

Rapid Innovation Fund (RIF) Program



Overview: January 2015

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OASD (R&E) Emerging Capabilities & Prototyping**



Background

- **Established by the Fiscal Year 2011 National Defense Authorization Act (Section 1073)**
 - **A competitive, merit-based program**
 - **Accelerate fielding of innovative technologies into military systems**

***Transition Small Business Technologies
into Defense Acquisition Programs***



Key Requirements

- ***Proposals or Projects:***

- Satisfy an operational or national security need
 - Accelerate or enhance military capability
 - In support of major defense acquisition program
- Reduce:
 - Technical risk
 - Cost: Development, acquisition, sustainment, or lifecycle
- Completed within 24 months of award
- Cost is not more than \$3 million

Selection Preference to Small Business Proposals



Implementation Strategy



- ***Competitive, Merit-Based Two-Step Process***

- **Step 1:**
 - Issue Broad Agency Announcements (BAAs)
 - Industry Response: 3 - 5 page White Paper + Quad Chart
 - Evaluations are “Go” or “No Go”
- **Step 2:**
 - Highest rated “Go” offerors invited to submit full proposals
 - Further competition – invite for proposal DOES NOT guarantee an award
 - Highest-rated proposals lead to award

- ***Public Notice:***

- **Federal Business Opportunities: www.FedBizOpps.gov**
- **Research & Engineering Defense Innovation Marketplace**



RIF Interest & Workload

FY 2011 – 2014 Summary



Funds: > \$1B (Research & Development)

Extremely Competitive Source Selection:

- 13 solicitations (BAAs)
- 19 Defense Components (Services & Agencies)
- 10,800+ White Paper Proposals
- 600+ Full Proposals
- 367 Contract Awards (FY11-13 funds)
 - 329 awards to Small Businesses (90%)



RIF Demand & Stats

FY 2011 – 2014 (By Year)



	FY 2011 (Actual)	FY 2012 (Actual)	FY 2013 (Act. or Est.)	FY 2014 (Act. or Est.)
Appropriated	\$439M	\$200M	\$250M	\$175M
Available	\$432M	\$187M	\$225M	\$175M
DoD Participants	7	10	16	19
BAAs Issued	A, N, AF, OSD	A, N, AF, OSD	A, N, AF, OSD	OSD (single BAA)
White Papers Submitted	> 3,500	> 2,200	> 2,900	> 2,200
Full Proposals Invited	> 200	> 125	> 175	> 130 (est)
Awards - Small Biz - SBIR	177 95% 80%	86 85% 75%	104 85% 70%	TBD
Avg. Project	\$2.2M	\$2.1M	\$2.1M	TBD



FY 2014 Defense Participants



- **Military Departments: Army, Navy & Air Force**
 - **OSD Activities / Defense Agencies:**
 - Deputy Assistant Secretary of Defense (Emerging Capabilities & Prototyping)
 - Deputy Assistant Secretary of Defense (Manufacturing & Industrial Base Policy)
 - Chief Information Officer / Defense Information Systems Agency
 - Defense Threat Reduction Agency
 - Missile Defense Agency
 - Defense Logistics Agency
 - National Reconnaissance Office
 - National Geospatial-Intelligence Agency
 - Defense Intelligence Agency
 - Defense Health Program
 - Combating Terrorism Technical Support Office
 - Joint S&T Office for Chemical and Biological Defense
 - **Combatant Commands (CCMDs)**
 - U.S. Special Operations Command
 - U.S. Northern Command / North American Aerospace Defense Command
 - U.S. Pacific Command
 - U.S. Transportation Command
- **19 Defense Activities**
 - **278 Defense Requirements**
 - **Army: 116**
 - **Navy: 34**
 - **Air Force: 88**
 - **OSD / Defense Agency: 40**



RIF FY 14 BAA:

Service “Acquisition” Participants



Army

- Acquisition Program Executive Offices (PEOs) & Program Managers (PMs)
 - Ammunition
 - Aviation
 - Soldier / Soldier Systems
 - Command, Control, Communications – Tactical
 - Intelligence, Electronic Warfare and Sensors
 - Combat Support / Combat Support Systems
 - Missiles & Space Systems
 - Simulation, Training & Instrumentation
 - Joint PEO for Chemical & Biological Defense
- Research & Development Centers / Other Activities
 - Aviation and Missile Research Development & Engineering Center (AMRDEC)
 - Armament Research, Development & Engineering Center (ARDEC)
 - Army Research Institute (ARI)
 - Army Research Lab (ARL)
 - Communications-Electronics Research, Development & Engineering Center (CERDEC)
 - Edgewood Chemical Biological Center (ECBC)
 - Natick Soldier Research, Development & Engineering Center (NSRDEC)
 - Tank Automotive Research, Development & Engineering Center (TARDEC)
 - Defense Forensics & Biometrics Agency (DFBA)
 - Corps of Engineers (COE)

