

Accelerating the Transition of Small Business Innovations into High Priority Defense Programs

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Conference

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By

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Agenda

1. Background
2. Overview of the San Diego Advanced Defense Technology (SDADT) Cluster
3. Current Examples of Programs which Accelerate Small Business Innovations
 - Navy IED Support
 - DHS TechSolutions
 - OSD's Domestic Preparedness Support Initiative
4. Creation of a DoD Program in Support of the Regional Clusters

Background

- Over the last several years there has been a lot of discussion concerning the value of establishing regional innovation clusters as a way to:
 - Grow Jobs in the innovation economy
 - Transition innovations into the market
- In September 2010 the Small Business Administration awarded 10 Cluster awards in regions around the US
 - 7 were Commercial Regional Innovation Clusters
 - 3 were Advanced Defense Technologies Clusters
 - San Diego, Ca
 - Huntsville, Al
 - Minnesota
- The SBA, in conjunction with DoD, is evaluating the best practices from these clusters with the intent of moving forward with a follow-on RFP



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The San Diego Advanced Defense Technology Cluster

OVERVIEW



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San Diego
Advanced Defense Technologies Cluster

Executive Board

Program Manager
SDSU Entrepreneurial Management Center

Advisory Board

CCAT
Business Services
SDSU EMC
CONNECT
FED
PTAC
TCA
SBDC

DOD Partner
SSC Pacific

Industry Assoc.
AFCEA
AUVSI
CommNexus
NDIA
SDSIC

Economic Dev.
ECEDC
SDREDC
SDO SBA

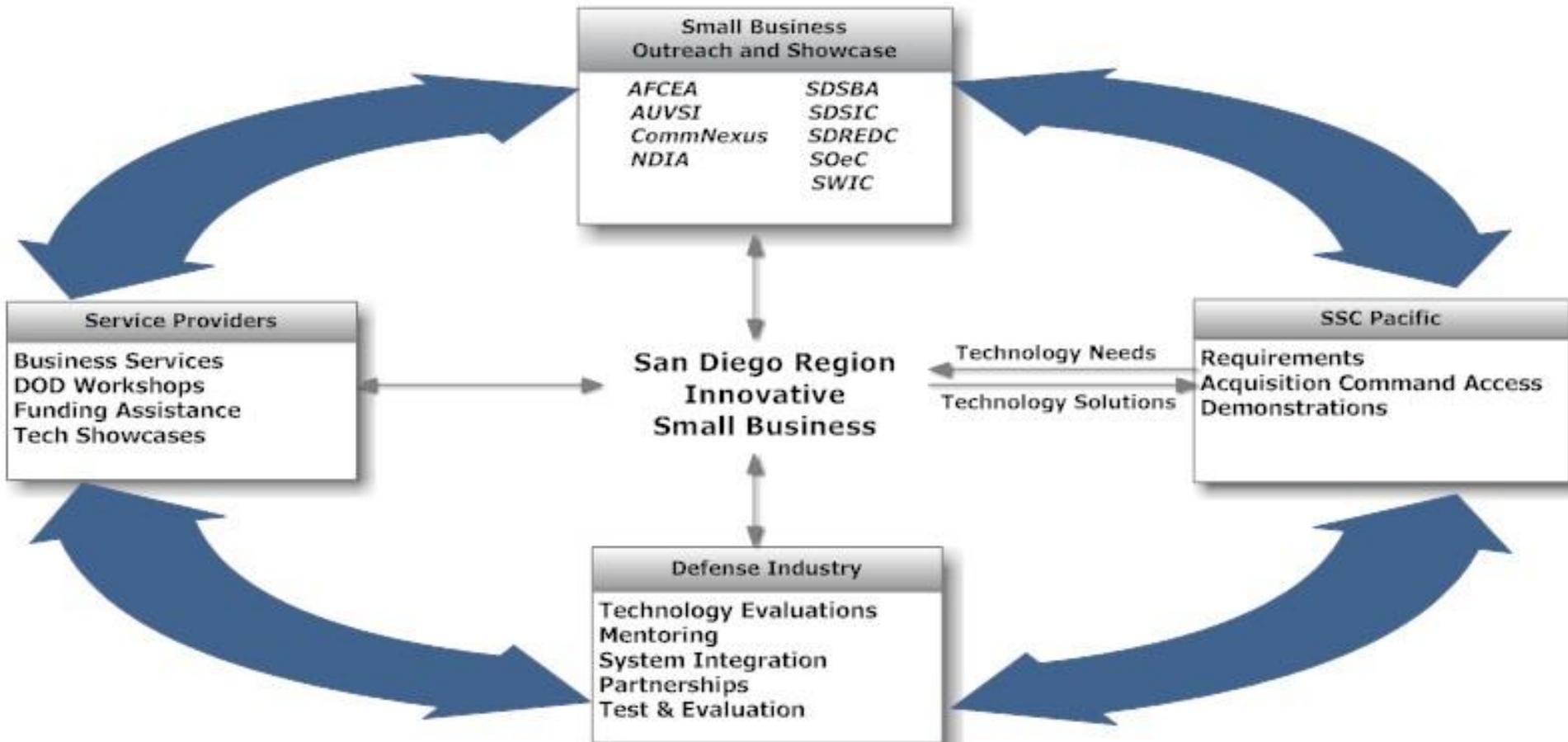
Cluster Groups
Securing Our eCity
SWIC

Defense Industry
Accenture
BAE
Boeing
Cubic
General Dynamics
InScope
Lockheed Martin
NGC
Raytheon
Rockwell Collins
SAIC



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Cluster Concept of Operations





Cluster Strategy and End Goal

Goal: to surround each small business with many elements of support in order to help the company grow and rapidly transition the company's technology into high priority needs in Department of Defense.

