NPS-CM-12-037



ACQUISITION RESEARCH SPONSORED REPORT SERIES

Impact of Contract Bundling and Consolidation on Defense Acquisition System and Defense Industrial Base:
The Case of the U.S. Department of the Navy

27 April 2012

by

Max V. Kidalov, J.D., LL.M., Assistant Professor

Graduate School of Business & Public Policy

Naval Postgraduate School

Approved for public release, distribution is unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



Report Documentation Page

Form Approved OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 27 APR 2012	2. REPORT TYPE	3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER	
Impact of Contract Bundling and Con- System and Defense Industrial Base: T	5b. GRANT NUMBER		
the Navy	5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER	
	5e. TASK NUMBER		
		5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND AE Naval Postgraduate School, Graduate S Policy, 555 Dyer Road, Ingersoll Hall, N	School of Business & Public	8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)	
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)	

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Despite Congressional and Presidential emphasis on reducing bundling and consolidation of defense contracts, recent research studies cast doubt on whether bundling and consolidation are problems for small defense contractors or for the defense acquisition system as a whole. On the contrary, those studies proposed that bundling and consolidation ought to be validated as legitimate tools to achieve best value for defense buyers. This paper tests these propositions by examining Department of the Navy (DoN) bundled and consolidated contracts for fiscal year (FY) 2010, the record year for bundling and consolidation in U.S. defense contracting. Specifically, the paper examines the effect of bundling and consolidation on the performance of Navy and Marine Corps buying commands in meeting small business goals, as well as on good-government policy objectives such as competition, performance-based acquisition (PBA), preference for commercial suppliers, and support for the U.S. defense industrial base. The paper concludes by recommending the Secretary of the Navy?s Office of Small Business Program?s (SECNAV OSBP) seven new strategies for challenging bundling and consolidation. Such strategies will enable the SECNAV OSBP to improve not only DoN?s performance on small business goals, but also the defense acquisition system as a whole.

a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	OF PAGES 53	RESPONSIBLE PERSON
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF	18. NUMBER	19a. NAME OF
15. SUBJECT TERMS					

The research presented in this report was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program
Attn: James B. Greene, RADM, USN, (Ret)
Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103

Tel: (831) 656-2092 Fax: (831) 656-2253

e-mail: <u>ibgreene@nps.edu</u>

Copies of the Acquisition Sponsored Research Reports may be printed from our website www.acquisitionresearch.org



Abstract

Despite Congressional and Presidential emphasis on reducing bundling and consolidation of defense contracts, recent research studies cast doubt on whether bundling and consolidation are problems for small defense contractors or for the defense acquisition system as a whole. On the contrary, those studies proposed that bundling and consolidation ought to be validated as legitimate tools to achieve best value for defense buyers. This paper tests these propositions by examining Department of the Navy (DoN) bundled and consolidated contracts for fiscal year (FY) 2010, the record year for bundling and consolidation in U.S. defense contracting. Specifically, the paper examines the effect of bundling and consolidation on the performance of Navy and Marine Corps buying commands in meeting small business goals, as well as on good-government policy objectives such as competition, performance-based acquisition (PBA), preference for commercial suppliers, and support for the U.S. defense industrial base. The paper concludes by recommending the Secretary of the Navy's Office of Small Business Program's (SECNAV OSBP) seven new strategies for challenging bundling and consolidation. Such strategies will enable the SECNAV OSBP to improve not only DoN's performance on small business goals, but also the defense acquisition system as a whole.

Keywords: Contract bundling, contract consolidation, small business, defense industrial base, Department of the Navy, competition in contracting, performance-based acquisition



About the Author

Max Kidalov joined the faculty of the Naval Postgraduate School in 2009 and is Assistant Professor of Procurement Law and Policy in the Graduate School of Business and Public Policy. His research and teaching interests include legislative and judicial controls over defense procurement, contingency contracting, socioeconomic and industrial base contracting policies, competition in contracting, procurement fraud, anti-corruption initiatives, and international defense contracting. Dr. Kidalov earned his BA and JD from the University of South Carolina in Columbia, SC, and his LLM in Government Procurement Law from the George Washington University in Washington, DC.

Max V. Kidalov, JD, LL.M.
Assistant Professor
Procurement Law & Policy
Graduate School of Business and Public Policy
Naval Postgraduate School
Monterey, CA 93943-5000
Tel: (831) 656-3254

Fax: (831) 656-3254

E-mail: mkidalov@nps.navy.mil



NPS-CM-12-037



ACQUISITION RESEARCH SPONSORED REPORT SERIES

Impact of Contract Bundling and Consolidation on Defense Acquisition System and Defense Industrial Base:
The Case of the U.S. Department of the Navy

27 April 2012

by

Max V. Kidalov, J.D., LL.M., Assistant Professor

Graduate School of Business & Public Policy

Naval Postgraduate School

Disclaimer: The views represented in this report are those of the author and do not reflect the official policy position of the Navy, the Department of Defense, or the Federal Government.





Table of Contents

Abstract		i
About the A	uthor	iii
Table of Cor	ntentsv	/ii
l.	Introduction	. 1
II.	Bundling and Consolidation: The Legal Framework	. 3
III.	Recent Studies and Key Research Propositions	. 7
IV.	Data Findings and Analysis: Testing Key Propositions	12
V.	Conclusion: Observations and Recommendations	35
References		37



I. Introduction

Bundling and consolidation of purchasing requirements into large-dollar, large-scope, large-geography contacts is commonly regarded as a major barrier to entry into the Federal, and especially the Department of Defense (DoD), procurement market (House Armed Services Committee [HASC], 2012; Kidalov, 2011). Since 1997, Congress and Presidential administrations have championed a series of major laws and regulatory initiatives to reduce bundling and consolidation (Kidalov, 2011). While earlier research strongly supported the need for anti-bundling initiatives in order to enhance small business opportunities and promote competition (Small Business Administration, Office of Advocacy [SBA Advocacy], 2002), some recent studies cast doubt on whether consolidation and bundling are problems for small business contractors (Moore et al., 2008; Nerenz, 2007; General Accounting Office [GAO], 2004). In particular, two recent studies suggested that bundling and consolidation may be positive or even best-practice purchasing activities with major benefits for the defense acquisition system or supplier base (Moore et al., 2008; Nerenz, 2007). With support from the Secretary of the Navy's Office of Small Business Programs (SECNAV OSBP), my study attempts to resolve the conflict among these studies by analyzing Federal Procurement Data System-Next Generation (FPDS-NG) data on bundled and consolidated contracts awarded by the Department of the Navy (DoN) during fiscal year (FY) 2010 (FPDS 2011). That year, reported bundling and consolidation in defense contracting reached a recent record of 224 contracts worth \$21.1 billion (HASC, 2012), of which the DoN share was 44 contracts (about 20%) worth well over \$0.8 billion (about 4%). My study addresses these contracts' features, the buying commands' actions, and those commands' records on achieving small business contracting goals.

II. Bundling and Consolidation: The Legal Framework

Contract bundling and consolidation are regulated by a complementary legal framework. Initially, contract bundling was recognized as an implied cause of action invoked under the Competition in Contracting Act of 1984 to protest contract solicitations as unduly restrictive of competition (Kidalov, 2011). Eventually, beginning with the Small Business Reauthorization Act of 1997 and continuing with the National Defense Authorization Act for Fiscal Year 2004, Congress passed and Presidents Bill Clinton and George W. Bush signed two laws establishing specific criteria to limit and regulate bundling and consolidation (Kidalov, 2011; Manuel, 2010). (This study does not address the effects of any post-FY2010 legislative or regulatory changes.) The legal concepts of bundling and consolidation substantially overlap, although "the rules that apply to bundling are more restrictive" (Department of Defense, Office of Small Business Programs [DoD OSBP], 2007, p. 1-4). "In the most general terms, for DOD, a consolidation is the combining of two or more previous contracts into a single solicitation, and a bundled contract is a consolidation that is unsuitable for award to a small business as a prime contractor even though one or more of the previous contracts was performed (or could have been performed) by a small business. To put it another way, a solicitation that consolidates requirements does not always bundle them, but a solicitation that bundles requirements always consolidates them" (DOD OSBP, 2007, p. 1-4).

