



**Report to the Secretary of Defense**

**Task Group Report on  
Tooth-to-Tail Analysis**

Report FY08-2

- **Recommendations for maximizing combat power with available Defense Department resources**

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**April 2008**



## Tooth-to-Tail Analysis

### TASK

The Deputy Secretary of Defense tasked the Defense Business Board (DBB) to assess and make recommendations regarding the relationship between (a) the force structure executing the Department's major combat and irregular warfare missions ("tooth"), and (b) the infrastructure used to manage and support those forces ("tail"). The Board was asked to make recommendations regarding improving the tooth-to-tail relationship that center on maximizing combat power with available Department of Defense (DoD) resources.

Specifically, the Task Group was asked to deliver actionable recommendations that would result in the strengthening of the combat force structure while reducing the Department's infrastructure. The Task Group considered:

1. The definition of "tooth" and "tail" in both major combat operations and irregular warfare,
2. Prior efforts aimed at improving the tooth-to-tail relationship and how to improve or reinforce those efforts,
3. The classification of DoD resources as either mission/combat related or infrastructure/support,
4. Department core competencies and opportunities for non-core and inherently non-governmental divestitures, and
5. Opportunities to convert military positions to civilian positions.

A copy of the official Terms of Reference (TOR) outlining the scope and deliverables for the Task Group can be found at **Appendix A**. The Task Group was co-chaired by Henry Dreifus and Arnold Punaro. Other Task Group Members included: Neil Albert, Madelyn Jennings, William Phillips, Atul Vashistha, and Dov Zakheim. The Task Group Sponsor was Gordon England, Deputy Secretary of Defense and the Task Group DoD Liaison was Brad Berkson, Director for Program Analysis and Evaluation. The Task Group Executive Secretaries were Lieutenant Colonel Joe Reimer USMCR and Kelly S. Van Niman, DBB Deputy Director.

## PROCESS

The Task Group conducted a series of interviews and researched related studies. Interviews were conducted with current and former DoD leaders, outside experts from the private sector, and members from academia. Business interviewees shared significant management experiences from companies such as IBM, Xerox, British Petroleum, Shell Oil Company, and the Gallup Organization. From academia, the group gained insights on the latest innovations and best practices from representatives including the Darden School of Business and the Naval Postgraduate School. The group also contacted the following government agencies to collect relevant studies and background data: the Government Accountability Office (GAO), Federal Bureau of Investigation (FBI), and Department of Homeland Security. The Defense Science Board (DSB) and Business Executives for National Security (BENS) also offered valuable insights. The group also analyzed existing data from the Office of the Under Secretary of Defense Comptroller, and the Office of the Director of Program Analysis and Evaluation (PA&E).

The Task Group identified current management tools used by DoD and explored best business practices from the private sector that could be applicable to improve DoD's business processes.

This study was predicated on two key assumptions:

- (1) An aligned and accountable workforce drives mission effectiveness and readiness, and
- (2) More effective combat power ("tooth") requires a more efficient "tail."

The Task Group presented their findings and recommendations to the full Board on April 17, 2008 (**see Appendix B**).

## OBSERVATIONS

The most significant finding by the Task Group was that the Department's spending on infrastructure (generally thought of as "tail") has remained relatively constant at approximately 42% of DoD's total spending. Data from Program Analysis and Evaluation (PA&E) showed that over Fiscal Years 2002 to 2006 there was 5% growth in spending on budget category Central Personnel Administration and 9% growth in spending in the category of Departmental Management. In the private sector these expenses would be considered general overhead ("tail" to DoD) that management would work aggressively to continuously reduce to achieve greater efficiency.

Industry best practices generally mandate that management continuously go to "war" on overhead with a focus on improving (and/or divesting) low value-added areas. Industry applies a number of tools including value chain and activity analysis to continuously reduce inefficiencies and organizational overlaps. It was not evident that DoD routinely goes to "war" on overhead. The Task Group questioned whether or not this practice should be conducted in a federal agency, particularly in DoD given the size of its budget. During the Board's April 17, 2008 deliberative session, the Members opined if the Secretary should conduct a review of all indirect and direct costs to determine if 42% is an appropriate amount of overhead and to identify opportunities to constantly reduce overhead.

