



Reinvigorating Industry Independent Research & Development

April 26, 2013

**Colonel Brooks McFarland, USAF
OASD(R&E)**



Better Buying Power 1.0

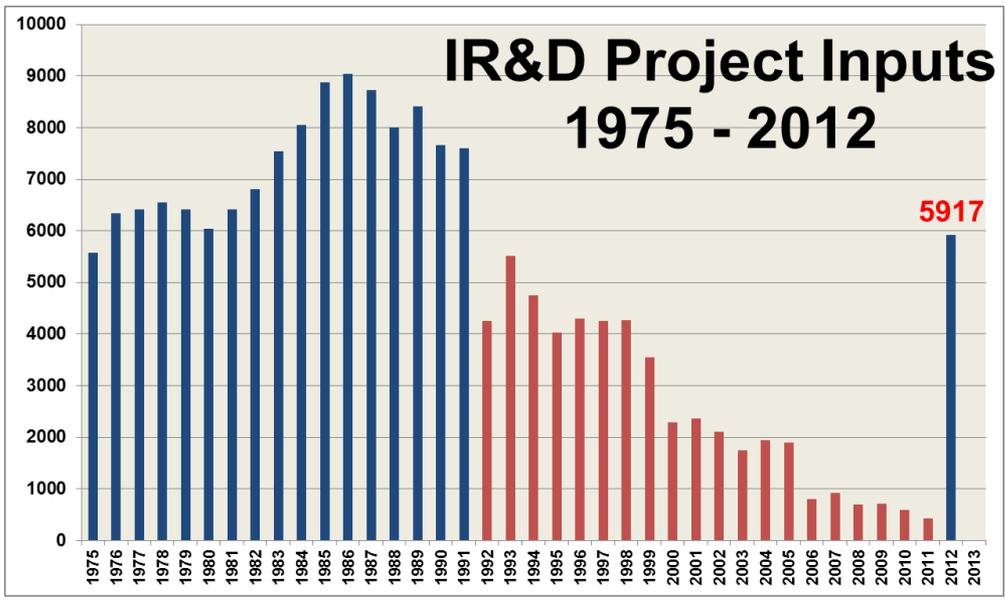
Reinvigorate industry's independent research and development and protect the defense technology base



DFARS Change

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

(a) Definitions. As used in this subsection—





BBP 2.0



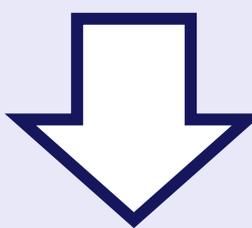
Expand programs to leverage industry's IR&D

PROGRAM

Leverage IR&D into specific programs

Industry, S&T and ACQ PMs

Technology Insertion



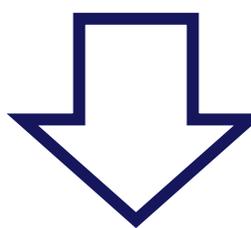
Creating options for the future & tech maturity for program insertion

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



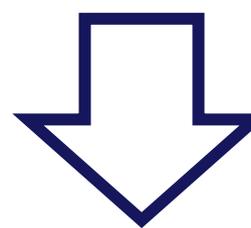
Inform S&T & ACQ investment portfolios

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



And Other DoD Agencies

HOME

RESOURCES

FAQs

NEWS & EVENTS

ABOUT

CONTACT US



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

S&T Strategic Documents

- DoD Rapid Fielding Activities ****NEW****
- DoD Basic Research Activities ****NEW****
- FY14 Budget Request for DoD S&T ****NEW****
- DoD Science & Engineering Activities ****NEW****
- Systems Engineering FY2012 Annual Report ****NEW****
- Navy RDT&E FY14 Testimony ****NEW****

More...

Doing Business with DoD

- USD Better Buying Power 2.0 Directive ****NEW****
- Maritime Helicopter Capabilities-Based Assessment ****NEW****
- Rapid Acquisition Cell Omnibus ****NEW****
- USMC Advanced Technology Investment Plan (ATIP) 2013 ****NEW****

More...

News & Events

- 14th Annual Science & Engineering Technology Conference
- Sea Power Expo Online Overview
- Submarine and Surface Combat System Signal Processing Industry Day
- AMPV Industry Day

More...

