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What Drives Defense Agency Performance?

Submission in Response to the Request of the
Senate Armed Services Committee

Dr. David S.C. Chu

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Institute for Defense Analyses

Based on analyses by the IDA Staff

29 September 2017

INTRODUCTION

The consolidation of functions into Defense-wide entities began in the Eisenhower administration, often seeking efficiencies from eliminating duplication and capitalizing on economies of scale. They also represented an opportunity to focus attention as leadership might wish (e.g., unifying policy or standards of service), and to adopt “best practices.” But now that Defense Agencies claim a substantial share of the Department’s resources, some question their growth.¹ The Chairman and Ranking Member of the Senate Armed Services Committee have posed three questions about the status of Defense Agencies:²

1. How should the business-support defense agencies be optimally organized...to ensure efficiency and effectiveness?
2. Are there opportunities to eliminate unnecessary duplication or to remove redundant functions?
3. What steps could substantially improve the provision of services to the Department?

This paper addresses these questions based on IDA’s research findings, augmented by the personal experiences of the author as an officer of the Department between 1981-93 and 2001-09.

HOW IMPORTANT ARE THE DEFENSE AGENCIES FROM A FUNDING PERSPECTIVE?

Excluding the intelligence Agencies, FY17 base budget appropriations (including Working Capital Funds) for the remaining Defense Agencies represent 18.3% of total DoD appropriations (vice 19.4% in FY11³). That funding, however, is concentrated in just four agencies (Defense Health Agency, Defense Information Systems Agency, Defense Logistics Agency, and Missile Defense Agency), accounting in FY17 for nearly 90% of the base budget fraction.⁴ Moreover, there were important changes among these four over the FY11-17 period, with DLA appropriations declining significantly (and MDA less significantly), partially offset by increases for DHA and DISA.

¹ See, for example, Senator Reed’s opening statement at the 8 December 2015 hearing of the Senate Armed Services Committee (*Stenographic Transcript before the Committee on Armed Services, United States Senate, Hearing to Receive Testimony on Improving the Pentagon’s Development of Policy, Strategy and Plans*. Washington, DC: Alderson Court Reporting, Tuesday, December 8, 2015, pp. 9-10.) or Arnold Punaro’s 15 November 2015 statement to that Committee (Punaro, Arnold L. *Statement of Major General Arnold L. Punaro, USMC Red. Before the Senate Armed Services Committee*. November 17, 2015, p. 10. Available online at https://www.armed-services.senate.gov/hearings/15-11-17-department-of-defense-reform_overcoming-obstacles-to-effective-management.)

² Their letter is reproduced as Appendix A.

³ Comparison excludes Working Capital Fund Operations of the Defense Commissary Agency, for which comparison data were not readily available. If Overseas Contingency Operations appropriations were included, the FY17 fraction would be 16.4%, and FY11 15.5%, again exclusive of DCA WCF Operations. Agencies included in the calculation: Defense Advanced Research Projects Agency (DARPA), Defense Commissary Agency (DCA), Defense Contract Audit Agency (DCAA), Defense Contract Management Agency (DCMA), Defense Finance and Accounting Service (DFAS), Defense Health Agency Defense Health Program (DHA), Defense Information Systems Agency (DISA), Defense Legal Services Agency (DLSA), Defense Logistics Agency (DLA), Defense POW/MIA Accounting Agency (DPAA), Defense Security Cooperation Agency (DSCA), Defense Security Service (DSS), Defense Threat Reduction Agency (DTRA), Joint Improvised-Threat Defeat Agency (JIDA), Missile Defense Agency (MDA), and Pentagon Force Protection Agency (PFFA).

⁴ Again, excluding the DCA WCF Operations appropriation.

WHAT DRIVES DEFENSE AGENCY PERFORMANCE?