The Task Group examined the tools used by the Department to manage its overhead: Tooth-to-Tail Ratio, OMB Circular A-76 (Competitive Outsourcing), Military-to-Civilian Position Conversions, and Force and Infrastructure Metrics.

Given the Department's inability to reduce its overhead over the very periods in which U.S. and global businesses have made such great strides in efficiency, it became apparent to the Task Group that the current management tools applied by DoD are increasingly ineffective in managing the "tail." When exploring the premise that an aligned and accountable organization, and a highly engaged workforce, would drive mission readiness and improve Departmental efficiency, the Task Group observed that the current management tools fail to drive an aligned and accountable

organization and workforce. The Task Group concluded a primary reason was that none of these tools are based on an enterprise vision to drive down overhead. By example, the Task Group observed that rather than making the tough calls necessary to target savings in overhead, the Department has historically preferred uninformed, across-the-board personnel reductions to increase efficiency often reducing the “tail” that the warfighter needs in support.

The Task Group concluded that the current management tools are too focused on outputs, not outcomes; hence management only has weak measures of implementation and achievement of goals. These measures are historical at best and lag, rather than lead, toward meeting strategic and proactive enterprise objectives.

## **RECOMMENDATIONS**

The Task Group developed (3) three actionable recommendations to aid the Department in developing an aligned, accountable and efficient organization and workforce.

### **1. Align the “Tail” to the “Tooth”**

The Department needs to align the “tail” to the “tooth”. To do so, the DBB recommends that the Secretary of Defense articulate and continuously reinforce an enterprise vision and associated goals to align Department strategies and operations on the priority of resourcing the “tooth”. This declaration of policy could then establish a performance culture directly linked to this enterprise vision. The enterprise vision and goals should be widely communicated across the Defense community, including contractors, the industrial base, Congress and other stakeholders. The DBB also recommends DoD align Departmental human capital plans to the enterprise vision and goals and require the Components to: (1) talent map the workforce to the enterprise goals, (2) identify leaders early and track their migration, (3) mandate an appropriate (civilian and military) workforce rotation strategy, and (4) baseline, track & analyze achievement of workforce engagement and goals.

## **2. Hold the “Tail” Accountable to the “Tooth”**

To hold the “tail” accountable to the “tooth,” the DBB recommends that DoD aggressively address waste and unnecessary duplication within the Department, create financial transparency, measure performance against the enterprise goals, and safeguard and strengthen the A-76 Competitive Sourcing process.

With respect to the A-76 competitive sourcing process, the DBB recommends the Department request Office of Management and Budget to modify the approach to garner greater mutual trust of both the contractor and government communities by re-competing underperforming outcomes, seek “best value” versus “lowest cost” (e.g., apply transparent equal cost standards), and monitor post award performance (via Letters of Obligation and scorecards) against the winning submission.

## **3. Drive Greater Efficiency in the “Tail”**

To drive better efficiency in the “tail,” the DBB focused on ways to free up workforce from overhead and shift those resources to the war fight. The DBB recommends that DoD create clear, motivating incentives to reward best practices performance. Specifically, DoD should (1) consider expanding “Shingo” Lean award competitions across the enterprise, (2) more broadly and continuously employ BRAC-like “thinking”, and (3) utilize the National Security Personnel System and Senior Executive Service personnel performance system benchmark awards to reward prudent risk taking that supports DoD’s enterprise vision and goals. In addition, the DBB recommends that DoD seek innovative technologies to achieve far better than 1:1 personnel conversion ratios and mandate full activity-based costing.

## Defense Business Board

### CONCLUSION

Over the past decades, there have been numerous studies on the tooth-to-tail ratio as the prime indicator of Defense efficiency and effectiveness. However, the dynamics of irregular and asymmetrical warfare have blurred the historical “bright line” between “tooth” and “tail.” The Department’s continued reliance on tooth-to-tail analysis has resulted in reduced management insight and inefficiencies in both “tooth” and “tail.”

The DBB therefore recommends a renewed effort to drive efficiencies, reduce waste in the Department’s overhead, and shift those freed resources to the war fight. The anticipated budget downturn increases the urgency for the Department to question its 42% overhead and to ensure that the Department is aligned to its enterprise vision, and stays aligned, to meet the needs of the warfighter.