INNOVATION OPPORTUNITIES

Resources for Industry

DoD Info for Business & Program Planning



Submit IR&D Data

Share projects with DoD Customers



Resources for DoD

Government employees search access tools



SPECIAL INITIATIVES

Human Systems



Space Systems



Follow us on Twitter



And Other DoD Agencies



Home > Industry Resources >

Industry Resources

- Follow us on Twitter
- Subscribe to RSS feed updates

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

Service Priorities & Strategy Documents (continued)

Air Force

- USAF Posture Statement 2013 ****NEW****
- Air Force NDAA Implementation Plan
- U.S. Air Force Energy Strategic Plan
- Presentations from Air Force Basic Science Review
- 2012-2013 Air Force

Doing Business with DoD

All Resources by Organization

- Army
- Navy
- Air Force
- USMC ****Updated****
- 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



And Other DoD Agencies

- HOME
- RESOURCES
- FAQs
- NEWS & EVENTS
- ABOUT
- CONTACT US

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

S&T Strategic Documents

- DoD Rapid Fielding Activities ****NEW****
- DoD Basic Research Activities ****NEW****
- FY14 Budget Request for DoD S&T ****NEW****
- DoD Science & Engineering Activities ****NEW****
- Systems Engineering FY2012 Annual Report ****NEW****
- Navy RDT&E FY14 Testimony ****NEW****

[More...](#)

Doing Business with DoD

- USD Better Buying Power 2.0 Directive ****NEW****
- Maritime Helicopter Capabilities-Based Assessment ****NEW****
- Rapid Acquisition Cell Omnibus ****NEW****
- USMC Advanced Technology Investment Plan (ATIP) 2013 ****NEW****

[More...](#)

News & Events

- 14th Annual Science & Engineering Technology Conference
- Sea Power Expo Online Overview
- Submarine and Surface Combat System Signal Processing Industry Day
- AMPV Industry Day

[More...](#)

INNOVATION OPPORTUNITIES

Resources for Industry

DoD Info for Business & Program Planning



Submit IR&D Data

Share projects with DoD Customers



Resources for DoD

Government employees search access tools



SPECIAL INITIATIVES

Human Systems



Space Systems



Follow us on Twitter

Subscribe to RSS

Updated 4/24/13



SEARCH RESULTS: Projects View



DEFENSE INNOVATION MARKETPLACE

Gov't User Portal > New Search > Results | Dashboard | Collaborate | Send Feedback |

Your Query: **Projects** Companies Overview

Projects: 1162 of 1224 Companies: 23 of 24 Total Funding: \$86.61B of \$86.66B

COMPANY PROPRIETARY DATA: Warning - This Data May be Subject to Export Control
 Your search returned too many results. Please refine your search to improve accuracy of results.
 Shown totals are calculated from the most relevant results and might be inaccurate.

Export All Summaries Sort By Relevance Title Company Date Database TRL Total Funding Status

Filter: Showing 1 to 10 of 1,162 entries Results Per Page 10

Item	Description	Date	TRL	Total Funding	Status
1	test only please ignore test only please ignore IRAD test test test P 12001647 1653 62657 : 8802 ...	Apr 22, 2013	IR&D	TRL 1 \$10M	Completed
2	ActiveContent ActiveContent IRAD TEST TEST TEST P 12001645 1651 27410 27410 DIV ...	Apr 11, 2013	IR&D	TRL 6 \$177K	New Start
3	K2013032901 K2013032901 IRAD KORETEST KORETEST - NO FILE UPLOADED KORETEST P 12001640 1646 06892	Mar 29, 2013	IR&D	TRL 1 \$1K	New Start
4	K2013032901 K2013032901 IRAD KORETEST KORETEST - NO FILE UPLOADED KORETEST P 12001639 1645 06892	Mar 29, 2013	IR&D	TRL 1 \$1K	New Start
5	K2013032901 K2013032901 IRAD KORETEST KORETEST - NO FILE UPLOADED KORETEST P 12001638 1644 06892	Mar 29, 2013	IR&D	TRL 1 \$1K	New Start
6	K2013032901 K2013032901 IRAD KORETEST KORETEST - NO FILE UPLOADED KORETEST P 12001637 1643 06892	Mar 29, 2013	IR&D	TRL 1 \$1K	New Start

Database: IR&D

Defense Technology Area

DTA Subarea

HS DTA Subarea Keywords

HS Technology Gap

Fiscal Year: All

Total Funding (\$K): From \$0K To \$3423101K

TRL: [Bar chart showing distribution across TRL levels 1-9]

