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TARDEC Dual Use Technology Briefing



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

National Automotive Center Tech Transfer Team

APBI 2011

Pete DiSante

UNCLAS: Distribution A
Approved for Public Release

- **Small Business Innovation Research (SBIR)**
- **Testing Services Agreements**
- **Education Partnerships**
- **Cooperative Research And Development Agreements (CRADA)**





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TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Small Business Innovation Research (SBIR) Overview

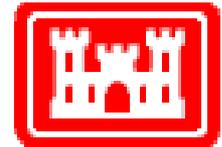
A congressionally mandated program...



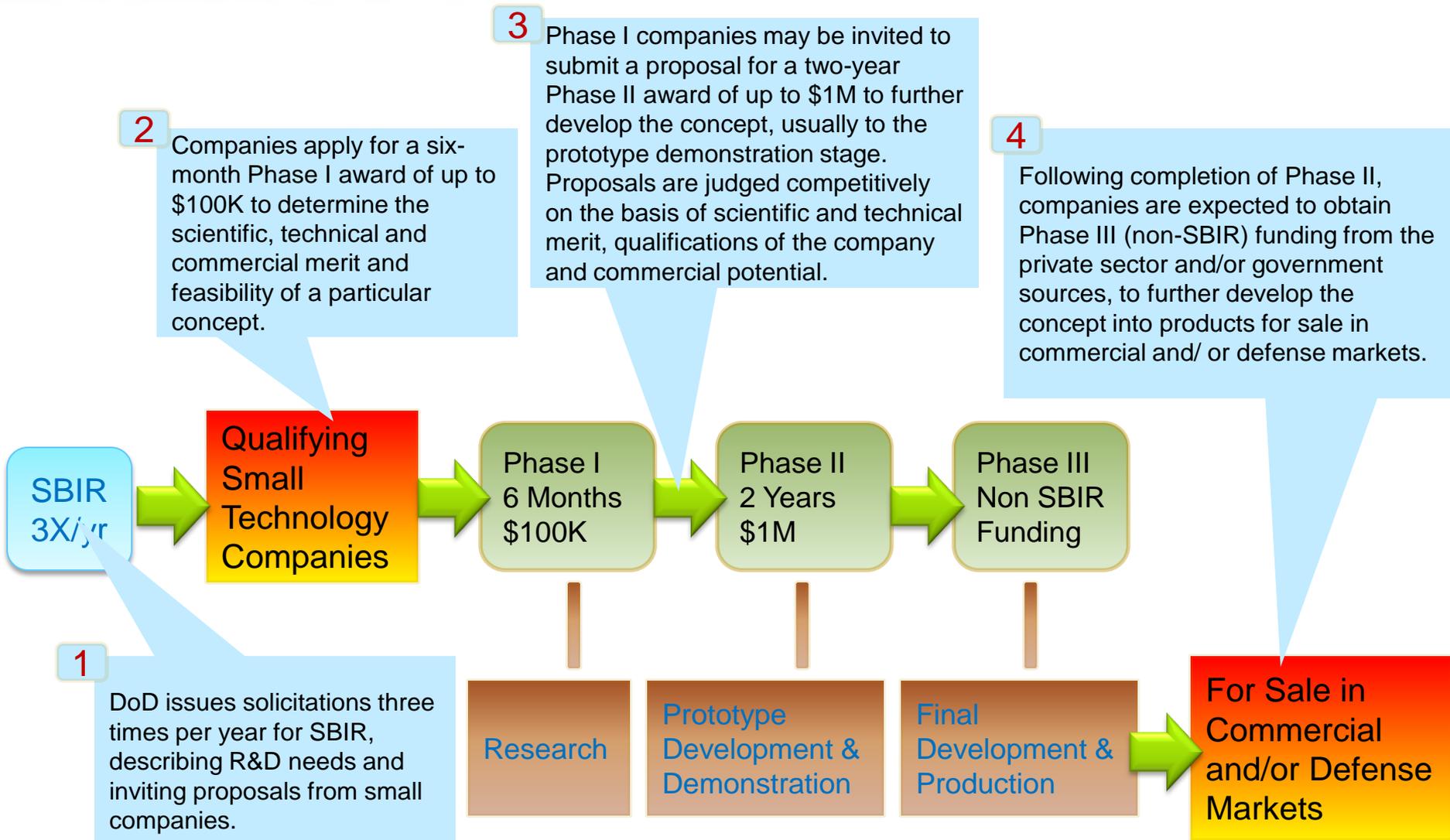
- Established in 1982, P. L. 97-219
- Federal Government wide (11 Federal agencies and 12 DoD components participate)
- 2.5% of Extramural RDT&E (>\$100M)
- Stimulate technological innovation
- Increase small business participation in federally funded R&D
- Transition Federal R&D into:
 - Government Programs
 - Industry Initiatives

