

Better Buying Power 3.0

Upcoming Changes in DoD's IR&D Policy

Day Two, 24 June 2015

DoD Acquisition Insight Focus Days

23-24 June 2015, AFIT

UPCOMING CHANGES IN DOD'S IR&D POLICY OVERVIEW

- **POLICY**

- What is new policy?
- What has changed? And why?
- How does this affect you?
 - Industry
 - Government

- **IMPLEMENTATION**

- How will this be implemented? Timeframe? By whom?
- What does this mean for you?
 - Industry
 - Government

- **Q&A**

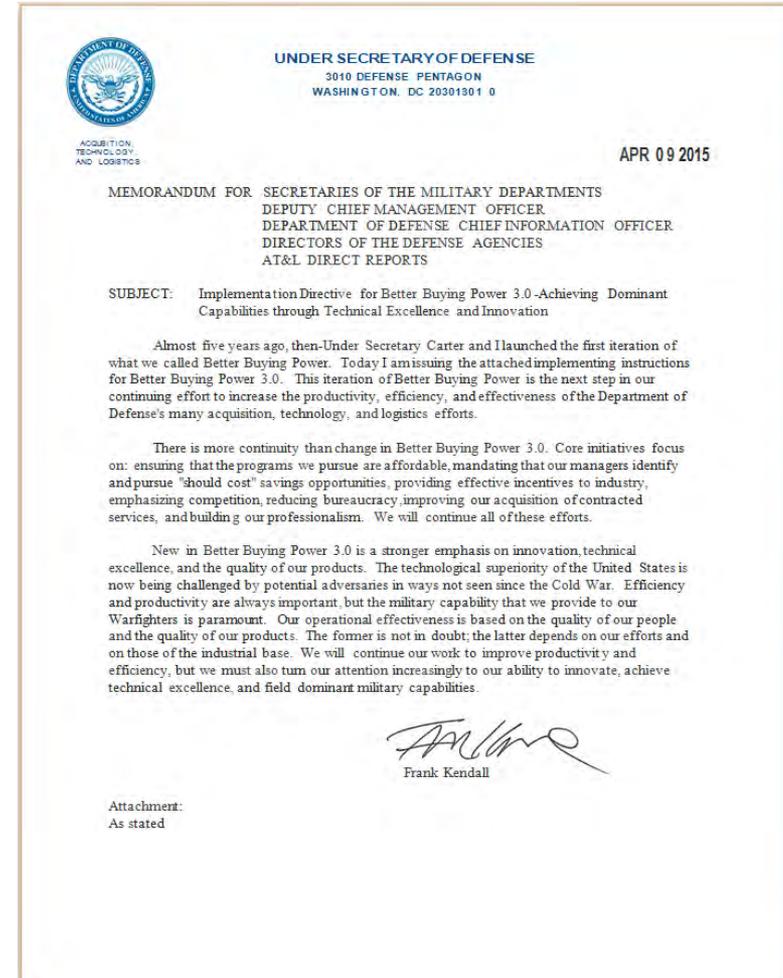
POLICY

WHAT IS THE NEW POLICY? BBP 3.0 DIRECTIVE

USD(AT&L) Memo 9 Apr 2015

- Implementation Directive for Better Buying Power 3.0
- Achieving Dominant Capabilities through Technical Excellence and Innovation

Learn about all facets of BBP 3.0
<http://bbp.dau.mil>



WHAT IS THE NEW POLICY? 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
- Anticipate and plan for responsive and emerging threats by building stronger partnerships of acquisition, requirements and intelligence communities
- Institutionalize stronger DoD level Long Range R&D Program Plans
- Strengthen cybersecurity throughout the product lifecycle

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
- Ensure effective use of Performance-Based Logistics
- Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- **Increase the productivity of corporate IR&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 and access to small business research and development
- Provide draft technical requirements to industry early and involve industry in funded concept definition
- Provide clear and objective “best value” definitions to industry

Eliminate Unproductive Processes and Bureaucracy

- Emphasize acquisition chain of command responsibility, authority and accountability
- Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews
- Remove unproductive requirements imposed on industry