Navy

- Acquisition Program Executive Offices (PEOs) & Program Managers (PMs)
 - Naval Air Systems Command (NAVAIR)
 - Tactical Aircraft Programs
 - Air Anti-Submarine Warfare, Assault and Special Mission Programs
 - Unmanned Aviation & Strike Weapons
 - Joint Strike Fighter
 - Naval Sea Systems Command (NAVSEA)
 - Aircraft Carriers
 - Integrated Warfare Systems
 - Littoral Combat Ship
 - Ships
 - Submarines
 - Space and Naval Warfare Systems Command (SPAWAR)
 - Command, Control, Communications & Integration
 - Enterprise & Integrated Systems
 - Space Systems
 - Fleet Readiness
 - Marine Corp Systems Command (MCSC)
- Other Activities
 - Naval Supply Systems Command
 - Navy Strategic Systems Programs
 - Naval Facilities Engineering Command
 - Navy Bureau of Medicine & Surgery

Air Force

- Acquisition Program Executive Offices (PEOs) & Program Managers (PMs)
 - Agile Combat Support
 - Battle Management
 - Command, Control, Communications, Integration & Network
 - Fighter / Bomber
 - Joint Strike Fighter
 - Space
 - Space Launch
 - Strategic Systems
 - Weapons
 - Intelligence, Surveillance Reconnaissance & Special Operation Forces
- Other Activities
 - Air Force Life Cycle Management Center
 - Air Force Test Center
 - Air Force Propulsion Directorate
 - Air Force Sustainment Center



Elements of a Good Proposal (1 of 2)

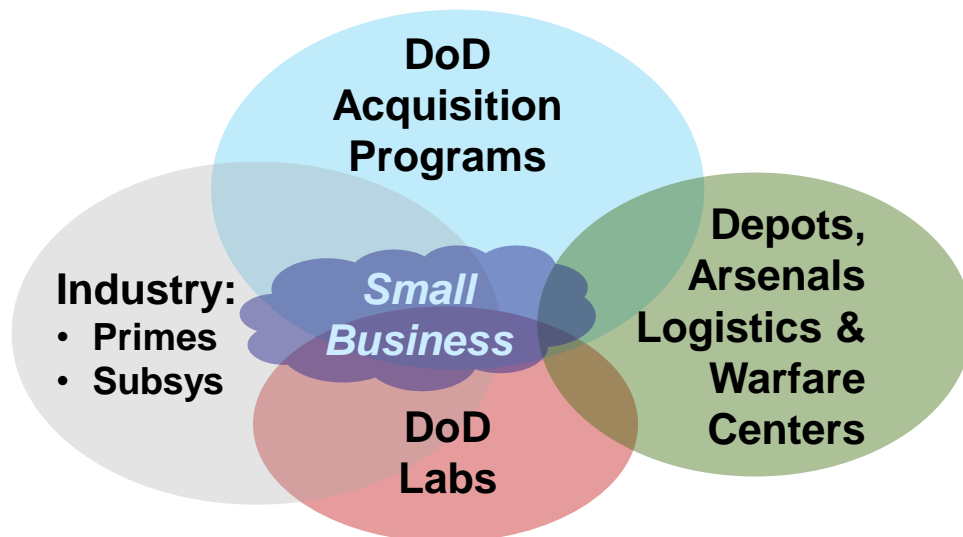


- Responds to a BAA requirement
- Relationship in place with key customers, or otherwise have an ability to reach-out and establish links -
 - DoD acquisition buyers / Program Executive Offices or Program Managers, depots, logistics or warfare centers
 - DoD prime or subsystem contractor who integrates RIF technology
 - DoD laboratory / technology provider

Selection Preference: Small Business Proposals

Source Selection Criteria:

1. Contribution to the Requirement
2. Technical Approach / Qualifications
3. Schedule
4. Cost





Elements of a Good Proposal (2 of 2)



Technology Readiness Level (TRL)

