

DEFENSE BUSINESS BOARD



# **Innovation**

## ***Attracting and Retaining the Best of the Private Sector***

**July 24, 2014**

*These are the final briefing slides as approved by the Defense Business Board in the public meeting held July 24, 2014.*

# Agenda

- Task Group
- Our Tasking
- Approach
- Innovation
- Findings
- Ramifications/Problem
- Recommendations
- Summary
- Appendices



# Task Group

## Task Group Members

**Mr. David Langstaff**, Task Group Chair -- Founder and CEO, Veridian Corporation; former President and CEO, TASC Inc.

**Mr. Denis Bovin** -- Chairman and Managing Partner, Palimere Group LLC; former Co-Chairman and Co-CEO of Stone Key Partners LLC

**Mr. Lon Levin** -- President of SkySevenVentures; Cofounder XM Radio

**Dr. Dov Zakheim** -- Senior Advisor, Center for Strategic and International Studies; former DoD Comptroller and SVP Booz Allen Hamilton

**Ms. Sally Donnelly** – Consultant, CEO, SBD Advisors

**Ms. Kelsey Keating** – DBB Staff



# Our Tasking

- Is DoD attracting and sourcing the most innovative offerings and ideas from the commercial marketplace?

If not, why not?

- Is DoD losing some of its more innovative suppliers?

If so, why?

Note: See appendix for original Terms of Reference

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# Approach

- Our topic: innovation
- Our goal: provide realistic, actionable recommendations
- Our focus:
  - Take a systems approach, with attention to cause-effect relationships
  - Go beyond the obvious; drive to root causes
  - Recognize DoD is a bureaucracy with a bureaucratic culture
- This report is not...
  - Study of the Defense Industrial Base
  - Study of small business



# Interviews

- DoD: current and retired OSD and Services acquisition senior leaders
- Private sector: large and small commercial companies largely outside the traditional Defense Industrial Base (DIB)
- Private sector: large and small companies primarily focused on defense markets (members of the DIB)
- Financial market experts
- Commercial innovation experts
- Think tank and defense industry experts

***Over 40 interviews conducted***

*Note: Opinions expressed are of DBB Task Force and are not to be attributed to any particular interviewee except as noted*

# Innovation

# Innovation

- Innovation is incentivized or triggered; emerges from opportunity
  - Supplier innovation can be both technical and around business processes
  - Buyer innovation around business processes may be a required precondition
- Systems forces, cause-effect relationships and barriers are critical
- Innovation framework\*:
  - Evolutionary (sustaining)
    - Next generation product development; incremental improvement
    - Examples: Xbox 360 vs. Xbox
  - Efficiency (sustaining or disruptive)
    - Process improvements; margin enhancing; releases capital
    - Example: cost reductions within Fixed-Price contracts
  - Revolutionary (disruptive)
    - Changes the game: market creating; new business models
    - Examples: Netflix vs. Blockbuster; Netflix vs. Netflix

\*Theory of innovation as articulated by Dr. Clayton Christensen, Harvard Business School





# Innovation: DoD and Commercial Markets

- DoD needs both sustaining and disruptive innovation
  - Sustaining innovation tends to be “top down”
    - Focuses on addressing known problems; managed
    - CR&D (contracted) and IR&D (independent) can address
  - Disruptive innovation tends to be “bottom up”
    - Source of major breakthroughs; organic
    - Sourced from non-traditional, self-funded development
  
- Why does industry seek and invest in innovation?
  - Source of differentiation and competitive advantage
  - Revenue growth; margin expansion
  - Long-term profitability; sustainable value

***DoD has inadvertently erected barriers against innovation***

# Findings

# General Findings

- Basics and obvious: lots of common complaints
  - Government regulations, DoD stove-piping
  - Risk-averse culture
  - Core value: “fairness” – but applied to process, not players or outcome
- FAR Part 15 “Contract by Negotiation” is significant barrier
  - Preferred DoD acquisition method; focus of workforce training
  - Inflexible; slow by design; Cost Accounting Standards (CAS) -based; levels competition
  - Does not accommodate commercial operating or investment models
- DoD has alternative methods to procure goods and services
  - Acquisition rules already exist;
    - FAR Part 12 “Acquisition of Commercial Items”
    - Other Transaction Authority (OTA)
  - In-Q-Tel model: non-FAR-based contracting

***DoD can act now...no new authorities required***



# Closed system discourages innovation

- Programs
  - Components often fully integrated (“hard-wired”) to platforms
  - Architecture, component “buy” decisions often ceded to prime contractor
  - “Hard-wiring” key components to platforms increases program risk, lengthens procurement times, and locks in obsolete technologies
- Industrial Supply Chain
  - High degree of vertical integration is a barrier to new entrants and innovation
  - Prime contractor concentration restricts competition
  - Lack of independent systems integrators creates barrier to innovation
  - CAS flow-down requirements favor subcontracting within the DIB

***Major DIB contractors benefit from closed system***  
***Keeps commercial competitors out***  
***Locks in high-priced customer buying behavior***

# Unintended consequences of budget reduction actions will hurt future innovation

- Lowest Price Technically Acceptable (LPTA) contracting drives reductions in R&D, talent development, benefits, salaries, and experienced personnel
- Staff augmentation model is barrier to institutional value-added; focuses on individual contributors
- Expanded use of Indefinite Delivery Indefinite Quantity (IDIQ) vehicles adds cost, creates employee uncertainty, and represents new barrier to entry
- By focusing solely on cost reductions, DoD has not capitalized on opportunity to drive industry business process innovations
- Low-cost emphasis has led to imbalance between roles of contracting and program offices
  - Program offices often relegated to secondary roles in contract decisions
  - Contracting offices often unable to make “best-value” decisions compatible with mission goals
- Government efforts to reduce profit erodes industry willingness to invest
  - Profit squeeze makes defense industry less attractive in the competition for capital and talent



# DoD lacks sufficient understanding of business operating models and drivers of innovation

- Fundamental business imperative: increase earnings per share (EPS)
  - Work the numerator (increase earnings or profit)
  - Work the denominator (decrease number of shares outstanding)
  - Additional lever: maximize free cash flow
- Profit: the lifeblood of the capitalist system
  - Profit is misunderstood by the government, seen as something to be minimized
  - Profit is not the same as fee on a contract
    - Contract fees contribute to profit, but must cover additional (un-allowable) costs
  - Intellectual property (IP) as a source of value must be allowed
  - Government should focus on the total price it pays for value received
- Profit is risk-calibrated
  - Low risk leads to lower profit levels: higher risks command higher profits
  - DoD: traditionally seen as low risk; increasingly viewed as higher risk

See appendix pp.  
33, 34, 35, 36

See appendix pp.  
37, 38, 39, 40

See appendix pp.  
41, 42, 43

***Today: witnessing the “de-investment” from the defense industry***



# Two Business Operating Models

## ***Traditional FAR Part 15 contracting***

- Model characteristics
  - Cost-based
  - Government funds IR&D; industry role: resource allocation
  - Often, not performance-based
  - Lower risk, lower profit vs. other industries
- Government engagement
  - Traditional procurement understood
  - CAS applies since cost is the base
  - IP rules favor government

## ***Commercial contracting***

- Model characteristics
  - Market value-based
  - R&D self-funded; recovered in price of product, if successful
  - Performance-based
  - Higher risk, higher profit; industry assumes innovation and market risks
- Government engagement
  - Traditional procurement, CAS do not work
  - FAR Part 12 and OTA works
  - IP rules must favor industry

## ***Key takeaways***

Fundamental differences between cost-based and value-based models  
Fundamental differences between DoD and commercial drivers

# Other Findings

## ■ Acquisition process

- Performs exactly as designed: slow, careful, risk-averse, “fair”
- Problem: 7-10 year platform cycle vs. 18 month Moore’s Law technology cycle
- Cannot accommodate agile, “best for now” or “good enough” standards

## ■ Workforce training

- Development curriculum for DoD acquisition workforce is inadequate
  - Need training on business models, practices, risk management
  - Need training on market research, systems engineering, and program management
- Curriculum trains for cost analysis rather than how to make value judgments
- Lowest cost selections seen as best defense against potential protests

## ■ Confused messaging

- DoD viewed as against profit, against industry and against commercial procurement
- DoD viewed as not encouraging or open to innovation that it does not direct
- DoD viewed as not understanding the new realities of the marketplace

See appendix pp.  
47, 48





# Ramifications

# DoD has achieved near-term cost reductions... but at what long-term cost?

- Commercial players are innovating elsewhere, de-emphasizing or exiting DoD market
- Investment capital looking elsewhere to invest; views DIB more as a source of cash than a source of innovation
- Some industry segments (“best-value” services) now in survival mode
- Talent is exiting
  - Employees are paying the biggest cost
  - Impact: “hollowing out” of DIB capabilities
  - Talent competition is with non-DoD markets: Silicon Valley, Wall St.

***Without talent and investment there will be little innovation***

# The Challenge

- Eliminate barriers to innovation; replace with clear incentives
  - Current IP rules crush industry upside potential
  - DoD process in the name of “fairness” destroys competitive advantage that should result from investment in innovation
  - Capital is neutral, not patriotic; need to attract capital on its terms
- Financial returns currently possible by selling to DoD are inadequate to attract innovation investment capital
  - Sustainable returns: decreasing
  - Perceived risk: increasing

***DoD fundamental misunderstanding of the economics of profit has become a huge obstacle to innovation***



# Recommendations

# Recommendations Overview

- **Overarching objectives**
  - Focus on desired outputs rather than antiquated process
  - Rebalance roles of program and contracting offices; retrain for better decision-making
  - Address unintended consequences
  - Open up a largely closed, vertically integrated system
  
- **Recommendations**
  1. Establish FAR Part 12 as default procurement method for non-platform acquisitions
  2. Require adoption of modular approach to new mission-essential platforms
  3. Rebalance policies on Intellectual Property
  4. Remedy unintended consequences of budget reduction actions
  5. Provide clear and consistent senior-level messaging of DoD goals and policies
  6. Systemize and mandate DoD workforce education as condition for promotion
  7. Simplify DoD internal processes and policies: ensure consistent long-term leadership
  8. Re-examine industry structure and incentives from standpoint of future DoD needs

# 1. Establish FAR Part 12 as the default acquisition method for non-platform procurements

## ■ What:

See appendix pp.  
44, 45, 46

- Establish FAR Part 12 as default acquisition method
- Reemphasize FAR Part 10, including preference for “good enough” over “exquisite”
- Use traditional acquisition methods only when FAR Part 12 cannot apply

## ■ How

- SecDef to issue memorandum directing change
- DepSecDef to follow with implementation specifics
- DepSecDef to establish commercial advocate “ombudsman” within DoD
- USD(AT&L) to drive execution
  - Expand rather than restrict definition of “of a type” and other stringent requirements
  - Require contracting officers to first seek commercial alternatives and certify actions taken
  - Require greater dialogue with industry pre-RFP in order to understand commercial options
  - Direct immediate training of acquisition personnel

## ■ Why

- Delivers clear statement: DoD invites commercial involvement; will engage on its terms
- DoD acquisition process change is a necessary prerequisite
- Begins to open what is otherwise a closed system
- Changes the game