The Small Business Reauthorization Act of 1997, codified in the Small Business Act at 15 United States Code (U.S.C.) Section 632, defines a bundled contract as "a contract that is entered into to meet requirements that are consolidated in a bundling of contract requirements." In turn, this statute defines bundling of contract requirements as "consolidating 2 or more procurement requirements for goods or services previously provided or performed under separate smaller contracts into a solicitation of offers for a single contract that is likely to be

unsuitable for award to a small-business concern due to—(A) the diversity, size, or specialized nature of the elements of the performance specified; (B) the aggregate dollar value of the anticipated award; (C) the geographical dispersion of the contract performance sites; or (D) any combination of the factors described in subparagraphs (A), (B), and (C)." The term *separate smaller contract* is defined in Section 632 as "a contract that has been performed by 1 or more small business concerns or was suitable for award to 1 or more small business concerns." Factors specified in the Small Business Act as those "that might cause unsuitability for award to small business" include "the diversity, size, or specialized nature" of performance called for in the contract, the total dollar value of the contract, the geographic spread of performance, or a combination of these factors (U.S. Code, 2010). "Substantial bundling" of defense contracts at over \$7.5 million requires identification of alternative buying strategies and additional reviews (Federal Acquisition Regulation [FAR], 2010, 7.104).

The contract consolidation law, Section 801 of the National Defense Authorization Act for Fiscal Year 2004 (2010), codified at 10 U.S.C. Section 2382 and implemented by the Defense Federal Acquisition Regulation Supplement (DFARS) Section 207.170-3 (2009), is not focused on prior performance by small businesses. It simply prohibits consolidation of two or more "contract requirements" totaling over \$5.5 million unless the senior procurement executive of a defense agency conducts market research, identifies alternatives involving "lesser degrees of consolidation," and determines that consolidation is necessary and justified. (DFARS 2009). Section 2382 (National Defense Authorization Act for Fiscal Year 2004, 2010) defines consolidation of contract requirements and consolidation as "a use of a solicitation to obtain offers for a single contract or a multiple award contract to satisfy two or more requirements of that [military] department, agency, or activity for goods or services that have previously been provided to, or performed for, that department, agency, or activity under two or more separate contracts smaller in cost than the total cost of the contract for which the offers are solicited" (DFARS, 2009).



Both the bundling and the consolidation statutes allow defense buyers to determine that bundling or consolidation was "necessary and justified" if they identified "measurably substantial benefits" from bundling, or if benefits from consolidation "substantially exceeding" benefits from alternatives to consolidation (U.S. Code, 2010). In both statutes, justification criteria are qualitatively identical and include cost, quality, acquisition cycle efficiencies, improved terms and conditions, and any other benefits. The difference is that bundling benefits must generally be dollarized to between 5% and 10% of the contract value, unless senior acquisition officials determine that the acquisition strategy is mission critical and provides for maximum practicable small business participation (FAR, 2009, 7.107). Title 10, Section 2382 of the U.S. Code (National Defense Authorization Act for Fiscal Year 2004, 2010) does not require dollarized benefits. Both statutes specify that administrative or personnel costs alone do not justify bundling unless they are at least 10% of the contract value, or unless they are "substantial" in relation to the consolidated contract value (U.S.C., 2010). Finally, bundling limitations apply only to contracts awarded or performed in the U.S. and only to contracts not awarded as small business set-asides, while contract consolidation limitations apply worldwide to small and large business contracts alike, including to new work (DoD OSBP, 2007).

III. Recent Studies and Key Research Propositions

Review of research literatures shows that contract bundling and consolidation have received scant research evaluation. Over the last decade, only four major studies addressed the subject: the 2002 Small Business Administration Office of Advocacy (SBA Advocacy) study performed by Eagle Eye Publishers Inc., *The Impact of Contract Bundling on Small Business*; the 2004 GAO report *Contract Management: Impact of Strategy to Mitigate Effects of Contract Bundling on Small Business Is Uncertain*; the 2007 Nerenz article, *Government Contract Bundling: Myths and Mistaken Identity* (reporting his 2006 study); and the 2008 Rand report authored by Moore, Grammich, DaVanzo, Held, Coombs, and Mele, *Enhancing Small Business Opportunities in the DOD.* Only the latter study discussed both bundling and Section 2382 consolidation. While the 2002 study found contract bundling and consolidation detrimental for small firms and the acquisition system overall, the 2007–2008 studies made contrary propositions, and the 2004 study appeared non-committal.

Proposition 1. Contract Bundling is Not a Serious Obstacle to Small Business Participation in Government/Defense Contracting

The SBA Advocacy study asserted that contract bundling was rampant, involving well over 34,000 contract actions and driving approximately 15,000 small firms out of business (SBA Advocacy, 2002). It found the following trend: "In FY 2001 both the number of bundled contracts and the amount of bundled contract dollars were the highest in 10 years. . . . In FY 2001 bundled contracts accounted for 16.4 percent of the reported 177,000 prime contracts and 51 percent of all reported prime contract spending" (SBA Advocacy, 2002, p. 4). That study's conclusion that contract bundling was a serious problem for small firms was later adopted by the White House Office of Federal Procurement Policy (OFPP, 2002). However, three subsequent studies have cast doubt on the SBA Advocacy's methodology and/or

conclusion. The Moore et al. (2008, p. 40) study suggested that contract bundling and consolidation at the DoD "will lead to fewer small business contracts" but implied that they were presently insubstantial problems for small firms. In support, the Moore et al. study cited Federal Procurement Data System (FPDS) data showing that neither bundling nor consolidation amounted to more than 2% of DoD contract awards or contract dollars during FY2001-FY2007 (Moore et al., 2008). The Moore study observed that consolidation/bundling "practices may have mixed results for small-business opportunities, reducing the number of small businesses receiving prime contracts but possibly providing them the same total dollars" (Moore et al., 2008, p. 23). The Moore et al. (2008) study also cited the Nerenz (2007) study, which found that contract bundling was protested at less than 2% of all bid protests filed at the GAO during the years 1995–2004. Both the Moore et al. (2008) and Nerenz (2007) studies suggested that the SBA Advocacy study was drastically overinclusive. Nerenz (2007) also noted that the SBA Advocacy study used a broad extra-statutory definition of bundling. The GAO 2004 report found that the DoD awarded almost 3,400 FY2002 contracts, which exceeded its substantial bundling threshold, accounting for over 75% of DoD prime contracting dollars. However, the GAO (2004) was able to validate bundling designation for only 8 contracts and did not provide their dollar value or share of DoD contracts.

Proposition 2. Small Firms Lack the Capability to Perform Legitimately Combined Military/Government Needs, and so Are Properly Excluded from Justified Bundled or Consolidated Contracts

This proposition reflects current law, as noted previously. Its strongest proponent was the Nerenz (2007) article, which suggested that all bundling not protested by small businesses and/or not approved by the Small Business Administration (SBA) was at least presumptively proper and so properly excluded small firms. The 2004 GAO study did not address this proposition, simply finding that most agencies reported that they did not engage in bundling (GAO, 2004). The SBA Advocacy (2002) study challenged this proposition only indirectly. It defined a bundled contract simply as one that "incorporates dissimilar activities" and lowered



the definition of a substantially bundled contract to \$1 million, but it did not address when such contracts may be justified or necessary (SBA Advocacy, 2002, p. 52). As a result, the SBA Advocacy (2002) study included a substantial volume of contracts awarded to small businesses into its data of bundled contracts—thereby showing that small firms have the capabilities to perform at least some combined requirements. On the other hand, the Moore et al. (2008) study suggested that small businesses were excluded from consolidated DoD contracts because of large firms' capabilities to meet customer needs such as Performance-Based/Life-Cycle Logistics on service contracts, systems-of-systems engineering in weapons contracts, and business choices of major aerospace and defense manufacturers to outsource work. The Moore et al. (2008) study recommended that the DoD "may wish to consider where small businesses can best contribute to innovation, including at Tier 1 or lower-level suppliers" (Moore et al., 2008, p. 27).

Proposition 3. Except for Alleged Problems for Small Businesses, Contract Bundling and Consolidation Provide an Overall Benefit to the Defense Acquisition System

The Moore et al. (2008) study was the strongest proponent of this proposition. It asserted that contract bundling is driven by two influences of commercial practices used by the industry to enhance efficiencies and improve performance.

