



Department of Defense S&T Priorities

22 June 2011

**The Honorable Zachary J. Lemnios
Assistant Secretary of Defense for
Research and Engineering**

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Secretary Gates' Priorities



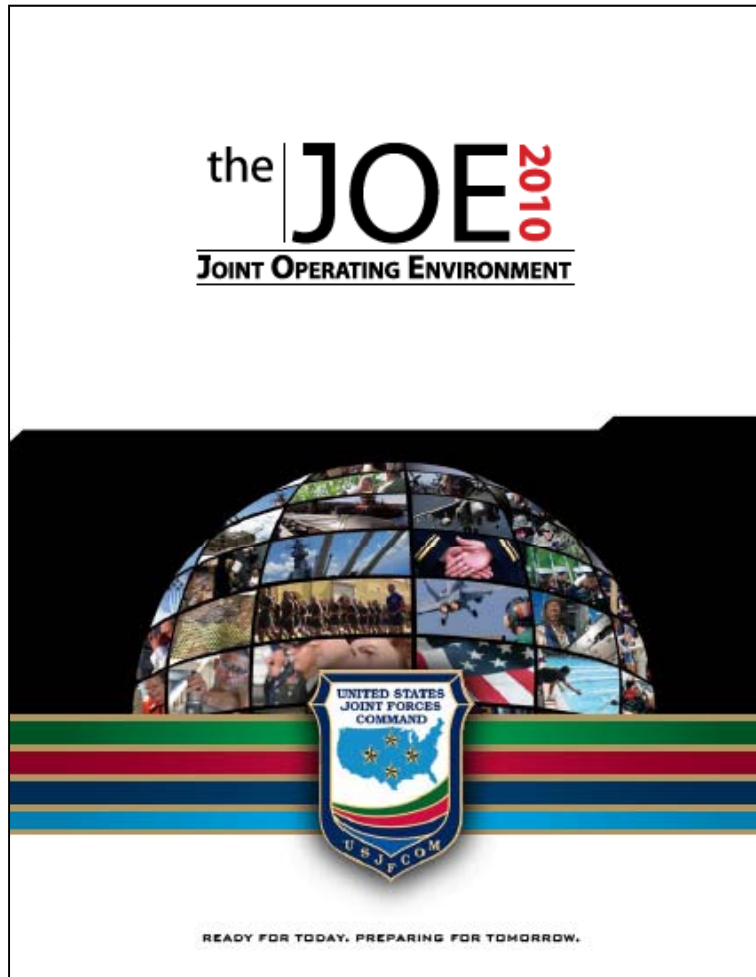
1. Take ca. 10% off our people
2. Rebalancing the military
3. Reforming what and how we buy
4. Supporting our troops in the field