Promote Effective Competition

- Create and maintain competitive environments
- Improve DoD outreach for technology and products from global markets
- Increase small business participation, including more effective use of market research

Improve Tradecraft in Acquisition of Services

- Strengthen contract management outside the normal acquisition chain – installations, etc.
- Improve requirements definition for services
- 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 development program leadership is technically qualified to manage R&D activities
- Improve our leaders’ ability to understand and mitigate technical risk
- Increase DoD support for STEM education

**Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence**

DOD COMMUNITIES OF INTEREST

- Ecosystem of 17 technical groups underpinning the S&T EXCOM leadership and cover the 17 technical areas that span the cross-cutting S&T in DoD
- Serve as an enduring structure to integrate technology efforts throughout the DoD S&T enterprise

The screenshot displays the 'DEFENSE INNOVATION MARKETPLACE' website. At the top, there is a navigation bar with links for HOME, BUSINESS OPPORTUNITIES, COMMUNITIES OF INTEREST, NEWS / EVENTS, and FAQs. Below the navigation bar, the 'Communities of Interest' section is highlighted. It includes a brief introduction: 'The Communities of Interest (COIs) were established 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 Science & Technology strategies across the Department, sharing new ideas, technical directions, and technology opportunities. The scope of the 17 COIs is detailed in the Tier 1 Taxonomy below, and on the COI pages.' Below this, there is a section titled '2015 Communities of Interest' which lists 17 categories, each with a small image and a brief description:

- Advanced Electronics**: The technologies encompassed by this COI include those that provide for the processing of information.
- Air Platforms**: A standing forum for developing consensus and identifying SAT issues related to air platforms.
- Autonomy**: This COI will closely examine the DoD's SAT investments in the enabling of autonomous systems.
- Biomedical ASBREM**: The purpose of this COI is to sustain and improve the program's responsiveness to medical readiness and warfighting needs.
- C4I**: This COI will coordinate the DoD C4I Science & Technology (S&T) portfolio investment and review DoD organizations' strategic plans.
- Counter-IED**: Multi-agency coordination is cross-cutting S&T focus areas that have particular benefit addressing the evolving challenge presented by IEDs.
- Counter-WMD**: Communication among the Components for the discovery of innovative technologies enhancing DoD capabilities in CWMD.
- Cyber**: Collaboration between DoD components leading to the discovery of innovative technologies in cyberspace.
- Electronic Warfare**: Military action involving electromagnetic (EM) and directed energy to control the electromagnetic spectrum (EMS).
- Energy and Power Technologies**: Provide technologies to enable intelligent power & energy management to enhance operational effectiveness.
- Engineered Resilient Systems**: Service and Acquisition Community concepts related to the ERS S&T portfolio.
- Ground and Sea Platforms**: Topics associated with a broad range of platform technologies for both ground and sea systems.
- Human Systems**: Framework for practitioners to share information, ideas, and best practices.
- Materials and Manufacturing Processes**: National leadership in developing technology-based options for advanced materials and processes for the Department of Defense.
- Sensors and Processing**: A forum for sharing new ideas, technical directions and technology opportunities.
- Space**: Facilitate collaboration and leveraging of complementary investments of the space S&T efforts performed by the DoD.
- Weapons Technologies**: This COI serves as the mechanism for the Military Services and Defense Agencies to work together to enhance the DoD S&T programs.

At the bottom of the page, the text 'CONNECTING INDUSTRY AND DOD' is displayed.

WHAT HAS CHANGED?

- **ASD(R&E) will organize and execute continuing series of joint Technology Interchange Meetings (TIMs) with industry by S&T Communities of Interest (COIs).**
- **S&T Col TIMs will**
 - provide industry with more detailed information about future program plans
 - gain enhanced DoD understanding and visibility into relevant IR&D.
- **DPAP and ASD(R&E) will recommend guidelines for allowable IR&D expenses to include:**
 - identification of an appropriate technical DoD **sponsor** from the DoD acquisition and technology community prior to project initiation
 - **endorsement** of project prior to initiation
 - annual written **report** if the project spans multiple years
 - report of results obtained following the completion of the project
- **DPAP and ASD(A) will develop a proposed regulatory or statutory change that would preclude use of substantial future IR&D expenses as a means to reduce evaluated bid prices in competitive source selections**