The first, prevalent in supply chain purchases, is . . . achieving superior quality, responsiveness, and lower total costs through supply chain transformation. . . . [A]s manufacturers have sought to reduce waste through "lean" practices such as minimal inventory, "just-in-time" supply, and use of fewer, larger, and more complex assemblies, they have also sought to use a smaller, more stable supply base that is well integrated with product design and synchronized with manufacturing. . . . Leading commercial firms, and the federal government, have similarly sought to develop strategic sourcing . . . Focusing on longer-term relationships with these suppliers can also improve quality in the supply chain. (Moore et al., 2008, p. 20-21)



"The second influence on commercial practices is the grouping of goods and services together into one offering, particularly as a company's goods become more like commodities with lower profits and their services (e.g., repairs) for these goods become more profitable." (Moore, et al., 2008, p. 23). Such contract structure, supposedly, "guarantees a level of operational performance and charges the customer a fee based on the hours" the manufactured product is used. (Moore, et al., 2008, p. 23). "Similarly, the DoD may expect its leading suppliers to offer more goods and services grouped together for purchase such as those it seeks for performance-based logistics" (Moore et al., 2008, p. 23). As stated previously, the Moore et al. (2008) study concluded that these commercial practices led the DoD to adopt Performance-Based Logistics, Strategic Sourcing, Total Life Cycle Systems Management, and similar measures to cut costs and increase performance of government contractors and claimed that best practices in the area of cost-cutting and performance were at odds with increased small business participation. The Moore et al. (2008) study called on the DoD to track consolidation in the private sector so as to explain or justify consolidation in DoD contracts (Moore et al., 2008).

The contrary position was taken by the SBA Advocacy in its 2002 study as well as in its original 2000 bundling study that was updated by its 2002 study. In particularly, the 2000 study asserted that "the growing lack of diversity and stratification in the federal industrial base being fueled by bundling will have long term and detrimental consequences to the government's ability to procure needed services and supplies at competitive prices" (SBA Advocacy, 2000, p. 41-42), while the 2002 study argued that although bundling "may appear to make the process of purchasing more efficient, the long-term costs associated with reduced competition and limited choice loom on the horizon" (SBA Advocacy, 2002, p. 7). However, SBA Advocacy did not specifically test this assertion in terms of analyzing the impact of bundling on competition or performance across the acquisition system. The 2004 GAO study, similarly, did not address systemic effects of bundling but claimed that FPDS data was not accurate or sufficient to do so (GAO, 2004). On the other hand, Nerenz (2007) argued that low bid protest filings challenging bundled contracts



government-wide (less than five bundling protest filings in the years 1995–2004) in comparison with the annual rate of protests filed (1,300 to almost 3,000 total protest filings per year) showed either that bundling was extremely rare or that all bundling that was not protested was appropriate and useful (Nerenz, 2007).

IV. Data Findings and Analysis: Testing Key Propositions

Finding I. High-Value Contract Bundling is Symptomatic of Below-Average Small Business Contracting Performance by Navy Commands

Although Nerenz (2007) and Moore et al. (2008) strongly criticized bundling and/or consolidation as overblown problems for small businesses in the Federal market, neither study examined whether a relationship exists between bundling/consolidation and achieving small business goals. Data shows that this relationship exists. According to FPDS (2011), during FY2010, total Department of the Navy bundled and consolidated contracts amounted to \$831,948,735.18. Table 1 illustrates bundling and consolidation activity by Navy Department commands which engaged in such activity. The top commands engaging in bundling and consolidation are Naval Facilities Engineering Command (NAVFAC) Europe & Southwest Asia and Commander of the Marine Corps Systems Command (MARCORCYSCOM), which together accounted for over 52% of bundled and consolidated contract dollars. Commands in the middle tier for bundling and consolidation are NAVFAC Expeditionary, Naval Supply Systems Command (NAVSUP) Fleet Logistics Center Norfolk, NAVSUP Weapon System Support Mechanicsburg, Naval Surface Warfare Center Crane, Space and Naval Warfare Systems Command (SPAWAR), and Strategic Systems Programs, together accounting for over 38% of the value of bundled and consolidated contracts. The lowest levels of bundled and consolidated awards took place at Naval Air Systems Command (NAVAIR); Naval Sea Systems Command (NAVSEA) Headquarters (HQ); NAVFAC Southeast, Southwest, and Hawaii; and NAVSUP Weapons Systems Support Philadelphia, together accounting for a little less than 9% of the value of bundled and consolidated contracts.

Table 1. Bundling and Consolidation Activity by Command

BUNDLING AND COSOLIDATION ACTIVITY BY COMMAND					
Command	Contracts Value	Command Share			
NAVAL FAC ENGINEEERING CMD EUR SWA	\$274,320,944.32	32.97%			
COMMANDER MARCORSYSCOM	\$162,533,621.00	19.54%			
NSWC CRANE	\$81,871,194.00	9.84%			
NAVSUP WEAPON SYSTEMS SUPPORT MECH	\$79,342,491.00	9.54%			
STRATEGIC SYSTEMS PROGRAMS	\$49,437,854.00	5.94%			
NAVAL FACILITIES EXPEDITIONARY	\$46,353,072.00	5.57%			
SPACE AND NAVAL WARFARE SYSTEMS	\$32,111,171.93	3.86%			
NAVSUP FLT LOG CTR NORFOLK	\$32,036,988.03	3.85%			
NAVSEA HQ	\$16,120,500.00	1.94%			
NAVSUP WEAPON SYSTEMS SUPPORT	\$15,538,153.90	1.87%			
NAVFAC ENGINEERING COMMAND HAWAII	\$13,760,057.00	1.65%			
NAVFAC SOUTHWEST	\$11,714,772.00	1.41%			
NAVFAC SOUTHEAST	\$10,037,000.00	1.21%			
NAVAL AIR SYSTEMS COMMAND	\$6,770,916.00	0.81%			
Grand Total	\$831,948,735.18	100.00%			

Within the DoN, the overall small business share of contract dollars amounted to 15.99% in FY2010. Commands that did not report engaging in bundling or consolidation showed a 32.78% small business share—more than doubling DoN performance. In contrast, commands which engaged in bundling or consolidation collectively demonstrated small business performance at half of the DoN average: only 7.69%. For individual commands, this correlation is not linear. However, all seven commands that engaged in bundling or consolidation and also performed below DoN-wide small business share (i.e., MARCORSYSCOM, SPAWAR, NAVSUP Weapons Systems Support Philadelphia, NAVSEA HQ, Strategic Systems Programs, NAVAIR SYSCOM Pax River, and NAVFAC Europe and Southwest Asia



(EUR SWA)) together accounted for 66.93%, or about two thirds of the DoN's total bundled and consolidated dollars. The other seven commands exceeded DoN small business performance and accounted for only one third of total bundled and consolidated dollars. Thus, high volumes of bundling and consolidation can predict subpar performance on small business contracting. Table 2 illustrates small business contracting performance of Navy Department commands in relation to their bundling and consolidation activity.

 Table 2. Bundling and Small Business Performance of Navy Commands

SMALL BUSINESS PERFORMANCE OF COMMANDS ENGAGING IN BUNDLING AND CONSOLIDATION						
Department /Command	Total Dollars	LB Dollars	Small Biz Dollars	Small Biz Share		
NAVFAC HAWAII	\$321,095,593.32	\$150,609,557.31	\$168,736,585.73	52.55%		
NAVFAC SOUTHEAST PANAMA CITY	\$1,086,557,539.26	\$601,447,213.16	\$487,471,602.24	44.86%		
NAVFAC EXPEDITIONARY PT HUENEME	\$506,172,067.51	\$299,616,301.24	\$186,585,513.62	36.86%		
NAVFAC SOUTHWEST SAN DIEGO	\$2,715,588,129.94	\$1,899,717,320.58	\$793,759,461.53	29.23%		
NAVSUP WEAPON SYSTEMS SUPPORT MECH	\$1,074,217,227.59	\$770,910,414.14	\$300,582,707.92	27.98%		
NAVSUP FLT LOG CTR NORFOLK	\$1,775,484,225.14	\$1,119,896,031.29	\$412,444,749.01	23.23%		
NSWC CRANE	\$1,400,599,909.85	\$1,137,087,934.65	\$256,363,949.31	18.30%		
MARCORSYSCOM QUANTICO	\$7,183,482,758.10	\$6,043,542,233.92	\$1,091,532,717.39	15.20%		
SPAWAR SAN DIEGO	\$2,616,862,292.52	\$2,434,239,814.78	\$181,038,679.74	6.92%		
NAVSUP WEAP SYS SUPPORT PHILA	\$1,944,930,431.48	\$1,875,723,849.15	\$60,103,423.73	3.09%		
NAVSEA HQ WDC	\$16,910,837,271.37	\$15,749,252,023.89	\$474,239,900.41	2.80%		



STRATEGIC SYSTEMS PROGRAMS WDC	\$1,937,492,455.08	\$1,491,199,854.01	\$54,055,062.89	2.79%
NAVAL FAC ENG CMD EUR SWA SIGONELLA	\$230,422,259.81	\$229,535,685.16	\$815,763.12	0.35%
NAVAIR SYS COM PAX RIVER	\$19,171,866,231.98	\$19,107,361,076.94	\$59,002,646.98	0.31%
SUBTOTAL: BUNDLING OR CONSOLIDATION COMMANDS	\$58,875,608,392.95	\$52,910,139,310.22	\$4,526,732,763.62	7.69%
SUBTOTAL: COMMANDS WITHOUT BUNDLING OR CONSOLIDATION	\$28,980,314,089.75	\$18,720,931,455.83	\$9,525,462,646.60	32.87%
DEPARTMENT OF THE NAVY TOTAL	\$87,855,922,482.70	\$71,631,070,766.05	\$14,052,195,410.22	15.99%

Finding 2. Small Businesses Have the Capability to Perform Most Bundled or Consolidated Contracts, Suggesting That Their Exclusion Is Not Ability-Based

Based on the SBA Advocacy/OFPP methodology (OFPP, 2002), small firms would have lost contracting opportunities worth about one third of the total value of bundled or consolidated contracts. The real adverse impact on small firms, however, is much higher: between 95% and 83% of the total value of bundled and consolidated contracts.

