

# DOING BUSINESS WITH DARPA

*Creating and Preventing Strategic Surprise*



*Small Business Programs Office (SBPO)*

[www.darpa.mil](http://www.darpa.mil)

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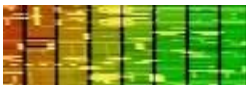
**THE DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA) WAS ESTABLISHED IN 1958 TO PREVENT STRATEGIC SURPRISE FROM NEGATIVELY IMPACTING U.S. NATIONAL SECURITY AND CREATE STRATEGIC SURPRISE FOR U.S. ADVERSARIES BY MAINTAINING THE TECHNOLOGICAL SUPERIORITY OF THE U.S. MILITARY.**



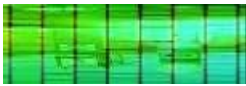
**AEO**  
Technology, Adaptability & Transfer



**DSO**  
Basic, Materials & Biological Science



**I2O**  
Information, Innovation & Cyber



**MTO**  
Electronics, Photonics & MEMS



**STO**  
Sensors, Communications & Energy



**TTO**  
Weapons, Platforms & Space

The preferred method for submitting ideas and concepts to DARPA is to respond to a Broad Agency Announcement (BAA). First determine under which technology office your idea falls. Next, visit the DARPA website at [www.darpa.mil](http://www.darpa.mil) for possible funding opportunities. Each Technology Office has a number of Broad Agency Announcements or "BAAs", which will be for very specific programs. Typically, each technology office has one BAA referred to as an "office wide" BAA. This BAA serves to capture ideas that do not fall within the other more specific BAAs. The BAAs will have a Subject Matter Expert (SME) whom you may contact for additional information. DARPA encourages you to submit proposals in response to advertised needs in lieu of submitting unsolicited proposals.

To fulfill its mission, the Agency relies on diverse performers to apply multi-disciplinary approaches to both advance knowledge through basic research and create innovative technologies that address current practical problems through applied research.

DARPA's scientific investigations span the gamut from laboratory efforts to the creation of full-scale technology demonstrations in the fields of biology, medicine, computer science, chemistry, physics, engineering, mathematics, material sciences, social sciences, neurosciences and more.

As the DoD's primary innovation engine, DARPA undertakes projects that are finite in duration but that create lasting revolutionary change.

*The DARPA website lists additional information regarding each Technical Office – including focus areas and personnel.*

# DARPA SUCCEEDS BY FINDING PEOPLE WITH INNOVATIVE TECHNICAL IDEAS

## DARPA'S GOALS IN BUSINESS AGREEMENTS

- Develop innovative business relationships and practices
- Match military needs with technological opportunities
- Protect information and ideas
- Create agreements for investments in DARPA-hard projects with high risk, revolutionary technologies and systems
- Promote innovation by using a flexible strategy in crafting agreements—"one type does not fit all"

## DARPA PROGRAM MANAGERS

To maintain an entrepreneurial atmosphere and the flow of new ideas, DARPA's strategy is to hire program managers (PMs) for a period of only 3 to 5 years; the best way to foster new ideas is to bring in new people with fresh outlooks. DARPA has special statutory authority to hire eminent scientists and engineers expeditiously.

The key to working with DARPA is through the PM. Do not constrain your great ideas by how you think DARPA may react. Just because DARPA does not appear active in a particular area does not mean the Agency will not be interested in a great technological idea in a new arena. In fact, these new ideas sometimes lead to whole new areas of research. DARPA program managers can help in any number of ways:

- Give feedback if an idea is suited to DARPA.
- Help shape the idea so it is a better fit to an ongoing or new DARPA program.
- In some cases, significantly change what he or she is planning to do based on a great idea.
- A big part of a program manager's job is to find great ideas on which to build a new program. Information exchanges with DARPA program managers are the foundation for "Doing Business with DARPA."

## DOING BUSINESS – STARTING POINTS

If interested in pursuing business with DARPA, it is helpful to review the following:

1. Your technical approach and whether it is of potential interest to a DARPA PM;
2. Current DARPA opportunities, posted at FedBizOpps.gov;
3. DARPA Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program opportunities posted at [www.dodsbir.net](http://www.dodsbir.net);
4. DARPA methods of contract management, available at [www.darpa.mil](http://www.darpa.mil).

## A DARPA PM MAY ASK

- *What are you trying to do?*
- *How is this done now, and what are the limitations?*
- *How will this approach remove those limitations and by how much will the approach improve performance?*
- *If the idea is successful, what difference will it make?*

Through questions like these, the program manager will better understand your idea.

## NOTICES OF BUSINESS OPPORTUNITIES BY DARPA

For information on DARPA programs and areas of research by individual technical offices, visit [www.darpa.mil](http://www.darpa.mil), "Our Work" then click on the applicable Technical Office acronym.