SECDEF Efficiency Initiative
9 August 2010

Secretary of Defense, HASC Budget Rollout Brief, February 2010



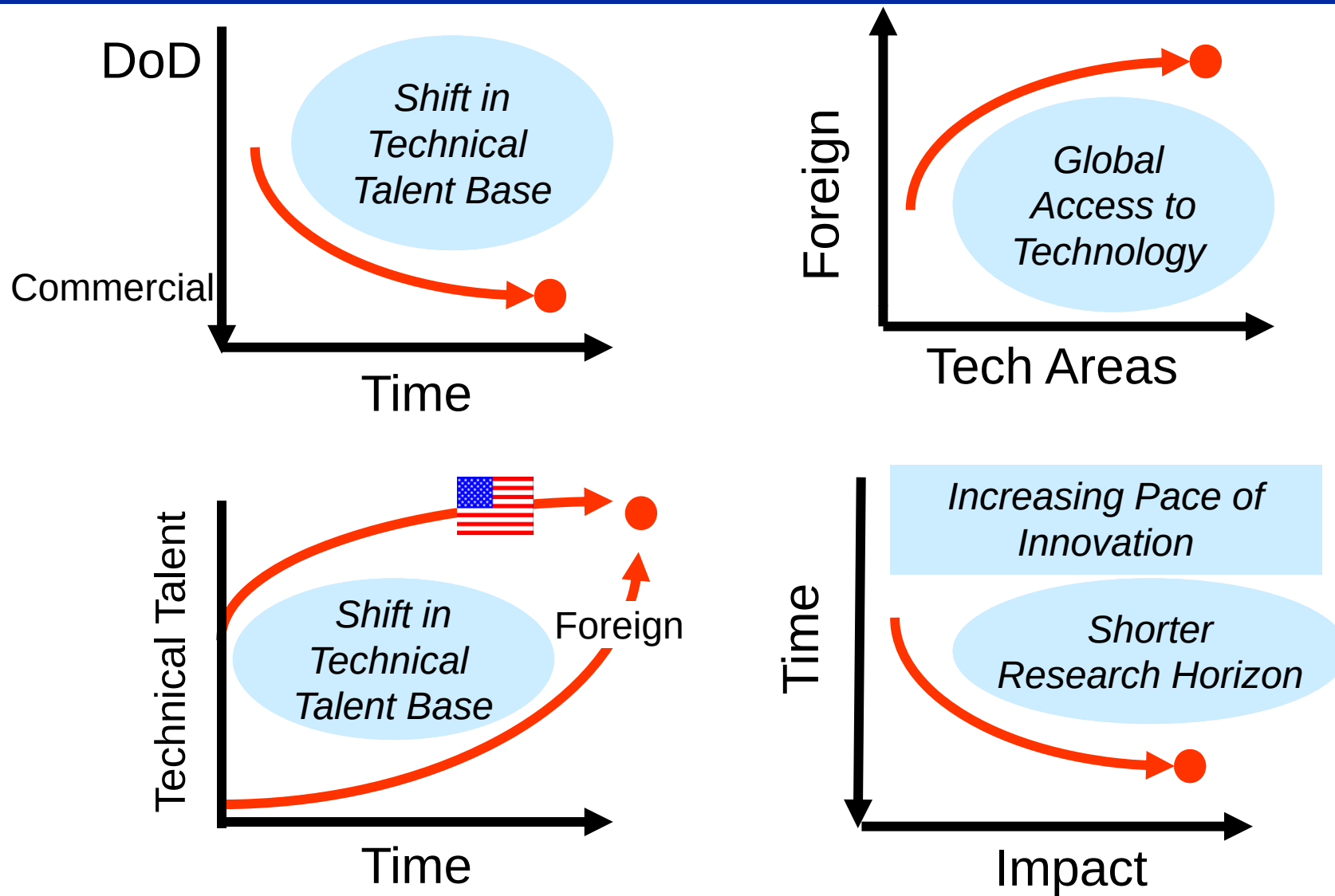
Global Challenges and Trends



- **Shifting Global Demographics**
- **Globalization shifts**
- **Energy**
- **Climate change & natural disasters**
- **Cyber as a new domain**
- **Challenges to existing state structures**
- **WMD proliferation**