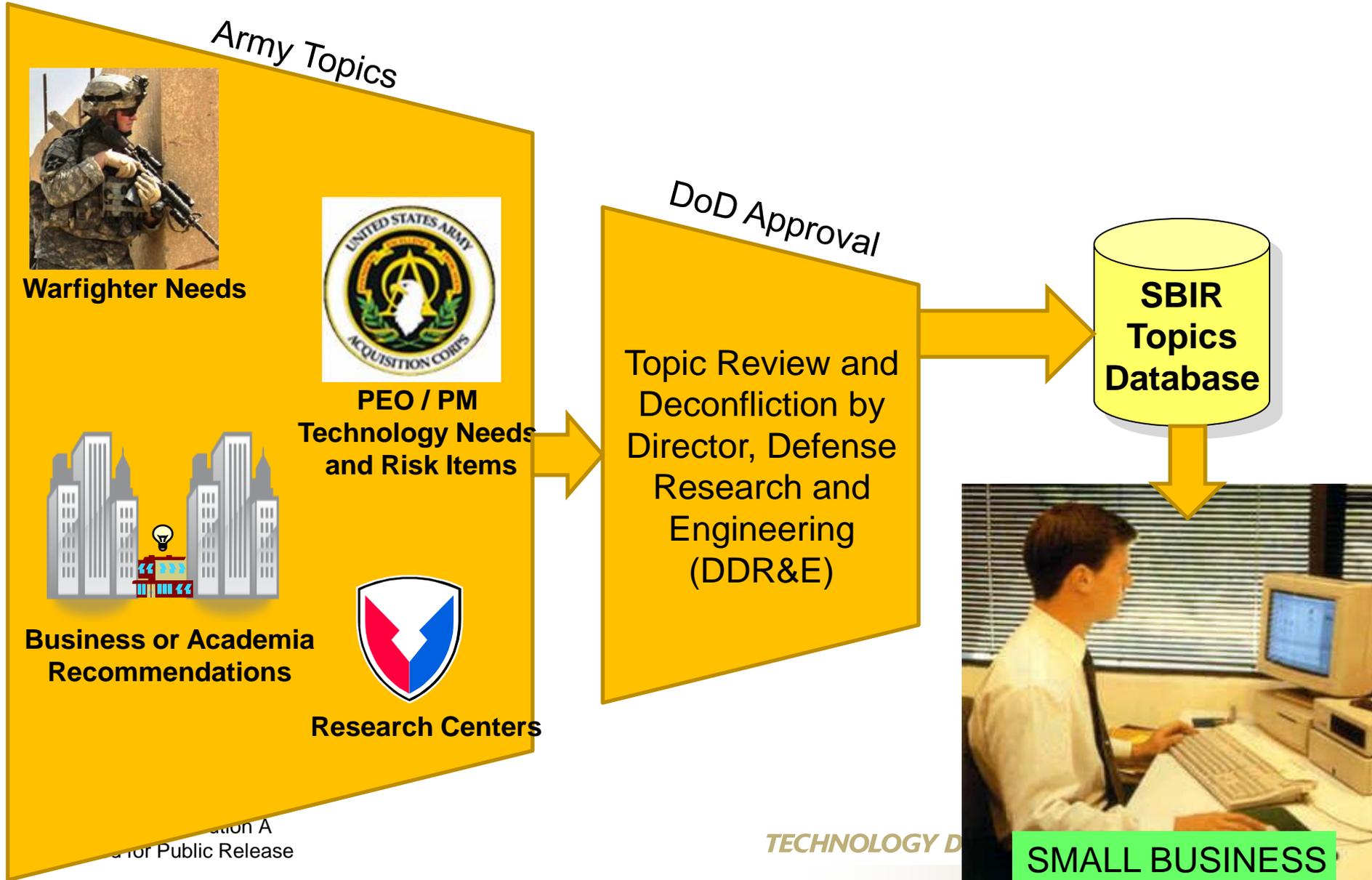
1. Must be a U.S. for-profit small business of 500 or fewer employees
2. All work must be performed in the United States; including subcontractors
3. During Phase I, a minimum of 2/3 of the effort must be performed by the proposing small business; a minimum of 1/2 of the effort in Phase II
4. The Principal Investigator must spend more than 1/2 of the time employed by the proposing small business.

AMC, Research Development and Engineering Command (RDECOM)
Army Test and Evaluation Command (ATEC)
CoE, Engineer Research and Development Center (ERDC)
MEDCOM, Medical Research and Materiel Command (MRMC)
Space & Missile Defense Command (SMDC)
DA G1, Army Research Institute (ARI)
Army Program Executive Offices (PEOs)