AND WHY? RATIONALE

- **IR&D is an important source of innovation for both defense corporations and DoD**
 - \$4 billion in annual Research and Development (R&D) spending
- **1970s to early 1990s - IR&D had been tightly regulated and heavily supervised by DoD**
- **Early 1990s changes in legislative guidance and authorities removed most DoD supervision of corporate IR&D**
- **Hon Ashton Carter, then OSD-ATL, Generated BBP 1.0 & 2.0 Initiatives**
- **BBP 3.0 initiative will**
 - improve communication between DoD and industry
 - restore higher degree of government oversight of this technology investment
 - avoid burdensome pre early 1990s regulatory environment
- **Current reviews of IR&D spending indicate that a high fraction of IR&D is being spent on**
 - near-term competitive opportunities and
 - on minor investments primarily intended to create intellectual property
- **A problematic form of this use of IR&D is in cases where promised future IR&D expenditures are used**
 - to substantially reduce the bid price on competitive procurements. In these cases, development price proposals are reduced by using a separate source of government funding (allowable IR&D overhead expenses spread across the total business) to gain a price advantage in a specific competitive bid
 - This is not the intended purpose of making IR&D an allowable cost

HOW DOES THIS AFFECTS YOU?

Industry

- **TIMs**
 - Deliberate and disciplined engagements with multi-service S&T COI teams
 - Single point of entry into a technical domain
 - DoD Technical Information provided to industry at appropriate disclosure level
- **Allowability**
 - Requires GOV sponsor of IR&D effort before initiating
 - Annual Reporting & at Closeout

Government

- **TIMs**
 - Regular, Organized, and Recurring interchanges with industry leading S&Es
 - Unique role as Government Technology Broker across S&T COI theme
- **Allowability**
 - Sought out as sponsor for Industry IR&D
 - Review IR&D Reports
- **PEOs, SPOs, CENTERS will become more actively engaged in IR&D review processes**

IMPLEMENTATION

HOW? BY WHOM? IMPLEMENTATION

- **HOW?**

- Sponsor – TBD (DPAP with ASD(R&E))
- TIMs
 - AF's IR&D TIM Framework Re-Tooled for DoD's 17 S&T COIs
 - Concurrent FBO and "The Marketplace" announcement
 - Industry Nominates IR&D Reports via IR&D DB
 - SMEs Augment by Searching "The Marketplace" IR&D DB
 - Selected Topics / Companies for Face to Face Engagements with Domain-Specific COI SMEs
 - Timeline - 12 to 36 month cycle for all 17 COIs
- IR&D to Reduce B&P costs – TBD (DPAP with ASD(A))

- **BY WHOM?**

- Facilitation and Coordination by Services' IR&D Program Offices
- Composed of DoD S&T COI SMEs
- Include Other Federal Agencies' SMEs

BY WHOM? DOD COMMUNITIES OF INTEREST

Each COI has a different focus area; Mission, Capability or Technology

Mission focus

Roadmaps describe capabilities enabled by advanced technologies and systems

Counter-IED

Counter-WMD

Biomedical (ASBREM)

Systems / Capability focus

Roadmaps describe how multiple technologies are integrated into complex systems to achieve mission impact

Command, Control,
Comms, Computers,
and Intelligence (C4I)

