



National Defense Industrial Association Human Systems Conference

Al Shaffer

**Principal Deputy Assistant Secretary of Defense
for Research and Engineering**

February 10, 2015



Agenda



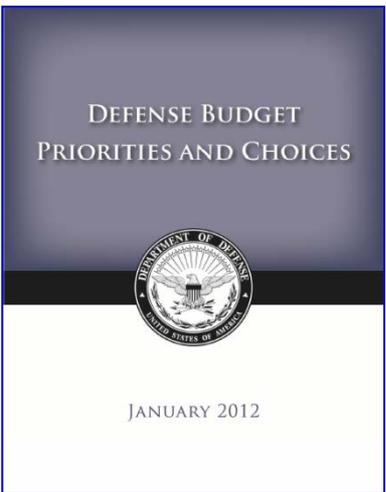
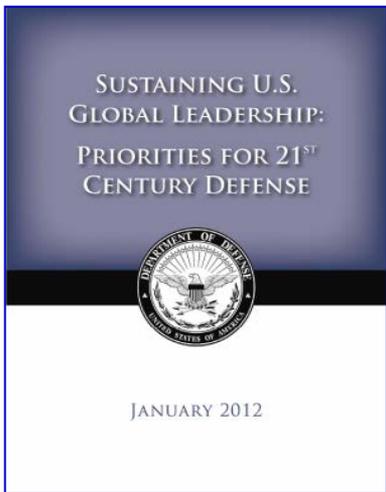
- **Strategic Direction**
 - Technology Offset
 - Better Buying Power 3.0
 - Defense Innovation Initiative
 - Long-Range Research and Development Program Plan
- **Strategic Guidance**
 - ASD(R&E) Strategic Guidance
 - DoD R&E International Strategy
 - Reliance 21: Operating Principles
- **Communities of Interest (COI)**
 - Technology Roadmaps / Portfolio Reviews
 - Human Systems COI
- **Communications Resources**
 - Defense Innovation Marketplace
 - ASD(R&E) Communities of Interest (COI) Wiki



Key Elements of Defense Strategic Guidance



- The military will be **smaller and leaner**, but it will be agile, flexible, ready and technologically advanced.
- **Rebalance our global posture** and presence to emphasize the Asia-Pacific region.
- Build partnerships and **strengthen key alliances and partnerships** elsewhere in the world.
- Ensure that we can quickly confront and defeat aggression from any adversary – **anytime, anywhere.**
- **Protect and prioritize key investments** in technology and new capabilities, as well as our capacity to grow, adapt and mobilize as needed.





DoD at Strategic Crossroads



Secretary Hagel

Budget Roll-Out Brief

24 Feb 2014

“The development and proliferation of more advanced military technologies by other nations means that we are *entering an era where American dominance on the seas, in the skies, and in space can no longer be taken for granted*”

The strategic question is – will the force of tomorrow be:

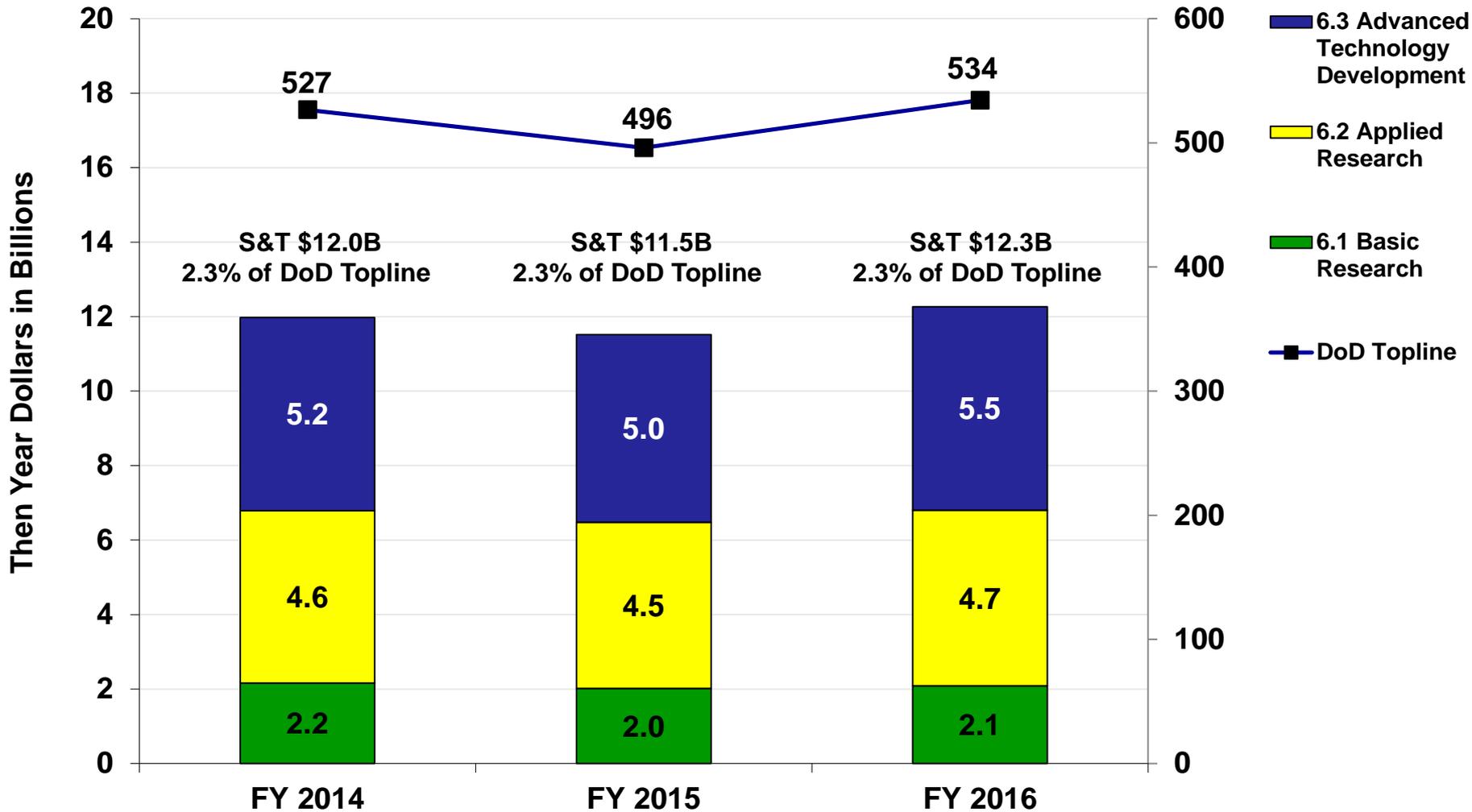
- Larger with diminished capability or,
- Smaller with more technologically advanced capabilities

