Periods and SBSIF Available: The SBSIF is spread over ten yearly evaluation periods (FY03-FY12). The evaluation for each yearly period will be cumulative. SBSIF not earned in a period shall not be transferred to later periods. For each percentage point by which the Contractor exceeds its goal for each applicable category, the Contractor will be paid 3% of the available SBSIF for that period.^{#86}

⁸⁶ PEO SUB; Small Business Incentive Clauses for Virginia-class Follow-on Construction Contract; 16 May 2002; pp. 1-2.

Small Business Innovation: Affordable Solutions for the Warfighter



SBIR and STTR Phase III Guidebook For Program Managers, Contracting Officers And Small Business Professionals

v 1.1

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http://www.secnav.navy.mil/smallbusiness/Pages/sbir-sttr.aspx

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