Respectfully Submitted,



Henry N. Dreifus  
Task Group Co-Chair



Arnold L. Punaro  
Task Group Co-Chair

**Defense Business Board**

**APPENDIX A**  
**(TASK GROUP TERMS OF REFERENCE)**

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

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FEB - 7 2007

MEMORANDUM FOR CHAIRMAN, DEFENSE BUSINESS BOARD (DBB)

SUBJECT: Terms of Reference – DBB Task Group on Tooth-to-Tail Analysis

Request you form a Task Group to assess and make recommendations to the Department of Defense (DoD) regarding the relationship between the force structure executing the Department's major combat and irregular warfare missions (tooth) and the infrastructure used to manage and support those forces (tail). Recommendations regarding improving the tooth-to-tail relationship should center on how to harness more combat power out of Defense Department dollars and resources.

The Task Group should deliver actionable recommendations that would result in the strengthening of the combat force structure while reducing the Department's infrastructure. The Task Group should consider:

- a. Defining "tooth" and "tail" in both major combat operations and in irregular warfare
- b. Prior efforts aimed at improving the tooth-to-tail relationship and how to improve or reinforce those efforts
- c. Classification of DoD resources as either mission/combat related or infrastructure/support
- \* d. Department core competencies and opportunities for non-core and inherently non-governmental divestitures
- \* e. Opportunities for military-to-civilian conversion

7 Feb 07

Mr. Brad Berkson, Director for Program Analysis and Evaluation will be the DoD Liaison. Mr. Arnold Punaro will be the Task Group Chairman. Kelly Van Niman of the DBB, will be the Task Group Executive Secretary. The Task Group will present recommendations no later than the April 26<sup>th</sup> DBB meeting.

The Task Group will be operated in accordance with the provisions of P.L. 92-463, the "Federal Advisory Committee Act," and DoD Directive 5105.4, the "the DoD Federal Advisory Committee Management Program." It is not anticipated that this Task Group will need to go into any "particular matters" within the meaning of Section 208 of Title 18, U.S. Code, nor will it cause any member to be placed in the position of acting as a procurement official.

30 JAN 07

*\* most important*  
*Arnold England*



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**Defense Business Board**

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**Defense Business Board**

**APPENDIX B**

**(TASK GROUP FINAL REPORT – APRIL 17, 2008)**

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DEFENSE BUSINESS BOARD

# Task Group on Tooth-to-Tail

*Maximizing Combat Power with Available  
Resources and People*

April 2008

*Final Report*



## **DBB Task Group**

Henry Dreifus (Co-Chairman)

Arnold Punaro (Co-Chairman)

Neil Albert

Madelyn Jennings

Bill Phillips

Atul Vashistha

Dov Zakheim

## **DoD Liaison**

Brad Berkson, Director, Program Analysis and Evaluation

## **DBB Executive Secretaries**

LtCol Joseph Reimer, USMCR and Kelly Van Niman, DBB Deputy Director



- Deliverable
  - “Actionable recommendations that would result in strengthening the combat force structure while reducing the Department’s infrastructure.”
- Focus Areas per Deputy Secretary England:
  - Opportunities for converting a military position to a civilian position
  - Core competencies and opportunities for divestiture
    - Divestiture is the elimination of a government requirement for a commercial activity
    - This Task Group did not identify any specific opportunities for divestiture of non-core activities



## ASSUMPTIONS

- Aligned/accountable work and workforce will drive mission readiness
  - Linking enterprise goals to employees' day-to-day work builds a sense of purpose, pride and commitment
  - Human capital levels should align with top spending priorities
- More effective combat power (“tooth”) requires a more efficient “tail”
  - “Tooth” is *generally considered* the resources or forces employed to perform core missions.
  - “Tail” is *generally considered* the resources or infrastructure used to manage and support those forces.