First, data shows that small businesses were excluded from over 95% of bundled and consolidated contracts—belying any optimistic assertions that such practices do not affect small business contract spending. Bundling and consolidation of DoN contracts were largely concentrated among a limited group of major U.S. defense contractors and select international firms, as shown in Table 3. A total of 23 firms became the beneficiaries of 44 bundled and consolidated contracts, receiving on average about two such contracts each. The top two firms, Derichebourg Multiservizi SPA and The Heil Co., received approximately \$182 million, or 21.85%, and \$141 million, or 16.91%, respectively. Together, they received just over \$322



million, or 39% of the value of such contracts. Next, a group of nine firms—EDO Communications and Countermeasures Systems, Lockheed Martin, Sociedad Espaniola de Montajes Industriales, Interstate Electronics, Navistar Defense, LLC, Sentek Consulting, Harris Corp., La Termica SRL, and U.S. Training Center, Inc. (also known as Blackwater and Academi)—received between two and 10% of such contracts each and collectively received 49.36% of such contracts, or almost \$411 million. Another group of nine firms—BAE Systems Land & Armaments, Tetra Tech, W.G. Yates & Cons Construction, Bell Boeing Joint Project Office, Triton Marine Construction, Multinational Logistic Services, Lockheed Martin Services, United Infrastructure Projects FZCO, Radiology Services of Hampton Roads, Avis Rent-acar, and Hawaiian Dredging Construction—received less than 2% each, or a total of about 12% or a little under \$99 million. Just two firms—Radiology Services and Sentek—which received just \$38 million, or 4.54% of contracts, were coded as small businesses. No size verification was made in this study.

Table 3. Contractors Benefiting From Bundling/Consolidation

BUNDLING AND CONDOLIDATION BENEFICIARIES					
Contractors	Contracts Value	Share			
HAWAIIAN DREDGING CONSTRUCTION COMPANY, INC.	\$5,574,000.00	0.67%			
AVIS RENT A CAR	\$5,638,320.00	0.68%			
RADIOLOGY SERVICES OF HAMPTON ROADS LLC	\$5,674,321.96	0.68%			
UNITED INFRASTRUCTURE PROJECTS FZCO	\$5,905,588.00	0.71%			
LOCKHEED MARTIN SERVICES INC	\$6,770,916.00	0.81%			
RAYTHEON COMPANY	\$6,935,563.00	0.83%			
MULTINATIONAL LOGISTIC SERVICES LTD	\$7,652,611.42	0.92%			
TRITON MARINE CONSTRUCTION CORP.	\$8,186,057.00	0.98%			
BELL BOEING JOINT PROJECT OFFI	\$8,602,590.90	1.03%			
W. G. YATES & SONS CONSTRUCTION COMPANY	\$10,037,000.00	1.21%			
TETRA TECH EC, INC.	\$11,714,772.00	1.41%			
BAE SYSTEMS LAND & ARMAMENTS, L.P.	\$16,120,500.00	1.94%			
U.S. TRAINING CENTER, INC.	\$18,710,054.65	2.25%			
LA TERMICA SRL	\$21,000,000.00	2.52%			
HARRIS CORPORATION	\$21,862,016.00	2.63%			
SENTEK CONSULTING INCORPORATED	\$32,111,171.93	3.86%			
NAVISTAR DEFENSE LLC	\$46,353,072.00	5.57%			
INTERSTATE ELECTRONICS CORPORATION	\$49,437,854.00	5.94%			
SOCIEDAD ESPAIOLA DE MONTAJES INDUSTRIALES SA	\$60,000,000.00	7.21%			
LOCKHEED MARTIN CORPORATION	\$79,342,491.00	9.54%			
EDO COMMUNICATIONS AND COUNTERMEASURES SYSTEMS INC.	\$81,871,194.00	9.84%			
HEIL CO., THE	\$140,671,605.00	16.91%			
DERICHEBOURG MULTISERVIZI SPA	\$181,777,036.32	21.85%			
Grand Total	\$831,948,735.18	100.00%			



Second, data shows that small businesses have the capability to perform about 83% of bundled and consolidated Navy contracts. A key de facto measure of small business capability is the SBA size standards, which are measured on either an employee or revenue basis and are assigned to each North American Industrial Classification System (NAICS) category. Since 1997, contracting officers have relied on the SBA's size standards tied to the North American Industrial Classification System ("NAICS") "to determine the type of industry in which a company is participating" (Kidalov, 2011). Specifically:

Under SBA regulations, Contracting Officers are responsible for choosing the NAICS code that best describes the "principal purpose" of the product or service acquired. The basis for this decision is subject to a complex six-factor test, which includes (1) "industry descriptions" in the NAICS Manual, (2) description of the product or service in solicitation documents, (3) "value and importance" of the procurement's components, (4) functions of products and services procured, (5) prior procurement classifications in similar purchases, and (6) the purposes of the Small Business Act. A procurement is usually classified according to the component that accounts for the greatest percentage of contract value. (Kidalov 2011)

Each NAICS code has a matching small business size standard based on either employment or revenue. "SBA's employee-based caps are calculated prior to each representation or certification of small business size based on the average number of employees for each pay period 'over the preceding 12 months.' Part-time or temporary employees count the same as full-time employees. Total average employees of all entities considered affiliated with the enterprise that have been employed by those affiliates over the preceding twelve-month period (even if affiliation arose more recently) are included in the count." (Kidalov, 2011, p. 464). Table 4 illustrates the Navy Department's bundling and consolidation needs by NAICS Code. In terms of classifying bundled and consolidated awards by NAICS Code, over \$426 million, or 51% of the value, went to firms in just three NAICS



categories: Facilities Support Services at almost 22%, Metal Tank (Heavy Gauge)
Manufacturing, at almost 17%, and Radio & Television Broadcasting and Wireless
Telecommunications Equipment Manufacturing, at about 12.5%, for a total of about
\$426 million. Mid-range NAICS categories, Engineering Services, Bare Printed
Circuit Board Manufacturing, Commercial & Institutional Building Construction,
Heavy Duty Truck Manufacturing, Industrial Building Construction, accounted for just
under \$323 million, or about 39%. Low-range NAICS categories, Other Guided
Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing, accounted
for just under \$83 million, or about 10%.