Enhanced Mutual Reliance Offsets Some of These Risks



DoD FY 2014, FY 2015, and FY 2016 S&T President's Budget Request Comparison

- in Then Year Dollars -





Technology Offset



- **Deputy Secretary of Defense Work Proposes *using Technology to Effect Capability Balance***
 - We now face a more uncertain strategic environment with an increasing range of threats to mitigate - others have researched our technology-based military superiority
 - We must benefit from globalization, enabling effective international collaboration, while leveraging and building on domestic advantages
 - We will need to leverage widely available commercial technology, while simultaneously creating unique advantage

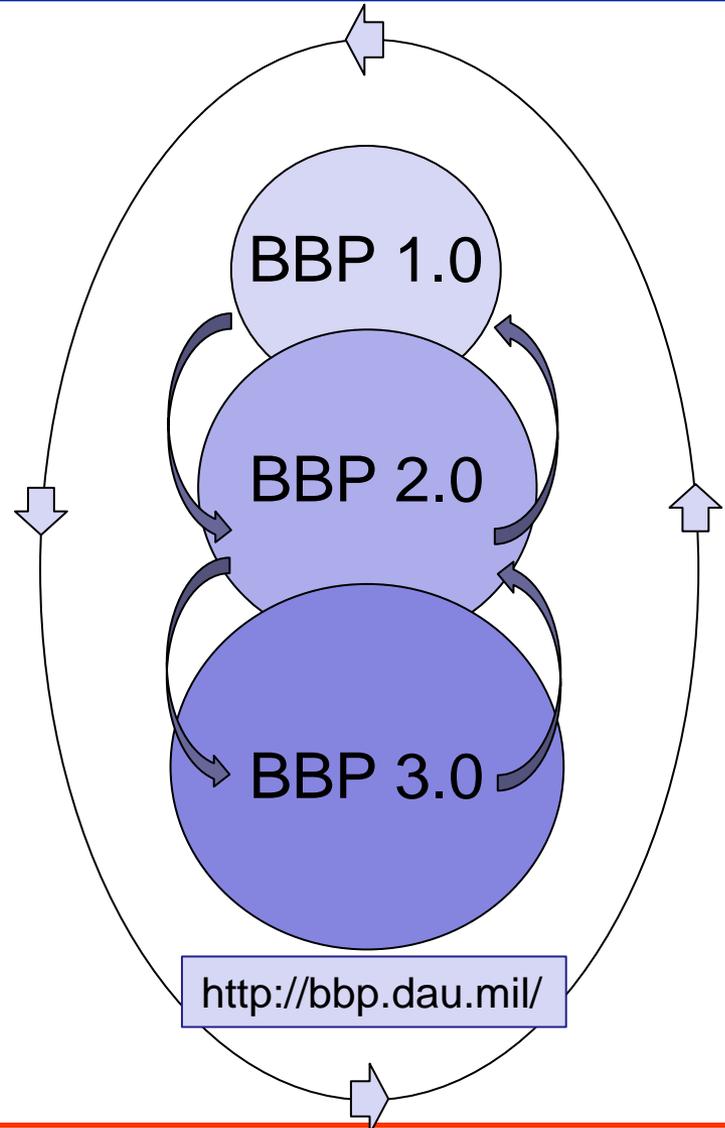
Emerging Themes: Autonomy, Range, Quantity at Cost



Better Buying Power (BBP) Continuous Improvement Process



- **USD(AT&L) Frank Kendall**
- **BBP 1.0:** Focused on **Best Practices** and Business Rules
 - Affordability, 'Should-Cost', Performance-Based Contracting
- **BBP 2.0:** Focused on **Critical Thinking**, making better business decisions
 - Supplier Incentive Programs, Open Systems Architectures and Risk Reduction
- **BBP 3.0:** Continues and builds upon prior elements – and takes the focus to our Products
 - **Innovation**
 - **Technical Excellence**
 - **Speed to Market**





Better Buying Power 3.0



Achieving Dominant Capabilities through Technical Excellence and Innovation

Achieve Affordable Programs

- Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs

- Strengthen and expand “should cost” based cost management
- Build stronger partnerships between the acquisition, requirements, and intelligence communities
- **Anticipate and plan for responsive and emerging threats**
- **Institutionalize stronger DoD level Long Range R&D Planning**

Incentivize Productivity in Industry and Government

- Align profitability more tightly with Department goals
- Employ appropriate contract types, but increase the use of incentive type contracts
- Expand the superior supplier incentive program across DoD
- Increase effective use of Performance-Based Logistics
- Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- Increase the productivity of IR&D and CR&D

Incentivize Innovation in Industry and Government

- Increase the use of prototyping and experimentation
- Emphasize technology insertion and refresh in program planning
- Use Modular Open Systems Architecture to stimulate innovation
- Increase the return on Small Business Innovation Research (SBIR)
- Provide draft technical requirements to industry early and involve industry in funded concept definition to support requirements definition
- Provide clear “best value” definitions so industry can propose and DoD can choose wisely

Eliminate Unproductive Processes and Bureaucracy

- Emphasize AE, PEO and PM responsibility, authority, and accountability
- Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews

Promote Effective Competition

- Emphasize competition strategies and creating and maintaining competitive environments
- Improve technology search and outreach in global markets

Improve Tradecraft in Acquisition of Services

- Increase small business participation, including through more effective use of market research
- Strengthen contract management outside the normal acquisition chain – installations, etc.
- Improve requirements definition
- Improve the effectiveness and productivity of contracted engineering and technical services

Improve the Professionalism of the Total Acquisition Workforce

- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Strengthen organic engineering capabilities
- Ensure the DOD leadership for development programs is technically qualified to manage R&D activities
- Improve our leaders’ ability to understand and mitigate technical risk
- Increase DoD support for STEM education

Strengthening Cost Consciousness, Professionalism, and Technical Excellence



Industry Engagement

DII and LRRDPP



- **Defense Innovation Initiative (DII)**: Identify and *invest in innovative ways* to sustain and advance our national security into the 21st century.
 - *People*: Integrate leadership development with emerging opportunities and re-think how we develop managers and leaders.
 - *Wargaming*: Reinvigorate wargaming to test alternative ways of achieving strategic objectives, and help us think more clearly about the future security environment.
 - *New Operational Concepts*: Explore how to employ resources to greater strategic effect and deal with emerging threats in more innovative ways.
 - *Business Practices*: Find ways to be more efficient and effective through external benchmarking and focused internal reviews.
- **Long-Range Research and Development Program Plan (LRRDPP)**: Study and prioritize *new or unconventional technology* that could provide significant, national security advantages.
 - Reach out to the best and brightest minds inside and outside the DoD
 - Help us think through the technologically-enabled systems and architectures that we will want to have available post-2025.
 - **Share your Ideas** (Submission portal and more information on the Defense Innovation Marketplace)