Keywords



SEARCH RESULTS: Single Project



Your Query 12001598 <input type="button" value="Search"/> <input type="button" value="Clear All"/> Refine your search Database <input checked="" type="checkbox"/> IR&D Year All Defense Technology Area DTA Subarea DTA Subarea Keywords System Interfaces and Cognitive Human, Social, and Cultural Scien Personnel, Training, and Leader Protection, Sustainment, and E Technology Gap Interface Technology Training Technology Total Funding (\$K) From <input type="text"/> To <input type="text"/> \$0K \$500K TRL Keywords <input type="checkbox"/> gadgets (1)	Projects Companies Overview Projects: 1 of 1204 Companies: 1 of 22 Total Funding: \$500K of \$86.65E	<div style="text-align: center; background-color: yellow;"> HYGIE-TECH USA PROPRIETARY DATA Warning - This Report May be Subject to Export Control </div> <p>Back to Projects <input type="button" value="Print"/></p> <p style="text-align: center;">TITLE: This is a fake record Type: IR&D YEAR: 2012</p> <p>Summary Chinese manufacturer Huawei's flagship Ascend P2 smartphone can be operated by users wearing gloves. It's just one of the innovations on display at year's Mobile World Congress -- a showcase of gadgets and gizmos that will allow us to wave goodbye to dying batteries, water damage and a whole range of perilous situations that dare to threaten the lives of our beloved mobile phones.</p> <table border="0"> <tr> <td>IR&D Record Number: 12001598</td> <td>Tech Readiness Level: 4 - Laboratory Validation</td> </tr> <tr> <td>Project Number: 135-246</td> <td>Primary Defense Tech Area/Sub-Area: Information Systems Technology/Information Security</td> </tr> <tr> <td>Status Of Effort: New Start</td> <td></td> </tr> <tr> <td>Anticipated Expenditures: \$500K</td> <td></td> </tr> </table> <p>Attachments: <input type="button" value="Download"/> DTA.docx - 21.21 KB</p> <p>Technical Point(s) of Contact Taitum Asher, tasher@gmail.com, 234-123-3456</p> <p>Target DoD Agencies DA - Army DAR - Defense Research Agency MDA - Missile Defense Agency USMC - United States Marine Corps</p> <table border="0"> <tr> <td>Performing Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205</td> <td>Parent Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205</td> </tr> </table> <p>Keywords gadgets, gizmos, smartphone, water damage, mobile phones</p> <p>Project Description: The best way to inform government users of the technical specifics of your project is to explain the objective and technical approach. This should not be a detailed technical report but an abstract. Two options are provided to accommodate different document formats. You may enter technical data directly in the Project Description section or by uploading files in the Project Document(s) section. You are required to enter information in at least one of these sections. The best way to inform government users of the technical specifics of your project is to explain the objective and technical approach. This should not be a detailed technical report but an abstract. Two options are provided to accommodate different document formats. You may enter technical data directly in the Project Description section or by uploading files in the Project Document(s) section. You are required to enter information in at least one of these sections.</p> <div style="text-align: center; background-color: yellow;"> HYGIE-TECH USA PROPRIETARY DATA Warning - This Report May be Subject to Export Control </div>	IR&D Record Number: 12001598	Tech Readiness Level: 4 - Laboratory Validation	Project Number: 135-246	Primary Defense Tech Area/Sub-Area: Information Systems Technology/Information Security	Status Of Effort: New Start		Anticipated Expenditures: \$500K		Performing Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205	Parent Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205
IR&D Record Number: 12001598	Tech Readiness Level: 4 - Laboratory Validation											
Project Number: 135-246	Primary Defense Tech Area/Sub-Area: Information Systems Technology/Information Security											
Status Of Effort: New Start												
Anticipated Expenditures: \$500K												
Performing Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205	Parent Organization Cage Code: 6EN03 HYGIE-TECH USA 125 WOLF RD ALBANY, NY 12205											



SEARCH RESULTS: Companies View



DEFENSE INNOVATION MARKETPLACE

Gov't User Portal > New Search > Results | Dashboard | Collaborate | Send Feedback |

Your Query: Search Clear All

Projects: 1162 of 1224 **Companies: 23 of 24** Total Funding: \$86.61B of \$86.66B

COMPANY PROPRIETARY DATA: Warning - This Data May be Subject to Export Control
Your search returned too many results. Please refine your search to improve accuracy of results.
Shown totals are calculated from the most relevant results and might be inaccurate.