To find solicitations, visit the official federal acquisition opportunities web site available at [www.fedbizopps.gov](http://www.fedbizopps.gov) (type "Other Defense Agencies Defense Advanced Research Projects Agency" in the Agency box within the search tool).

Find DoD SBIR and STTR Program Solicitations at [www.dodsbir.net/solicitation](http://www.dodsbir.net/solicitation).

DARPA's acquisition strategies are structured to facilitate small business participation, either directly or indirectly, by fostering small business teaming. Under FAR 9.602, a team arrangement occurs when two or more small businesses form a partnership to compete on a consolidated contract or a potential prime contractor agrees with one or more firms to have them act as subcontractors if the team is awarded a contract. An advantage of teaming is that small business teams can maximize complementary skills, resources and capabilities to exceed those of any single contractor on the team and minimize their risks

## THE BAA AND RFP

### Broad Agency Announcements (BAAs)

The Broad Agency Announcement (BAA) is a competitive solicitation procedure used to obtain proposals for basic and applied research and that part of development not related to the development of a specific system or hardware procurement. The BAA is described in FAR 6.102, "Use of Competitive Procedures," and FAR 35.016, "Broad Agency Announcements."

The type of research solicited under a BAA attempts to increase knowledge in science and/or to advance the state of the art as compared to practical application of knowledge. DARPA generally uses a Program Information Pamphlet (PIP) for BAA information.

#### **BAAs describe:**

- The agency's research interest, for either an individual program or broadly defined areas of interest covering full range of the agency's research and development efforts
- The criteria for selecting proposals, their relative importance, and the method of the evaluation
- The specific time available for submission of proposals
- Specific instructions for the preparation and submission of proposals

### Types of BAAs

**DARPA "Office-wide" BAAs** — Each DARPA technical office has an office-wide BAA that is usually open for 1 year or more. These BAAs usually cover a broad range of topics.

#### **DARPA Program Specific BAAs**

#### **Pre-proposal Information**

**DARPA Proposers' Days**—"Proposers' days" are held after the publication of a program notice and prior to the submission of proposals. They provide the opportunity to hear, first hand, the program managers' vision for a program and meet potential industry partners for teaming. DARPA proposers' days are not limited to the promotion of BAAs; they are used for all methods of soliciting business.

**BAA White Papers**—White papers are the initial ideas submitted to a DARPA program manager and are not considered proposals. These papers permit the presenter to make a detailed written explanation of the idea/concept. Check the BAA for page limitation and informational needs.

#### **Submitting a white paper can allow:**

- Feedback from the DARPA program manager
- A response from a program manager expressing interest or disinterest in the concept and, if appropriate, a request for a proposal.
- Presenters can still submit a proposal despite a negative response on the associated white paper.

#### **BAA Evaluation and Award**

BAA proposals are reviewed based on technical merit and are not compared to other proposals. There is no common statement of work. DARPA identifies general areas of interest, but does not tell companies how to propose work or how to solve problems. Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort.

## Requests for Proposal (RFPs)

Federal Acquisition Regulation (FAR), Part 15, discusses the negotiation of procurement contracts, which can be done through competitive or noncompetitive negotiation.

RFPs list the Government needs, solicitation provisions, potential discussions, and the evaluation method for the review of proposals. An RFP serves as the basis for the selection for an award. If the proposed award is for a cost-type contract, the awardee must have an approved cost accounting system to audit costs.

## Contract Management

DARPA's Contracts Management Office (CMO) has the authority to enter into and administer contracts, grants, cooperative agreements, and Other Transactions in pursuit of DARPA's research and development mission. CMO's role is to serve as DARPA's acquisition advisor and make awards in select, critical technology areas. The bulk of DARPA awards are entered into on behalf of the agency by contract agents within the military services, who assist DARPA with technology transition to the warfighter.

## PROGRAM SOLICITATIONS

*Program solicitations are:*

1. *Used for soliciting proposals for Other Transactions (OTs) for prototypes, SBIR and STTR.*
2. *Formatted similar to BAAs*
3. *FAR-based procurement contracts, with OT awards being a possibility*

## Small Business Innovation Research (SBIR) Program

Congress established the SBIR Program in 1982 to provide opportunities for small businesses to participate in Federal government-sponsored research and development (R&D). The goals of the SBIR Program are to:

- Stimulate technological innovation;
- Use small business to meet Federal R&D needs;

- Foster and encourage participation by socially and economically disadvantaged small business concerns (SBCs), and by SBCs that are 51 percent owned and controlled by women, in technological innovation; and
- Increase private sector commercialization of innovations derived from Federal R&D, thereby increasing competition, productivity and economic growth.