In my experience, much more important than the organizational form of a Defense Agency is the set of incentives it confronts, and the constraints under which it must operate. DLA's recent history, as reported in the Congressionally-mandated IDA independent review, illustrates this reality. Between 2002 and 2013, DLA cut its operating costs relative to revenue (i.e., purchases by customers) by a third. As the IDA review reports, performance also advanced: from 2007-2014, material availability improved for every class of supply, and backorders were cut dramatically.⁵

That it operates under a Working Capital Fund (WCF) is a key element in the DLA incentive structure. The WCF creates a buyer-seller relationship between DLA and its customers, the Military Services. The buyer-seller relationship is an important incentive to better performance (and, of course, works best if prices are based on incremental costs). Other elements contribute, too, of course, but there is wide agreement that the Working Capital Funds Congress has authorized provide a strong and necessary encouragement to improved performance.⁶

Further improvements in DLA performance are possible. The IDA review particularly emphasizes moving from DLA's original wholesale culture to an integrated wholesale and retail culture, consistent with its contemporary retail responsibilities.⁷

Moreover, in one critical area, policy decisions create constraints that distort the Working Capital Fund incentive. Currently, DLA must buy engineering support services from the Service Research and Engineering organizations (as administered, establishing a perverse incentive). And under current policy, an unreasonably large number of weapon system consumables are subject to the engineering support service requirement, triggering delay and cost increases. IDA's analyses recommend revisiting these policies.⁸

The challenges faced by the Defense Health Agency likewise reflect the combined effects of incentives and constraints, as John Whitley argues in his recent paper, drawing extensively on IDA research.⁹ While Congress has already enacted reforms that affect both the incentives and constraints under which Military Treatment Facilities operate, Whitley concludes that "[further] reform must begin with improving the incentives within the system to focus on outcomes."¹⁰

Whitley notes the tension between the dual missions of the current system: beneficiary care and military readiness, with performance evaluation often dominated by beneficiary care

⁵ Graham, David R. et al. *Independent Review of the Defense Logistics Agency's Roles and Missions*. IDA document P-5210, December 2014, pp. iii, 22, 27.

⁶ See, for example, <http://www.finweb.com/investing/overview-of-working-capital-funds.html#axzz4tzD3UjWR>.

⁷ The full set of IDA recommendations can be found at pp. 41-62, P-5210.

⁸ Evans, Kenneth A. et al. *Analysis of the Joint Engineering Support System and Its Contribution to the DoD Supply Chain*. IDA document P-4202, May 2007. Also: Evans, Kenneth A. and Thi U. Tran. *Improving the Management of Critical Application Items (CAIs)*. IDA document D-4217-VOL-1, D-4217-VOL-2 and D-4217-VOL-1 AND 2-ANNEXES. And: Evans, Kenneth A. *Improving DLA Aviation Engineering's Support to its Customers and the DoD Supply Chain*. IDA document P-5184, October 2014.

⁹ Whitley, John. *Five Actions to Improve Military Hospital Performance*. Washington, DC: IBM Center for The Business of Government, 2017. Available in PDF format: <http://www.businessofgovernment.org/report/five-actions-improve-military-hospital-performance>.

¹⁰ *Ibid*, p. 15.

considerations. He argues that the beneficiary mission should compete for resources with other compensation instruments, and the readiness mission with other readiness investments—not the way the Department’s processes are currently organized. To further strengthen incentives, he opines, the Military Treatment Facilities should have to compete for patients, and be funded based on outputs produced, via a revolving fund (recommended by the Military Compensation and Retirement Modernization Commission), vice the current practice that too much bases funding on inputs consumed.¹¹

It should be acknowledged that the Defense Health Agency and the larger Military Health System operate under constraints imposed by Congress, reflecting goals that can conflict with its business responsibilities. For a number of years, as one example, the Department was precluded by statute from moving to what it believed was a more efficient manpower mix, and Congress continues to restrict the ability of the Department to set medical plan fees at levels that would discourage cost-shifting from the private sector, or channel beneficiary responses more constructively.