- Evaluated the current and prescriptive states of the enterprise:
  - Departmental interviews (active and retired)
  - Private sector comparables/benchmarks on best practices
  - Academic perspectives
  - Review of existing literature and data
- Assessed current DoD management tools
- Provided recommendations to create an **Aligned**, **Accountable** and more **Efficient** organization/workforce

***Goal: Re-engineer the “Tail” to maximize the “Tooth”***



## Premise: “tail” is causing the “tooth” to decrease

### Alignment

- Alignment of Defense Human Capital to long-term strategy is unclear
  - See Appendix A for trends in manpower levels and program Total Obligation Authority (TOA) spending

### Accountable

- The Department is spending approximately **\$670 Billion** per year and has difficulty sustaining a force of 200,000 in the Middle East

### Efficiency

- Projected budget reductions will require targeted overhead reductions
  - Uninformed, across-the-board reductions mandated by HQ, i.e., “fair share” reductions, are a missed opportunity to focus resources on top priorities



## KEY OBSERVATIONS

- Current tools, many of which are mandated by law, are irrelevant to meet today's challenges, ineffective in managing the "tail", and fail to produce an aligned and accountable organization and workforce
  - Irregular and asymmetrical warfare blur the line between "tooth" and "tail"
- Current metrics are historical; not strategic and proactive in nature
- Regulatory framework only permits 1:1 manpower conversions
- Current metrics are weak on tracking implementation (scorecards); not guided by business rules/best practices (incentives, costing, risk)

### **Current Tools that Are Not Being Applied Effectively**

"Tooth-to-Tail" Ratios

Military to civilian conversion

Force and Infrastructure metrics

OMB A-76 Competitive Sourcing



## What Does Industry Do?

- Continuously goes to war on waste – focus on low value-add areas
  - “Value-chain” and “Activity Analyses” tools reduce inefficiencies/overlaps
  - Leverages technology to achieve better than 1:1 ratios in personnel conversions
- Designs organizations to facilitate and encourage prudent risk taking
  - Decentralize to encourage innovation; Centralize to eliminate duplication
- Continuously charts “core *competencies and incompetencies*”
  - Incentivize, measure and reward desired outcomes
  - Constantly monitor performance
  - Develop succession and promotion plans accordingly
  - Career map to core competencies – builds on people’s strengths
- Measures and analyzes human capital performance and engagement to drive a culture of excellence
  - Applies benchmarks and projects 3-4 years ahead (leads, not lags)
  - Compares results to competition and/or most efficient organizations



## Align the “Tail” to the “Tooth”

- The Secretary Should Articulate an Enterprise Vision and Goals to Horizontally Integrate and Align Department Strategies
  - Lead a culture of alignment & performance directly linked to Secretary’s vision
  - Widely communicate enterprise vision & goals across the Defense community, including contractors, the industrial base, Congress and other stakeholders
    - Develop a shared understanding of the measures of effectiveness and efficiency
  - Monitor alignment of Departmental human capital plans to enterprise goals
    - Talent map the workforce to the enterprise goals
    - Identify leaders early and track their migration
    - Mandate an appropriate “rotation strategy” (et.al, CoComs, theaters of operation)
    - Baseline, track & analyze achievement of workforce engagement and goals
  - Link performance metrics to the enterprise goals
    - Senior Executive Service and National Security Personnel System



## Hold the “Tail” Accountable to the “Tooth”

- Go to War on Waste
  - Require leadership to slash redundant bureaucracies and reward collaboration
- Create Financial Transparency
  - Charge organizations full compensation costs of military personnel
- Measure Performance against the Enterprise Goals
  - Conduct employee engagement surveys
  - Conduct value-chain analysis - eliminate non-value-add workforce/organizations
  - Initiate DSD review of Component Strategic Plans and Human Capital Strategies
- Safeguard and Strengthen A-76 Competitive Sourcing
  - Require re-compete awards
  - Award “best value” versus “lowest cost” (apply equal cost standards)
  - Monitor performance (Letters of Obligation/scorecards)

**“Every dollar squandered on waste is one denied to the warfighter.”**

(Secretary Donald Rumsfeld, September 10, 2001)