***To participate in the SBIR program, a firm must:***

- Be a U.S. for-profit small business with 500 or fewer employees
- Perform work in the United States
- Perform a minimum of 2/3 of the effort in Phase I
- Perform a minimum of 1/2 of the effort in Phase II
- Have the principal investigator spend more than 1/2 of the time employed by the proposing firm

It is possible to be awarded a Phase I SBIR with no follow-on Phase II award. For further information regarding program eligibility, limitations, and definitions, review the SBIR solicitations at: [www.dodsbir.net/solicitation](http://www.dodsbir.net/solicitation).

## Small Business Technology Transfer (STTR) Program

In 1992, Congress established the STTR pilot program. STTR is similar in structure to SBIR but funds cooperative R&D projects involving a small business and a research institution (i.e., university, federally-funded R&D center, or nonprofit research institution). The STTR Program is a vehicle for moving ideas from our nation's research institutions to the market, where they can benefit both private sector and military customers.

The purpose of the STTR Program is to stimulate a partnership of ideas and technologies between innovative small business concerns (SBCs) and research institutions through Federally funded research or research and development (R/R&D).

### ***To participate in the STTR program:***

- a firm must be a U.S. for-profit small business of 500 or fewer employees; there is no size limit on the research institution
- research institutions must be a U.S. college or university, FFRDC or non-profit research institution
- work must be performed in the U.S.
- the small business must perform a minimum of 40% of the work and the research institution a minimum of 30% of the work in both Phase I and Phase II
- the small business must manage and control the STTR funding agreement
- the principal investigator may be employed at the small business or research institution

For further information regarding program eligibility, limitations, and definitions, review the STTR solicitations at: [www.dodsbir.net/solicitation](http://www.dodsbir.net/solicitation).

### **SBIR & STTR – 3 Phase Programs**

Both the SBIR and STTR programs are comprised of three phases.

**Phase I** is a feasibility study that determines the scientific, technical and commercial merit and feasibility of a selected concept. Phase I projects are competitively selected from proposals submitted against solicitations. Each solicitation contains topics seeking specific solutions to stated Federal government needs. The Phase I selection process is highly competitive, with about one of 10 submitted Phase I proposals receiving awards.

**Phase II** represents a major research and development effort, culminating in a well defined deliverable prototype (i.e., a technology, product, or service). The Phase II selection process is also highly competitive. Successful Phase I contractors are invited to submit Phase II proposals as there are no separate Phase II solicitations.

**In Phase III**, the small business or research institution is expected to obtain funding from the private sector and/or non-SBIR government sources to develop the prototype into a viable product or service for sale in the government or private sector markets.

## **DARPA SBIR/STTR TRANSITION PLANNING**

DARPA SBIR/STTR Transition Planning Guide covers the unique aspects of transitioning technology funded by the DARPA SBIR/STTR programs, and provides a framework that integrates three components-technology, business, and market-for Phase II companies to augment their commercialization strategy for implementation and, if Phase I, to support development of a commercialization strategy for inclusion in a Phase II proposal.

In addition, there is a set of checklists, templates, and resource lists to assist companies in addressing and compiling the critical and interrelated pieces of information needed to determine which of the multiple available options to pursue with a specific transition path.

The guide is being updated with recent web links and to reflect the latest checklists found in the SBPT. The guide is available by clicking [HERE](#).

The DARPA Small Business Planning Tool (SBPT)-Web Tool is a self-assessment tool to help your company define or refine your commercialization strategy, assess the status of your current transition plan, and prioritize the important next steps to transition the technology, component, or product you are developing into DoD and other federal and commercial markets. The SBPT is available by clicking [HERE](#).

## **DARPA'S TOOLKIT OF AGREEMENT INSTRUMENTS**

DARPA has the authority to use several different funding instruments. The selection of the appropriate agreement instrument and the terms of the instrument are determined by the purpose of the research and negotiation of the parties.

The agreement instruments range from different forms of Other Transactions (OTs), which allow flexibility in acquiring research to a traditional procurement contract for the acquisition of supplies and services, or a grant or cooperative agreement (considered "assistance agreements" because they are not for the acquisition of supplies or services).

## Other Transactions (OT) for Research

Pursuant to 10 U.S.C. 2371, Research Projects: Transactions Other than Contracts and Grants, DARPA may enter into Other Transactions (OTs). CMO awards Other Transactions for Prototypes and Technology Investment Agreements.

### **What is an OT for prototype?**

An OT for Prototype is an acquisition instrument used for prototype projects directly relevant to weapons or weapons systems proposed to be acquired or developed by the DoD. OTs for Prototypes are often called 845 agreements, referring to Section 845 of Public Law 103-160 (as amended) that authorizes the use of OTs.

OTs are not subject to the FAR and DFARS; however, many agreements contain articles similar to common terms and conditions found in standard FAR procurement contracts, including articles for Intellectual Property, Foreign Access to Technology, and others. The OT Guide (January 2001), available at [www.darpa.mil](http://www.darpa.mil), gives guidance regarding eligibility and information regarding what should be included in an OT agreement.