## 2. Require adoption of modular approach to new mission-essential platforms

- What
  - Require platform open architecture; separate platform from components
  - Encourage “plug and play” modularity of key components
  - Separate component “buy” decisions from prime contractor
- How
  - USD(AT&L) to require all major programs be designed in advance for modularity
  - USD(AT&L) to require commercial assessment to seek ‘good enough’ capabilities
- Why
  - Encourages innovation at all levels (platforms, components, subsystems)
  - Fully integrated, “hard-wired” platforms stop component innovation once procured
  - Recognizes the reality of Moore’s Law and technology innovation cycles
  - De-risks major programs; able to swap-out what does not perform
  - Reduces cost and personnel redundancy, particularly in forward-deployed areas



# 3. Rebalance policies on Intellectual Property

- What
  - IP policy must allow for industry to gain full value from its IP
  - IP policy must protect industry IP for self-funded R&D
  - Rebalance government/industry IP rights on cost-shared R&D
- How
  - SecDef to mandate change
  - DepSecDef to instruct OSD General Counsel to develop language that can be presented to industry for comment; inform Congress of DoD actions; DepSecDef to require closure within 12 months
  - USD(AT&L) to clarify DoD goals to industry
- Why
  - Encourages industry to invest in new technologies relevant to DoD
  - Finding “win-win” space is in interest of all parties
  - Clarification of IP policy is essential and opens the door to future innovation



# 4. Remedy unintended consequences of budget reduction actions

- What
  - Stop practices that now represent barriers to innovation
  - Replace “input-based-design” with “output-based-performance” requirements
- How
  - Eliminate LPTA and staff augmentation contracting other than for commodity services with minimal mission impact
  - Avoid fixed price incentive fee contracts where efficiency innovation is possible
  - Stop reverse auctions other than for commodity services that have no mission impact in the event of failure
  - Minimize IDIQ contracting for work that requires sustained industry expertise, and where rapid technological changes are occurring
  - Mandate that requirements are established around performance, not design
- Why
  - Arrests industry “race to the bottom”
  - Preserves quality in mission-essential areas
  - Addresses talent and experience loss and “hollowing out” of industry capability

See appendix pp.  
49, 50

# 5. Provide clear and consistent senior-level messaging of DoD goals and policies

- What
  - Deliver clear and consistent messaging from senior DoD leadership
  - Ensure operative follow-through and execution of initiatives
- How
  - SecDef embrace recommendations for immediate implementation
  - DepSecDef establish specific timeframe and process to track progress
  - USD(AT&L) and DCMO to implement and hold Department accountable for results
  - USD(AT&L) seek opportunities to underscore messages to industry and Wall Street
  - USD(AT&L) to re-exert control over commercial contracting guidance
- Why
  - Clarify DoD goals and priorities
  - Correct inadvertent, erroneous, and conflicting messaging
  - Underscore fact that DoD seeks innovative commercial solutions and will engage industry on commercial terms where possible
  - Capitalize on “window of opportunity” to set investment expectations and provide directional guidance to DIB and Wall Street

# Recommendations 6, 7, 8

6. Systemize and mandate DoD workforce education as condition for promotion
  - Launch campaign to re-train acquisition workforce (see “Findings” p. 16)
  - Mandate year of study in a technical field at a major university or year in industry as a prerequisite for promotion to program manager/deputy manager/SES
  - Establish public-private partnership and rotational program with industry to cross-train personnel
7. Simplify DoD internal processes and policies
  - Ensure consistent long-term leadership; right people “on the bus”
  - Encourage other “fast lane” procurement methods
  - Seek permanent statutory authority for OTA
  - Direct that audits by one agency are accepted by other agencies
8. Re-examine industry structure and incentives to align with future DoD needs
  - Require that RFPs allow industry to propose more innovative ways to meet government needs without being considered non-compliant
  - Direct reduction of contractors housed in government facilities, 10% by FY15
  - Encourage more “DARPA-like” challenges and rapid prototype development
  - Curtail sole-source contracts to FFRDCs; open FFRDC work to greater competition
  - Encourage competition at the top and development of a larger DIB “middle tier”



# Summary

# Summary

- The focus of this report is on what DoD can do now and what can have immediate market impact
  - No new authorities required in order to act
  - Our recommendations target specific remediable barriers
- To attract commercial innovation, DoD must change its acquisition model
  - Business process innovation on the customer side is a necessary first step
  - DoD must adapt its behavior, policies, and procedures to the current market realities
- Recommendations reflect the particular issues around the different types of innovation



# Time for action is now

- If future military technological leadership is the goal, DoD must elevate mission above process
- Commercial industry is questioning whether DoD is a desirable market
- Window of opportunity exists now for clear messaging to commercial industry, DIB and Wall Street



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Questions?

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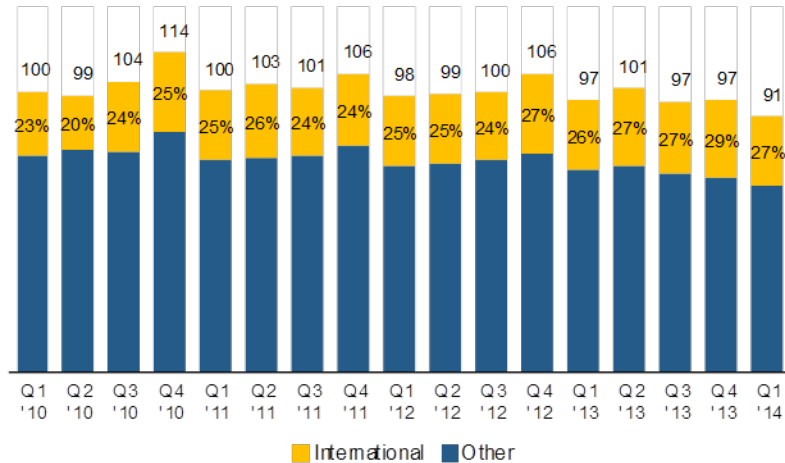
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# Appendices

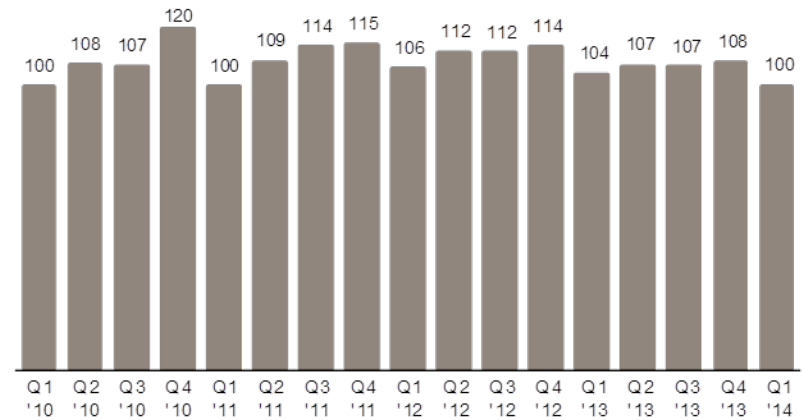


# Defense primes' revenue trends

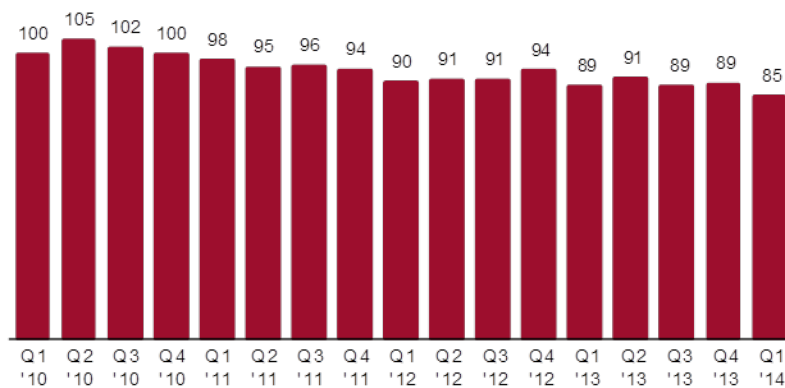
## Raytheon<sup>(1)</sup>



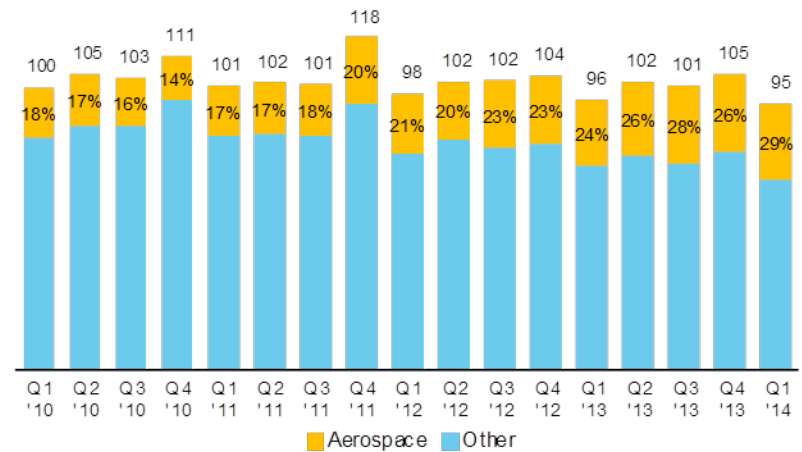
## Lockheed Martin



## Northrop Grumman<sup>(2)</sup>



## General Dynamics



Source: Company filing.

Note: Revenue indexed to 100 as of Q1 2010.

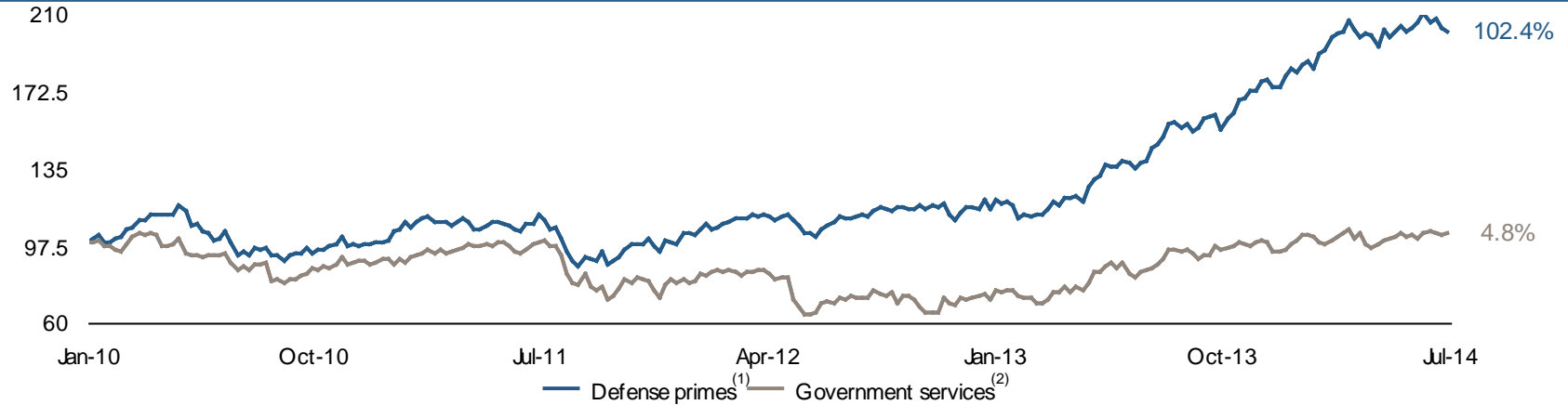
(1) International sales indicates "total international sales", which includes foreign military sales through the U.S. government.