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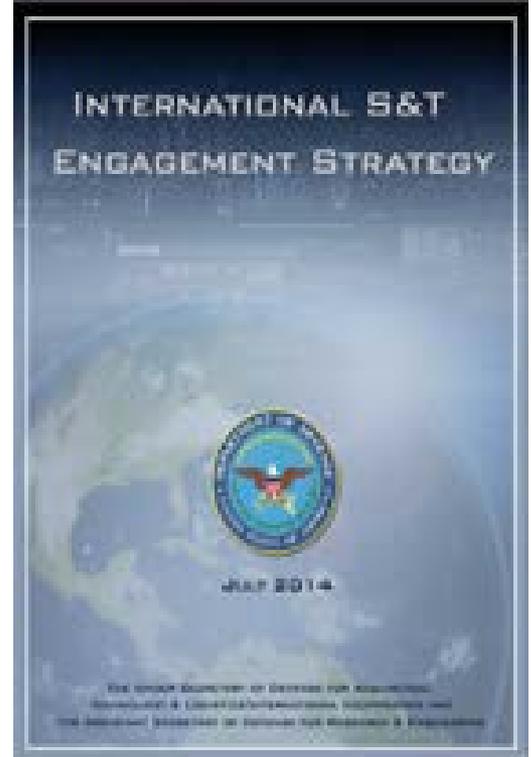
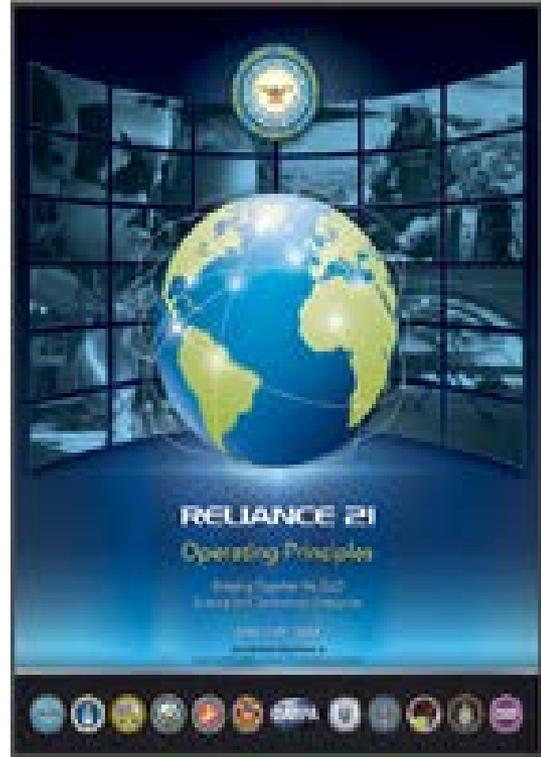
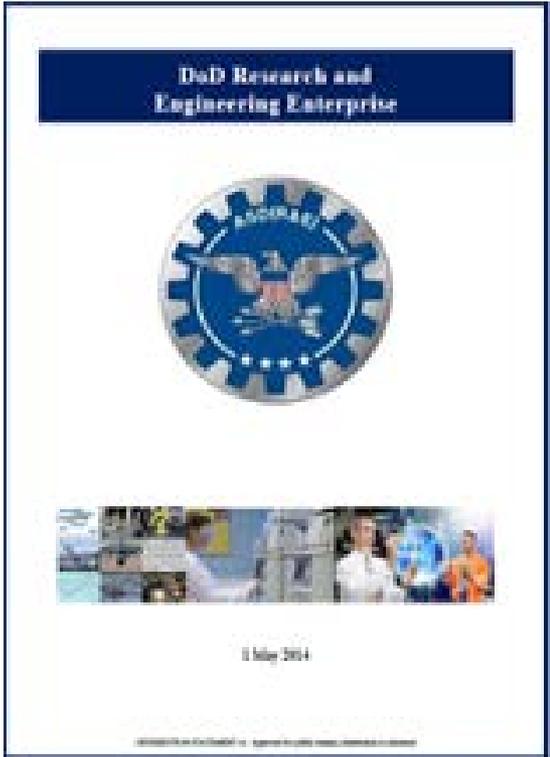
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DoD Research and Engineering Strategic Guidance



“Our technological superiority is not assured, and in fact it is being challenged very effectively right now.”
-Frank Kendall, USD(AT&L) 19 Sec 2014



Available at www.DefenseInnovationMarketplace.mil



DoD Research & Engineering (R&E) Strategic Guidance



- Provides strategic guidance for DoD components to shape their R&E programs

- Why we do R&D? “*Three Enduring Principles*”:

1. **Mitigate** or eliminate current and emerging threats to national security
2. **Affordably** enable new or extended military capabilities
3. Create **technology surprise** through science and engineering

- Supports the Defense Strategic Guidance, signed January 2012, “*Sustaining U.S. Global Leadership, Priorities for 21st Century Defense*”



Available at [www.defenseinnovationmarketplace.mil/resources/ASD\(R&E\)_Strategic_Guidance_May_2014.pdf](http://www.defenseinnovationmarketplace.mil/resources/ASD(R&E)_Strategic_Guidance_May_2014.pdf)



DoD Research & Engineering (R&E) International S&T Engagement Strategy



- **Coordinated DoD Global S&T Engagement to:**

- Guide DoD S&T toward enhanced, global interoperability
- Strengthen existing and expand into new relationships and cooperation with partner nations
- Accelerate the pace of U.S. research and development
- Leverage emerging global opportunities
- Mitigate the risk of global threats to improve our capabilities and those of our allies and partner nations
- Gain economic efficiencies

- **Signed July 2014**



Available at www.defenseinnovationmarketplace.mil/resources/jp3_18.pdf

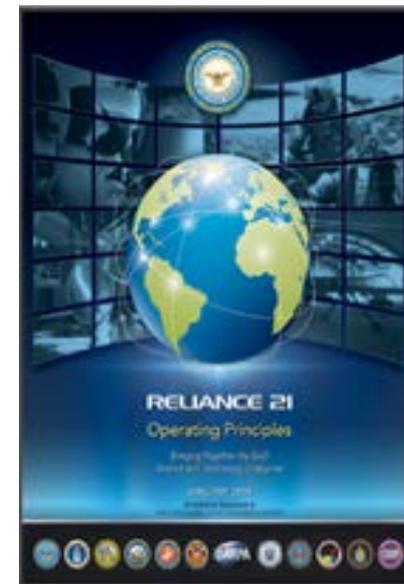


Reliance 21: Operating Principles



- **Operational Framework of the DoD S&T Joint Planning and Coordination process (Updated January 2014)**

- Executes the DoD R&E Strategies
- Portfolio Management infrastructure to enable:
 - Information sharing
 - Alignment of effort against capability gaps
 - Coordination of priorities and investments
 - Exploit synergies and develop new opportunities
 - Support for scientists and engineers across the DoD R&E Enterprise
- Communities of Interest (COI)
 - 17 **cross-domain** technical areas, each with their own Steering Group Lead and multiple technical 'challenge areas' or sub-groups, staffed with Subject Matter Experts (SMEs)
 - Specific cross-cutting technology areas where there is substantial investment **across multiple Components**



Available at www.defenseinnovationmarketplace.mil/resources/2014-Reliance21OperatingPrinciples.pdf