Table 4. Bundling/Consolidation Needs by NAICS Code

BUNDLING/CONSOLIDATION NEEDS BY NAICS CODE					
NAICS Code Descriptions	Total Contracts Value	Share			
PASSENGER CAR LEASING	\$5,638,320.00	0.68%			
PHARMACEUTICAL PREPARATION MANUFACTURING	\$5,674,321.96	0.68%			
AIRCRAFT MANUFACTURING	\$6,770,916.00	0.81%			
PORT AND HARBOR OPERATIONS	\$7,652,611.42	0.92%			
REMEDIATION SERVICES	\$11,714,772.00	1.41%			
OTHER HEAVY AND CIVIL ENGINEERING CONSTRUCTION	\$13,760,057.00	1.65%			
OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING	\$15,538,153.90	1.87%			
OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING	\$16,120,500.00	1.94%			
ALL OTHER MISCELLANEOUS SCHOOLS AND INSTRUCTION	\$18,710,054.65	2.25%			
INDUSTRIAL BUILDING CONSTRUCTION	\$21,000,000.00	2.52%			
HEAVY DUTY TRUCK MANUFACTURING	\$46,353,072.00	5.57%			
COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$75,942,588.00	9.13%			
BARE PRINTED CIRCUIT BOARD MANUFACTURING	\$79,342,491.00	9.54%			
ENGINEERING SERVICES	\$81,549,025.93	9.80%			
RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING	\$103,733,210.00	12.47%			
METAL TANK (HEAVY GAUGE) MANUFACTURING	\$140,671,605.00	16.91%			
FACILITIES SUPPORT SERVICES	\$181,777,036.32	21.85%			
Grand Total	\$831,948,735.18	100.00%			

There is no official SBA cross-reference between employment and revenuebased size standards, which may make it difficult to determine whether capable small firms are available. However, a suitable cross-reference may be established



based on the SBA's official number of small business contracting dollars per job supported, as reported in the SBA's official 2010 Annual Performance Report (2011). In FY2010, the SBA job support goal was \$141,252.69 in Federal small business contract expenditures per job (SBA, 2011). Out of 17 NAICS categories in which bundled and consolidated contracts were awarded by the DoN, the average value of such contracts in 14 NAICS categories was lower than the SBA size standard cap (or its equivalent for employee-based size standards). This translated to over \$591 million in contract spending, or 71% of the value of bundled and consolidated contracts, that could have gone to small firms. In two other categories, All Other Miscellaneous Schools and Instruction and Metal Tank (Heavy Gauge) Manufacturing, the average contract value was within three times and two times the value of the size standard cap. This translated to over \$100 million in contract spending, or 12% of the value of bundled and consolidated contracts, that could have gone to small firms. Only in one NAICS category—Engineering Services—was the average contract size within 10 times the size standard cap. This amounts to over \$140 million, or just under 17%, of the total value of bundled and consolidated contracts. Thus, individual small firms were capable of performing the vast majority of bundled and consolidated contracts. In two categories, teams or joint ventures of two or three small businesses were capable of performing bundled and consolidated contracts (OFPP, 2002). In one category, teaming or joint venturing would have been difficult to secure because it would have required the participation of up to 10 small firms. Even then, small firms could have participated in that category's contracts under the DoD Mentor-Protégé Program agreements with large businesses per DFARS subpart 219.71 (2010). Figure 1 illustrates small business capabilities to perform bundled and consolidated Navy Department contracts in summary form in, while Table 5 matches small business capabilities to average contract size and SBA size standard.



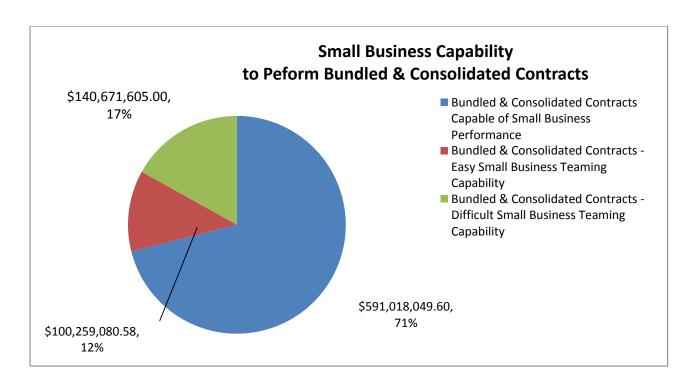


Figure 1. Summary of Small Business Capabilities to Perform

Table 5. Small Business Capabilities to Perform Bundled/ Consolidated Contracts

SMALL BUSINESS CAPABILITY TO PERFORM BUNDLED & CONSOLIDATED CONTRACTS						
NAICS Code Descriptions	Average Value	Current Size Standard	\$-Based Size Standard*	Small Biz Team Size		
AIRCRAFT MANUFACTURING	\$6,770,916.00	1,500	\$211,879,035.00	1		
ALL OTHER MISCELLANEOUS SCHOOLS AND INSTRUCTION	\$18,710,054.65	\$7,000,000.00	\$7,000,000.00	3		
BARE PRINTED CIRCUIT BOARD MANUFACTURING	\$39,671,245.50	500	\$70,626,345.00	1		
COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$12,657,098.00	\$33,500,000.00	\$33,500,000.00	1		
ENGINEERING SERVICES	\$40,774,512.97	\$4,500,000.00	\$4,500,000.00	10		
FACILITIES SUPPORT SERVICES	\$12,118,469.09	\$35,500,000.00	\$35,500,000.00	1		
HEAVY DUTY TRUCK	\$23,176,536.00	1,000	\$141,252,690.00	1		



MANUFACTURING				
INDUSTRIAL BUILDING CONSTRUCTION	\$7,000,000.00	\$33,500,000.00	\$33,500,000.00	1
METAL TANK (HEAVY GAUGE) MANUFACTURING	\$140,671,605.00	500	\$70,626,345.00	2
OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING	\$7,769,076.95	1,000	\$141,252,690.00	1
OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING	\$16,120,500.00	1,000	\$141,252,690.00	1
OTHER HEAVY AND CIVIL ENGINEERING CONSTRUCTION	\$6,880,028.50	\$33,500,000	\$33,500,000.00	1
PASSENGER CAR LEASING	\$5,638,320.00	\$25,500,000.00	\$25,500,000.00	1
PHARMACEUTICAL PREPARATION MANUFACTURING	\$5,674,321.96	750	\$105,939,517.50	1
PORT AND HARBOR OPERATIONS	\$7,652,611.42	\$25,500,000.00	\$25,500,000.00	1
RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING	\$34,577,736.67	750	\$105,939,517.50	1
REMEDIATION SERVICES	\$11,714,772.00	\$14,000,000.00	\$14,000,000.00	1
Grand Total	\$18,907,925.80		FY2010 Goal of (lob Supported: \$141,	

Finding 3. Bundling and Consolidation Materially Reduces Competition

In addition to excluding small business concerns, bundled and consolidated contracts materially reduce full and open competition in the DoN procurement market as illustrated in Table 6. Only 70% of the value of bundled and consolidated contracts was awarded pursuant to full and open competition or legally equivalent procedures. Fully over \$242 million, or over 29% of the contract value, was spent through sole source contracts. Another 0.7%, or approximately \$5.7 million, was competed under FAR part 13 Simplified Acquisition (2010) procedures, which



require competition only to the "maximum extent practicable" and allow for sole source brand name preferences.

Table 6. Competition for Bundled and Consolidated Contracts

COMPETITION FOR BUNDLED & CONSOLIDATED CONTRACTS				
Extent Competed Contracts Value Competition Share				
COMPETED UNDER SAP	\$5,674,321.96	0.68%		
FULL AND OPEN COMPETITION	\$583,964,220.32	70.19%		
NOT COMPETED	\$242,310,192.90	29.13%		
Grand Total	\$831,948,735.18	100.00%		

Finding 4. Bundling and Consolidation Hinders Preference for Commercial Items

The FAR (2010) established a preference for "maximizing the use of commercial products and services" in Section 1.102 and established procedures in FAR part 12 and elsewhere to implement this preference (FAR, 2010). Data shows that bundling and consolidation seriously undermine this preference. By volume, the DoN's top bundling and consolidation needs were Facilities Operations Support Services at 20.39% and Lubrication & Fuel Dispensing Equipment at 16.91% of the total value of bundled and consolidated contracts, or over \$310 million together. Mid-range needs for bundled and consolidated contracts were for Electronic Assembly – BDS Cards – Associated Hardware, Electronic Countermeasure & Quick Reaction Equipment, Engineering & Technical Services, Maintenance, Repairs, Alterations of Miscellaneous Buildings, and Trucks & Wheeled Tractors, together accounting for 35.52% of the total value of bundled and consolidated contracts, or about \$296 million. The remaining product and service needs included Guided Missile Launchers, Miscellaneous Aircraft Accessories Components, Maintenance-Repair-Alteration of Dining Facilities, Construction – All Other Non-Building Facilities, Fire Protection Services, Hazardous Substance Removal-Cleanup-Disposal, and Construction - Other Industrial Buildings, and account for just under 16% of bundled and consolidated dollars, or about \$133 million. Table 7



illustrates bundling and consolidation of Navy Department contracts by product or service.