## Drive Efficiency in the “Tail”

- Incentivize and Reward the Right Performance
  - Expand “Shingo” Lean award competitions across the enterprise
    - Consider BRAC-like incentives (continually apply military value reviews)
  - Utilize NSPS and SES performance awards – reward prudent risk taking
- Seek Innovative Technology to Achieve Better than 1:1 Conversion Ratios
  - Review all business areas for opportunities to innovate and streamline
- Mandate Activity-Based Costing
  - Track and measure earned value output/outcome
  - Realign the workforce to meet the Enterprise Strategic Plan
    - Refine work schedules for maximum efficiency
  - PA&E/Comptroller should develop business rules for Services to implement



## IMPLEMENTATION

- Brief recommendations to USD(P&R), Service leadership and Deputy's Advisory Working Group
- Consider incorporating DBB recommendations into transition documents as best practice guidance for the incoming DoD leadership
  - Consider continuation of ongoing collaborative efforts among the DoD Components with respect to Human Capital Strategies
- Initiate a study to identify opportunities for innovative technology to create better than 1:1 conversion ratios



# Supporting Materials



## History of DoD Characteristics by Presidential Administration

- A logical question: How much defense do we get for \$670 Billion per year?

Category	End of Carter	End of Reagan	End of Bush	End of Clinton	GW Bush	Change 1980-2007
	1980	1988	1992	2000	2007 (Est)	
Total Budget Authority (\$B - Constant \$)	\$412	\$491	\$412	\$354	\$441	7%
Total Budget Authority (\$B - Current \$)	\$178	\$284	\$282	\$291	\$441	148%
Supplementals (\$B)	\$0	\$0	\$4	\$0	\$190	
Active Duty Personnel (K)	2,101	2,209	1,886	1,449	1,406	-33%
Reserve and Guard Personnel (K)	851	1,158	1,135	865	843	-1%
Civilian Personnel (K)	1,019	1,090	1,006	698	702	-31%
Active in Commission Ships	521	573	471	341	236	-55%
Army Divisions (active)	19	20	20	10	10	-47%
AF Fighter/Attach (Total Active Inventory)	2,789	3,027	2,000	1,666	1,619	-42%

Table sources: National Defense Budget Estimates for FY 2006, April 2007;  
<http://www.history.navy.mil/branches/org9-4c.htm>; AFA Almanac



## DoD Infrastructure \$(Billions) Remains Steady at ~42%

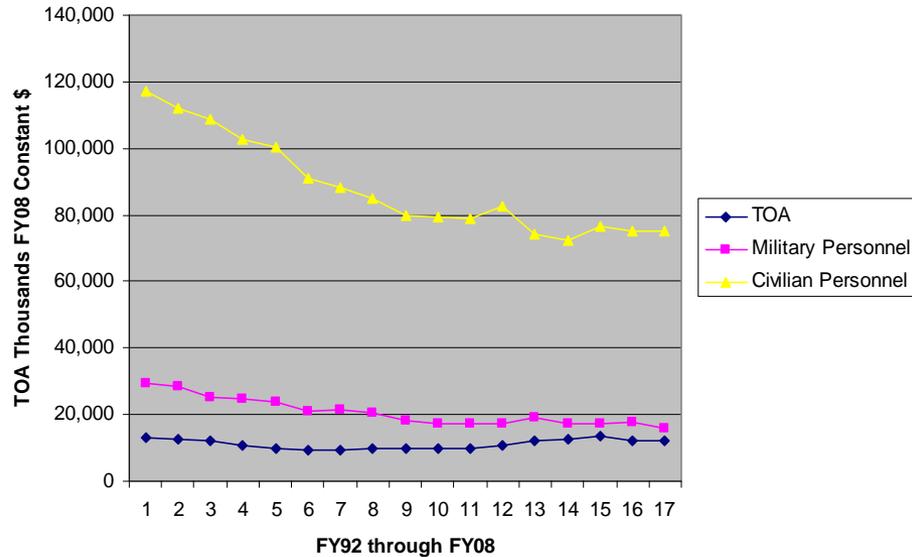
(Total Obligation Authority) source: PA&E