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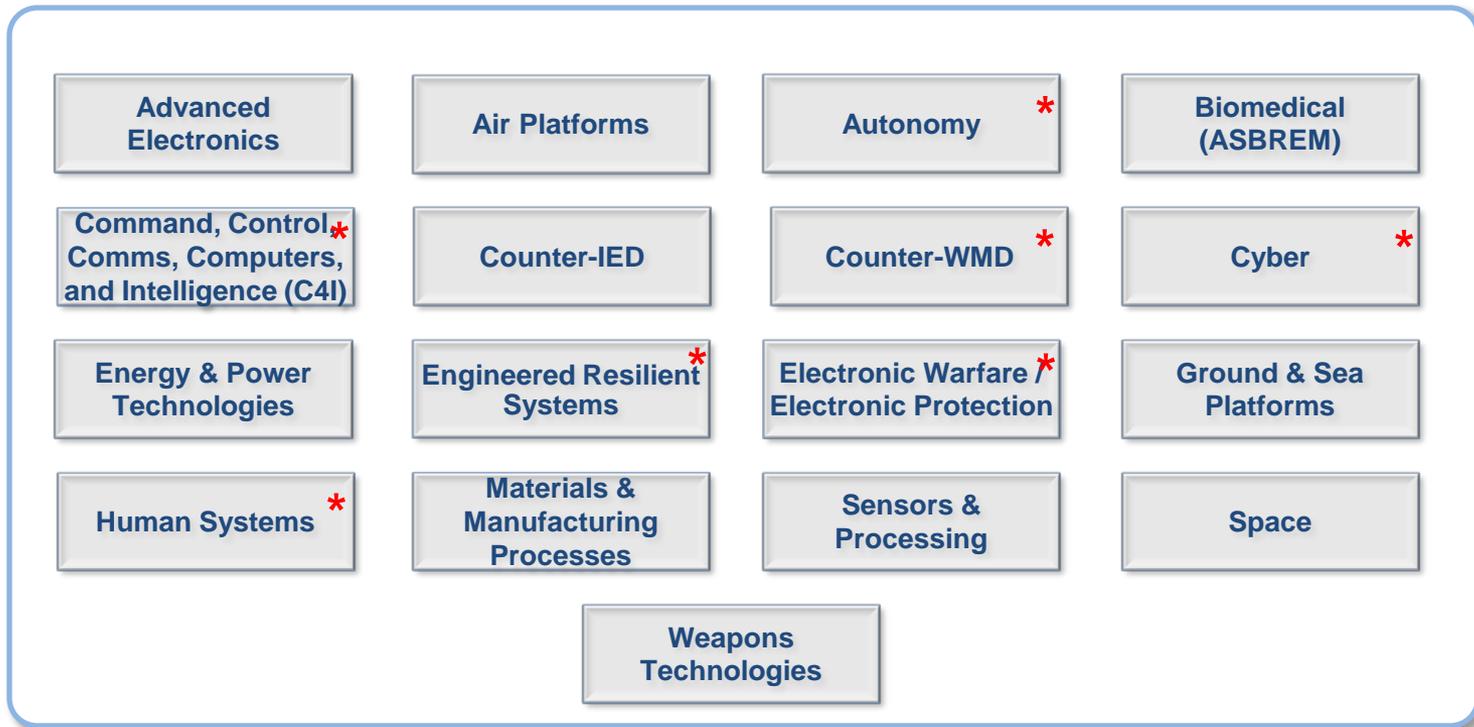
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DoD Engagement Strategy Communities of Interest



Mission: Leverage **global commercial and non-commercial research and development (R&D)** to ensure superior and affordable development in areas critical to defense, including but not limited to:



* Denotes DoD cross-cutting S&T Priorities (Data-to Decisions is found in C4I)



Reliance 21 Technology Roadmaps

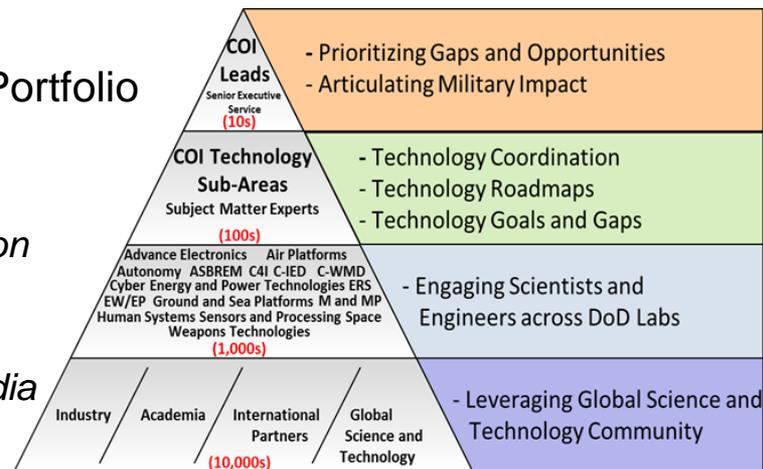


COIs Build Technology Roadmaps



- Collect, coordinate and align technical capabilities, requirements, gaps, opportunities and priorities into Investment-grade Technology Roadmaps for their respective focus area
- Motivations: What is military need / impact of meeting these technical needs?
- Goals and Metrics: What technical plans are in place and where are the gaps?
- Analysis: Where are the opportunities to leverage external investments and expertise?
- Produced every two years, used to update the COI Portfolio Reviews, and the Annual S&T Overview

- Public versions will be posted on the *Defense Innovation Marketplace*
- More detailed versions will be posted on *DoD Techipedia*
ASD(R&E) COI Wiki



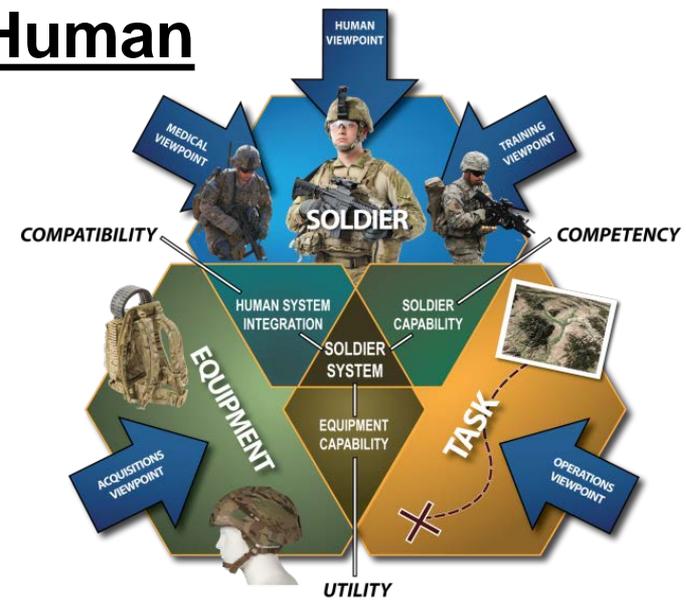
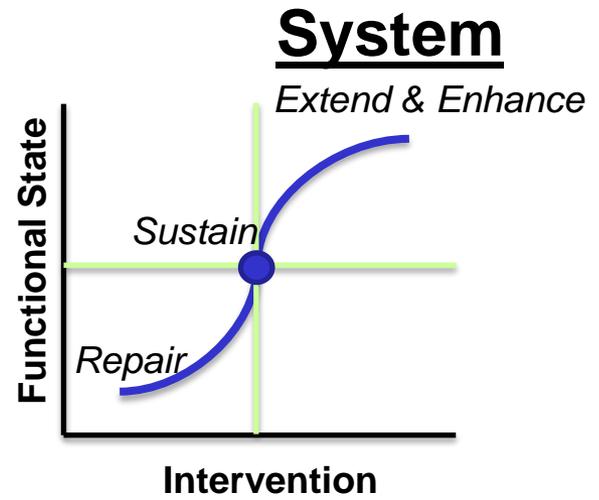
COI Roadmaps: An ideal framework to improve engagement with Industry; identify technical challenges