(2) Excludes Shipbuilding segment (spun off in March 2011).

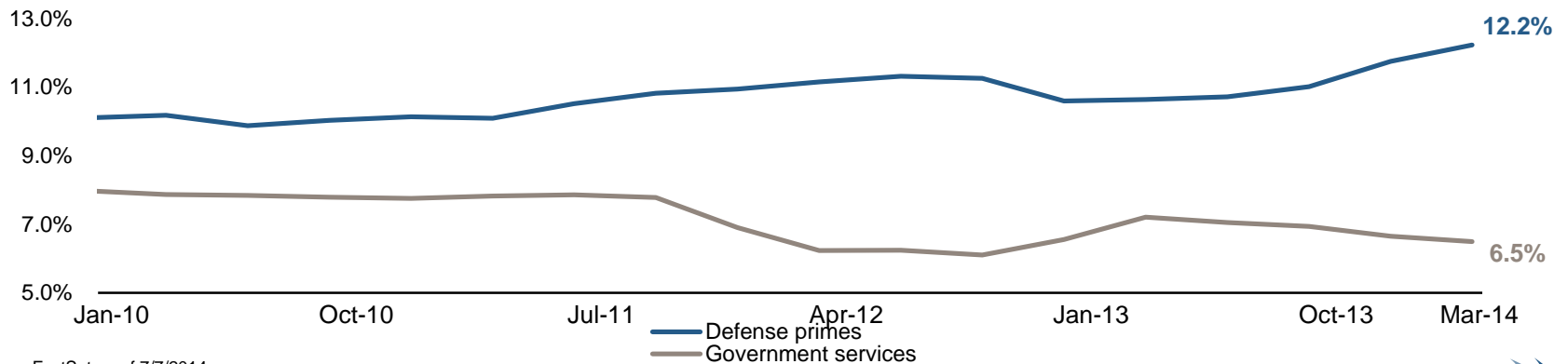


# Comparison of Defense primes and government services

## Stock price



## Operating margins



Source: FactSet as of 7/7/2014.

Note: Stock price indexed to 100 as of January 1st, 2010.

Science Applications International commenced trading under ticker SAIC on July 5th, 2013.

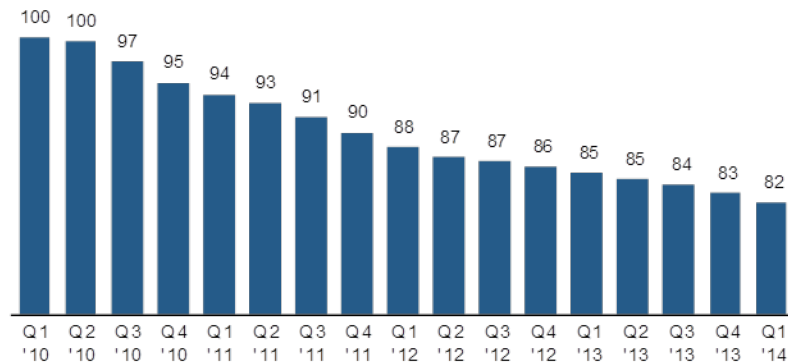
(1) Defense primes include: Raytheon, Lockheed Martin, Northrop Grumman, General Dynamics.

(2) Government services include: Booz Allen Hamilton, Science Applications International Corp, Leidos, ManTech, CACI International.

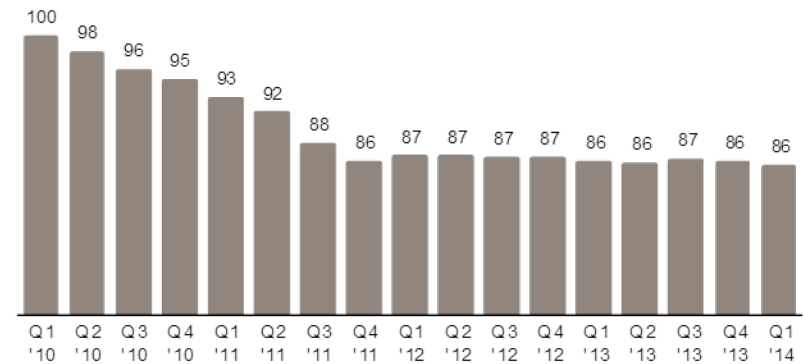


# Defense primes' indexed share count

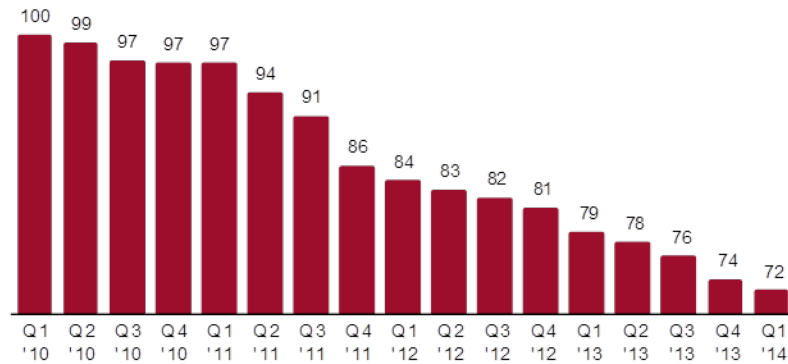
## Raytheon



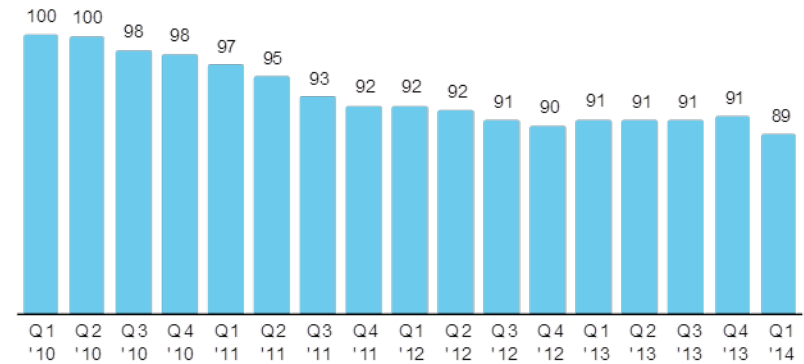
## Lockheed Martin



## Northrop Grumman



## General Dynamics



Source: Company filings.

Note: Share count indexed to 100 as of Q1 2010.

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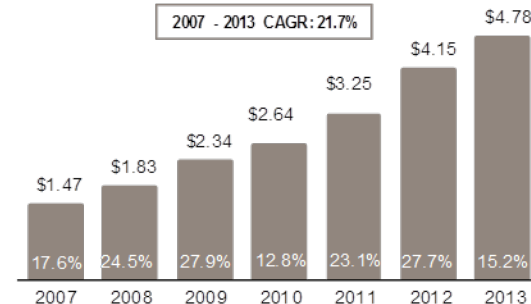
# Defense primes' dividend per share

## Raytheon



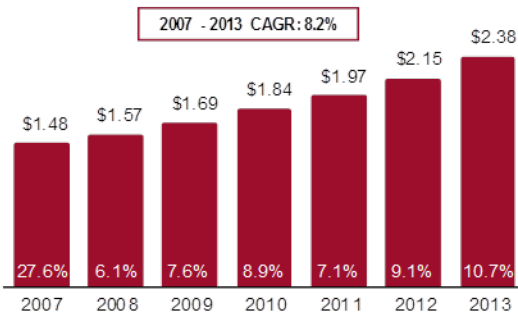
% NI:	26%	28%	25%	31%	32%	35%	34%
% FCF:	50%	27%	20%	34%	34%	41%	33%

## Lockheed Martin



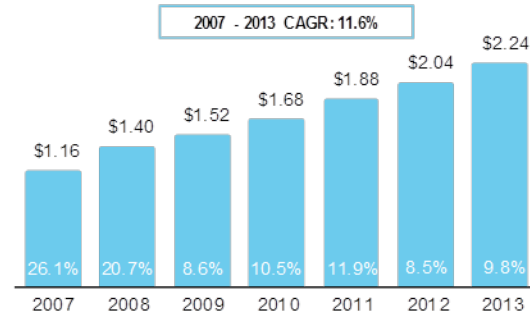
% NI:	20%	23%	30%	37%	41%	50%	52%
% FCF:	19%	21%	39%	36%	32%	NM	42%

## Northrop Grumman



% NI:	29%	(42%)	34%	27%	26%	27%	28%
% FCF:	24%	21%	36%	32%	33%	23%	26%

## General Dynamics



% NI:	23%	22%	24%	24%	27%	31% <sup>(1)</sup>	25%
% FCF:	19%	21%	24%	25%	25%	32%	22%

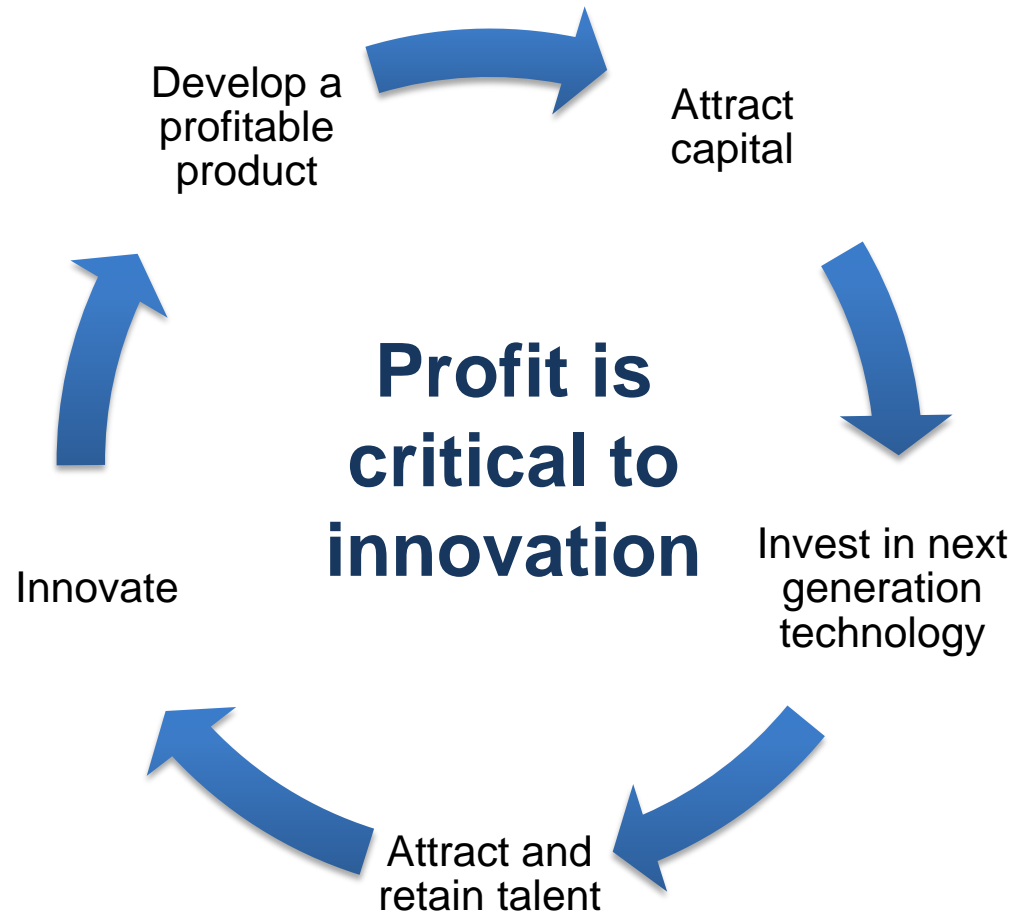
Source: Company filings.