The power of incentives to drive better practices is not limited to the business support agencies. That’s nicely illustrated by the Department’s experience in the 1980s with the Defense Mapping Agency (DMA). Plagued by a repeated need to increase DMA funding to match proliferating demands for its services from weapons systems developers, the Deputy Secretary of Defense announced that any weapon system posing unique mapping requirements would have to provide its own financing, while DMA would continue to finance non-unique requirements from its fiscal allocation. This change in incentives largely solved the problem.¹²

One of the most important incentive issues faced by Agencies is the differential financing of personnel under DoD practices. Military personnel are centrally funded (“free” in some sense), whereas civilian personnel must be financed by a component from its fiscal allocation. You cannot easily exchange one for another.¹³ Restructuring personnel usage, however, can be an important source of efficiency improvement—and that applies across the entire Department, not just to Agencies. IDA research has identified substantial opportunity for reducing beneficiary health care costs by increased use of civilians,¹⁴ and there is similar opportunity for the cyber work force.¹⁵ Civilians might even fly portions of Unmanned Aircraft System missions.¹⁶

The inhibiting incentive effect of how personnel are financed, precluding tradeoffs, can likewise affect active-reserve trades. IDA research for the National Commission on the Structure of the Air Force

¹¹ Ibid, pp. 15-22, 31.

¹² Demonstrating the power of incentives, the practical effect was to create a new set of mapping demands applying to just two systems, the minimum qualification to escape the “unique” designation! Author’s experience as Director, Program Analysis and Evaluation.

¹³ IDA’s summary of the history of military to civilian conversions summarizes the impediments. See Eisler, David F. *A Brief History of Military-to-Civilian Conversions in the Department of Defense, 1965-2015*. IDA document P-5357, March 2017, p. iii.

¹⁴ Whitley, John E. et al. *Medical Total Force Management*. IDA document P-5047, May 2014.

¹⁵ Horowitz, Stanley A. et al. *Staffing for Cyberspace Operations: Summary of Analysis*. IDA document NS D-8089, August 2016.

¹⁶ Norton, Travis L. (Lt. Col., USAF). *Staffing for Unmanned Aircraft Systems (UAS) Operations*. IDA document P-5352, May 2015.

identified savings from using prior-service Air Reserve pilots as instructors.¹⁷ That would have the further benefit of relieving demand on the active-duty pilot force, currently threatened by shortages.

While Congress has backed the Department's enhanced use of incentives to drive efficiency-producing behavior, there remain significant barriers to harnessing the power of decentralized action, given DoD procedures and sometimes statutory restrictions, as these personnel examples illustrate. Looking for decentralized, market-like mechanisms could have wide benefit throughout the Department's activities. IDA's review of DoD investment in Enterprise Resource Planning systems, for example, concludes that "the Department [should] implement a distributed ERP ecosystem approach in order to consider the multiple missions and operational needs of its various organizations," noting this is consistent with the practice of large commercial organizations.¹⁸

CONCLUDING OBSERVATIONS

Consolidating similar functions (i.e., creating agencies or field activities) can reap the benefit of economies of scale, avoiding the duplication of fixed costs, or exploiting other opportunities available to larger organizations, as the Department has done over the last several decades.¹⁹ To gain the benefit, of course, it is necessary actually to eliminate duplicative fixed costs, or exploit the available opportunities. Some training consolidations, for example, have not produced as much savings as might be possible because separate, Service-oriented structures were retained. It also follows that consolidating dissimilar functions will not necessarily produce savings.

IDA's analyses demonstrate the critical role of incentives in producing efficient solutions. But If the Agency is constrained from responding to the signals it receives, that incentive mechanism can be thwarted.

One of the important constraints in much of DoD is the ability to set compensation for federal civilians competitively, reflecting a combination of outdated skill comparisons, the use of grades to set salaries, and the cap on compensation levels. In some cases, compensation may be more generous than necessary to "clear the market," in other cases too modest. IDA's analysis of the typical starting salary under the General Schedule system, for Bachelors' degree recipients in nine broad skill areas, revealed that in five it would approximate the median starting salary, but in four it would fall substantially short.

One method to decentralize compensation decisions and improve responsiveness to market signals is the pay band, i.e., a range for a broad skill area that the manager can employ to adjust as conditions require—where the budget, not the grade structure, limits excess. A return to a pay band structure for the Defense Agencies could conceivably yield important efficiencies, especially if for highly

¹⁷ Horowitz, Stanley A. et al. *Analyses for the National Commission on the Structure of the Air Force (Revised)*. IDA document NS D-5130 REVISED, April 2014.