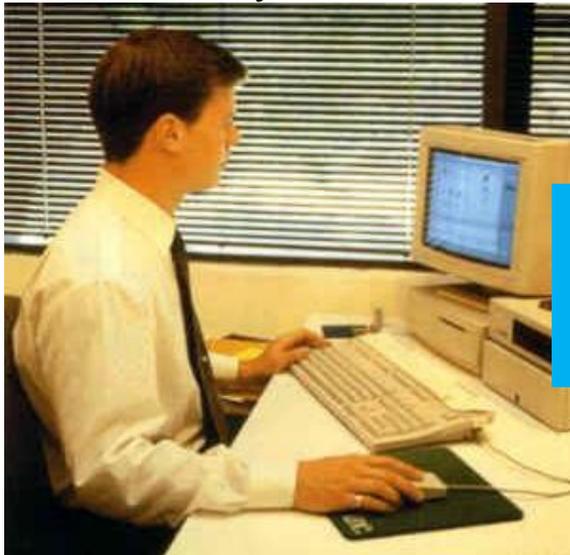
RDECOM manages for the Army



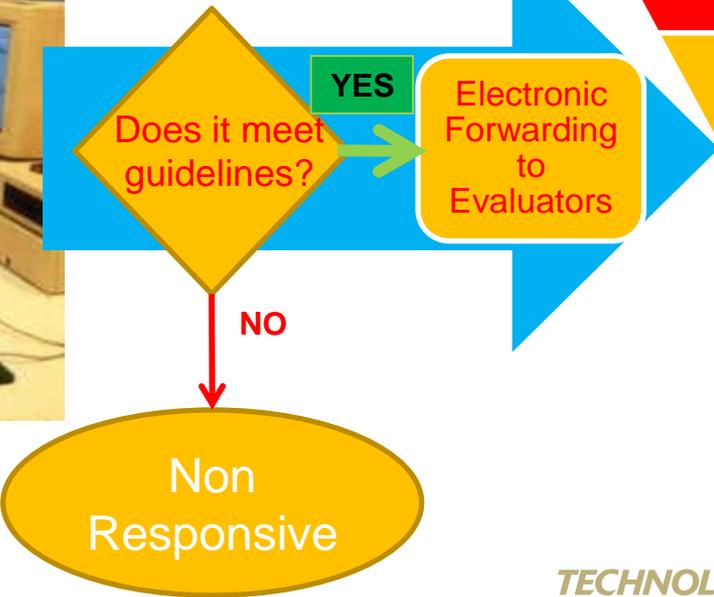


Goal: Impartial, Equitable, and Comprehensive Proposal Evaluation

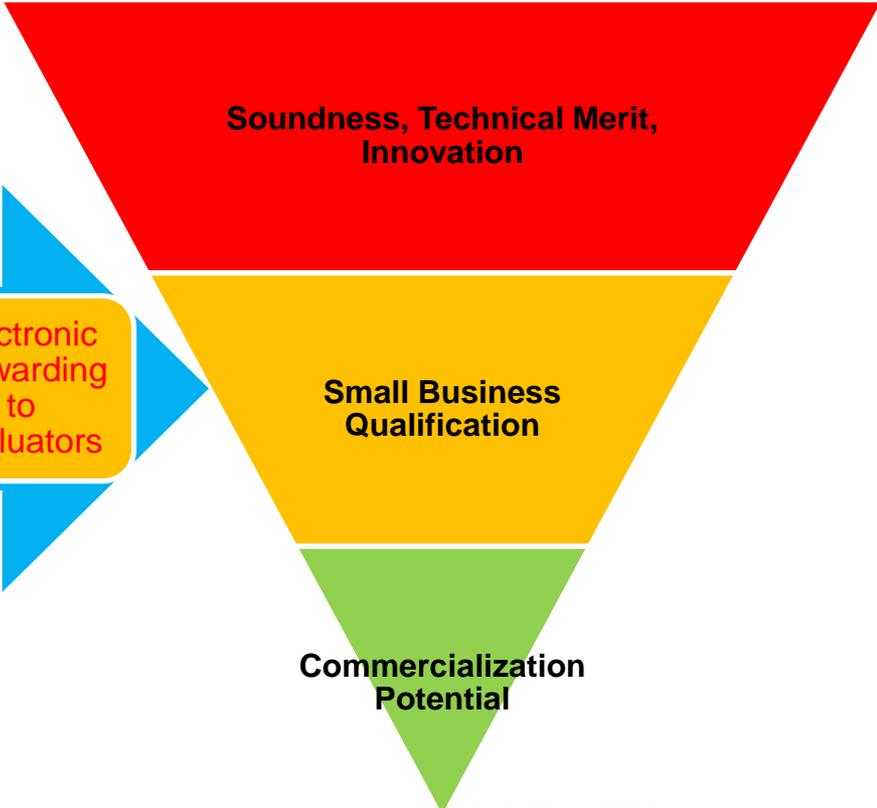
Follow Solicitation
Instructions from DoD
Proposal Submission
System



SMALL BUSINESS



TWO-STEP EVALUATION



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.