Note: Free cash flow defined as operating cash flow less capital expenditures.

(1) Based on GAAP adjusted 2012 full year earnings of \$6.48 per share fully diluted.

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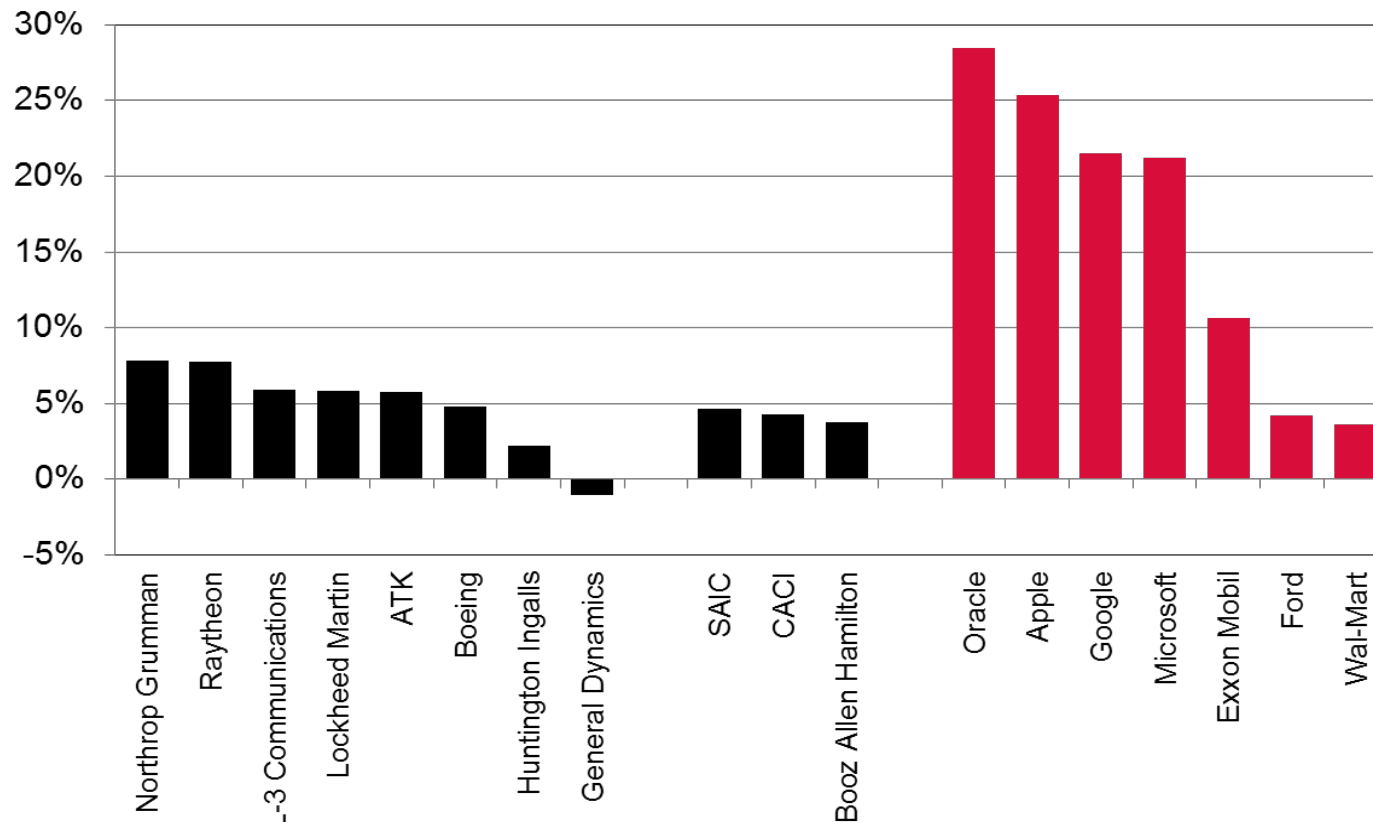
# Business profit cycle



# Profit margin comparison

## Defense industry generates very low margins on sales

What is the Profit Margin on Goods and Services Delivered to Customers?  
Net Profit / Revenues



Source: Fidelity data for TTM through April 2013

Graph source: Strategy& / PWC

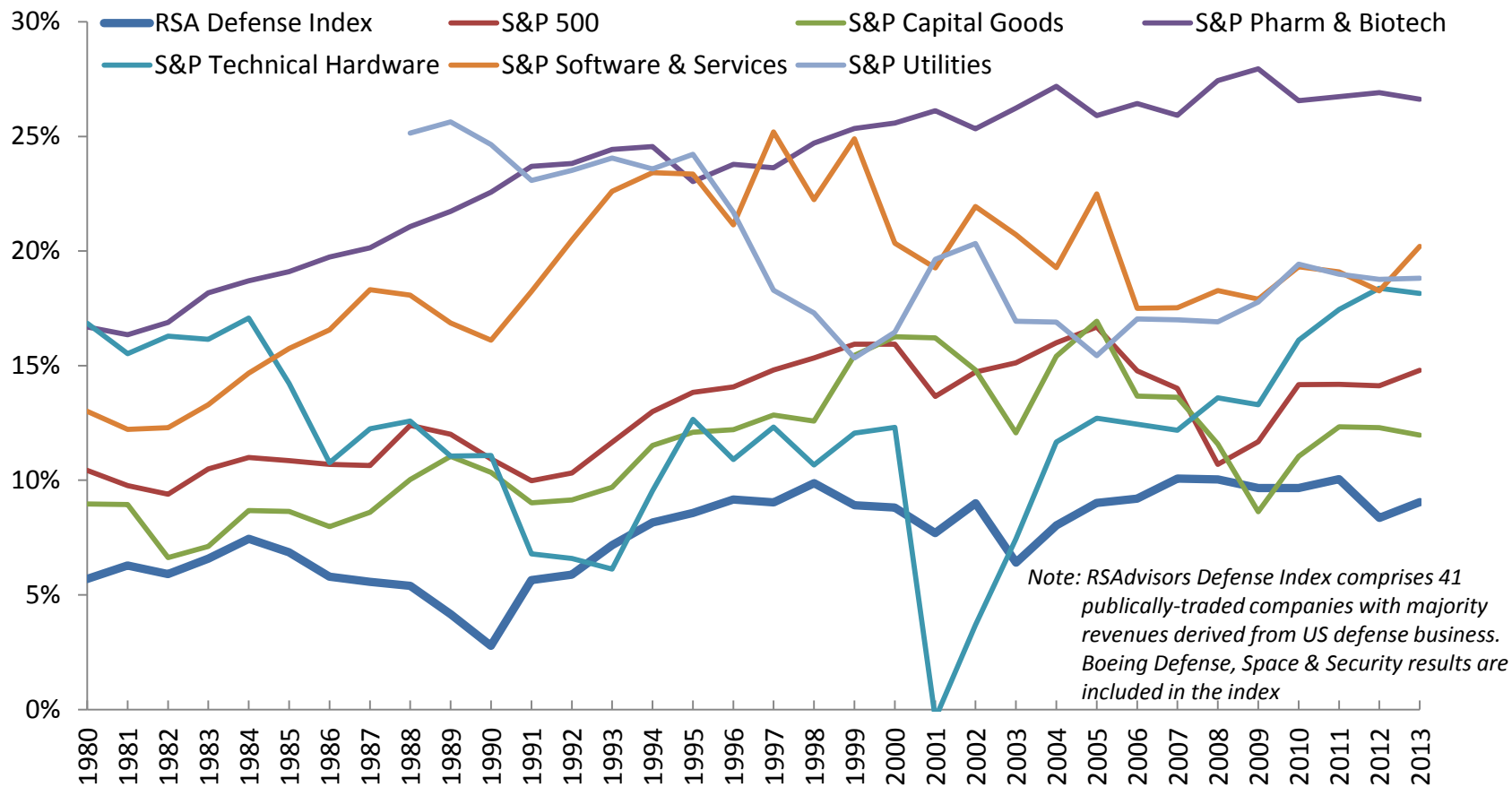
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# Compared to other markets, Defense industry has the lowest returns

**Industry Average Operating Margin**  
1980-2013, weighted by revenue

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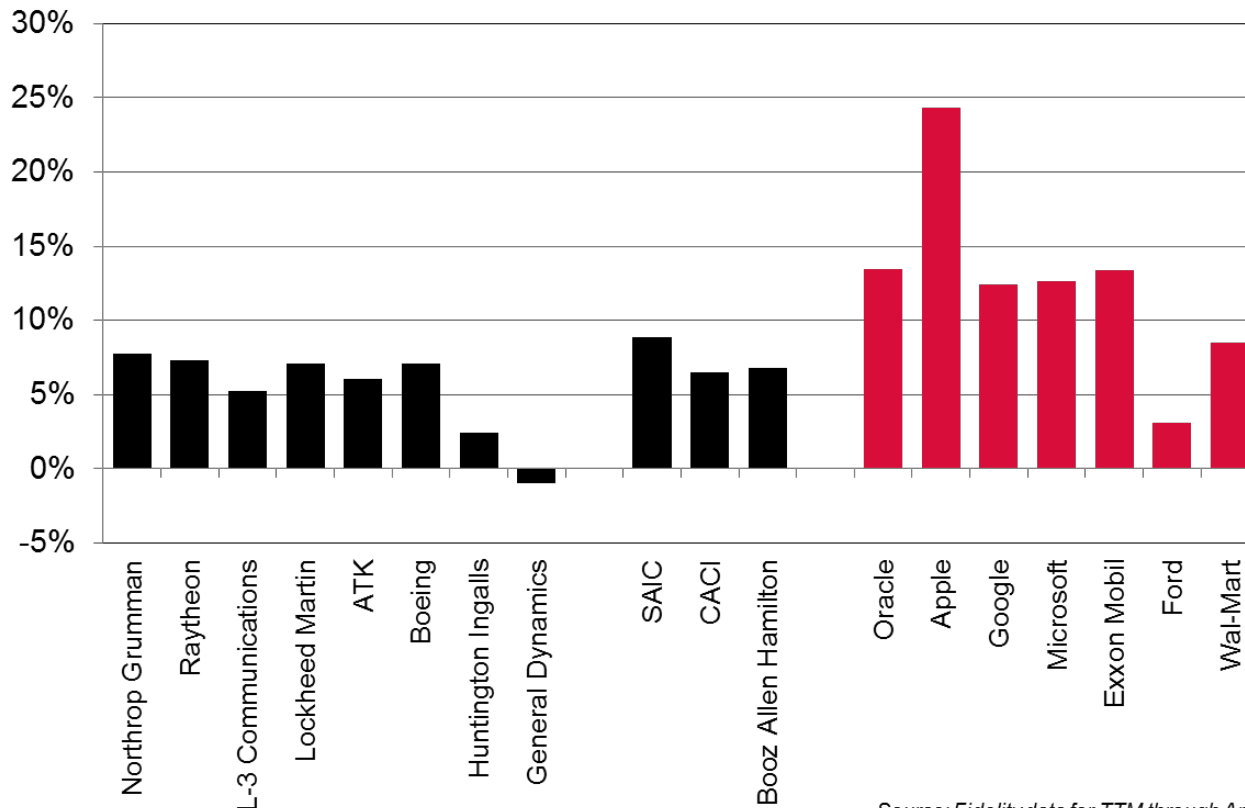
Sources: CapitalIQ, FactSet, S&P Compustat, Energy Information Administration, Company Reports, CSIS Defense-Industrial Initiatives Group, RSAAdvisors analysis

