Reinvigorating Industry Independent Research & Development

April 26, 2013

Colonel Brooks McFarland, USAF
OASD(R&E)
Better Buying Power 1.0

Reinvigorate industry’s independent research and development and protect the defense technology base

DFARS Change

231.205-18 Independent research and development and bid and proposal costs.

(a) Definitions. As used in this subsection—

IR&D Project Inputs 1975 - 2012


0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

5917
BBP 2.0

Expand programs to leverage industry’s IR&D

PROGRAM

Leverage IR&D into specific programs

Industry, S&T and ACQ PMs

Technology Insertion

Creating options for the future & tech maturity for program insertion

COMPONENT

Assessment of Component S&T and Industry IR&D to support capabilities for core missions

Industry Division Leaders Component S&T Execs

Strategic Planning

Inform S&T & ACQ investment portfolios

OSD

Reinvigorating innovation
Protecting the Defense Industrial Base

CEOs
Industry Associations
USD(AT&L)
ASD(R&E)
DASD(M&IBP)
DASD(Research)

Setting Policy

Strengthen technical base

IR&D INITIATIVE – using actionable data to support research and development planning
CONNECTING INDUSTRY & GOVERNMENT

The Defense Innovation Marketplace is a centralized resource to reinvigorate innovation.

For Industry, the Marketplace is a resource for information about Department of Defense investment priorities and capability needs. Additionally, industry uses this site to submit proprietary IR&D summary reports which are separately stored, accessed and used solely for compliance with the Defense Federal Acquisition Supplement at 48 CFR 231.205-18(c)(iii)(C).

For Government, the Marketplace provides access to search tools to assess and then leverage industry IR&D projects for current and future programs.

NEW IN THE MARKETPLACE

<table>
<thead>
<tr>
<th>S&amp;T Strategic Documents</th>
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<tr>
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www.defenseinnovationmarketplace.mil
Industry Resources

The Defense Innovation Marketplace is your one-stop source for Department of Defense (DoD) science and technology (S&T) planning, acquisition resources, funding and financial information. Please let us know what other Department materials would be useful to post on the Marketplace so that industry can plan its IR&D investments at (comments@defenseinnovationmarketplace.mil).

Strategic S&T Overview

US S&T Priorities
- Science and Technology Priorities for the FY 2014 Budget
- Science, Technology & Innovation For National Security

Featured Testimony and Remarks
- USAF Space Budget 2014
- ASD(R&E) Laboratories Testimony 2013
- Equipping the Modern Marine
- Equipping the Modern Soldier
- FY14 S&T Testimony

Service Priorities & Strategy Documents (continued)

Air Force
- USAF Posture Statement 2013
- Air Force NDAA Implementation Plan
- U.S. Air Force Energy Strategic Plan
- Presentations from Air Force Basic Science Review
- 2012-2013 Air Force Panel, Standing Committee

Doing Business with DoD

All Resources by Organization
- Army
- Navy
- Air Force
- USMC

Combatant Commands (CCMDs)

Other DoD Agencies/DoD Offices

DoD Basic Research

DoD Laboratories

Federally Funded Research and Development Centers and University Affiliated Research

Special Initiatives
- Joint Service Human Systems IR&D Events
- AF Space IR&D Events
- Interagency Working Group - Complex Engineering

DoD Research and Technology Funding Opportunities
- Federal Business Opportunities

comments@defenseinnovationmarketplace.mil
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**SEARCH RESULTS:**

**Companies View**

### Defense Innovation Marketplace

![Defense Innovation Marketplace](image)

####公司结果列表

<table>
<thead>
<tr>
<th>序号</th>
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<td>COMPANY J</td>
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Virtual IR&D Interchanges

DoD to Industry
Transmits Tech Needs/Gaps

Industry to DoD
Responds With IR&D to meet Needs/Gaps

Assess/Align Investments

Nov 12-Jun 13: Human Systems
Jan 13-June 13: Space
May 13-Sept 13: C2, ISR, Cyberspace
June 13-Nov 13: Air Superiority, Global Precision Attack, Personnel Recovery, Spec Ops, Mobility, ACS
Aug 13-Feb 14: Nuclear Weapons

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Setting Policy
Strengthen technical base
Virtual Interchange: Human Systems

Interface Challenges

#1 – Human-Machine Teaming

Gaps
- Non-verbal cue understanding between the interface and the operator
- Natural interfaces to manage multiple scale (one to many), multiple role systems

#2 – Intelligent, Adaptive Aiding

Gaps
- Metrics (systematic, scalable, relevant) for free form interactions
- Interfaces which adapt to the user’s mental state
- Heuristics to determine relevant information to be exchanged during operations

#3 – Intuitive Interaction

Gaps
- Human-centric parameters for management of autonomous systems
- Goal-oriented interfaces for simultaneous multiple domain operations

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Access to Data: Industry

Current

PIN Process

Option 1

- Company Registrar
- Register Employee
- Request Password
- Access

Option 2

- Company Registrar
- Register Employee
- Purchase ECA
- Access

More Access = Higher Admin Burden on Firms

PROPRIETARY DATA

Protect Proprietary Information And Expand Access to Project Submissions
Access to Data: Government

Legacy

- Register
- Warning / Accept
- Access

Retrieve Only

Current

- Register
- Warning / Accept
- Access

Plus

- Military or DoD Civ CAC Holder Only
- Vetted for Need to Access

Retrieve Only

Planned

- Register
- Warning / Accept
- Access

Plus

- Military or DoD Civ CAC Holder Only
- Vetted for Need to Access

Retrieve Only

Security Reviews

PROPRIETARY DATA

Protect Proprietary Information And Expand Access to Project Submissions
Defense Innovation Marketplace


Twitter: @DoDInnovation
Backup
FAQs

• Who has access to the IR&D data and who is really using it?
  – Access to industry data is restricted and protected. Required to be:
    • DoD personnel; have CAC card; valid need for access
  – A limited number of contractors from the ASD(R&E) staff and DTIC support the project to develop and refine the SEARCH site and functionality

• What are they doing with the data we provided - how are they using it, and how do they intend to use it?
  – Goal of BBP is to reinvigorate innovation. The specific uses of the data are a product of the responsibilities of the users. Examples (anticipated and actual) include:
    • DASD(RF): understand innovative technologies that may support immediate needs of warfighters
    • EW Priority Steering Council: improve understanding of performers and technologies
    • S&T Execs: support investment/disinvestment decisions based on technical maturity
    • Virtual IR&D Exchange: foster discussion between PMs & industry on current technology development

• Are they sensitive to the Proprietary nature of the data?
  – Yes, access to use the database is restricted
  – Information is marked on every screen and printout with appropriate markings
  – Information is treated the same as all other proprietary information
FAQs

• What are the likely benefits to the Contractor of sharing this information?
  – As evidenced by possible uses above, submitting information into the IR&D projects database provides visibility of technology development to relevant S&T PMs and Senior leaders in the Department (JPCC example).

• What additional demands on Contractors do they see this creating, meaning additional inquiries from government agencies, etc.?
  – Beta test of SEARCH is scheduled for April. We welcome your feedback on engagement with DoD personnel either positively or negatively.

• Is / will there be a systematic review and evaluation of our IR&D project descriptions?
  – No initial plans for a comprehensive review of the projects. Inputs are in the early stages -- we don’t yet have one entire FY. The intent is to use the information to support strategic planning and influence investment decisions.