Infrastructure	FY2002	FY2003	FY2004	FY2005	FY2006
Force Installations	29	35	33	35	28
Communications & Information	7	10	9	9	9
Science & Technology Program	11	12	13	14	14
Acquisition	9	10	12	12	12
Central Logistics	22	29	26	25	25
Defense Health Program	28	25	27	27	28
Central Personnel Administration	8	13	13	12	13
Central Personnel Benefits Programs	9	10	10	10	10
Central Training	33	36	33	33	34
Departmental Management	18	22	21	29	27
Other Infrastructure	4	4	12	25	5
<b>Total Infrastructure (%of DoD)</b>	<b>180 (44%)</b>	<b>206 (42%)</b>	<b>209 (42%)</b>	<b>230 (43%)</b>	<b>205 (42%)</b>

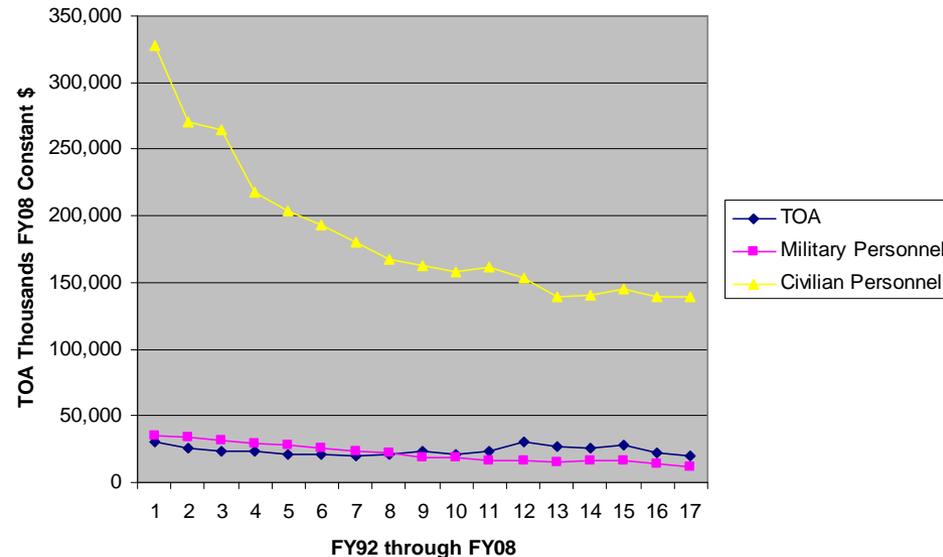


# Manpower Alignment to TOA in Thousands of FY08 Constant \$

### Acquisition



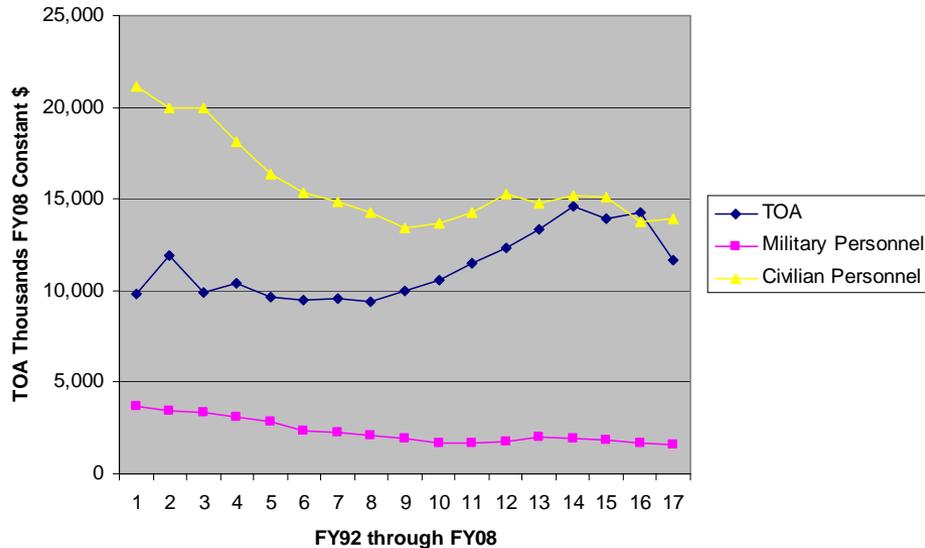
### Central Logistics





# Manpower Alignment to TOA in Thousands of FY08 Constant \$

### Science and Technology Program



### Defense Health Program