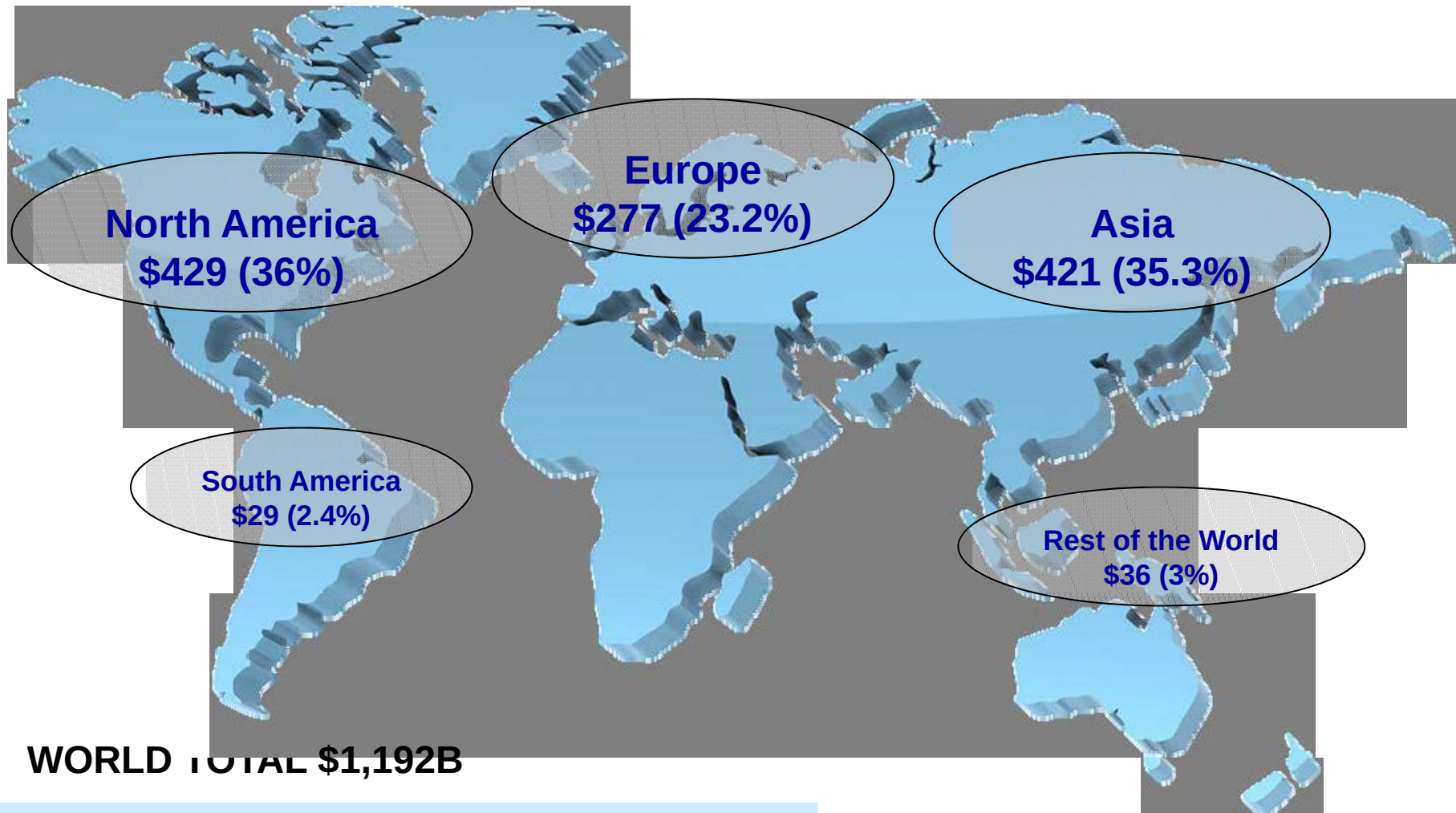


Key Challenges to our Technical Base





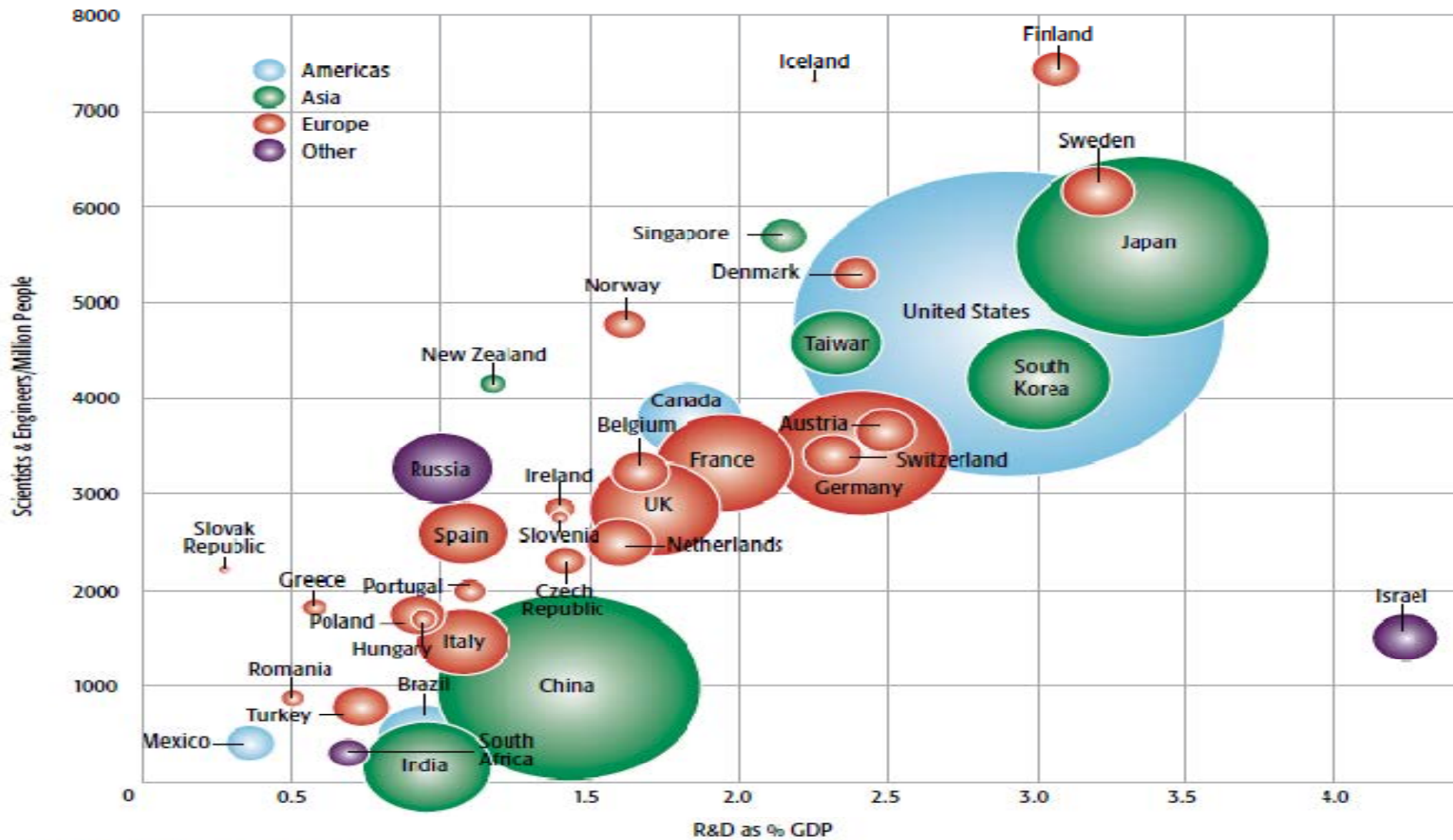
Globalization of R&D



Source: www.rdmag.com "2011 Global R&D Funding Forecast" - Battelle



World R&D Trends: A Global Shift



Source: Battelle, R&D Magazine, OECD, IMF, CIA



Five Strategic Thrusts



Supporting Current Operations

Mandating Affordability Requirements

Improving Efficiency in Acquisition

Better
Buying
Power



Strengthening the Industrial Base

Strengthening the Acquisition Workforce



Better Buying Power



Target Affordability and Control Cost Growth

- Mandate affordability as a requirement
 - At Milestone A set affordability target as a Key Performance Parameter

Improve Tradecraft in Services Acquisition

- Create a senior manager for acquisition of services in each component, following the Air Force's example
- Adopt uniform taxonomy for different types of services

- Target Affordability and Control Cost Growth
- Incentivize Productivity & Innovation in Industry
- Promote Real Competition
- Improve Tradecraft in Service Acquisition
- Reduce Non-Productive Processes and Bureaucracy