Table 7. Bundling and Consolidation Needs by Product/Service

BUNDLING & CONSOLIDATION NEEDS BY PRODUCT/SERVICE			
Product/Service Description	Contracts Value	Share	
LEASE-RENT OF VEHICLES-TRAILERS-CYC	\$5,638,320.00	0.68%	
DRUGS AND BIOLOGICALS	\$5,674,321.96	0.68%	
MAINT-REP-ALT/AIRPORT RUNWAYS	\$5,905,588.00	0.71%	
CABLE CORD WIRE ASSEMBLY - COMM EQ	\$6,530,385.00	0.78%	
MAINT-REP OF AIRCRAFT COMPONENTS	\$6,770,916.00	0.81%	
LOGISTICS SUPPORT SERVICES	\$7,652,611.42	0.92%	
CONSTRUCT/OTHER INDUSTRIAL BLDGS	\$10,037,000.00	1.21%	
HARZ REMV/CLEAN-UP/DISP/OP	\$11,714,772.00	1.41%	
FIRE PROTECTION SERVICES	\$12,175,007.57	1.46%	
CONTRUCT/ALL OTHER NON-BLDG FACS	\$13,760,057.00	1.65%	
MAINT-REP-ALT/DINING FACILITIES	\$15,000,000.00	1.80%	
MISCL AIRCRAFT ACCESSORIES COMPS	\$15,538,153.90	1.87%	
LAUNCHERS, GUIDED MISSILE	\$16,120,500.00	1.94%	
OTHER ED & TRNG SVCS	\$18,710,054.65	2.25%	
BLDGS & FAC / ADMIN & SVC BLDGS	\$21,000,000.00	2.52%	
COMM SECURITY EQ & COMPS	\$21,862,016.00	2.63%	
PROGRAM MANAGEMENT/SUPPORT SERVICES	\$32,111,171.93	3.86%	
MAINT-REP-ALT/MISC BLDGS	\$45,000,000.00	5.41%	
TRUCKS AND TRUCK TRACTORS, WHEELED	\$46,353,072.00	5.57%	
ENGINEERING AND TECHNICAL SERVICES	\$56,309,048.00	6.77%	
ELE ASSEMB-BDS CARDS-ASSOC HARDWARE	\$72,812,106.00	8.75%	
ELEC COUNTERMEASURE & QUICK REAC EQ	\$75,000,000.00	9.01%	
LUBRICATION & FUEL DISPENSING EQ	\$140,671,605.00	16.91%	
FACILITIES OPERATIONS SUPPORT SVCS	\$169,602,028.75	20.39%	
Grand Total	\$831,948,735.18	100.00%	



Commercial item procedures were used only to procure Drugs and Biologicals, Rent – Lease of Vehicles, Logistics Support Services, and Other Education and Training Services (a turnkey Counterterrorism Training Center). Commercial item procedures were not applicable to Construction of Industrial Buildings and All Other Buildings, as well as Buildings and Facilities. Several additional categories of requirements seem to be either not suitable or of questionable suitability for commercial item designation, such as Communications Security Equipment, Electronic Countermeasure & Quick Reaction Equipment, and Guided Missile Launchers. However, numerous categories appear to be good candidates for commercial item designation, including the following: Fire Protection Services; Facilities Operation Support Services; Engineering & Technical Services; Lubrication & Fuel Dispensing Equipment; Electronic Assembly of BDS Cards and Associate Hardware; Program Management & Support Services; Cable Cord Wire Assembly for Communications Equipment; Miscellaneous Aircraft Accessories Components; Maintenance and Repair of Aircraft Components; Maintenance, Repair, and Alteration of Airport Runways, of Dining Facilities, and of Miscellaneous Buildings; and Hazardous Material Removal, Clean-up Disposal, and Operations. Table 8 illustrates the impact of bundling and consolidation on commercial suppliers by product or service description.

Table 8. Impact on Commercial Item Suppliers

IMPACT OF BUNDLING AND CONSOLIDATION ON COMMERCIAL SUPPLIERS			
Commercial Item Purchases Contracts Value Share			
COMMERCIAL ITEM	\$37,675,308.03	4.53%	
DRUGS AND BIOLOGICALS	\$5,674,321.96	0.68%	
LEASE-RENT OF VEHICLES-TRAILERS-CYC	\$5,638,320.00	0.68%	
LOGISTICS SUPPORT SERVICES	\$7,652,611.42	0.92%	
OTHER ED & TRNG SVCS	\$18,710,054.65	2.25%	
COMMERCIAL ITEM PROCEDURES NOT USED	\$794,273,427.15	95.47%	



BLDGS & FAC / ADMIN & SVC BLDGS	\$21,000,000.00	2.52%
CABLE CORD WIRE ASSEMBLY - COMM EQ	\$6,530,385.00	0.78%
COMM SECURITY EQ & COMPS	\$21,862,016.00	2.63%
CONSTRUCT/OTHER INDUSTRIAL BLDGS	\$10,037,000.00	1.21%
CONTRUCT/ALL OTHER NON-BLDG FACS	\$13,760,057.00	1.65%
ELE ASSEMB-BDS CARDS-ASSOC HARDWARE	\$72,812,106.00	8.75%
ELEC COUNTERMEASURE & QUICK REAC EQ	\$75,000,000.00	9.01%
ENGINEERING AND TECHNICAL SERVICES	\$56,309,048.00	6.77%
FACILITIES OPERATIONS SUPPORT SVCS	\$169,602,028.75	20.39%
FIRE PROTECTION SERVICES	\$12,175,007.57	1.46%
HARZ REMV/CLEAN-UP/DISP/OP	\$11,714,772.00	1.41%
LAUNCHERS, GUIDED MISSILE	\$16,120,500.00	1.94%
LUBRICATION & FUEL DISPENSING EQ	\$140,671,605.00	16.91%
MAINT-REP OF AIRCRAFT COMPONENTS	\$6,770,916.00	0.81%
MAINT-REP-ALT/AIRPORT RUNWAYS	\$5,905,588.00	0.71%
MAINT-REP-ALT/DINING FACILITIES	\$15,000,000.00	1.80%
MAINT-REP-ALT/MISC BLDGS	\$45,000,000.00	5.41%
MISCL AIRCRAFT ACCESSORIES COMPS	\$15,538,153.90	1.87%
PROGRAM MANAGEMENT/SUPPORT SERVICES	\$32,111,171.93	3.86%
TRUCKS AND TRUCK TRACTORS, WHEELED	\$46,353,072.00	5.57%
Grand Total	\$831,948,735.18	100.00%

Approximately 95% of bundled and consolidated FY2010 DoN contracts, or approximately \$794.3 million, was reported as potentially eligible for commercial item procedures. Altogether, contracts reported in FPDS (2011) as non-applicable for commercial item procedures and contracts with requirements descriptions likely unsuitable for commercial item procedures amount to just under 19%, or almost



\$158 million, of the total value for bundled and consolidated FY2010 Navy Department contracts. Thus, data shows that over 81% of bundled and consolidated contract dollars, or over \$674 million, was eligible for awards using commercial item procedures. A stunning \$636 million of these commercial item procedure-eligible contracts was not awarded using commercial item procedures. This represents 76.51 % of total value of bundled and consolidated contracts, or 94% of total value of bundled and consolidated contracts eligible for commercial item procedures. Table 9 illustrates the use and non-use of commercial item procedures in bundled and consolidated Navy Department contracts.

Table 9. Summary Use of Commercial Item Procedures

USE OF COMMERCIAL ITEMS PROCEDURES IN BUNDLED AND CONSOLIDATED CONTRACTS			
CONTRACT TYPE Amount Share			
NON-COMMERCIAL ITEMS (ACTUAL OR LIKELY)	\$157,779,573.00	18.97%	
COMMERCIAL ITEMS	\$674,169,162.18	81.03%	
COMMERCIAL ITEM LIKELY – PROCEDURES NOT USED	\$636,493,854.15	76.51%	
COMMERCIAL ITEM – PROCEDURES USED	\$37,675,308.03	4.53%	
Grand Total	\$831,948,735.18	100.00%	

Finding 5. Bundling and Consolidation Seriously Hinders the DoN's Attempts to Pay Its Contractors for Performance (Use of Performance-Based Services Acquisitions)

Data suggests a stunningly negative detrimental impact of bundling and consolidation of service contracts on the use of Performance-Based Acquisitions (PBAs) per FAR subpart 37.6 (2010). Approximately \$431 million, or about 52% of the total FY2010 value of DoN bundled and consolidated contracts, was eligible for award using PBA terms. The remaining \$400 million was either construction or manufacturing contracts and was not eligible for use of PBAs. Over \$336 billion, or 78% of the value of bundled and consolidated contracts eligible for PBAs, was awarded without the use of PBA terms. Only 22%, or over \$95 million, was awarded

using PBA terms. In comparison, as of FY2008, OFPP established a goal for Performance-Based Acquisitions in 50% of eligible contracts (OFPP, 2007). This data suggests that as more service requirements were bundled and consolidated, DoN buyers may have simply lost control over performance objectives across the multiple lines of service requirements. Table 10 illustrates the use and non-use of Performance-Based Acquisitions in PBA-eligible bundled and consolidated contracts.