# Return on asset comparison

## Defense industry return on total assets is also low

What is the Profit Earned on Assets Deployed in the Business?

Net Profit / Total Assets



Source: Fidelity data for TTM through April 2013

Graph source: Strategy& / PWC

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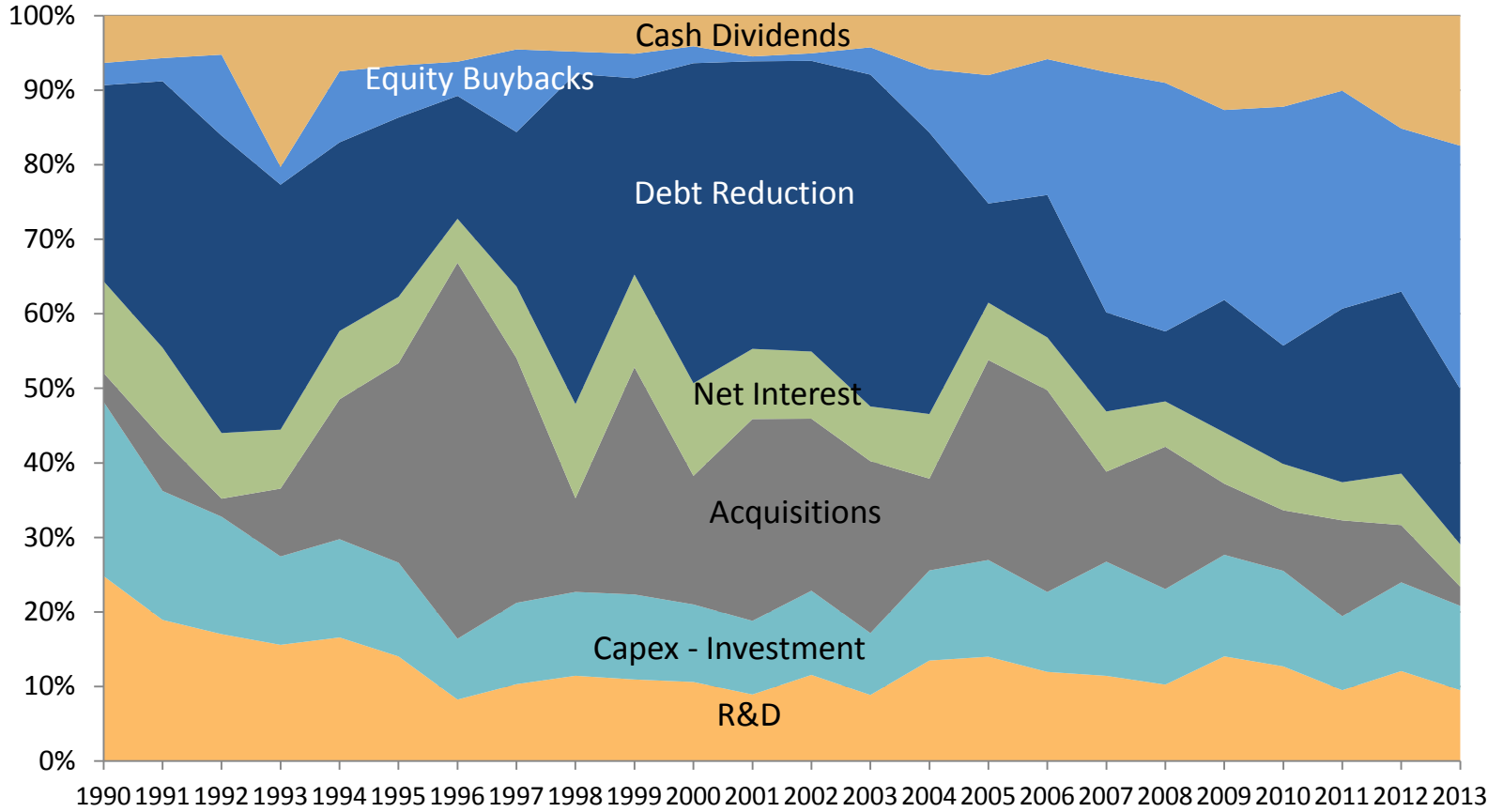




# Allocation of capital by Defense Industrial Base

**Defense Industry Cash Outflows (Percent)  
Renaissance Strategic Advisors Index (1990-2013)**

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Source: FactSet, S&P Compustat, CapitalIQ, Energy Information Administration, National Defense Budget Estimates, Company filings, CSIS Defense Industrial Initiative Group, RSAdvisors analysis

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# Investor focus: cash payout

Today, investor focus is on cash distribution rather than growth

## Defense Company Investor Strategies

	Defense Companies					Other Industries	
	BA	NOC	GD	RTN	LMT	Utilities	Tobacco
<b>Dividend Yield</b>	2.5%	3.3%	3%	3.4%	4.4%	3.8%	3.7%
<b>Payout Ratio</b>	30%	26%	21%	31%	44%	60%	71%
<b>5 Year Dividend Growth Rate</b>	6%	11%	10%	13%	21%	0.6%	-7%
<b>Share Repurchase (2009 – 2011)</b>	\$3B	\$4.5B	\$3B	\$4B	\$7B		

Source: Strategy&/PWC analysis using data reported in annual 10-K filings and equity investor analysis

Graph source: Strategy& / PWC

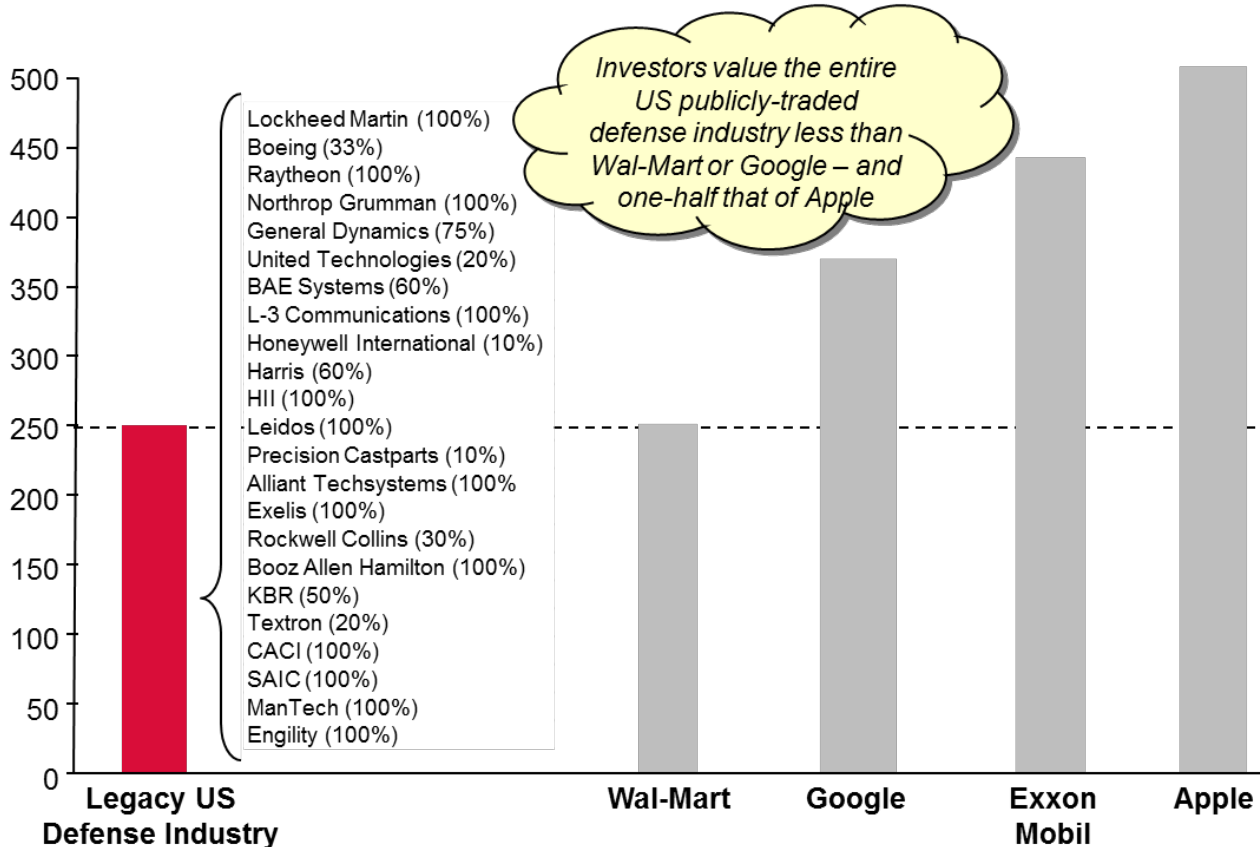
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# Investors now looking beyond Defense industry

## Market Capitalization of US Defense Industry vs. Selected Companies

Data for US Defense Industry Prorated for Defense as % of Total Portfolio  
\$Billions - Data for 31 December 2013



- eBay is worth more than Lockheed Martin and Raytheon combined
- Facebook is worth more than Lockheed Martin, Raytheon Northrop Grumman and GD combined
- Apple could buy almost the entire defense industry -- with the cash it has on hand
  - Lockheed Martin
  - Raytheon
  - General Dynamics
  - Northrop Grumman
  - BAE Systems
  - L-3 Communications
  - Huntington Ingalls
  - Exelis (ITT)
  - Alliant Techsystems

Source: Standard & Poors data. Note: in cases where companies serve both defense and other markets (e.g., Boeing), valuation is pro-rated for that portion of the total company driven by US defense and FMS. The percentage is noted parenthetically. Given relative growth trends, this almost certainly overstates the valuation of those defense units.