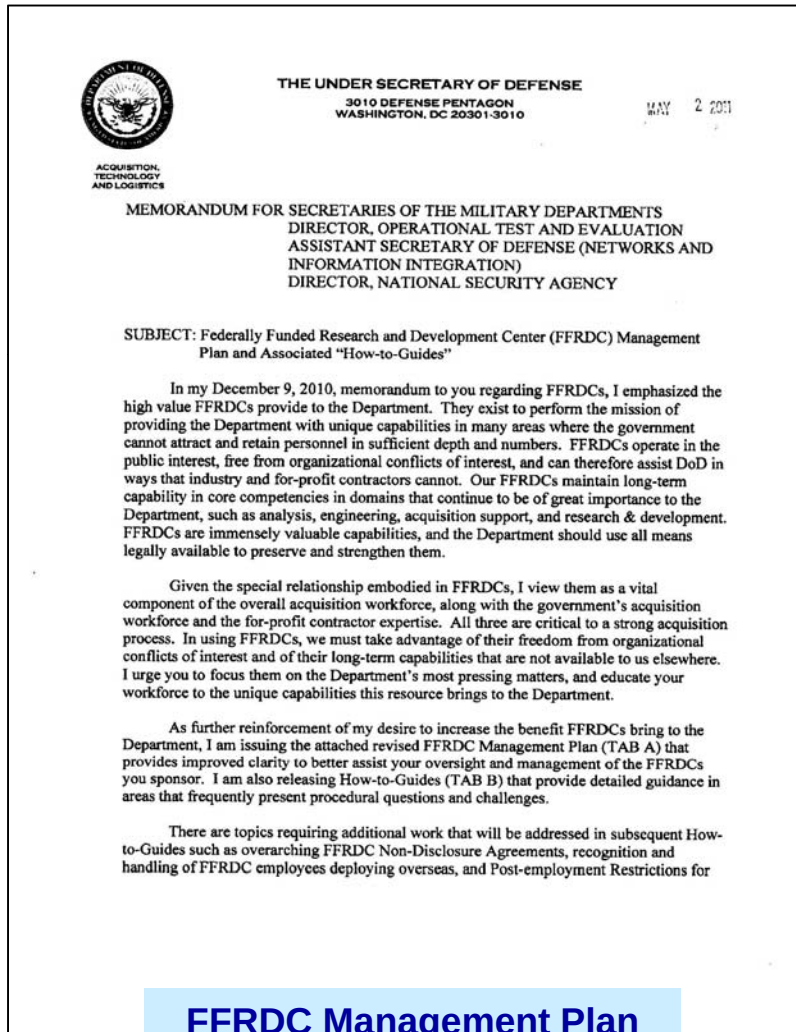
Promote

- Require open system architectures and set rules for acquisition of technical data rights
- Increase dynamic small business role in defense marketplace competition

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(FPRRs) to



Strengthen the Defense Industrial Base



**FFRDC Management Plan
Signed 2 May 2011**

What we've done:

- Published a new management plan for FFRDCs
- Communicated our perspectives on the base publicly
- Conducted analysis of specific issues

What we are doing:

- Conducting Sector by Sector and Tier by Tier industry analysis (S2T2)
- Being vigilant for specific issues in the base
- Evaluating specific issues brought to our attention by industry and/or Congress

What needs to still be done:

- Develop a holistic mapping of the industrial landscape based on the S2T2 analysis



Strengthen the Acquisition Workforce



Appendix 1
DOD Strategic Human Capital Plan Update
The Defense Acquisition Workforce
April 2010

The Defense Acquisition Workforce Improvement Strategy

FY10 Strategy

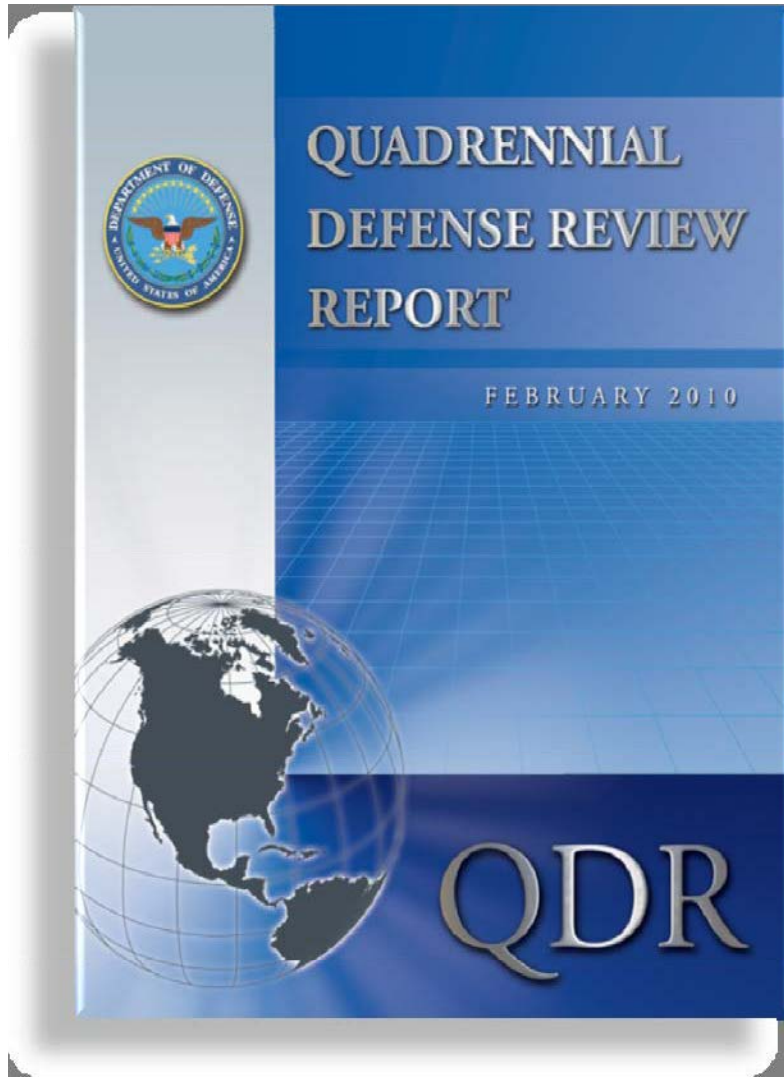
- 4,080 growth hires
- ~1,580 new hires
- ~2,500 insourcing