Table 10. Performance-based Acquisitions in Bundled/ Consolidated Contracts

PERFORMANCE-BASED ACQUISITION ELIGIBLE SERVICE CONTRACTS REPORTED AS BUNDLED OR CONSOLIDATED				
PBA USE Contracts Value PBA Share				
NO - SERVICE WHERE PBA IS NOT USED.	\$336,011,947.32	77.89%		
YES - SERVICE WHERE PBA IS USED.	\$95,374,628.00	22.11%		
Grand Total	\$431,386,575.32	100.00%		

Finding 6. Private Sector Best Practices Apparently Have a Minor Impact on Bundling/Consolidation

Data suggests that the impact of private-sector, performance-based best practices described in the Moore et al. (2008) study on bundling and consolidation is very small. Requirements with descriptions suitable for such best practices (e.g., system-of-systems engineering, Total Lifecycle Costs, or Performance-Based Logistics) account for under 10% of volume of bundled and consolidated contracts. Thus, it appears that 90% of DoN bundled and consolidated contract dollars was awarded in this way for reasons other than performance. Table 11 illustrates bundling and consolidation of Navy Department contracts due to private sector best practices.

Table 11. Bundling/Consolidation due to Private Sector
Best Practices

BUNDLING/CONSOLIDATION DUE TO PRIVATE SECTOR "BEST PRACTICES": SYSTEM-OF-SYSTEMS, TOTAL LIFECYCLE COST, OR PERFORMANCE-BASED LOGISTICS REQUIREMENTS			
Requirements	Value	Share	
MAINT-REP OF AIRCRAFT COMPONENTS	\$6,770,916.00	0.81%	
MISCL AIRCRAFT ACCESSORIES COMPS	\$15,538,153.90	1.87%	
LAUNCHERS, GUIDED MISSILE	\$16,120,500.00	1.94%	
LOGISTICS SUPPORT SERVICES	\$7,652,611.42	0.92%	
PROGRAM MANAGEMENT/SUPPORT SERVICES	\$32,111,171.93	3.86%	
Total	\$78,193,353.25	9.40%	

Finding 7. Consolidation and Bundling Hurts the U.S. Defense Industrial Base

Data shows that bundling and consolidation hurt not only U.S. small businesses but the U.S. defense industrial base as a whole. The negative impact on U.S. firms of all sizes is significant. Foreign-based businesses have received almost \$282 million, or over 33% of the total value of FY2010 bundled and consolidated contracts (although some of that money went to foreign subsidiaries of U.S. firms). Of that \$282 million, \$24 million, or 2.8% of the total value of bundled and consolidated contracts, was designated as foreign funded (non-Foreign Military Sales). Those foreign-funded contracts included \$15 million to an Italian firm under NAICS code for Industrial Building Construction work in Italy (at about 1.8% of the total value), as well as \$9 million to a Spanish firm for Commercial & Institutional Building Construction in Spain (at about 1% of the total value). However, descriptions and similar contracts awarded to the same recipients provide reasons for questioning the foreign funding designation. Other internationally sourced bundled and consolidated contracts include the following NAICS categories: Facilities Support Services at about \$181.8 million, or 21.85% of the total value of contracts, Industrial Building Construction at \$21 million, or 2.52% of the total value

of contracts; Commercial and Institutional Building Construction at \$60 million, or 7.21%; Port and Harbor Operations at approximately \$7.7 million, or 0.92%; and Passenger Car Leasing at over \$5.6 million, or 0.68%. As shown previously, in all of these NAICS categories, the average bundled and consolidated DoN contracts are within the capability of small businesses to perform. Thus, the explanation for these awards to foreign firms must be found in barriers to entry other than lack of performance capability, such as local licensing requirements. For instance, in Italy, offerors on U.S. projects were "required to submit a Societa Organismi D'Attestazione (SOA), a certification evidencing compliance with Italian law regarding the qualifications of companies competing for public works contracts. . . . An SOA certifies a company to be qualified in particular categories and classifications of work. . . . Submission of an SOA in the name of another contractor is permissible in certain circumstances under a system called avvalimento, authorized by Italian law" (GAO, 2010). Table 12 illustrates international sourcing of bundled and consolidated Navy Department contracts.

Table 12. International Sourcing of Bundled and Consolidated Contracts

International Contracts: Contractor Home Countries, Places of Performance, NAICS Descriptions	Contracts Value	Share
BAHRAIN	\$5,638,320.00	0.68%
BAHRAIN	\$5,638,320.00	0.68%
PASSENGER CAR LEASING	\$5,638,320.00	0.68%
ITALY	\$202,777,036.32	24.37%
ITALY	\$202,777,036.32	24.37%
FACILITIES SUPPORT SERVICES	\$181,777,036.32	21.85%
INDUSTRIAL BUILDING CONSTRUCTION	\$21,000,000.00	2.52%
MALTA	\$7,652,611.42	0.92%
MISSING	\$7,652,611.42	0.92%
PORT AND HARBOR OPERATIONS	\$7,652,611.42	0.92%
SPAIN	\$60,000,000.00	7.21%
SPAIN	\$60,000,000.00	7.21%
COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$60,000,000.00	7.21%
UNITED ARAB EMIRATES	\$5,905,588.00	0.71%
KENYA	\$5,905,588.00	0.71%
COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$5,905,588.00	0.71%
UNITED STATES	\$549,975,179.44	66.11%
Grand Total	\$831,948,735.18	100.00%

Finding 8. U.S. Taxpayers Were Likely Shortchanged on Expected Benefits from Bundling and Consolidation

As stated previously, Congress required federal agencies to obtain a 5% to 10% premium in "measurably substantial benefits" from contract bundling pursuant to Title 15, Section 632, or to prove "substantially exceeding" benefits from consolidation pursuant to Title 10, Section 2382. (U.S. Code 2010). It is DoD policy to "strongly encourage" its buyers "to quantify the benefits" regardless of whether a contract is bundled or consolidated (DoD OSBP, 2007). Thus, on over \$831 million in bundled and consolidated contracts, the expected benefits should have been

valued at over \$77.7 million. The projected value of expected benefits to the taxpayers from bundling and consolidation is illustrated in Table 13. I did not check agency files to examine whether these benefits have been documented. However, over 71% of the value of these benefits would have been expected from contracts that individual small firms could perform, and another over 12% of the value of these benefits would have been expected from contracts that teams of up to three small firms could perform. Without reviewing contract files, it is hard to assume that large firms provided the kind of benefits on over 83% of the value of bundled and consolidated contracts that small firms could not have also provided. A contrary outcome is much more plausible.

Table 13. Projected Value of Expected Benefits From Bundling and Consolidation

Small Business Performance Capability	Contracts Value	Contracts Share	Expected Benefits
Contracts Capable of Small Business Performance	\$591,018,049.60	71.04%	\$55,217,923.18
Contracts - Easy Small Business Teaming Capability	\$100,259,080.58	12.05%	\$9,367,054.38
Contracts - Difficult Small Business Teaming Capability	\$140,671,605.00	16.91%	\$13,142,735.46
Total	\$831,948,735.18	100.00%	\$77,727,713.02

V. Conclusion: Observations and Recommendations

The previous analysis of FY2010 DoN bundled and consolidated contracts casts serious doubts on whether the three key propositions advanced in recent studies of bundling and consolidations in the DoD are valid. As to the proposition that consolidation is not a major obstacle for small firms seeking defense contracts, data shows that commands that were responsible for two thirds of consolidation and bundling were anchors weighing down the DoN's achievement of small business goals. Data also shows that the SBA/OFPP methodology vastly understated the exclusionary impact of bundling and consolidation on small businesses. As to the proposition that small firms are legitimately excluded from consolidated contracts because they lack the capability to perform the military's needs, data shows that small firms were capable of performing the vast majority of such contract spending awarded by the DoN. Data also shows that only a small portion of consolidated requirements likely involved so-called private sector best practices. As to the proposition that consolidation and bundling benefit the defense acquisition system, data shows that bundling and consolidation seriously undermine fundamental principles such as paying for performance, competition, preference for use of commercial terms and suppliers, and support for the U.S. defense industrial base. With regard to impact on the U.S. defense industrial base, contract consolidation may have been driven by artificial barriers to entry created by foreign governments hosting DoN bases or ships. Finally, because small firms were found capable of performing most bundled or consolidated contracts, the expected value of benefits to the taxpayers from consolidation is highly questionable. Of course, further research would be necessary to determine how these data trends hold across time.