Human Systems COI Portfolio Overview



Notional Concept of the Human System



COI TAXONOMY	
Personalized Assessment, Education, & Training	
Systems Interfaces & Cognitive Processing	
Human Aspects of Operations in Military Environments	
Protection, Sustainment, & Warfighter Performance	

Goals of the Human Systems COI

Enhance Mission capability by:

- Out-thinking the adversary
- Designing human-factored interfaces
- Understanding PMESII* battle space
- Optimizing body-worn equipment systems

Reduce:

- Attrition/injuries/death
- Manpower needs per system
- Fog of war
- System burden on human performance

*Political, Military, Economic, Social, Infrastructure, & Information



HS COI Subareas & Scope

Personalized Assessment, Education, & Training

- **Objective:** Provide innovative human science solutions to enhance the readiness & reduce cost
- **Technical Challenges:** Integrated measures & adaptive training and testing to improve individual potential assessment
- **Operational Opportunities:** Improve selection screening to reduce personnel lifecycle costs; personalized training



System Interfaces & Cognitive Processing:

- **Objective:** Develop natural & intuitive human-machine interaction to improve Warfighter efficiency and effectiveness
- **Technical Challenges:** Real-time physical, cognitive, & psychological state assessment; natural language & gestural interfaces
- **Operational Opportunities:** More intuitive technologies to assist Warfighters on the battlefield



Human Aspects of Operations in Military Environ's:

- **Objective:** Improve warfighters access to & understanding of changes in political, military, economic, social, infrastructure, & information affecting the operational environment
- **Technical Challenges:** interpretation / evaluation of behaviors in chaotic, culturally complex environs
- **Operational Opportunities:** Interaction with combatants & non-combatants in contested & adverse urban environments



Protection, Sustainment, & Warfighter Performance:

- **Objective:** Support a safer & more agile force on the battlefield
- **Technical Challenges:** Collecting relevant performance data and metrics in operational environments
- **Operational Opportunities:** Optimizing individual warfighter cognitive & physical performance





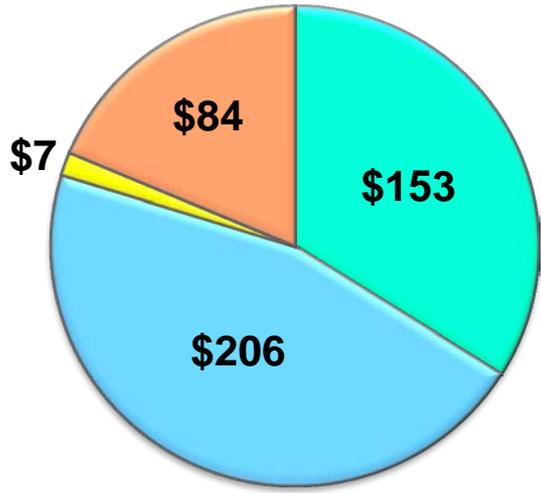
COI Investment Profile

DoD PB15 FY 2015



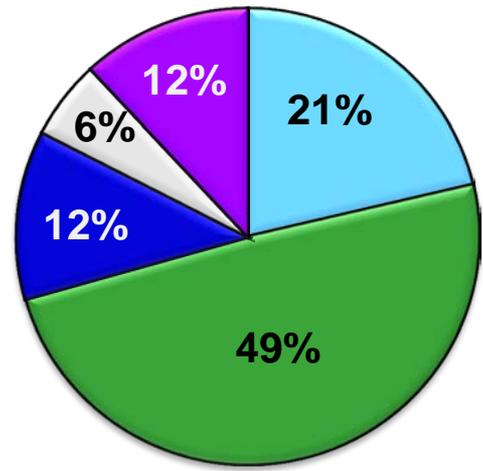
COI Sub Areas (\$M)

Total = \$450M



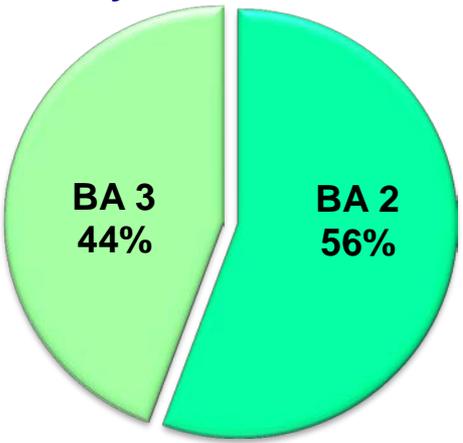
- Personalized Assessment, Education, & Training
- Protection, Sustainment & Warfighter Performance
- Human Aspects of Operations in Military Environments
- System Interfaces & Cognitive Processing

Component Investment



- Air Force
- Army
- Navy
- DARPA
- Other Components

Budget Activity



Industry Collaboration

- **IR&D Technology Interchange (2013)**
 - All 19 companies provided follow-on opportunities
 - Meetings, site visits, data exchanges
 - Working Cooperative R&D Agreements (CRADAs) & Memorandum of Agreement (MOA)
 - Supported by the Defense Innovation Marketplace
- **NDIA HS Conference (Feb 2015): *Maintaining our Physical Edge, Enabling our Cognitive Edge***
 - NDIA HS Division & Conference structured around COI sub areas
 - 2014 Conference: 108 attendees
 - Informed topics for 2015 Conference



Converge Multiple Domains

Focus on one outcome: natural human-technology interactions

HUMAN

MACHINE

Computational Modeling
Simulate human information processing

Context Inference
Reason about a situation

Neuroscience
Brain's operating principles



Knowledge Systems
Store/search for information

Evolutionary Biology / Social Psychology
Cognitive & Behavioral operating principles

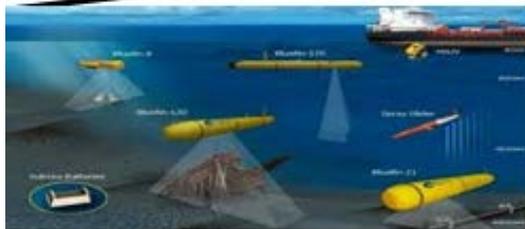
Computer Vision
Lays groundwork for reasoning about a situation



Natural Human-Technology Interactions



Designing Technology to Optimize Human Potential



Today, Human-Technology Interactions use interfaces that:

- Do not support bi-directional communication
- Do not learn with experience
- Require specialized operator selection and training

S&T is needed to augment natural human capacities for Data Volumes, Processing, and Decision Speeds

- *Easy to use*
- *Limited functionality*



- *Hard to use*
- *Ample functionality*



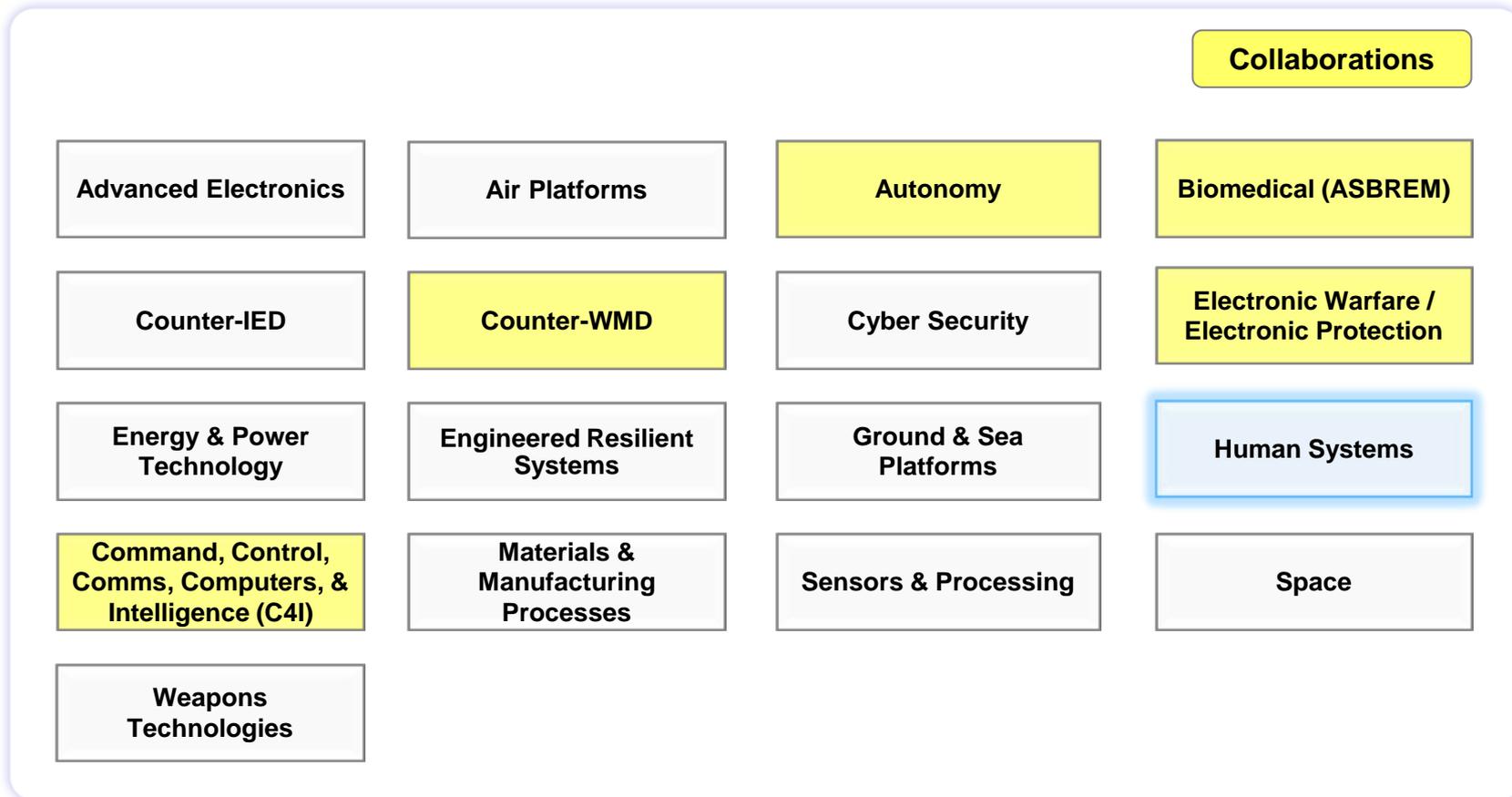


Augmented Cognition

- **Research and develop technologies capable of extending – without overloading - the information management capacity of 21st century warfighters**
 - Allow complex information to be absorbed and analyzed in high volume and density
 - Accelerate novel concepts in human-systems integration – address cognitive bottlenecks in real-time, such as:
 - Attention
 - Memory
 - Learning
 - Comprehension
 - Decision Making
 - Employ behavioral, psychophysiological and / or neurophysiological data
 - Adapt or augment to significantly improve performance
 - Benefits to all current and future warfighter systems



Current HS COI Interactions



Intend to collaborate with all COIs since all technologies support the Warfighter in accomplishing their missions



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DoD-Industry Engagement

The Marketplace: Your DoD S&T/R&D Resource



Defense Innovation Marketplace website is [the communication resource](#) between DoD S&T/R&D and Industry/Academia, hosting:

- DoD R&E Strategic Guidance
- Long-Range Research and Development Program Plan
- Virtual Technology Interchanges
 - *Human Systems COI Virtual Technology Interchange – June 2015*



- [Independent Research & Development \(IR&D\) Secure Portal](#)

Are YOU using the Marketplace and the IR&D portal?



The Marketplace: Industry Engagement – DII and LRRDPP

DEFENSE INNOVATION MARKETPLACE

HOME RESOURCES FAQs NEWS & EVENTS ABOUT CONTACT US

**The Long-Range Research & Development Program Plan (LRRDPP):
Developing a New Technology Offset Strategy**

The last technology offset strategy and the subsequent creation of new capabilities for the Department, was preceded by a long-range R&D plan. This prior plan, developed in the 1970s, was considered a successful effort in identifying game-changing capabilities, such as networked precision strike, stealth and surveillance, and helped us focus our science and technology (S&T) resources on enabling those opportunities and delivering those capabilities. Since that time, others countries and groups have sought to replicate our capabilities and identified ways to potentially diminish U.S. and our allies' competitive advantages.

LRRDPP is a new effort to gather information from a broad group of people in order to study and prioritize new or unconventional applications of technology in ways that would provide significant, advantage to future national security capabilities. We anticipate using input to help in the internal analysis and prioritization of future DoD research and development investments.

Today we see significant changes in the global technology landscape that compel a strategic evaluation of the Department's research and development investment strategy. This current long-range R&D study seeks to identify opportunities for enduring innovation and opportunities to sustain the future our nation's military capabilities in an era of increasing globalization, rapidly evolving technology, and tightening budgets. Many, if not most, of the technologies that we have today are no longer the exclusive domain of the Department of Defense. To put together our updated long-range R&D plan, we would like to leverage ideas from across commercial industry, academia, not-for-profits and the general public..

The objective of the Department's effort is to identify high-payoff enabling technology opportunities that could offer opportunities to shape the trajectory of future competition for technical superiority in the 2025-2030 timeframe.