	Pre Solicitation	Solicitation	Proposal Deadline	Award Goal
SBIR Yxx.1	Nov	Dec	Jan	May
SBIR Yxx.2	Apr	May	June	Oct
SBIR Yxx.3	July	Aug	Sept	Jan

- Evaluation process is a rigorous 2 tier source selection process (TET, SSEB, SSA)
- Evaluation criteria - technical feasibility, personnel/facilities, and transition potential
- Competitive Process (Phase I – 10% selected)

View solicitations and submit all proposals via DoD Web Site

<http://www.dodsbir.net/submission>



	Proposal Invitation	Submission Deadline	Award Goal
SBIR Yxx.a	Sept	Oct	April
SBIR Yxx.b	March	April	Oct
SBIR Yxx.c	June	July	Jan
SBIR Yxx.d	July	Aug	Feb

- Proposals by Invitation Only
- Evaluation Process the same as Phase I
- Phase II – 50% selected

HOME

SBIR

STTR

CBD SBIR

COMMERCIALIZATION

AWARDS

SMALL BUSINESS PAGE

RELATED LINKS

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SUGGEST A RESEARCH TOPIC



OUR MISSION

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs allow small, high-tech U.S. businesses (less than 500 employees) and academia the opportunity to provide innovative research and development solutions in response to critical Army needs. By capturing the tremendous and agile talents of the U.S. small business community, the SBIR and STTR programs benefit the Department of Defense (DoD), the private sector, and our national economy. This portal provides all the information necessary to participate in these programs.

10.2 PHASE I SCHEDULE

10.2 Solicitation Pre-release:
21 April - 18 May 2010
10.2 Solicitation Opens: 19 May 2010
10.2 Solicitation Closes 23 June 2010

Upcoming Events

- > **2010 Beyond Phase II Conference**
September 13-17, San Antonio, TX
More Info...
- > **2010 Defense Manufacturing Conference**
November 29-December 2, Las Vegas, NV
More Info...
- > **2010 Spring National SBIR/STTR Conference**
April 21-23, Hartford, CT
More Info...

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- RELATED LINKS
- CONTACT US
- SUGGEST A RESEARCH TOPIC

SMALL BUSINESS PAGE

This area provides:

- **Firm Profile** - view your firm's information, as it is stored on the DoD Submission Site.
- **Proposal Status/Debriefing** - Army SBIR/STTR proposal debriefing requests (for non-selected proposals)
- **Summary Reports** - Summary reports that you have created and their current status
- **Impact/Transition Story** - Individual small businesses may complete the SBIR/STTR Impact/Transition Story form highlighting a particular SBIR/STTR project.
- **Commercialization Pilot Program (CPP) Commercialization and Transition Assessment (CTA)** - The 2010 CPP process is now complete. We will notify all eligible firms when the FY11 process begins.
- **Phase III Plan** - Army SBIR Technical Assistants will contact Phase II Awardees and assist to develop and deliver Phase III plans in coordination with government project managers, Phase II company and stakeholders. Those small businesses contacted will be able to go into the Portal and find a template to build a Phase III Plan. This Phase III Plan can be used as a precursor to CPP inclusion or other transition opportunities.

- Firm Profile
- Proposal Status & Debriefs
- Phase I & II Summary Reports
- Impact/Transition Story
- CPP Commercialization & Transition Assessment (CTA)
- Phase III Plan

SMALL BUSINESS PORTAL LOGIN

Small Business Name (or first letters)

You **MUST** have an account on the DoD SBIR/STTR Submission Site [↗](#).

In order to log in, use the same login information here as you do on the DoD site. If you are not sure if you have an account on the DoD Site, or if you have forgotten your password, please proceed to the DoD SBIR/STTR Submission Site [↗](#) and enter your company name. You can verify if your small business has an account and/or request a forgotten password.

NOTE - Correspondence between the Army SBIR Program and small businesses is normally done via e-mail. Please update any Spam filters which do not allow our mail into your system. Suffixes on e-mails from this office end with @belvoir.army.mil and @us.army.mil. The Principal Investigator (PI) and Company Official (CO) should also ensure that e-mail addresses are accurate on submitted proposals, as well.

★ + DoD SBIR Resource Center - www.dodsbir.net

DEPARTMENT OF DEFENSE

Resource Center

Small Business Innovation Research

www.dodsbir.net

SEARCH

- AWARDS**
DoD SBIR & STTR Awards
- TOPICS**
Current DoD SBIR & STTR Topics
- SITIS**
Interactive Topic Info System

INTEREST

- [ABOUT SBIR/STTR](#)
- [CURRENT SOLICITATION](#)
- [SELECTION LISTINGS](#)
- [CONFERENCES](#)
- [DESK REFERENCE](#)
- [MAJOR ACQUISITION LIAISONS](#)
- [SUCCESS STORIES](#)
- [FIRMS IN THE NEWS](#)
- [SBIR ANNUAL REPORT](#)
- [STTR ANNUAL REPORT](#)
- [FAST TRACK/PHASE II ENHANCEMENT](#)
- [COMMERCIALIZATION PILOT PROGRAM](#)

HELP

- HELPDESK**
Answers Questions About DoD SBIR & STTR
- WEBSITE**
Main Website for More Information
- LISTSERV**
Subscribe to Receive Program Notices and Updates
- CONTINUOUS LEARNING**
A library of SBIR Program Resources

SUBMISSION

SUBMISSION
DoD SBIR/STTR Proposal Submission



U.S. Department of Defense
SMALL BUSINESS INNOVATION RESEARCH
SMALL BUSINESS TECHNOLOGY TRANSFER