FY09-FY15 Strategy

- ~9,887 new hires
- ~10,000 insourcing



Quadrennial Defense Review Missions Require New Capabilities



1. **Defend the United States and Support Civil Authorities at Home**
2. **Succeed in Counterinsurgency, Stability, and Counterterrorist Operations**
3. **Build the Security Capacity of Partner States**
4. **Deter and Defeat Aggression in Anti-Access Environments**
5. **Prevent Proliferation and Counter Weapons of Mass Destruction**
6. **Operate Effectively in Cyberspace**



Capability Priorities *for FY13-17*



Complex Threats

**Electronic Warfare /
Electronic Protection**

**Cyber Science and
Technology**

**Counter Weapons of
Mass Destruction**

Force Multipliers

Data-to-Decisions

Autonomy

**Engineered Resilient
Systems**

Human Systems



Integrated S&T Enterprise

Missions

- National Defense Strategy
- Quadrennial Defense Review
- Space Posture Review
- Nuclear Posture Review

Objective Architectures

Operational Challenge

JUONs, UONs, COCOM
IPL

Critical Capabilities

Enabling Technologies

Laboratory Program

Basic Research Program

STEM Program

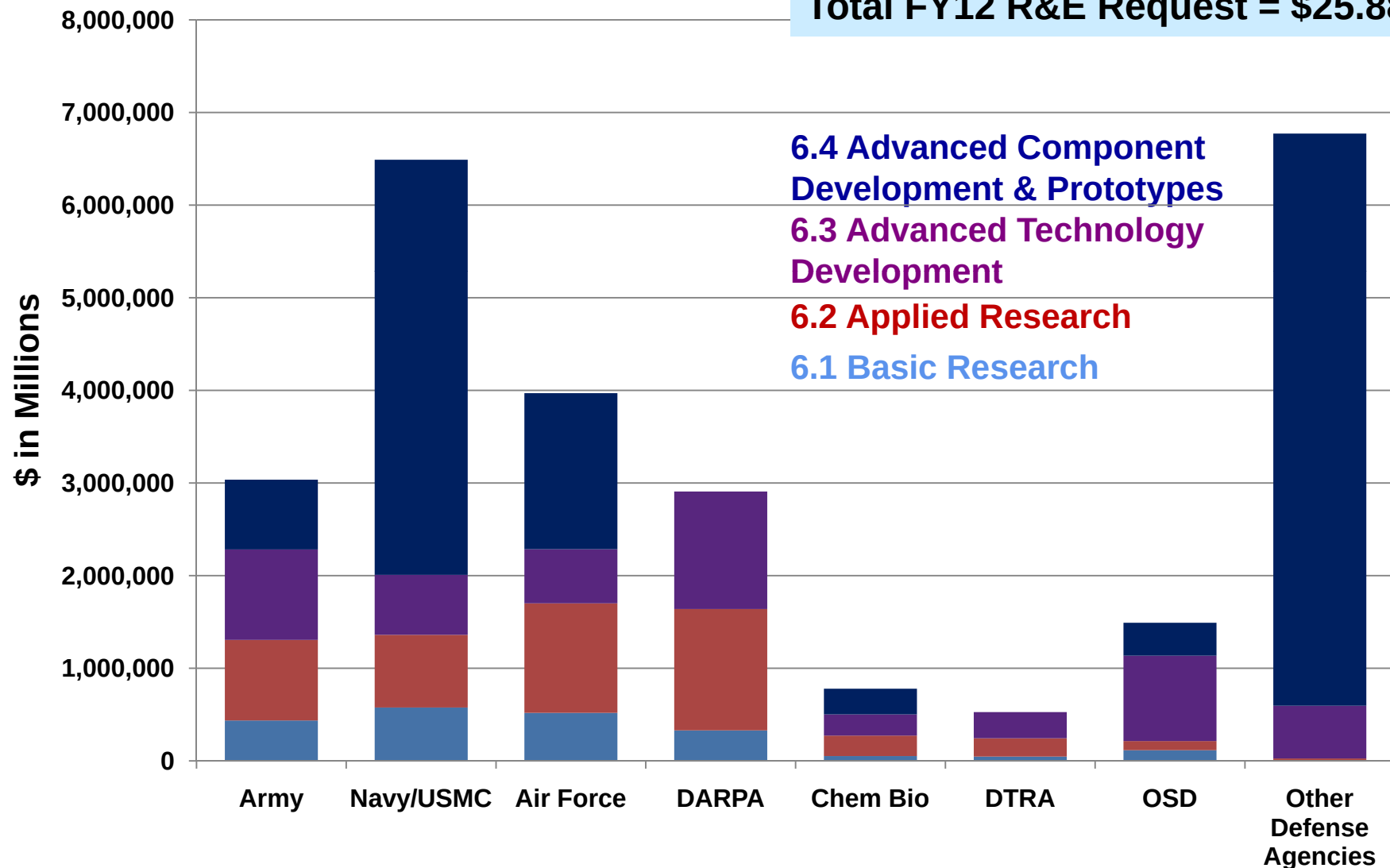
Industry IR&D



FY12 DoD R&E Budget Request



Total FY12 R&E Request = \$25.88B





Business Opportunities



Department of Defense

RESEARCH & ENGINEERING ENTERPRISE

Logos: U.S. Army, U.S. Air Force, DARPA, U.S. Navy, U.S. Marine Corps, U.S. Coast Guard

HOME MISSION S&T EMPHASIS AREAS EXCOM NEWS RESOURCES CONTACTS