Human Systems

Cyber

Autonomy

Engineered Resilient
Systems

Electronic Warfare

Sensors &
Processing

Air Platforms

Ground & Sea
Platforms

Weapons
Technologies

Space

Technology focus

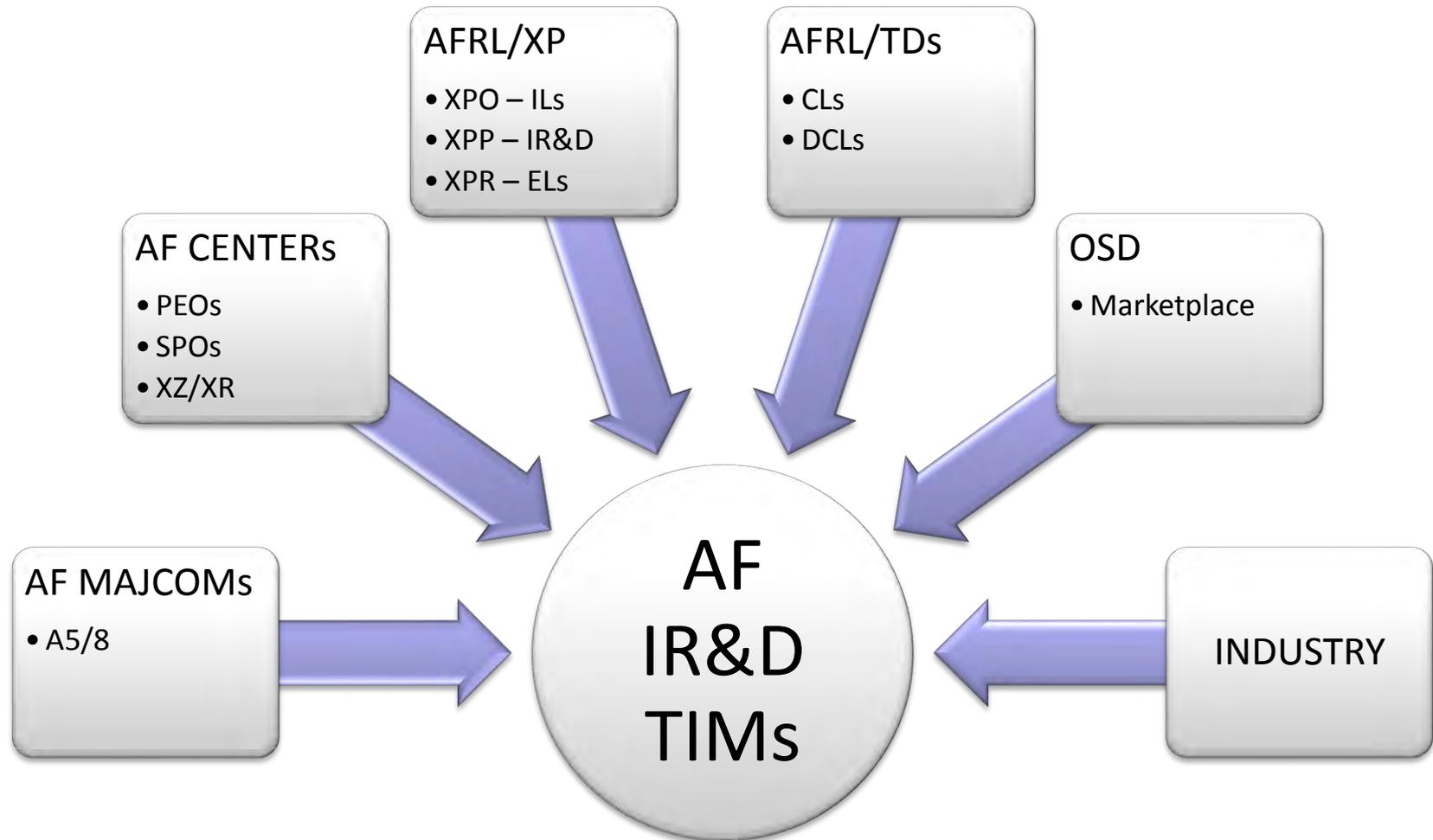
Roadmaps describe technology goals with multiple applications