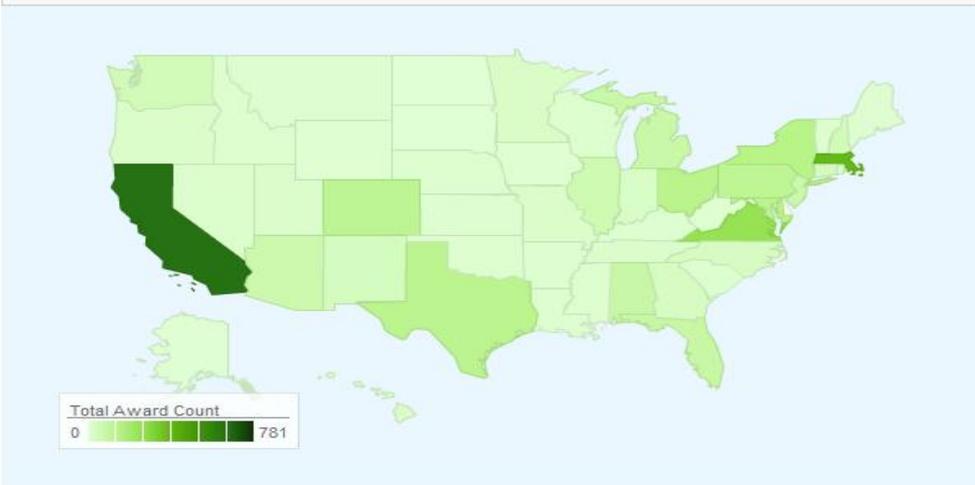
- Home
- About ▾
- for Small Business ▾
- for Government ▾
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- Contacts ▾

Get Started Now!

Learn how to submit a proposal and receive R&D funding for your innovation ideas that support the Warfighter



DoD SBIR/STTR Awards by State - 2010



This graphic shows SBIR/STTR program results. Click on the tabs at the bottom of the graphic to view total Awards, Commercialization or Socioeconomic results by State or by Component. Commercialization results are the combined value of sales and additional non-SBIR investments, from either a federal or private entity, which result from, extend, or logically conclude any Phase II project. Click [here](#) to download the data for these graphics for FY 2008–2010.

- #### QUICK LINKS
- Solicitation Schedule ▶
 - SITIS—Topic Questions & Answers [↗](#) ▶
 - Topics Search [↗](#) ▶
 - Proposal Submission [↗](#) ▶

AWARDS	COMMERCIALIZATION	SOCIOECONOMIC
AWARDS BY COMPONENT	COMMERCIALIZATION BY COMPONENT	SOCIOECONOMIC BY COMPONENT

GET TO KNOW THE PROGRAM
 Overview of the SBIR and STTR programs and funding information for each program going back to their inceptions.

Address http://www.dodsbir.net/topics/Default.asp



DoD SBIR / STTR TOPICS - Basic Search

Topic Number Search

Search by Topic Number:

- OR -

Keyword Search

Search by Keyword:

Limit search to within

AND Matches within

Sorted by

- Topic #
- Agency

DoD SBIR/STTR Topics

Topics for current Department of Defense (DoD) Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program Solicitations are easily accessed from this site. Search by topic number or keywords.

Current Solicitation	Pre-release Date	Begin Accepting Proposals	Close Date	Participating Components
				Air Force, Army, DARPA



DoD SBIR / STTR

SITIS - SBIR/STTR Interactive Topic Information System

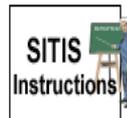
As of midnight September 1, questions for solicitations SBIR 10.3 and STTR 10.B will no longer be accepted.

The purpose of *SITIS* is to provide technical clarification on solicitation topics. Any other questions will not receive a response. In *SITIS*, questioner and respondent remain anonymous and all technical questions and answers are posted electronically for general viewing.

Questions that deal with the technical aspect of a specific topic in the DoD SBIR FY2010.3 and STTR FY2010.B Solicitations will be accepted in *SITIS* through September 1, 2010. Once DoD begins accepting proposals on August 17, 2010, questions may only be submitted through the *SITIS* system because direct contact between proposers and topic authors is no longer allowed.

View [SITIS Quick Scan](#) daily to see which topics currently have Q&As or other information. To submit a technical question, click on the topic number listed in Quick Scan and scroll to the New Question section at the bottom.

If you haven't used this system before, you should first read the [SITIS Instructions](#), which explains how to use the system, as well as what to expect from *SITIS*.