¹⁸ Odell, Laura A. et al. *Beyond Enterprise Resource Planning (ERP): The Next Generation Enterprise Resource Planning Environment*. IDA document P-4852, February 2012, pp. 87-88.

¹⁹ For a review of the 1980s and 1990s experience, including estimates of the savings achieved, see Graham, David R. and Stanley A. Horowitz et al. *Next Steps for Managing Defense Agencies, Field Activities, and Support Process*. IDA document P-3627, December 2001.

paid skills the Agency were allowed ceilings higher than the current cap.²⁰ The last objective could also be achieved by granting additional flexibilities in the current GS system—for example, targeted pay adjustments, special pays, performance-based step increases, and relaxing the pay cap for high-skill, high-demand occupations.

The emphasis on securing the right skill mix through a competitive compensation system responds to the need for these entities to perform as combat support agencies. Put differently, the search for efficiency must be balanced against the need to be effective in both peacetime and wartime. It is for this reason that up to now the supervisors for Defense Agencies have been the Secretary's principal staff assistants for the function involved. The advent of a Chief Management Officer, with responsibility in part or in whole for these Agencies, could make providing the necessary combat support guidance difficult. A division of labor in which the Secretary's delegates focus on the policy guidance for outcomes to be achieved, while the management officer focuses on the incentives under which they operate, and the constraints that preclude reaching full potential, might provide the balance needed for long-term success.

²⁰ It's notable that in that same comparison, the DoD "Lab Demo" system, which has pay band authority, was competitive with median salaries in all nine areas. Unpublished IDA research for Secretary Carter's "Force of the Future" initiative.

APPENDIX A

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United States Senate
 COMMITTEE ON ARMED SERVICES
 WASHINGTON, DC 20510-6050

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August 7, 2017

Dr. David S. C. Chu
 President
 Institute for Defense Analyses
 4850 Mark Center Drive
 Alexandria, VA 22311-1882

Dear Dr. Chu:

Measured by dollars, people, and global missions, the Department of Defense (DOD) is one of the largest and most complex organizations in the world. While the military departments are the most notable, the Department includes more than 30 defense agencies and field activities comprising greater than \$100.0 billion dollars in annual spending. Several major, yet often overlooked, components of this enterprise are the business-support agencies, which perform functions as disparate as payroll, logistics, education, enterprise management, and information technology to support the Department. Though not well-known outside the Pentagon, several of these elements are large enough to rival Fortune 50 companies, and do more business with the Department than many defense contractors.

However, some business functions provided by these agencies have been criticized within DOD, as well as by external stakeholders like the Government Accountability Office. Many agencies have not had comprehensive and sustained reviews focused on their performance in delivering services or their management and execution of annual budgets. This is not a new problem. In 1979, a report commissioned by the Department (“Defense Agency Review”) concluded that the “incremental development of organizational problems over an extended span of time” had impeded the Department’s success in delivering support to the warfighter.

The Senate Armed Services Committee is reviewing the challenges currently facing defense business management and potential solutions to address any identified deficiencies. Against this backdrop, the committee intends to assess the defense business enterprise to complement recent legislative efforts, including the creation of a Chief Management Officer. In furtherance of that review, we would welcome your thoughts and input on the following questions:

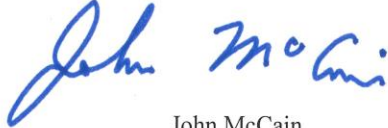
1. How should the business-support defense agencies be optimally organized for the current, and future, environment in order to ensure efficiency and effectiveness?
2. Are there opportunities to eliminate unnecessary duplication or to remove redundant functions within the Department?
3. What steps could substantially improve the provision of services to the Department?

As the committee begins its review in the fall, responses received no later than October 1, 2017 will receive the best consideration. We look forward to your contribution and thank you in advance for your time.

Sincerely,



Jack Reed
Ranking Member



John McCain
Chairman