Graph source: Strategy& / PWC

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# “Commercial item” definition

FAR Subpart 2.101 - “Commercial item” means—

(1) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and—

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (1) of this definition through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (1) or (2) of this definition, but for—

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. Minor modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (1), (2), (3), or (5) of this definition that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if—

(i) Such services are procured for support of an item

referred to in paragraph (1), (2), (3), or (4) of this definition, regardless of whether such services are provided by the same source or at the same time as the item; and

(ii) The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed or specific outcomes to be achieved and under standard commercial terms and conditions. For purposes of these services—

(i) “Catalog price” means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public; and

(ii) “Market prices” means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors.

(7) Any item, combination of items, or service referred to in paragraphs (1) through (6) of this definition, notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a contractor; or

(8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local governments.



# FAR Part 12 – Acquisition of Commercial Items

The Board recognizes that FAR Parts can be used together. The areas identified below highlight the uniqueness of FAR Part 12 compared to traditional contracting methods.

## **FAR Part 12 – Acquisition of Commercial Items - Meets commercial sellers on their terms:**

12.203: FAR Part 12 used in conjunction with policies and procedures for solicitation, evaluation, and award prescribed in Part 13, Part 14, or Part 15, as appropriate. Can use **streamlined solicitation procedure** for soliciting offers for commercial items prescribed in 12.603.

### **Faster solicitation process:**

12.204(b) **Can allow fewer than 15 days** before issuance of solicitation.

12.205(c) **Can allow fewer than 30 days response time** for receipt of offers for commercial items

Contract Types: Firm-fixed-price or fixed-price with economic price adjustment

### **Price Reasonableness:**

Established in accordance with 13.106-3, 14.408-2, or Subpart 15.4, as applicable; the contracting officer should be aware of **customary commercial terms and conditions when pricing commercial items**. Commercial item prices are affected by factors such as speed of delivery, length and extent of warranty, limitations of seller's liability, quantities ordered, length of the performance period, and specific performance requirements.

### **Cost accounting:**

Commercial items are **exempt from providing certified cost or pricing data** (15.403-1), instead the contracting officer must use price analysis to determine whether the price is fair and reasonable whenever the contracting officer acquires a commercial item.

### **Data Rights:**

12.211 – Technical data: Except as provided by agency-specific statutes, the **Government shall acquire only the technical data and the rights in that data customarily provided to the public with a commercial item or process**. The contracting officer shall presume that data delivered under a contract for commercial items was developed exclusively at private expense.

### **Contract changes:**

In commercial contracting, unless contract has a change clause, **only bi-lateral changes allowed**, and must be in writing. FAR Part 43 gives government the right to unilaterally change a contract.



# “A New Way of Doing Business”

William J. Perry - 29 June 1994

## MEMORANDUM FOR SECRETARIES OF THE MILITARY

SUBJECT: Specifications & Standards - A New Way of Doing Business

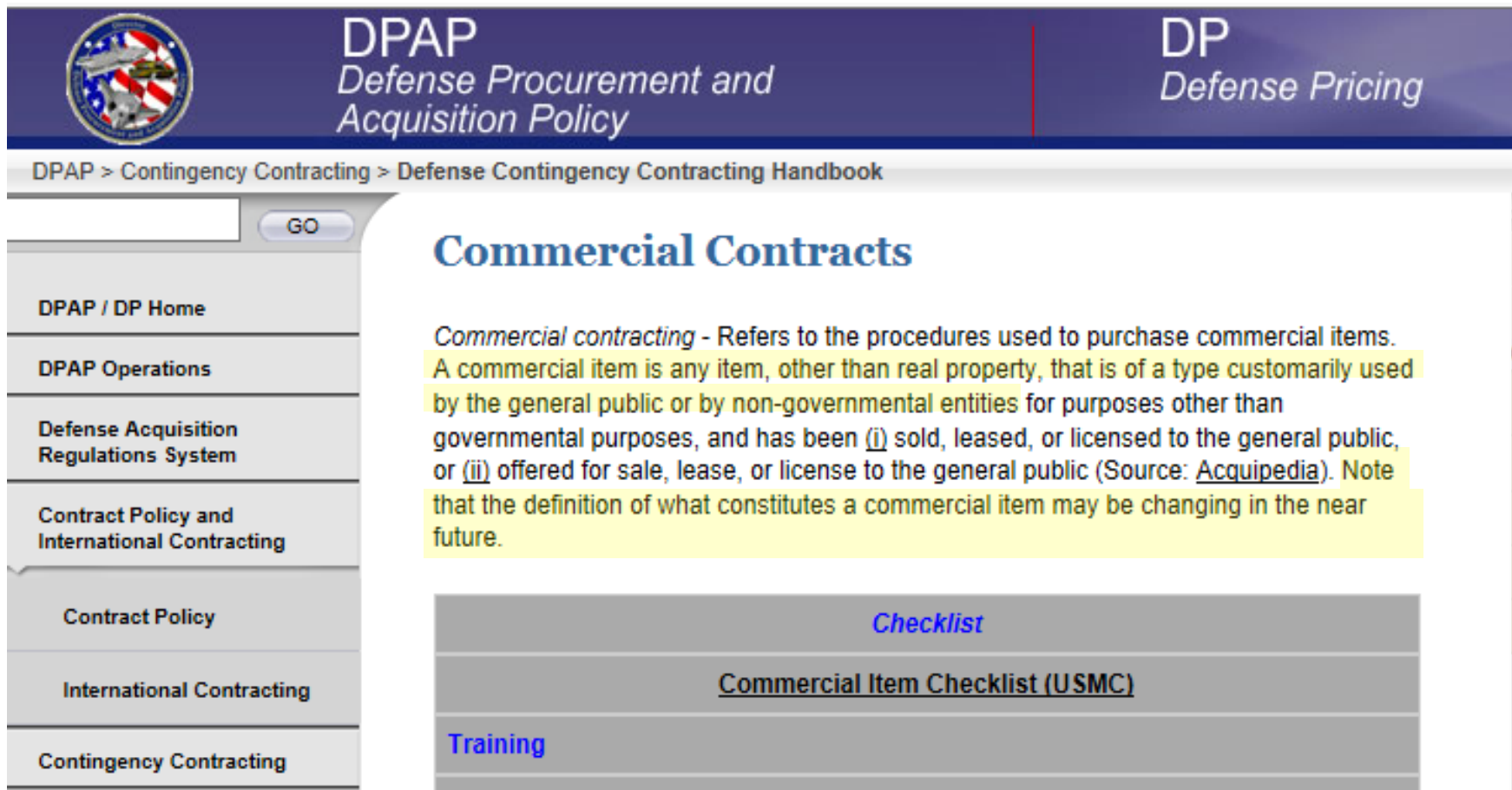
To meet future needs, the Department of Defense must increase access to commercial state-of-the-art technology and must facilitate the adoption by its suppliers of business processes characteristic of world class suppliers...

I have repeatedly stated that moving to greater use of performance and commercial specifications and standards is one of the most important actions that DoD must take...

To accomplish this objective, the Deputy Under Secretary of Defense (Acquisition Reform) chartered a Process Action Team to develop a strategy and a specific plan of action to decrease reliance, to the maximum extent practicable, on military specifications and standards. The Process Action Team report, "Blueprint for Change," identifies the tasks necessary to achieve this objective. I wholeheartedly accept the Team's report and approve the report's primary recommendation to use performance and commercial specifications and standards in lieu of military specifications and standards, unless no practical alternative exists to meet the user's needs...



# DoD's commercial contracting guidance



The screenshot shows the DPAP (Defense Procurement and Acquisition Policy) and DP (Defense Pricing) website. The header includes the DoD seal and the text "DPAP Defense Procurement and Acquisition Policy" and "DP Defense Pricing". The breadcrumb trail reads "DPAP > Contingency Contracting > Defense Contingency Contracting Handbook". A search bar with a "GO" button is present. The left sidebar contains a navigation menu with the following items: "DPAP / DP Home", "DPAP Operations", "Defense Acquisition Regulations System", "Contract Policy and International Contracting", "Contract Policy", "International Contracting", and "Contingency Contracting". The main content area is titled "Commercial Contracts" and contains the following text: "Commercial contracting - Refers to the procedures used to purchase commercial items. A commercial item is any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and has been (i) sold, leased, or licensed to the general public, or (ii) offered for sale, lease, or license to the general public (Source: [Acquipedia](#)). Note that the definition of what constitutes a commercial item may be changing in the near future." Below this text are three buttons: "Checklist", "Commercial Item Checklist (USMC)", and "Training".

Source: [http://www.acq.osd.mil/dpap/ccap/cc/jcchb/HTML/Topical/com\\_contracts.html](http://www.acq.osd.mil/dpap/ccap/cc/jcchb/HTML/Topical/com_contracts.html)





# Proposed restrictions to statutory commercial item definition

*Department of Defense Panel on Contracting Integrity*

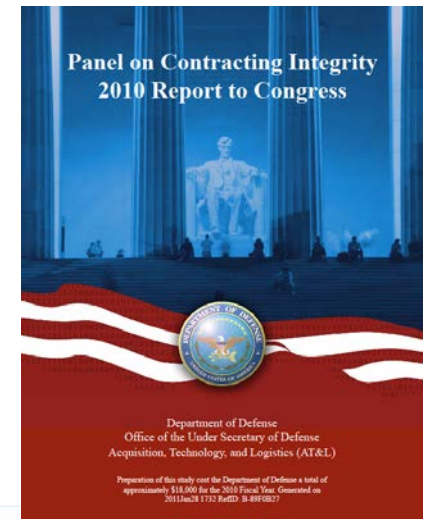
**2009 CARRYOVER Action 4a: Establish a working group to assess the need for establishing thresholds for higher-level approval of commercial item determinations based on “of a type” and develop recommendations. This is an interim measure pending a legislative change proposal.**

## Discussion

SC4 continues to recommend a legislative proposal be submitted for the FY2012 Defense Authorization Bill to eliminate “of a type” and “offered for sale” from the definition of commercial item to eliminate this contract vulnerability. The Department’s 2012 Legislative Proposal process is on-going at this time.

## Status

This action is on-going.