Comments or Problems: SBIRHelp@brtrc.com

Updated: July 2010



DoD SBIR/STTR SUBMISSION



Enter the First Few Letters of your Firm Name:

And Press:

- Resource Center: www.dodsbir.net
 - ✓ Everything you ever wanted to know about the DoD SBIR program
- Homepage: www.acq.osd.mil/osbp/sbir/
 - ✓ Program overview, solicitations, sample proposals, and more
- Topic Search: www.dodsbir.net/topics/
 - ✓ Search current solicitation topics by topic number or keyword
- Proposal Submission: www.dodsbir.net/submission/
 - ✓ Prepare & submit proposal coversheets, commercialization report, update phase II projects
- Topic Questions: www.dodsbir.net/sitis/
 - ✓ Obtain technical clarification regarding current solicitation topics
- Awards Search: www.dodsbir.net/awards/
 - ✓ Searchable database of SBIR awards from FY83-FY11

- Review the Topics in the current solicitation at www.dodsbir.net/solicitation/
- Register and submit proposals at www.dodsbir.net/submission/
- General questions? Call our Help Desk
866-SBIRHLP (724-7457)
- Questions about a solicitation topic? Contact topic author listed with the topic during the pre-release period or www.dodsbir.net/sitis/
- Subscribe to the Listserv at www.dodsbir.net/ to receive program notices and updates

Things to remember:

- DoD's SBIR 2011.3 Solicitation,
 - available in HTML, PDF and MS WORD formats on the web at: <http://www.acq.osd.mil/sadbu/sbir/solicitations/sbir113/index.htm>
 - posted on the Web Site on July 28, 2011; began accepting proposals on August 29, 2011; closed to proposals on September 28, 2011.
- The DoD topics search Web site can be found at: <http://www.dodsbir.net/Topics/>

Things to remember:

- Pre-Solicitation. Speak directly to topic authors or submit questions on SITIS (SBIR-Interactive Topic Information System).
- Once solicitation begins. Questions may only be submitted through SITIS.
- SITIS will cease accepting questions two weeks prior to the solicitation close date.
- Before you submit a proposal check SITIS even if you don't need to ask a question; you should view your competitor's questions and the DoD's answers at: <http://www.dodsbir.net/sitis/>

Things to remember:

- ALL SBIR offerors **MUST** register electronically via the Web at: <http://www.dodsbir.net/submission/>
- Via the same Web site you will submit:
 - a) DoD Proposal Cover Sheet (cover and summary abstract),
 - b) ENTIRE Technical Proposal with any appendices,
 - c) Cost Proposal, and the
 - d) Company Commercialization Report

Things to remember:

- DoD requires proposals submitted in PDF format only.
- DoD Help Desk Phone: 866-SBIRHLP (866-724-7457)
- A facility to submit e-mail questions can be found at <http://www.dodsbir.net/helpdesk/>

Things to remember:

- Prior to receiving a contract award, the offeror must be registered in the Central Contractor Registration (CCR) database. For information regarding registration, call 1-888-227-2423 or visit <http://www.ccr.gov/>
- You are required to, “Identify any foreign nationals you expect to be involved on this project, country of origin and level of involvement”
- Army Phase I proposals have a 20-page limit (excluding the Cost Proposal and the Company Commercialization Report).

Things to remember:

- Must use required marking for proprietary info
- Must respond to a published topic
- No unsolicited proposals
- No external proposal info (no links)
- No subcontracting with Government agencies
- No classified proposals
- No paper/mailed proposals

Things to remember:

Pricing and Contracts

- Phase I and Option generally Firm Fixed Price with payment every two months based on reports delivered
- Phase II generally Cost Plus Fixed Fee (CPFF)
 - ✓ Performance based scope
 - ✓ Requires adequate cost accounting system
 - ✓ Payments once or twice a month based on cost
- SBIR data rights apply

Things to remember:

Phase I options:

- Allowed by Army (up to \$50K)
- Should be fully costed separately from the Phase I (base) approach
- Should have separate work plan from Phase I
- Both cost proposal and work plan need to be part of Phase I proposal

- Accelerated Phase II process for Phase I contractors with investors matching Phase II SBIR funding
- Provides incentive to build strategic partners for Phase III investment and marketing as early as Phase I
- Benefits of the process:
 - ✓ Expedited Phase II evaluation, selection and award
- Qualifications:
 - ✓ Fast Track application 120 days after Phase I award
 - ✓ Independent investor commitment for funds in cash
- Matching Rates: 4:1 matching-new firms, 1:1 others

Visit <http://www.acq.osd.mil/sadbu/sbir/fasttrack/index.htm>

- P.L. 97-219; Enacted in 1982, as part of the Small Business Innovation Development Act
- P.L. 99-443 and 102-564; Signed 10/28/92. The SBIR R&D Enhancement Act of 1992 extended the SBIR Program until Oct 2000.
- P.L. 106-554; Signed 12/21/00. The Act HR 5667 of December 2000 extended the Program until 2008.
- **Congress extended the SBIR and STTR programs only through November 18, 2011 (H.R. 2608).**
- DOD SBIR Program administered in accordance with Small Business Administration (SBA) SBIR Policy Directives



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Testing Services Agreement (TSA)

- Allows commercial entities to **utilize unique capabilities** of Government labs
- Government is **reimbursed** for operational and equipment expenses
- **Cannot compete** with private industry
- Test data belongs only to **customer**





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Education Partnership (EP)

- Encourage, enhance **study** in scientific disciplines;

- Set up with US non-profit **educational institutions** dedicated to improving science, math & engineering education;

- Provide assistance by...
 - Loaning or transferring **equipment**
 - Making lab **personnel** available
 - Involving students and faculty in **research**
 - Providing academic and career **advice**