What systems, capabilities and architectures could the Department field post-2025 that will ensure U.S. dominance and shape the future of military technical competition? [Share your ideas here](#)

Share your Ideas: Long-Range Research & Development Program Plan Request for Information

It is the Department's goal to reach out to the best and brightest minds from industry, academia, labs (government and corporate), FFRDCs/engineering centers/product centers, think tanks, small business and the general public - to help us think through the technologically-enabled systems and architectures that we will want to have available post-2025. If your organization has technologies, concepts, or ongoing efforts that are applicable to this goal and you would like to share these ideas with our government team, please submit your ideas through our [Submission Site](#).

Note: This link is only for unclassified submissions. If you have a classified submission, please contact Lt Col Cropsey @ luke.c.cropsey@mail.mil.

LRRDPP Resources

ASD(R&E)

Share your Ideas

Submit your ideas for LRRDPP Here

[LRRDPP Request For Information](#)

[LRRDPP RFI on FedBizOps](#)

www.DefenseInnovationMarketplace.mil/LRRDPP.html

- **Defense Innovation Initiative (DII)**
 - Identify and invest in innovative ways to sustain and advance our national security into the 21st century.
 - People
 - Wargaming
 - New Operational Concepts
 - Business Practices
 - LRRDPP
- **Long-Range Research and Development Program Plan (LRRDPP):**
 - Study and prioritize new or unconventional technology that could provide significant, national security advantages.
 - **Share your Ideas** ([Link](#))



COI Industry Engagement Strategy



- Virtual Technology Interchanges hosted on the Marketplace
 - Air Force (AFRL) has hosted, since 2013, six Virtual Technology Interchanges using the Marketplace to discuss industry IR&D efforts in Aeronautics, Autonomy, C4ISR, Human Systems (joint effort with the HS COI), Nuclear and Space.
 - Specific technology challenges are outlined and posted to the Marketplace
 - Industry is invited to provide their potential IR&D solutions through the Secure Portal
 - Submissions are reviewed by DoD (COI) subject matter experts.
 - Select projects/companies are then invited to attend a more detailed face-to-face (or Virtual) meeting.
 - Due to the efficiency of these Technology Interchanges
 - Face-to-face dialogues on the technology needs and potentially viable solutions are improved
 - New relationships and partnering opportunities have developed

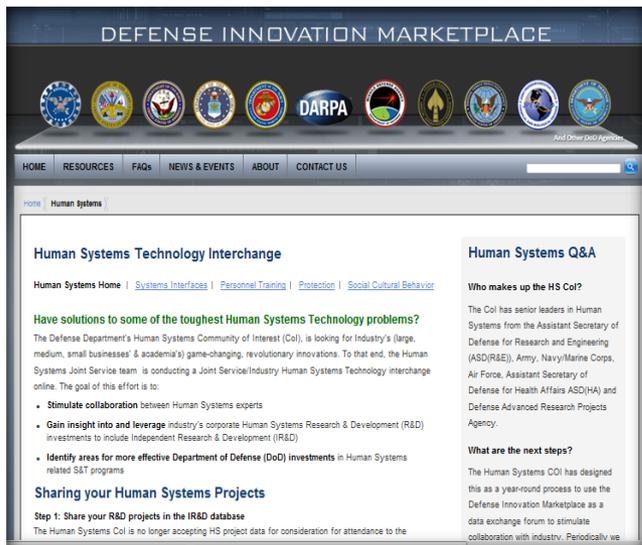
COIs will be identifying their priority technology challenges and using Virtual Technology Interchanges to work them with industry



Virtual Technology Interchanges: Specific Technology Challenges for Industry Engagement



Joint Service/Industry Human Systems COI



defenseinnovationmarketplace.mil/humansystems.html

Selection of Projects

Response:

- 44 Companies submitted 206 Projects online

Selection:

- 19 companies selected to brief 43 projects

Secure Video Teleconference was used when Gov't could not attend

Results/Value

- Good "discovery" mix
- Targeted discussions with industry leaders vs. long briefings
- 6 CRADAs/ partnerships underway
- Proposals in discussion





The Marketplace:

Industry Engagement – Virtual Technology Interchanges

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Home > Air Force > Autonomy

Air Force Research Lab (AFRL)/Industry Autonomy IR&D Technology Interchange

AFRL seeks to enable the right balance of human and machine capability to meet Air Force challenges in the future. We will focus on growing autonomous system capability, integrated with the human capacity to perform in a high-tempo, complex decision environment, and to optimize humans working together with machines both effectively and efficiently. Simply stated, the AFRL Autonomy S&T vision is:

Intelligent machines seamlessly integrated with humans... maximizing mission performance in complex and contested environments

The components of the AFRL vision are described in the four goals featured below. These buttons link you to video or audio podcasts and presentations where each goal is explained in more detail.

AFRL Autonomy Vision

- Human Machine Teaming
- Teams of Intelligent Machines
- Complex & Contested Environments
- Test & Evaluation, Validation & Verification

The AFRL Autonomy page is intended to explain our intent to maintain (1) a hybrid mix of virtual science & technology (S&T) discussions and (2) a planned face-to-face event focused on Autonomy. AFRL's goal is to initiate a dialogue with Industry that is focused generally on Autonomy, and more specifically on what, how and where Industry is focusing its IR&D investments.

This is a vast domain, posing critical challenges to us with potential adversaries making advancements in technologies that will continue at a dramatic pace, and AFRL sees a critical need to engage with Industry. The goal of this IR&D engagement is continue our dialogue with Industry on how we can work together to improve the autonomy technology edge.

The 2014 AF/Industry Autonomy IR&D Technology Interchange meeting is currently scheduled to take place 17-21 November 2014, hosted at Wright-Patterson Air Force Base, near Dayton Ohio.

This engagement will bring together subject matter experts from both Industry and the DOD to talk about Autonomy and how we work as partners in facing near and mid-term (5-10 year) and far term technology challenges.

Background

The AFRL Autonomy team sponsoring this series of activities will include senior leaders and technical experts from several AFRL technology directorates and attended by Autonomy S&T experts from the Army and Navy. These experts will be engaged to discuss S&T challenges, capabilities, and opportunities for collaboration.

Autonomy Systems:

Systems which have a set of intelligence-based capabilities that enable responses to situations not pre-programmed or anticipated in the design (i.e., decision-based responses).

Autonomous systems have a degree of self-governance and self-directed behavior (with the human's proxy for decisions).

Multimedia

Autonomy Conversation Video
Video Transcript available for download.

Q&A

Why use an online technical interchange for sharing IR&D information?

A: There is an increased focus on improving engagement with industry in terms of IR&D. The Marketplace is a forum designed to encourage DoD & Industry to exchange information more efficiently with a mutual goal of identifying opportunities for collaboration. The preliminary online dialogue has shown to lead to better in-depth, face-to-face discussions that have yielded new collaboration agreements.

What if I just want to attend the face-to-face IR&D event?