Small Business Innovation Research Program proposers interested in pursuing OTs should see the SBIR OT page available on [www.darpa.mil](http://www.darpa.mil).

## Technology Investment Agreement (TIA)

TIAs are governed by Part 37 of the DoD Grants and Agreements Regulations (DoDGARs). TIAs are assistance instruments used to support or stimulate research. The ultimate goal for using TIAs, like other assistance instruments used in defense research programs, is to foster the best technologies for future defense needs. TIAs therefore are designed to reduce barriers to commercial firms' participation in defense research, to give the Department of Defense (DoD) access to the broadest possible technology and industrial base; promote new relationships among performers in both the defense and commercial sectors of that technology and industrial base; and stimulate performers to develop, use, and disseminate improved practices.

**Additional information on these agreements and others, including the items listed below, are available at [www.darpa.mil](http://www.darpa.mil).**

- Pre-proposal Administration
- Representations and Certifications
- Grants and Cooperative Agreements
- Contracts
- Justification and Approval Documents
- Closeouts

## PROTECTING IDEAS

The ground rules for protecting proprietary and government information in establishing and performing agreements are based on a balancing of the following interests:

- National security interests
- Congressional and Department of Defense directions on Intellectual Property (IP)
- Protecting ideas

### Protection of Program Information

The National Security Decision Directive (NSDD) 189, September 21, 1985 states "to the maximum extent possible, the products of fundamental research remain unrestricted." The government does not typically have a need for pre-publication approval if the program information is considered fundamental research.

### Protection of Information in Submission of Proposals

#### **U.S. Laws Requiring Protection of Proprietary Information:**

- The Procurement Integrity Act, 41 U.S.C.
- 41 U.S.C. 423 addresses contractor bid and proposal information and source selection information
- Freedom of Information Act (FOIA)
- 5 U.S.C. 552
- Trade Secrets Act, 18 U.S.C. 1905—prohibits unauthorized release of proprietary information by Government employees

## Intellectual Property (IP)

IP includes technical data, software, patents, copyrights, trademarks, and trade secrets.

OSD IP Guide “Intellectual Property: Navigating Through Commercial Waters” at [www.acq.osd.mil/dpap/Docs/intelprop.pdf](http://www.acq.osd.mil/dpap/Docs/intelprop.pdf) is applicable to procurement contracts, but provides helpful background information on all types of agreements. IP statutes like the Bayh-Dole Act, 35 U.S.C. 202-204 do not apply to OTs, so there is great flexibility in negotiating IP issues.

In the traditional procurement contract, the contractor retains the title to IP and the government receives a non-exclusive, royalty free license for inventions conceived or first reduced to practice during the agreement under Bayh-Dole principles. For OTs, the parties are allowed flexibility to negotiate IP since Bayh-Dole does not apply. DARPA normally does not acquire IP rights that will impede commercialization of technology.

## What is Fundamental Research?

Contracted fundamental research includes grants and contracts that are:

- Funded by budget Category 6.1 (Research), whether performed by universities or industry
- Funded by budget Category 6.2 (Exploratory Development) and performed on-campus at a university

The research shall not be considered fundamental in those rare and exceptional circumstances where the 6.2-funded effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant.

## Foreign Access to Technology

International Traffic in Arms Regulations (ITAR) 22 C.F.R. 120-130 controls the release of defense articles specified on the U.S. munitions list; also controls defense services. ITAR—information in the public domain not subject to need for licenses for the export of technical data and classified defense articles (22 C.F.R. 125.1).

Public domain means information is published and is generally accessible or available to the public, including through fundamental research (22 C.F.R. 120.11).

## Publication Approval (Public Release)

NSDD 189 established the national policy for controlling the flow of scientific, technical, and engineering information produced in federally funded fundamental research at colleges, universities, and laboratories. It is DARPA’s goal to eliminate pre-publication review and other restrictions on fundamental research except in those exceptional cases when it is in the best interest of national security. Please visit <http://www.darpa.mil/NewsEvents/PublicReleaseCenter/PublicReleaseCenter.aspx> for additional information and applicable publication approval procedures. Verify whether or not your award has a pre-publication review need at <http://dtsn.darpa.mil/fundamentalresearch/>.



## HELPFUL LINKS



The most comprehensive source of publicly available data on DARPA programs is available on our website. [www.darpa.mil](http://www.darpa.mil)



Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) funding opportunities  
<http://www.acq.osd.mil/osbp/sbir/>.

A|PTAC



Assistance on locating funding opportunities across the Federal Government is available through your local Procurement Technical Assistance Center as well as your local Small Business Office.

<http://www.aptac-us.org/new/index.php> <http://www.sba.gov/direct/index.html>

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