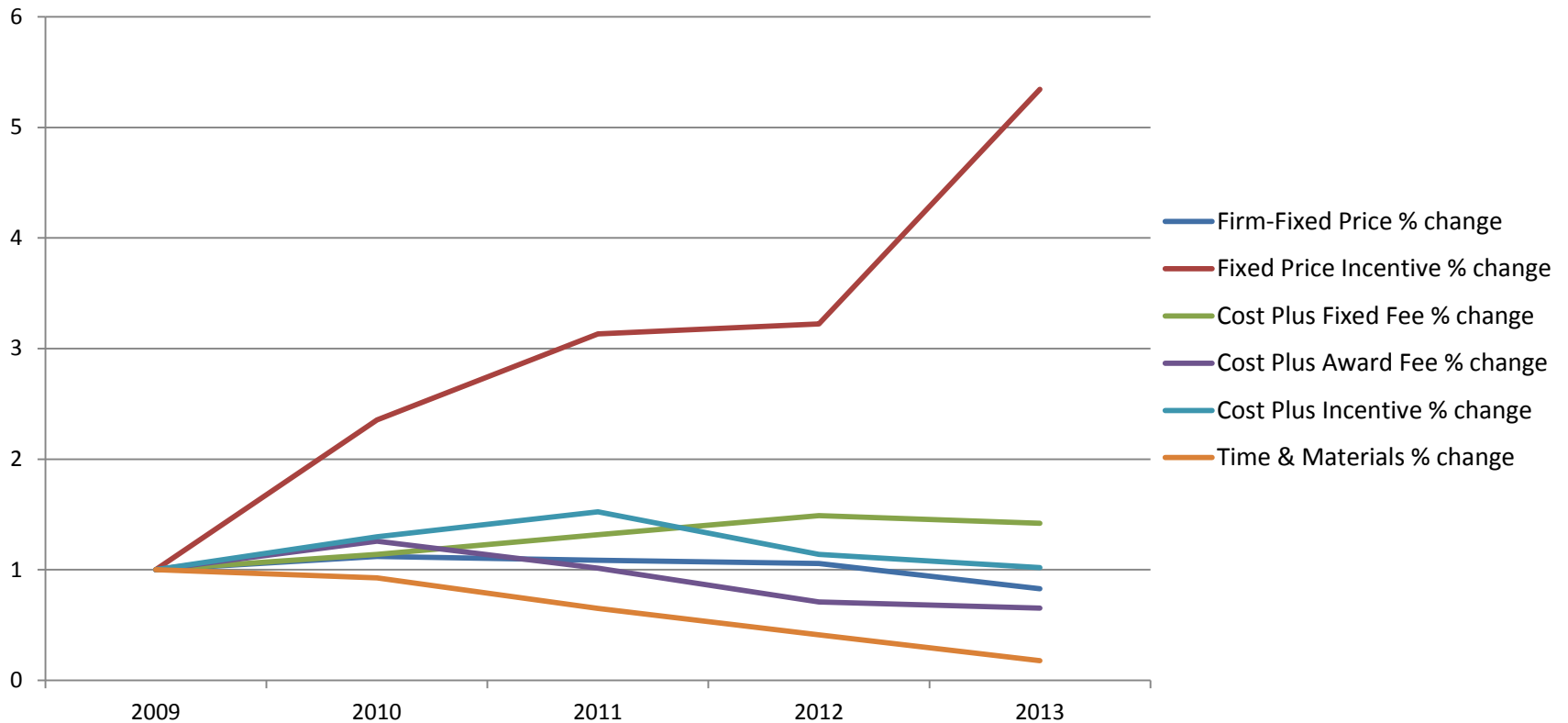


Source: Department of Defense, Under Secretary for Acquisition, Technology and Logistics, *Panel on Contracting Integrity 2010 Report to Congress*, January 2011, p 22.





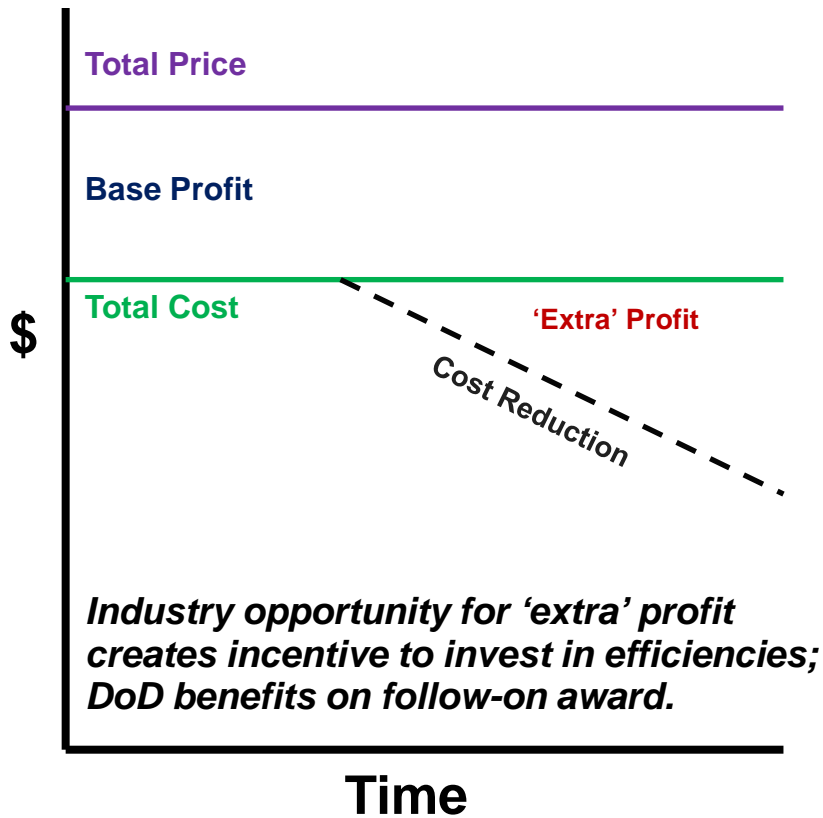
# Change in DoD Contract Types 2009-2013



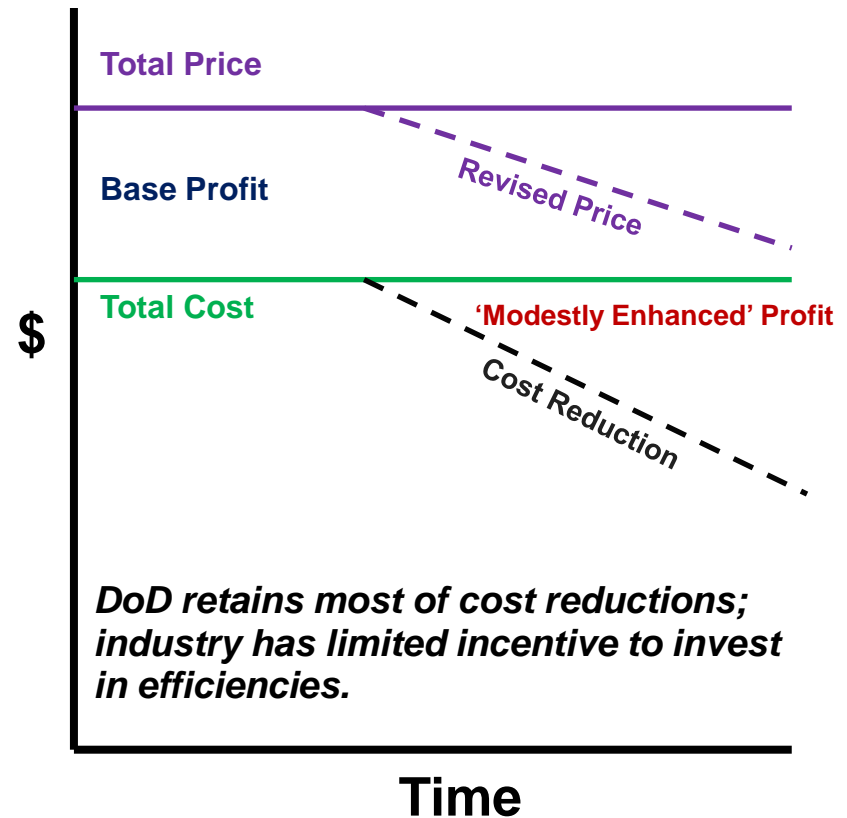
Source: <http://www.usaspending.gov>; FY2009 as baseline, where each interval of 1 equals 100%

# Firm-Fixed Price vs. Fixed Price Incentive Fee Contracts

## Firm-Fixed Price



## Fixed Price Incentive



**Note: Notional**

These are the final briefing slides as approved by the Defense Business Board in the public meeting held July 24, 2014.



# Interviews

## DoD and Other Government (current and former)

**Bruce Andrews** – Chief of Staff, Dept. of Commerce

**Elana Broitman** – Deputy Assistant Secretary of Defense (Manufacturing and Industrial Base Policy)

**General James Cartwright** – former Vice Chairman of the Joint Chiefs of Staff

**Sean Crean** – Director, Office of Small Business Programs (Navy)

**Lt. Gen. Charles Davis** – Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition

**Richard Ginman** – Director, Defense Procurement and Acquisition Policy

**Andre Gudger** – Director, Defense Small Business Programs Office

**Mark Husband** – Senior Advisor for Root Cause Analyses, Performance Assessments and Root Cause Analyses

**Frank Kendall** – Under Secretary of Defense (Acquisition Technology & Logistics)

**Brett Lambert** – former Deputy Assistant Secretary of Defense (Manufacturing and Industrial Base Policy)

**Alan Shaffer** – Acting Assistant Secretary of Defense (Research & Engineering)

**Heidi Shyu** – Assistant Secretary of the Army for Acquisition, Logistics, and Technology

**Jim Thomsen** - Principal Civilian Deputy Assistant Secretary of Navy, Research, Development & Acquisition

**Scott Ulrey** – Deputy Director, Contracts Management Office, Defense Advanced Research Projects Agency

## Defense Industry Experts and Financial Analysts

**David Berteau** – Center for Strategic and International Studies

**Marty Bollinger** – Strategy& (formerly Booz & Company)

**Pierre Chao** – Renaissance Strategic Advisors

**Chris Kubasik** – formerly of Lockheed Martin Corporation

**Craig Oxman** – Credit Suisse

**Arnold Punaro** – The Punaro Group

**Cai Von Rumohr** – Cowen Group

**Stan Soloway** – Professional Services Council

**Space Foundation**

## Innovation Experts

**Chris Darby** – In-Q-Tel

**Mark Johnson** – Innosight

**Rory McDonald** – Harvard Business School

## Industry

Analytical Graphics, Inc.

Blue Ridge Networks

Digital Globe

FLIR Systems, Inc.

Google

Intelsat

Northrop Grumman Corporation

Robertson Fuel Systems, LLC

SpaceX



# Literature Review

## Sample Selection of Works\*

Christensen, Clayton, and Derek van Bever. "The Capitalist's Dilemma." *Harvard Business Review*, June 2014.

Christensen, Clayton, Mark Johnson, and Henning Kagermann. "Reinventing Your Business Model." *Harvard Business Review*, December 2008.

Enthoven, Alain C., and K Wayne Smith. *How Much Is Enough? Shaping the Defense Program, 1961-1969*. new ed. Santa Monica, CA: Rand Corp., 2005.

Fox, J. Ronald. *Defense Acquisition Reform, 1960–2009: An Elusive Goal*. Washington, DC: Center of Military History, United States Army, 2011.

Harrison, Todd, and Barry D. Watts. *Sustaining Critical Sectors of the U.S. Industrial Base*. Washington, DC: Center for Strategic and Budgetary Assessments, 2011.

House Committee on Armed Services. *Challenges to Doing Business with the Department of Defense: Findings of the Panel on Business Challenges in the Defense Industry*. March 19, 2012.