Filter: Showing 1 to 10 of 23 entries Results Per Page 10

NORTHROP GRUMAN SYSTEMS CORPORATION

Relevancy	Company	Num Projects	TRL Chart	Expenditures
1	COMPANY A	16		\$35.846M
2	COMPANY B	33		\$2.985M
3	COMPANY C	84		\$2.510M
4	COMPANY D	6		\$28.091M
5	COMPANY E	12		\$25.3M
6	COMPANY F	65		\$854K
7	COMPANY G	2		\$5.844M
8	COMPANY H	141		\$386K
9	COMPANY I	1		\$4.75M
10	COMPANY J	9		\$2.849M

Refine your search: Database IR&D, Defense Technology Area, DTA Subarea, HS DTA Subarea Keywords, HS Technology Gap, Fiscal Year: All, Total Funding (\$K): From \$0K To \$3423101K, TRL:

Keywords:



Virtual IR&D Interchanges



**DoD to
Industry**

**Industry
to DoD**

**Assess/
Align
Investments**

**Transmits
Tech Needs/Gaps** **Responds
With IR&D to meet
Needs/Gaps**

DEFENSE INNOVATION MARKETPLACE

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**

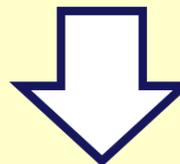
Aug 13-Feb 14: Nuclear Weapons

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



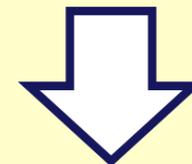
Inform S&T & ACQ
investment portfolios

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



Virtual Interchange: Human Systems



DEFENSE INNOVATION MARKETPLACE

HOME RESOURCES FAQs NEWS & EVENTS ABOUT CONTACT US

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

S&T Strategic Documents	Doing Business with DoD	News & Events
<ul style="list-style-type: none"> DoD Rapid Fielding Activities **NEW** DoD Basic Research Activities **NEW** FY14 Budget Request for DoD S&T **NEW** DoD Science & Engineering Activities **NEW** Systems Engineering FY2012 Annual Report **NEW** Navy RDT&E FY14 Testimony **NEW** 	<ul style="list-style-type: none"> USD Better Buying Power 2.0 Directive **NEW** Maritime Helicopter Capabilities-Based Assessment **NEW** Rapid Acquisition Cell Omnibus **NEW** USMC Advanced Technology Investment Plan (ATIP) 2013 **NEW** 	<ul style="list-style-type: none"> 14th Annual Science & Engineering Technology Conference Sea Power Expo Online Overview Submarine and Surface Combat System Signal Processing Industry Day AMPV Industry Day

Updated 4/24/13

Follow us on Twitter
Subscribe to RSS

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

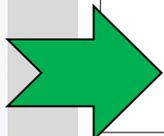
Gaps

- 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



Distribution A: Approved for Public Release



Access to Data: Industry

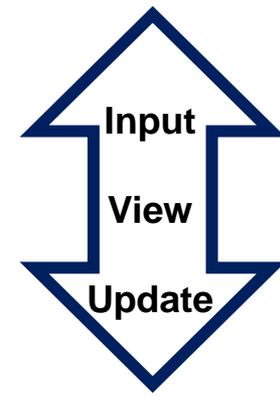
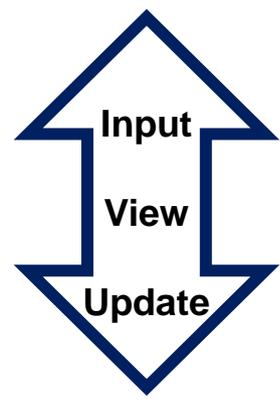
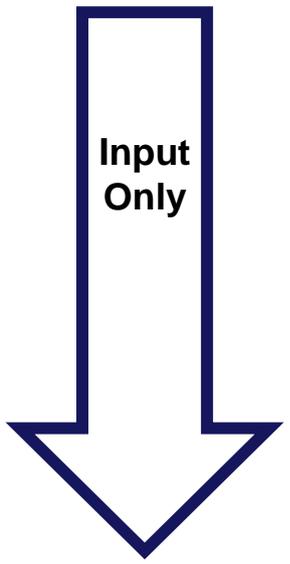