4 Component and/or breadboard validation in a laboratory environment

5 Component and/or breadboard validation in a relevant environment

- **Maturity Goal: TRL 6 – 9**
- **Lower TRL accepted if:**
 - Breakthrough capability or operational game-changer
 - Cost neutral to the acquisition program
 - Accommodated within program schedule

6 System/subsystem model or prototype demonstration in a relevant environment

7 System prototype demonstration in an operational environment

8 Actual system completed and qualified through test and demonstration

9 Actual system proven through successful mission operations

Technology Readiness Assessment Guidance - -
<http://www.acq.osd.mil/ddre/publications/docs/TRA2011.pdf>



RIF FY 2015 – 2016 (FY15 Funds) Source Selection Milestones



Date(s)		Action	As of January 20, 2015
2015	March 1	Requirements from Components, prep DRAFT BAA	
	April 1	BAA Release in FEDBIZOPPs (link to be provided)	
	June 1	BAA Closes: White Papers (WPs) due from offerors	
	NLT October 15	<ul style="list-style-type: none">Components complete WP evaluationsInitial priorities and ranking by Components	
	NLT November 1	Components notify all offerors of WP disposition, invite full proposals	
	NLT December 1	<ul style="list-style-type: none">Full proposals due from offerorsComponents start full proposal evaluations	
2016	NLT February 1	Components complete full proposal evaluations	
	NLT March 1	Negotiations complete, contract awards	
	NLT June 1	FY15-funded RIF contract awards complete	

For Questions / Additional Information --

***[http://defenseinnovation
marketplace.mil/RIF.html](http://defenseinnovationmarketplace.mil/RIF.html)***

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BACK-UP

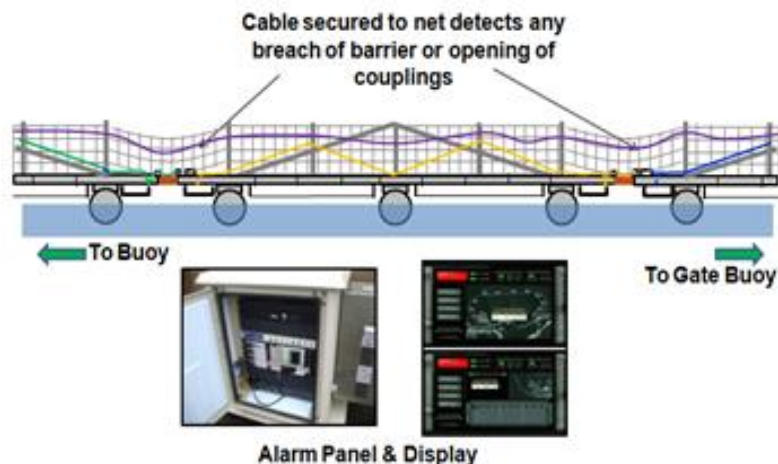


Completed Projects & Results (Navy Examples)



Port Security Barrier (PSB) Intrusion Detection System

Strategic Systems Programs /
Sound & Sea Technology



- Demonstrated fiber optic continuity sensor to monitor PSB continuity
- Optic-electronic alarm & software monitor gate conditions
 - Ensures threats cannot exploit undetected gaps
- Over \$2M budgeted to procure PIDS from FY14 to FY16 for Kings Bay, GA & Bangor, WA

SPAWAR / Referential Systems Inc

Network Planning & Real-Time Automated Management System

- Enables more real-time management of critical network assets and ability to quickly configure network traffic
 - Visualization of network traffic flow status
 - Improved response to network alerts
 - Simplified user interfaces
- Deployed to four Fleet Network Operations Centers



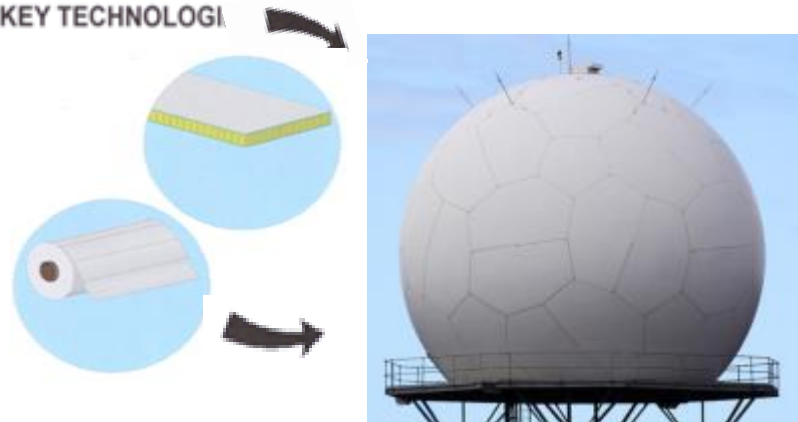


Promising Projects (Air Force Examples)