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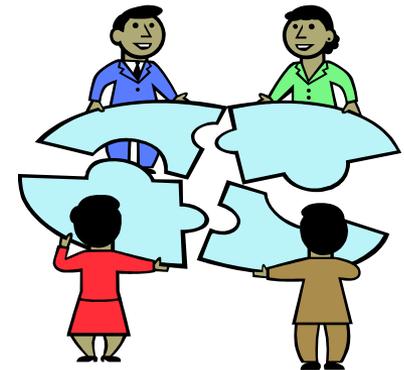
TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Cooperative Research and Development Agreement (CRADA)

- Created by the **Federal Technology Transfer Act** of 1986
- Extends to all **government-owned laboratories**
- Defined in U.S. Code, Title 15, **Section 3710a**
- Not a procurement contract; **Federal Acquisition Regulations do not apply**



- Between **Government Laboratories** and commercial, academic, government or association partners;
- Facilitate **technology transfer** between the parties;
- Partner contributes **personnel, services, property and funding**;
- Government contributes all the above, **except funding**.

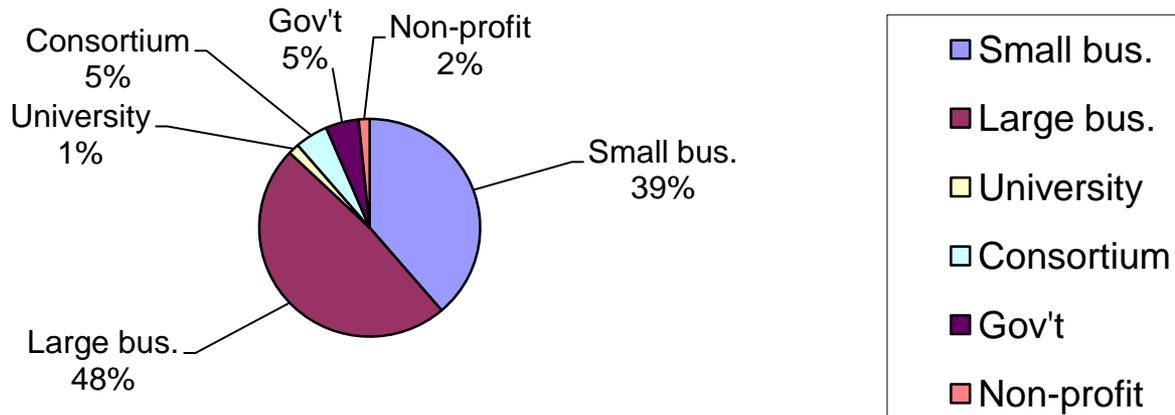
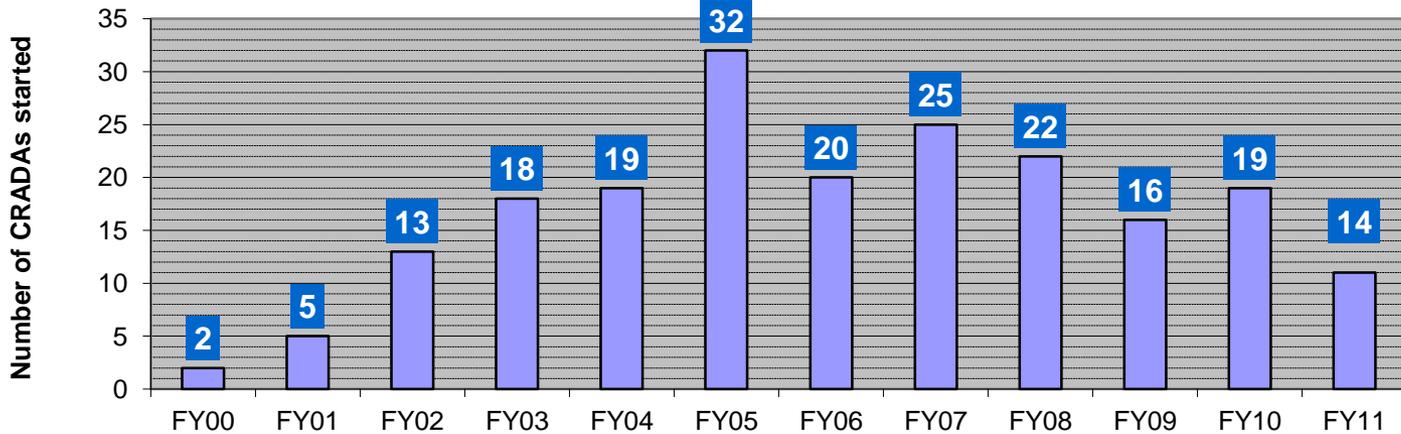


- **Quick** - Typically established within 60 days of initiation.
- **Flexible** - Leveraging of resources; each party pays for their tasks under flexible Statement of Work (SOW).
- **Mutually Beneficial** - Encourages cooperative R&D; partner has option to obtain an exclusive license for technology the Army invents under the CRADA.
- **Safe** - Proprietary information protected; all inventions developed under CRADA belongs to inventing party.
- **Simple** - Conditions and basic rights set forth in clear and simple language.