Advanced
Electronics

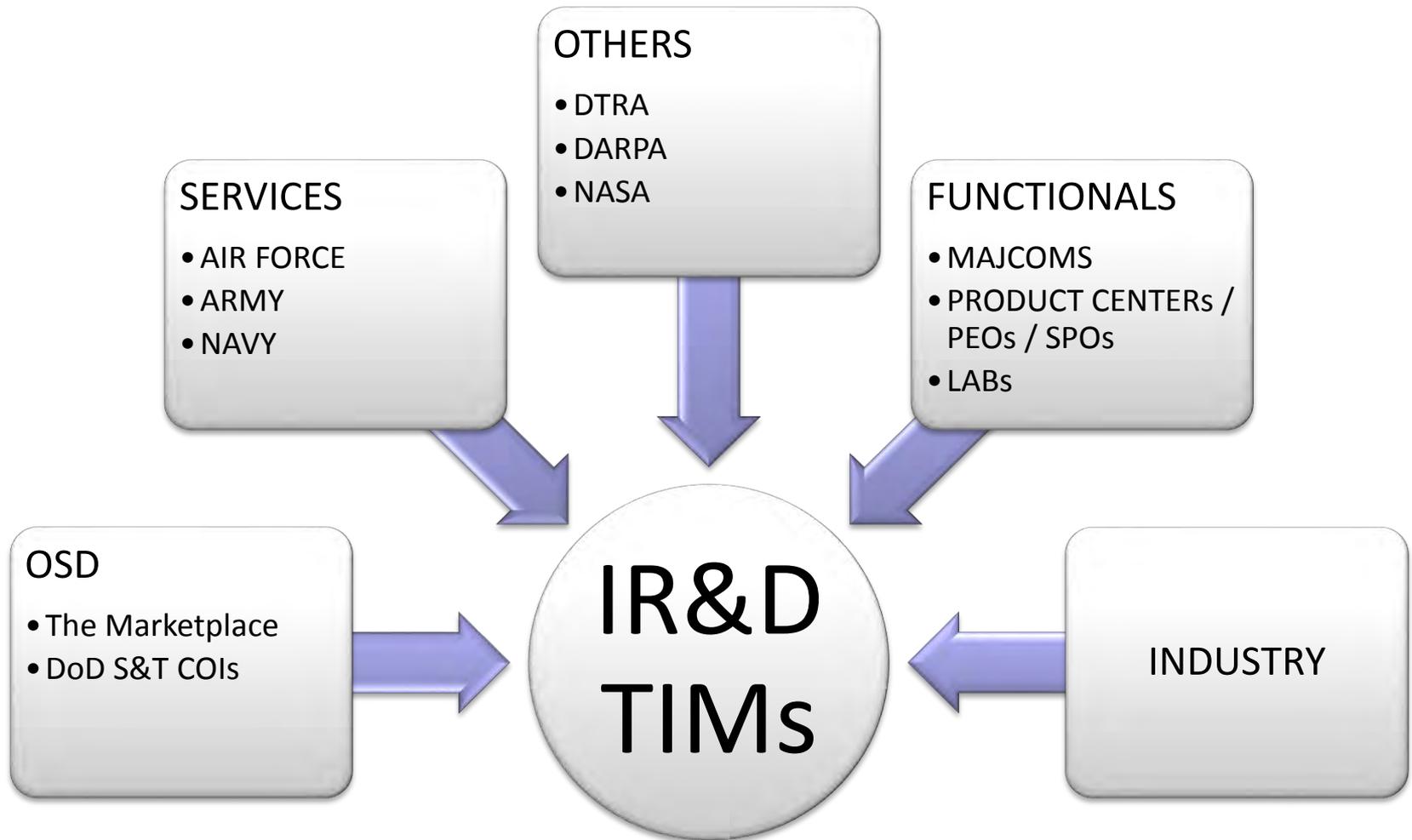
Energy & Power
Technology

Materials &
Manufacturing
Processes

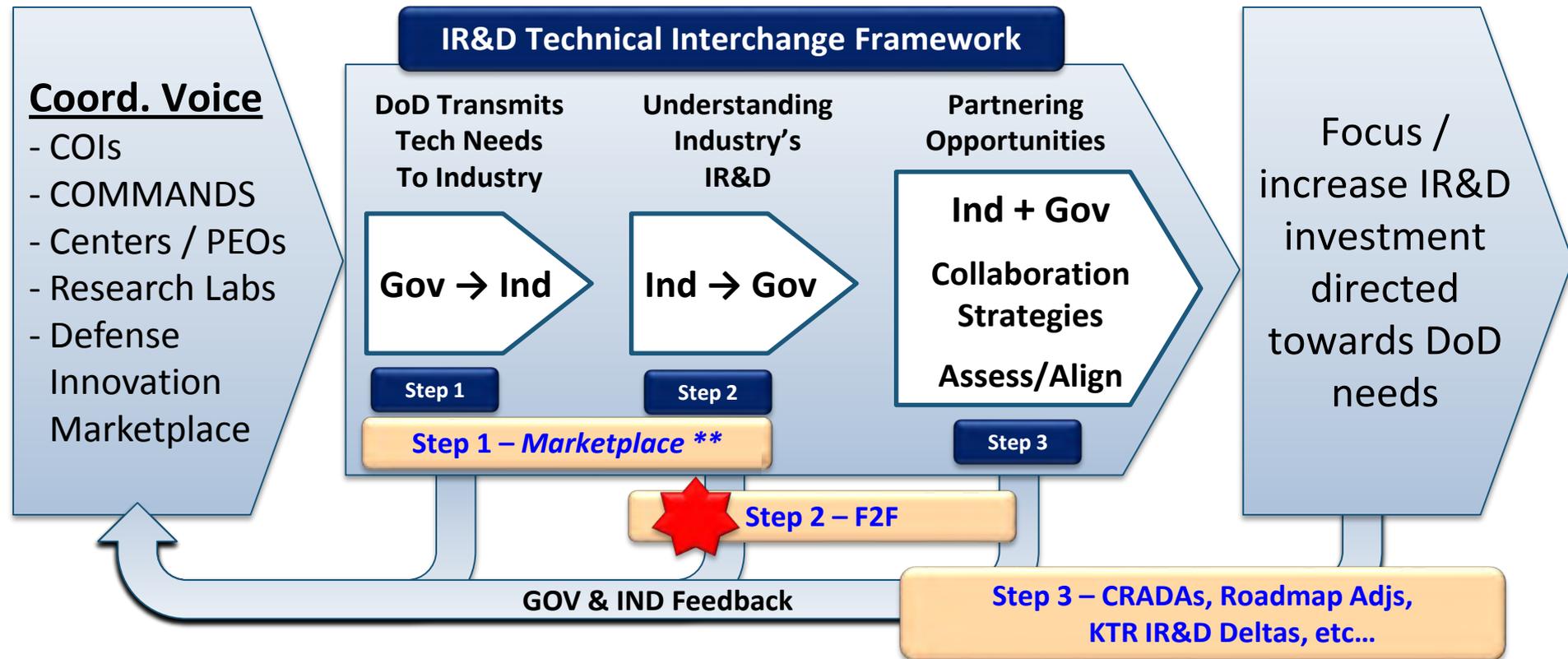
HOW IMPLEMENTED? CURRENT AF IR&D TIMs MODEL



HOW IMPLEMENTED? PROPOSED DOD COI IR&D TIMs MODEL



IR&D TECHNOLOGY INTERCHANGE FRAMEWORK



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Space

Technology focus

Roadmaps describe technology goals with multiple applications

Advanced
Electronics

Energy & Power
Technology

Materials &
Manufacturing
Processes

In-Coord

Completed

WHAT DOES THIS MEAN TO YOU?

- **Industry**
 - Anticipate FBO Announcements in S&T Areas of Interest
 - Ensure Diligent Response
 - Exercise Your Network in Government
- **Government**
 - Anticipate Involvement as SME in TIMs
 - Expect Contact from Industry Requesting Sponsorship of IR&D Efforts of Interest

UPCOMING EVENTS

HUMAN SYSTEMS COI IR&D TIM

- **Joint Service Interchange**
- **22-26 June 2015**
- **ONR, Washington DC**

S&T Areas of Critical Interest

1. Personalized Assessment, Education, & Training
2. Protection, Sustainment, & Warfighter Performance
3. Human Aspects of Operations in Military Environments
4. Systems Interfaces and Cognitive Processes

AF SPACE & CYBER IR&D TIM

SPACE

1. Nuclear Survivable Communications
2. Launch Detection I Missile Warning
3. Position, Navigation and Timing (PNT)
4. Space Situational Awareness & Battlespace Awareness
5. Assured Space Access I Spacelift
6. Space Command and Control
7. Defensive Space Control
8. Satellite Operations
9. Protected, Tactical Communications
10. Offensive Space Control
11. Unprotected Communications
12. Space to Surface ISR
13. Terrestrial Environmental Monitoring
14. Nuclear Detonation Detection