Advanced Composite Radomes

INTEGRATING TWO
KEY TECHNOLOGI



AF Sustainment Center / Ebert Composites Corp

- Combines innovative advancements in 3D thermoplastic fibers and hydrophobic film to eliminate delamination issues
- Developed one-step pultrusion process that creates spherical shape needed for radome panels
- Full scale prototype (Summer 2014)

AF PEO C3I & Networks /
Windmill International Inc.

Lightweight Tactical Suitcase Portable Receive Suite

- Enables deployed military forces to access Global Broadcast System (GBS) for satellite imagery, weather info, map data, classified and unclassified intelligence
- Several hundred expected to be ordered, primarily for special forces

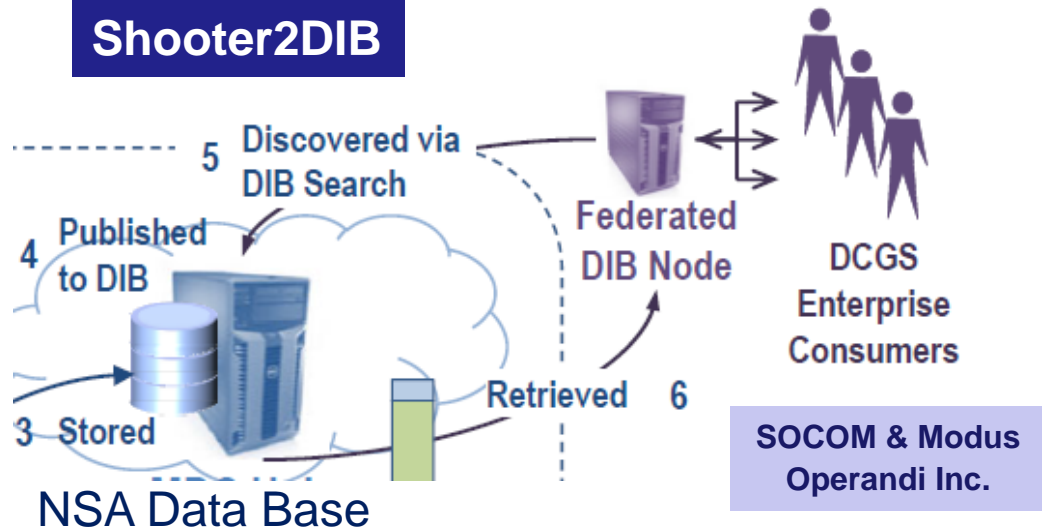




Completed Projects & Results (Defense Agency Examples)



Shooter2DIB



- Accelerates exploitation of intelligence by publishing Signal Intelligence data to the DCGS Integration Backbone (DIB)
- Capability transitioned to the Distributed Common Ground System (DCGS) Management Office for the DCGS Enterprise

SOCOM & Systema Technologies, Inc

- Doubles the number of targets that can be attacked from a single CLT while maintaining the overall system
- Smaller warheads combined with precision delivery minimizes collateral damage
- Transitioned to CLT Program of Record

Multi-Missile Common Launch Tube (CLT)



Two Missile Carried & Launched from CLT





Resources for Industry: Defense Innovation Marketplace

(1 of 2)



Improve Industry Understanding of DoD Needs --
www.DefenseInnovationMarketplace.mil

Marketplace: Resources for Industry

- DoD R&D Roadmaps; Investment Strategy
- Business Opportunities with the DoD
- Virtual Interchanges & Events
- Secure Portal for IR&D Project Summaries
- Top Downloads / Pages visited

Resources for Small Business: Rapid Innovation Fund and DoD Small Business Links



Resources for Industry:

Small Business Innovative Research (2 of 2)



Doing Business with the Department of Defense

<http://www.acq.osd.mil/osbp/sb/index.shtml>

- “How-To” work with Defense
- Guides on Marketing to Defense
- Programs for Small Business
 - SBIR / STTR
 - Mentor Protégé
- Contracting with Defense
- Small Business Training
- Conferences & Workshops
- Frequently Asked Questions

Talk to an Small Business Program Expert

<http://www.acq.osd.mil/osbp/sbir/contacts/sbir-contacts.shtml>

- 14 Points of Contact Across the Department of Defense