- **Duration** – Typically 3 years; renewable.
- **Termination** – Upon expiration, by mutual consent, or unilaterally (with written notice).
- **Multiple CRADAs** – A partner may have more than one CRADA with TARDEC simultaneously.
- **Special Agreements**
 - Master Agreement: many SOW's under one contract
 - 3-way: more than one partner
 - Foreign partner: requires approval from trade rep.







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Partnership Resources

Partnership Intermediaries (DoD)

Licensing of patented
government technologies

First Responder
Technology Transfer

TechLink

SpringBoard

FirstLink

www.techlinkcenter.org

www.gospringboard.org

www.dodfirstlink.com

Partnership Intermediary (Local)

Automation Alley

www.automationalley.com

Authorized by 15 USC 3715

More info at http://globals.federallabs.org/pdf/2008/Partnerships_Gonsalves.pdf



www.dodtechmatch.com

DoD TechMatch is a web-based portal designed to provide industry and academia a Department of Defense-sponsored solution to find Research & Development Opportunities, Licensable Patents, and information on approximately 120 DoD Labs located across the United States. Registered users will receive a daily e-mail taking them to their matching R&D opportunities from FedBizOpps, Grants.gov, and SBIR/STTR solicitations; Calendar events; and Licensable Patents relevant to your business.

LEAD - INNOVATE - INTEGRATE - DELIVER

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- Education Partnership Agreement
- Ground Vehicle Gateway
- National Automotive Center (NAC)
- Patent License Agreement
- SBIR Program
- Test Services Agreement

National Automotive Center (NAC)



Chartered by the Secretary of the Army 21 June 1993

Mission

NAC will serve as the *Army focal point* for developing *dual-use automotive technologies* and their applications to military ground vehicles. It will focus on *facilitating joint efforts and collaboration among industry, government and academia* in basic research, technology, industrial base development and professional development.

Introduction

NAC, founded in 1993, is the Department of Defense and Army focal point for collaborative ground vehicle research and development (R&D). NAC is co-located with the U.S. Army TACOM Life Cycle Management Command at the Detroit Arsenal in the heart of the automotive capital. Tank automotive and Armaments Command (TACOM), is an integral part of the Army's Tank Automotive Research, Development and Engineering Center (TARDEC). NAC serves as a catalyst, linking industry, academia and government agencies in the

<http://tardec.army.mil/NationalAutomotiveCenter.aspx>

reduction in ground vehicle design, manufacturing, production, operation and support costs.

AUGUST 17-19, 2010
GVSETS
 GROUND VEHICLE SYSTEMS ENGINEERING AND TECH

https://tardec.GroundVehicleGateway.com. Your submission will be treated confidentially, and a TARDEC technologist will thoroughly evaluate your proposal. For all other inquiries, please use the contact information below.' Below this text are sections for 'Mailing Address' (TARDEC, 6501 E. 11 Mile Road, Warren, MI 48397-5000), 'E-mail' (dami_pao@conus.army.mil), 'Contact for Small Businesses' (groundvehidegateway@conus.army.mil), and 'Careers at TARDEC' (http://tardec.army.mil/careers.aspx). A yellow box at the bottom of the screenshot contains the URL http://tardec.army.mil/contactus.aspx."/>

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Doing Business with Us ▼

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Soldiers are our NUMBER 1 priority. Help us make them your priority as well. Submit your ground vehicle systems technology concepts, ideas and innovations to TARDEC today by visiting <https://tardec.GroundVehicleGateway.com>. Your submission will be treated confidentially, and a TARDEC technologist will thoroughly evaluate your proposal. For all other inquiries, please use the contact information below.

Mailing Address
TARDEC
6501 E. 11 Mile Road
Warren, MI 48397-5000

E-mail
dami_pao@conus.army.mil

Contact for Small Businesses
groundvehidegateway@conus.army.mil

Careers at TARDEC
At the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC), we are fully committed to supporting the warfighter and we need your help to fulfill our mission requirements.
A secure future and a challenging opportunity await you. <http://tardec.army.mil/careers.aspx>

<http://tardec.army.mil/contactus.aspx>



TARDEC Technology Submissions

Soldiers are our NUMBER 1 priority. Help us make them your priority as well. Submit your ground vehicle systems technology concepts, ideas and innovations to TARDEC today using the electronic submission form below. Your submission will be treated confidentially, and a TARDEC technologist will thoroughly evaluate your proposal.

For all other inquiries, click on this link: <http://tardec.army.mil/contact.asp>

Your Submission

- Submission Title:

- Submission:

Maximum 6,000 characters

Documents:

Click "Browse" and select the file you want to attach. Typing file names in the fields above will not attach your files.

- Business Name:

Industry:

- Name:

Job Title:

Address 1:

**TARDEC's
Ground Vehicle Gateway
is YOUR entry point!**

**Submit your technology
for review**

<https://tardec.groundvehiclegateway.com>

<https://tardec.groundvehiclegateway.com>

<https://tardec.groundvehiclegateway.com>



GroundVehicleGateway@conus.army.mil