A: This event is by invitation only. It is imperative our corporate partners understand

- **For Industry:**
 - Human Systems Virtual Technology Interchange – June 2015
 - Webpage soon to be posted on Marketplace
 - Responses will be submitted through the IR&D Secure Portal;
 - Efforts already in the Portal can be identified to Host for review with no further action required.
- **For DoD**
 - All responses are in same format, accessible to all Subject Matter Experts to review.
 - Most relevant efforts selected for more detailed, in-person review; more effective and efficient process.



DoD-Industry Engagement IR&D Secure Portal



- Defense Innovation Marketplace Website

- Industry uses the [IR&D Secure Portal](#) to submit project summaries of their efforts
- To date, more than **18,000** project summaries have been submitted, by more than 100 companies
- Access to these summaries is **restricted to:**
 - [Registered and approved DoD government employees and military personnel](#) with R&E/S&T or acquisition responsibilities (No contractor access)

- Request access at <http://www.defenseinnovationmarketplace.mil/government.html>

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Steps to Access Proprietary Industry IR&D Data

Industry's Independent Research & Development (IR&D) data within the Defense Innovation Marketplace SEARCH is proprietary and access to search the database is restricted to Department of Defense (DoD) federal employees or military service members with a direct interest in technology development or S&T planning and that have a Common Access Card (CAC).

Please use the attached guide to help in your Search of the Marketplace.

First Time Users Of IR&D SEARCH
If you are a first time user of the SEARCH tool, you will need to answer a few questions to request access. We will need the following information from you:

1. Are you a Department of Defense (DoD) federal employee or military service member with a Common Access Card (CAC)?
If yes, you need to provide it.
If no, visit DTIC registration center (<http://www.dtic.mil/dtic/registration/>) and Register Now to self-register to generate one.
2. Do you have a Defense Technical Information (DTIC) User ID?
If yes, you need to provide it.
If no, visit DTIC registration center (<http://www.dtic.mil/dtic/registration/>) and Register Now to self-register to generate one.
3. What is your title and the organization in which you work?
4. How will the IR&D Proprietary data help support your role at DoD?

Please [CLICK HERE](#) with the answers to the above question to request access to SEARCH. Once allowed access, you will receive an email with instructions from the Marketplace team.

Returning DOD Users of the IR&D SEARCH Tool
If you are a returning user of the SEARCH tool, click the button below to access the secure site.
(Make sure SSL 2.0 is selected in your security protocols to access Search)

[Leverage Industry's Innovation Projects Here](#)

If you have problems/questions [CONTACT US](#).

THE DEFENSE INNOVATION MARKETPLACE HAS MORE THAN 18,000 INDUSTRY IR&D PROJECTS

LEARN ABOUT & LEVERAGE INDUSTRY'S INNOVATIVE TECHNOLOGY PROJECTS

Updated 2/14/14

www.DefenseInnovationMarketplace.mil



R&E Gateway Resources ASD(R&E) COI Wiki



COI Collaboration Wiki – Accessible to all DoD Civilian and Military (CAC Required) – DoD Contractors can access with approval of Government Sponsor

DoDTechSpace | DoDTechpedia | Defense Innovation Marketplace | Budget | IACs | Services | Search

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R&E Gateway
DoDTechpedia by DTIC

Defense Communities DTIC Collections SEARCH

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ASD(R&E) Communities of Interest (COIs)
ASD(R&E) Communities of Interest (COIs) Home
Added by Angela Davis, last edited by JAMMI CASH on Sep 25, 2014 (view change)

The International Agreement Database tool is up and running!!

This database is available to all DoD employees and their support contractors through the DTIC website (<https://www.dtic.mil/IA>). The tool was developed to more easily search the Department's ~1200 established international agreements with 52 different countries, not limited to S&T.

Users will have the ability to perform the following searches: Text Search, Agreement ID, Other ID, Proponent, Agreement Type, Partners, Legal Authority, Agreement Status, NATO Only and the Date agreement went into effect.

This is an important tool as we are working to ensure a coordinated and strategic approach to our international S&T engagement efforts. Our newly released International S&T Engagement Strategy can be found at the following website: (<http://www.defenseinnovationmarketplace.mil/resources/2014InternationalStrategyASDRE.pdf>)

Communities of Interest (COIs)

Underpinning the S&T ExCom leadership is an ecosystem of technical groups known as Communities of Interest. These groups cover 17 technical areas that span the cross-cutting science and technology in the Department. The collection of COIs serve as an enduring structure to integrate technology efforts throughout the DoD S&T enterprise. While they cover the majority of the DoD's S&T investment, some Service specific investments are not included in these groups.

What are Communities of Interest?

COIs were established in 2009 as a mechanism to encourage multi-agency coordination and collaboration in cross-cutting technology focus areas with broad multiple-Component investment. COIs provide a forum for coordinating S&T strategies across the Department, sharing new ideas, technical directions and technology opportunities, jointly planning programs, measuring technical progress, and reporting on the general state of health for specific technology areas.

The S&T COI Review presentations can be found on the wiki page here.

Quick Links to COIs and Important Documents

- Advanced Electronics
- Air Platforms
- Armed Services Biomedical Research Evaluation and Management (ASBREM)
- Autonomy
 - Autonomy Research Pilot Initiative (ARPI)
- Command, Control, Communications, Computers and Intelligence (C4I)
- Counter-IED
- Counter-WMD
- Cyber
- Electronic Warfare
- Energy and Power Technology
- Engineered Resilient Systems
- Ground & Sea Platforms (G&SP)
- Human Systems
- Materials & Manufacturing Processes

Click on the above image to review the full Reliance 21 Operating Principles Document

R&E Gateway
POWERED by DTIC

A Connected DoD = Challenges Solved

DoDTechpedia (<https://www.dodtechpedia.mil>)
This collective wiki enables the sharing and updating of technology development information instantly by the community.

DoDTechSpace (<https://dodtechspace.dtic.mil>)
A virtual collaboration environment for the community to engage in dialogue, create content, coordinate projects and connect with colleagues.

Search (<https://www.dtic.mil>)
Quickly discover DoD research projects and documents, as well as people, places and content from the DoDTechSpace community on your topic of interest.

Analytics (<https://cbat.dtic.mil/>)
Through this tool you can access S&T funding information via the Unified R&E Database and other sources such as Congressional budget information.

Defense Innovation Marketplace (<http://www.defenseinnovationmarketplace.mil/>)
A resource for industry to view DoD S&T planning documents, acquisition resources, funding and financial information. It is also where industry submits proprietary Industry R&D (IR&D) summary reports for compliance with the Defense Federal Acquisition Supplement.

Access to these secure websites requires registration with DTIC, including for contractors without a Common Access Card (CAC) and non-DoD federal employees (<http://www.dtic.mil/dtic/registration/>).

<https://www.dodtechpedia.mil/dodc/pages/viewpage.action?pageId=11797462>



ASD(R&E)

DoD Research and Engineering Enterprise:

<http://www.acq.osd.mil/chieftechnologist/>

Defense Innovation Marketplace

www.DefenseInnovationMarketplace.mil

Twitter: @DoDIInnovation