PIN Process

- Company Registrar
- Register Employee
- Request Password
- Access

- Company Registrar
- Register Employee
- Purchase ECA
- Access

More Access = Higher Admin Burden on Firms

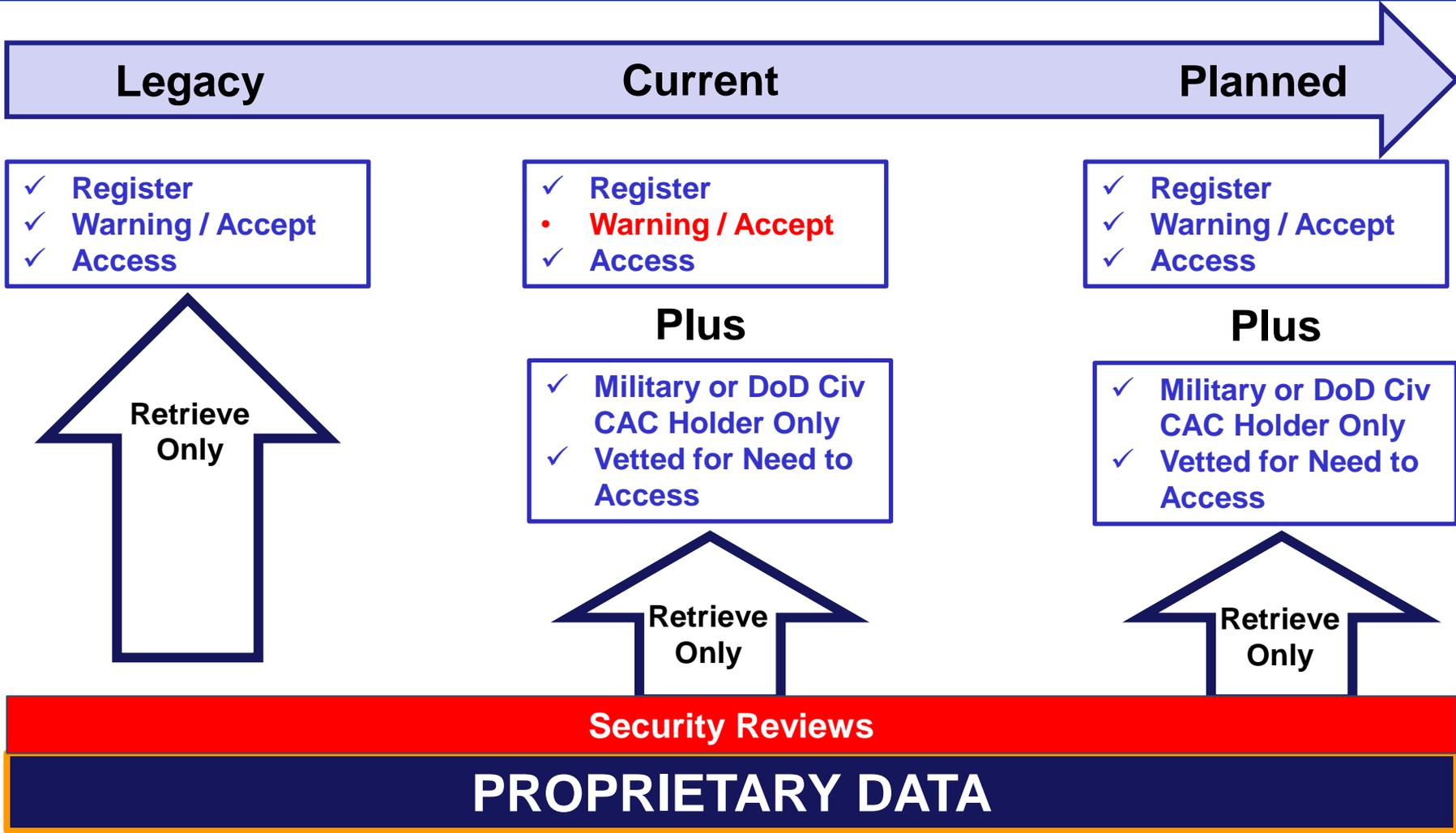


PROPRIETARY DATA

Protect Proprietary Information And Expand Access to Project Submissions



Access to Data: Government



Protect Proprietary Information And Expand Access to Project Submissions



Defense Innovation Marketplace

www.DefenseInnovationMarketplace.mil

Twitter: @DoDIInnovation



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.