Sanders, Gregory, Jesse Ellman, and Rhys McCormick. *U.S. Department of Defense Contract Spending and the Supporting Industrial*. Washington, DC: CSIS, December 2014.

Soloway, Stan. "From Disruption to Innovation: Bridging a Growing Cultural Gap." *FCW*, 16 June 2014.

\*Final report will contain full bibliography

# Acronyms

CAS – Cost Accounting System  
CR&D – Contracted Research and Development  
DARPA – Defense Advanced Research Projects Agency  
DAU – Defense Acquisition University  
DCMO – Deputy Chief Management Officer  
DIB – Defense Industrial Base  
DoD – Department of Defense  
EPS – Earnings Per Share  
FAR – Federal Acquisition Regulations  
FFP – Firm-Fixed Price  
FFRDC – Federally Funded Research and Development Center  
FPI – Fixed Price Incentive  
IDIQ – Indefinite Delivery, Indefinite Quantity  
IP – Intellectual Property  
IR&D – Independent Research and Development  
LPTA – Lowest Price Technically Acceptable  
OSD – Office of the Secretary of Defense  
OTA – Other Transaction Authority  
R&D – Research and Development  
RFP – Request for Proposal  
TINA – Truth in Negotiations Act  
USD(AT&L) – Under Secretary of Defense for Acquisition, Technology and Logistics





DEPUTY SECRETARY OF DEFENSE  
1010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1010

MAY 26 2013

MEMORANDUM FOR CHAIRMAN, DEFENSE BUSINESS BOARD

SUBJECT: Defense Business Board Terms of Reference – “Best Practices by the Department of Defense to Achieve More Effective Participation by Industry”

The Department of Defense (DoD) depends on the industrial base and the private sector to obtain essential materiel and services. DoD works closely with industry to inform and align near- and long-term investment decisions with its requirements and acquisition processes. Requirements determination should take into consideration industry’s ability to innovate and advance technology. However, industry often lacks knowledge of DoD’s near- and long-term strategic concerns so that it can better apprise DoD of available solutions and technology advancements that would allow DoD to better meet its future requirements.

DoD awards complex service and materiel contracts to the private sector and conducts management and oversight of contractors’ performance. Large private sector companies also award complex contracts with their suppliers and subcontractors and also have various means of oversight. DoD’s oversight practices may be incongruent with best business practices for effective management. DoD’s oversight processes may unnecessarily add costs and discourage private companies from doing business with DoD, or its prime contractors.

As DoD’s advisory board for providing independent advice on best business practices, the DBB is directed to conduct, through a DoD established Task Group, a study that reviews best business practices for contract oversight and ways to encourage broader participation with the private sector. As a minimum, the DBB’s recommendations should address:

- A number of studies have been conducted to increase participation with the industrial base. Of recommendations from these studies, what has worked, what has not, and why?
- How can DoD gain greater access to innovation from the private sector marketplace?
- In a lower budget environment, are there segments of the industrial base that are at higher risk for exiting the industry or reducing investment in innovation?
- What could be done to promote better industry understanding of DoD known and future requirements to enable firms to apprise DoD of potential solutions and technology enhancements?
- What are the low-value added overhead cost drivers currently imposed by the Department that may be reduced or eliminated to achieve savings?



OSD003442-13



- Where can DoD reduce or eliminate impediments and barriers to entry for high technology firms that would not otherwise choose to participate in the defense sector?
- What policy or statutory changes would be required to implement the recommendations?

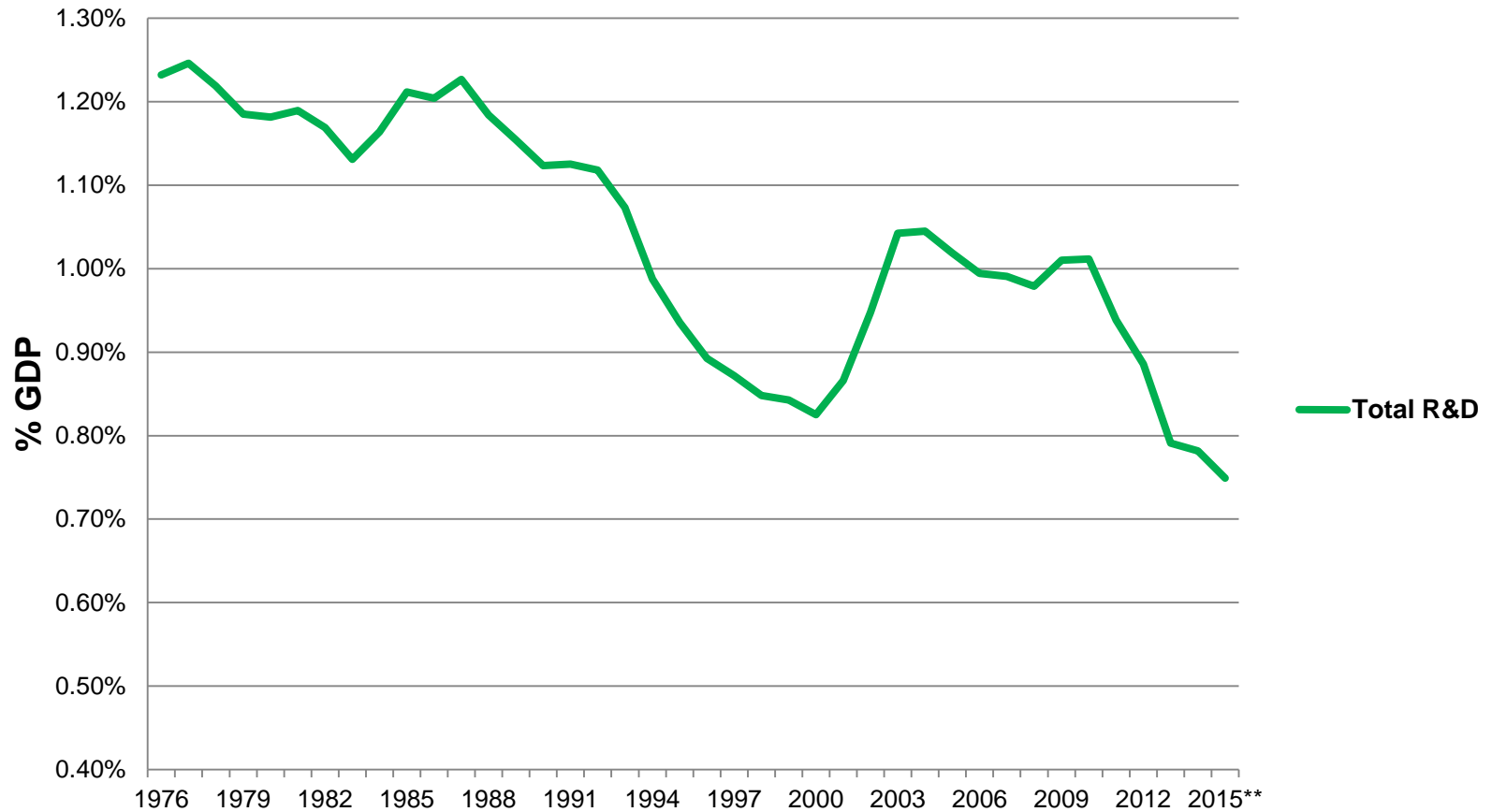
As a subcommittee of the DBB, this Task Group must comply with the Federal Advisory Committee Act of 1972, the Government in the Sunshine Act of 1976, Federal regulations, and DoD policies and procedures. The Task Group will not work independently of the DBB's charter and will report its recommendations to the DBB for full deliberation and discussion in open session. The Task Group does not have the authority to make decisions on behalf of the Board, nor can it report directly to any Federal officer. The Task Group will avoid discussing "particular matters" within the meaning of Section 208 of title 18, U.S. Code.

A handwritten signature in black ink, reading "Ashton B. Carter". The signature is written in a cursive style with a large initial 'A' and a long, sweeping underline.

# Extras



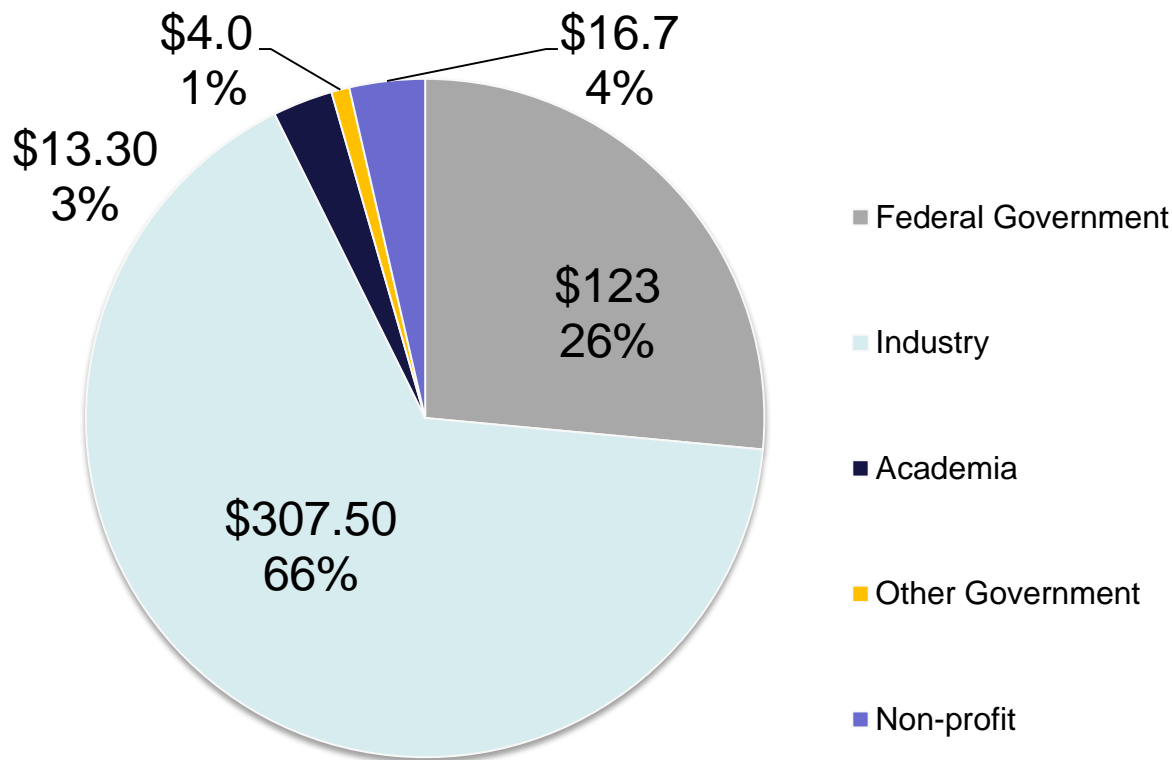
# Federal R&D as % GDP



Source: <http://www.aaas.org/page/historical-trends-federal-rd>; 2015 based on President's Budget submission



# Projected US R&D Spending 2014



Source: Battelle "2014 Global R&D Funding Forecast" December 2013

*These are the final briefing slides as approved by the Defense Business Board in the public meeting held July 24, 2014.*