CYBER

1. Proactive Defense
 2. Defensive Counter Cyberspace (Recon/Counter Recon)
 3. Cyberspace ISR & Situational Awareness
 4. Persistent Network Operations
 5. Data Confidentiality & Integrity Systems (DCIS)
 6. Cyberspace Command and Control
 7. Offensive Counter Cyberspace for Global Reach & Access
 8. Network Extension & Resiliency
- Air Force Interchange
 - 3-7 November 2015
 - TBD

AIR PLATFORMS COI IR&D TIM

- **Joint Service Interchange**
- **19-23 October 2015**
- **TBD**

S&T Areas of Critical Interest

1. Aircraft Propulsion, Power and Thermal
2. Fixed Wing Vehicles
3. High-Speed/Hypersonics
4. Rotary Wing Vehicles

SENSOR & PROCESSING COI IR&D TIM

- **Joint Service Interchange**
- **TBD March 2016**
- **Washington DC**

S&T Areas of Critical Interest

1. Radio Frequency (RF) (non-EW)
2. Acoustic, Seismic and Magnetic
3. Electro-Optical/Infrared (EO/IR)
4. System Interfaces & Cognitive Processes

QUESTIONS?

BACKUP

INCREASE PRODUCTIVITY OF CORPORATE IR&D

Increase the productivity of corporate Independent Research and Development

GENERAL GUIDANCE:

Independent Research and Development (IR&D) conducted by defense companies as an allowable overhead expense is an important source of innovation for both defense corporations and DoD. It represents over \$4 billion in annual Research and Development (R&D) spending. Changes in legislative guidance and authorities in the early 1990s removed almost all DoD supervision of corporate IR&D. Until that time, IR&D had been tightly regulated and heavily supervised by DoD. This initiative will improve communication between DoD and industry and restore a higher degree of government oversight of this technology investment, while avoiding the burdensome regulatory environment that existed prior to the early 1990s.

Reviews of IR&D spending indicate that a high fraction of IR&D is being spent on near-term competitive opportunities and on de minimis investments primarily intended to create intellectual property. A problematic form of this use of IR&D is in cases where promised future IR&D expenditures are used to substantially reduce the bid price on competitive procurements. In these cases, development price proposals are reduced by using a separate source of government funding (allowable IR&D overhead expenses spread across the total business) to gain a price advantage in a specific competitive bid. This is not the intended purpose of making IR&D an allowable cost.

The intent of the actions below is to ensure that IR&D meets the complementary goals of providing defense companies an opportunity to exercise independent judgment on investments in promising technologies that will provide a competitive advantage, including the creation of intellectual property, while at the same time pursuing technologies that may improve the military capability of the United States. The laissez faire approach of the last few decades has allowed defense companies to emphasize the former much more than the latter. The goal of this initiative is to restore the balance between these goals. The actions below approach this problem in an incremental way and their effectiveness will be evaluated once they are in place.

SPECIFIC ACTIONS:

ASD(R&E), beginning in 2015, will organize and initiate the execution of a continuing series of annual joint Technology Interchange Meetings (TIMs) with industry, organized by the existing S&T CoIs. Through virtual exchange of data and in person reviews, the S&T CoIs will provide industry with more detailed information about future program plans and gain enhanced DoD understanding and visibility into relevant IR&D.

Director DPAP, with ASD(R&E), will recommend to USD(AT&L) new guidelines for allowable of IR&D expenses by May 2015. The new guidelines will include: identification and endorsement of an appropriate technical DoD sponsor from the DoD acquisition and technology community prior to project initiation; and provision of a written report of results obtained following the completion of the project, or annually if the project spans multiple years. Following USD(AT&L)'s approval, the new guidelines will be implemented through a standard rule making notice and comment process.

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COMMUNITIES OF INTEREST

- **Advanced Electronics**
- **Air Platforms**
- **Autonomy**
- **Biomedical (ASBREM)**
- **Counter IED**
- **Counter WMD**
- **Cyber Security**
- **Electronic Warfare/
Electronic Protection**
- **Energy & Power
Technologies**
- **Engineered Resilient
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- **Ground & Sea Platforms**
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