Developing Technology to Advance the Warfighter

S&T Emphasis Areas

The Department has identified seven priorities:

- Autonomy
- Counter Weapons of Mass Destruction
- Cyber Sciences
- Data-to-Decisions
- Electronic Warfare
- Engineered Resilient Systems
- Human Systems

Around the R&E Enterprise

- \$37.8M Awarded for Research Equipment
- The Future of War
- Can you design, build, and fly the next-generation UAV?
- ONR Recruits for Online Wargame
- OSD S&T Priority Memo
- Health of Defense Industrial Base Testimony

View All >>

S&T Strategic Plan

Learn about how the DoD is planning for tomorrow's challenges.

Read More >>

About ASD(R&E)

ASD(R&E) provides science and technology leadership throughout the Department of Defense to meet tomorrow's challenges.

- About
- Leadership
- History

ASD(R&E) Offices: Developmental Test & Evaluation, Rapid Fielding, Research, Systems Engineering

STEM Initiatives

To safeguard our Nation's security, the DoD has a long history of supporting Science, Technology, Engineering & Math (STEM) initiatives at local, regional, and national levels.

Read More >>

Chief Technologist's Corner

The Honorable Zachary J. Lemnios
Assistant Secretary of Defense (R&E)

Welcome to the ASD(R&E) Enterprise website portal.

Read More >>

CLICK HERE FOR FUNDING resources

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<http://www.acq.osd.mil/ddre/index.html>