This support includes:

1. Assistance in obtaining additional product development funding
2. Introductions to large DOD Primes for integration of technologies and partnerships
3. Inclusion in periodic showcase and demonstration events in front of government and industry customers
4. Access to customized business services to support the path and strategy to bring the technology to the market, e.g. market analysis, license agreements, IP assistance, mentoring by business entrepreneurs, etc.



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SDADT Process for Support of Small Businesses

1. Complete a very simple application form available on line at the web site. The application requests a short description of your technology, your company, and the types of support that you request. Application submitted through <http://sdadt.sdsu.edu/index.php>
2. After receiving your application an initial session will be scheduled with your CEO to discuss your technology, your company, and create an initial plan for customized support to your company.
3. Your customized support could include:
 - Assistance in obtaining additional development funding
 - Business Model and business plan review and/or development support
 - Government and commercial market assessments
 - Intellectual property and export control training and assistance
 - DoD marketplace training (funding vehicles, positioning, contracting)
 - Networking, mentoring, and other collaborative assistance facilitation
 - Each small business can be assigned a business entrepreneur to work with the company as an advisor throughout the process, if appropriate.
4. Each company will be included in major events such as showcases and demonstrations



Results of Support

In the first 12 months of operations, the Cluster :

- Recruited and is providing customized business support to 31 clients
 - Assigned business consultant/entrepreneur-in-residence for B&P services
 - Assigned University Business School faculty-student teams for market research
 - Sponsored showcase demonstrations to primes and DoD agencies for 11 clients
- Supported ~80 small businesses through business oriented workshops

Results included:

- 15 new contracts valued at \$3,177,023 with Cluster support
- \$2,000,000 in private investments

\$5,177,023 of new funding received by SDADT clients



Conclusions

1. The Regional Innovation Program is a very effective approach to:
 - Growing jobs in high tech, innovative small businesses
 - Greatly accelerates the transition of innovations into the market
2. The Clusters could, however, be potentially even more effective with a partner program within the DoD to assist with development funding.



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Examples of Successful Programs That Show How the DoD Partnership Program Would Work

1. Navy EOD Support for IED Defense
2. DoD Domestic Preparedness Support Initiative
3. The DHS Tech Solutions Program

These programs are all being executed by the
Center for Commercialization of Advanced Technology

Navy EOD Support to IED Defense

- CCAT partners with NAVEODTECHDIV, who sponsors the initiative
- Navy provides high priority requirement for “End-Effector Tooling”
- A 30-day national solicitation seeking mature technologies (TRL 6)
- Evaluations are performed by SMEs from Navy, business, and academia
- Most viable technology solutions are presented to a panel of SME
- Panel recommendations are reviewed and approved by the Navy
- Due diligence and contract is put in place within 30 days
- Contract funds customization and integration onto Packbot and Talon
- Navy takes product into operational testing as part of the contract
- CCAT and the Navy decide on acquisition plan following successful testing

Results: Innovative Solution Brought to high priority need in < 1 year

DHS Tech Solutions Program

- CCAT partners with the first responder technologies portion of DHS S&T
- CCAT then partners with a national group of first responders brought together by DHS to understand requirements and obtain the ability to get timely evaluations of potential solutions
- Program focuses on the transition mature technologies (TRL 6) which solve first responder needs in a 1 to 1.5 years.
- CCAT executes the solicitation, selection, and contracting processes as previously described.
- The product is then tested with multiple first responder organizations
- Once demonstrated as a viable solution, CCAT then supports the company in creating the best commercialization plan.

DoD Domestic Preparedness Support Initiative

- CCAT partners with OSD, who sponsors the initiative
- Purpose: identify DoD developed mature technologies that could solve first responder needs
- CCAT partners with first responder organizations across the nation
- OSD/CCAT identifies requirements related to high priority needs in the first responder community
- CCAT executes the solicitation, selection, contracting process as for the Navy program
- After completion of development effort, the technology is tested with first responder organizations to prove viability
- CCAT supports the small business bring the product to the market by devising the proper commercialization plan: license, partnership, etc.

CCAT Success Metrics (Over 11 years)

1. Conducted 49 solicitations, evaluated 1338 applications, and selected 226 technologies for development, integration, evaluation and transition
2. Provided \$49 million in support to 164 small businesses.
3. Leveraged CCAT funding and services into \$363 million of product sales, 3rd party investments, and mergers and acquisitions.
4. Achieved a 49.5% success rate with 91 of 184 clients achieving one or more commercialization milestones, i.e. sales, 3rd party funding, licenses, and/or acquisitions/mergers/partnerships.

The Programs discussed here are all on-going
and can be accessed at:

<http://www.ccatsandiego.org/index.shtml>

How can we combine these approaches to create a highly effective national program to bring innovations to the defense programs?

Potential Approach

1. The SBA expands their support of the Advanced Defense Technology Clusters by increasing the number of clusters from 3 to 5 or 6 in order to cover most of the high tech regions in the nation.
2. OSD could establish a program similar to the examples which would partner directly with DoD high priority initiatives such as JUONs, service UONs, etc.
3. The high priority initiatives would identify technology needs that could be solved by innovative small businesses.
4. The OSD program would issue a solicitation to all 5 ADT clusters who would solicit in their regions for solutions and submit proposals to the OSD for review and evaluation.
5. If a technology was selected, OSD would fund the development and test much like the examples cited.

Benefits

1. A much more rapid growth path for small innovative businesses
2. A much greater prospect for transitioning innovations into the key high priority needs of DoD
3. A major step towards off-setting the sizable DoD down sizing by increasing the innovations in our remaining key systems



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Entrepreneurial Management Center

College of Business Administration



Partnering to Accelerate Innovation

Thank you for your attention!