These findings suggest innovative new strategies that the SECNAV OSBP can employ to reduce bundling and consolidation. First, DoN small business performance could drastically improve should the SECNAV OSBP begin to annually

track top bundling and consolidation commands with additional oversight. Second, to enable easier finding of capable small firms, teams, or mentor-protégé arrangements, the SECNAV OSBP should create a simplified size standards-tocontracts value conversion chart where all size standards are expressed in dollars. Third, the SECNAV OSBP should amend the Navy-Marine Corps Acquisition Regulation Supplement (NMCARS) to ensure review by the Navy Competition Advocate General of most contracts that are both: (1) not competed and (2) are bundled or consolidated. Fourth, the SECNAV OSBP should amend the NMCARS to ban or strictly limit the ability of buying commands to choose not to use PBA terms and procedures on all bundled and consolidated services contracts. Fifth, the SECNAV OSBP should amend the NMCARS to strictly limit the choice not to use commercial item terms and procedures on eligible bundled or consolidated contracts. Sixth, the SECNAV OSBP should amend the NMCARS to require consideration of impact on U.S. defense industrial base when foreign firms receive bundled or consolidated contracts. Seventh, the SECNAV OSBP should review, revise, or enforce international trade and defense agreements to reduce trade barriers and help U.S. firms get work on the United States' own bases overseas. These strategies will not only result in greater small business participation but will also enable the DoN to achieve broad systemic improvements in defense acquisitions.

References

- Competition in Contracting Act of 1984, 10 U.S.C. § 2304 (2010).
- Department of Defense, Office of Small Business Programs (DoD OSBP). (2007).

 Benefit analysis guidebook: A reference to assist the Department of Defense Acquisition Strategy teams in performing a benefit analysis before consolidating or bundling contract requirements. Retrieved from:

 http://www.acq.osd.mil/osbp/docs/benefits_analysis_guidebook.pdf
- Defense Federal Acquisition Regulation Supplement (DFARS), 48 C.F.R. Section 207.170-3 (2009).
- Defense Federal Acquisition Regulation Supplement (DFARS), 48 C.F.R. subpart 219.71 (2010).
- Executive Office of the President, Office of Management & Budget, & Office of Federal Procurement Policy (OFPP). (2007). Memorandum for chief acquisition officers, senior procurement executives: FY 2008 performance-based acquisition performance goal. Retrieved from:

 http://www.whitehouse.gov/sites/default/files/omb/assets/procurement/pba_20_08_memo.pdf
- Executive Office of the President, Office of Management & Budget, & Office of Federal Procurement Policy (OFPP). (2002). Contract bundling: A strategy for increasing federal contacting opportunities. Retrieved from:

 http://www.whitehouse.gov/sites/default/files/omb/assets/procurement/contract
 t bundling oct2002.pdf
- Federal Acquisition Regulation (FAR), 48 C.F.R. ch. 1 (2010).
- Federal Procurement Data System-Next Generation. (2011). Department of the Navy bundled and consolidated contracts report for fiscal year 2010. Retrieved from: https://www.fpds.gov/fpdsng_cms/
- Government Accountability Office (GAO). (2010). *Bilfinger Berger AG Sede Secondaria Italiana* (B-402496). Washington, DC: GAO.
- General Accounting Office (GAO). (2004). Contract management: Impact of strategy to mitigate effects of contract bundling on small business is uncertain (GAO-04-454). Washington, DC: GAO.
- House Armed Services Committee (HASC). (2012). Challenges to doing business with the Department of Defense: Findings of the Panel on Business Challenges in the Defense Industry. Retrieved from:



- http://armedservices.house.gov/index.cfm/files/serve?File_id=f60b62cb-ce5d-44b7-a2aa-8b693487cd44
- Kidalov, M. (2011). Small business contracting in the United States and Europe: A comparative assessment. *Public Contract Law Journal*, *40*(2) 443-509.
- Manuel, K. (2010). Contract bundling under the Small Business Act: Existing law and proposed amendments (Report No. R-41133). Washington, DC: Congressional Research Service.
- Moore, N., Grammich, C., DaVanzo, J., Held, B., Coombs, J., & Mele, J. (2008). Enhancing Small Business Opportunities in the DOD (Technical Report 601-1). Santa Monica, CA: RAND.
- National Defense Authorization Act for Fiscal Year 2004, § 801, codified at 10 U.S.C. § 2382 (2010).
- Nerenz, T. (2007). Government contract bundling: Myths and mistaken identity. Defense Acquisition Review Journal, 46, 470–485, and Contract Bundling and Public Policy: A Case Study in Acquisition of Goods and Services by the U.S. Government (2006-07).
- Small Business Administration, Office of Advocacy (SBA Advocacy). (2002). The impact of contract bundling on small business, FY1992-FY2001: A report by Eagle Eye Publishers, Inc. Retrieved from:

 http://archive.sba.gov/advo/research/rs221tot.pdf
- Small Business Administration, Office of Advocacy (SBA Advocacy). (2000). The impact of contract bundling on small business, FY1992-FY1999: A report by Eagle Eye Publishers, Inc. Retrieved from:

 http://archive.sba.gov/advo/research/rs203tot.pdf
- Small Business Administration (SBA). (2011). FY2012 congressional budget justification and FY2010 annual performance report. Retrieved from: http://www.sba.gov/sites/default/files/FINAL%20FY%202012%20CBJ%20FY%202010%20APR 0.pdf
- Small Business Act, 15 U.S.C. §§ 631–657g (2010).

2003 - 2012 Sponsored Research Topics

Acquisition Management

- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- BCA: Contractor vs. Organic Growth
- Defense Industry Consolidation
- EU-US Defense Industrial Relationships
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Managing the Services Supply Chain
- MOSA Contracting Implications
- Portfolio Optimization via KVA + RO
- Private Military Sector
- Software Requirements for OA
- Spiral Development
- Strategy for Defense Acquisition Research
- The Software, Hardware Asset Reuse Enterprise (SHARE) repository

Contract Management

- Commodity Sourcing Strategies
- Contracting Government Procurement Functions
- Contractors in 21st-century Combat Zone
- Joint Contingency Contracting
- Model for Optimizing Contingency Contracting, Planning and Execution
- Navy Contract Writing Guide
- Past Performance in Source Selection
- Strategic Contingency Contracting
- Transforming DoD Contract Closeout
- USAF Energy Savings Performance Contracts
- USAF IT Commodity Council
- USMC Contingency Contracting



Financial Management

- Acquisitions via Leasing: MPS case
- Budget Scoring
- Budgeting for Capabilities-based Planning
- Capital Budgeting for the DoD
- Energy Saving Contracts/DoD Mobile Assets
- Financing DoD Budget via PPPs
- Lessons from Private Sector Capital Budgeting for DoD Acquisition Budgeting Reform
- PPPs and Government Financing
- ROI of Information Warfare Systems
- Special Termination Liability in MDAPs
- Strategic Sourcing
- Transaction Cost Economics (TCE) to Improve Cost Estimates

Human Resources

- Indefinite Reenlistment
- Individual Augmentation
- Learning Management Systems
- Moral Conduct Waivers and First-term Attrition
- Retention
- The Navy's Selective Reenlistment Bonus (SRB) Management System
- Tuition Assistance

Logistics Management

- Analysis of LAV Depot Maintenance
- Army LOG MOD
- ASDS Product Support Analysis
- Cold-chain Logistics
- Contractors Supporting Military Operations
- Diffusion/Variability on Vendor Performance Evaluation
- Evolutionary Acquisition
- Lean Six Sigma to Reduce Costs and Improve Readiness



- Naval Aviation Maintenance and Process Improvement (2)
- Optimizing CIWS Lifecycle Support (LCS)
- Outsourcing the Pearl Harbor MK-48 Intermediate Maintenance Activity
- Pallet Management System
- PBL (4)
- Privatization-NOSL/NAWCI
- RFID (6)
- Risk Analysis for Performance-based Logistics
- R-TOC AEGIS Microwave Power Tubes
- Sense-and-Respond Logistics Network
- Strategic Sourcing

Program Management

- Building Collaborative Capacity
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to AEGIS and SSDS
- Managing the Service Supply Chain
- Measuring Uncertainty in Earned Value
- Organizational Modeling and Simulation
- Public-Private Partnership
- Terminating Your Own Program
- Utilizing Collaborative and Three-dimensional Imaging Technology

A complete listing and electronic copies of published research are available on our website: www.acquisitionresearch.net

THIS PAGE INTENTIONALLY LEFT BLANK





ACQUISITION RESEARCH PROGRAM GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY NAVAL POSTGRADUATE SCHOOL 555 DYER ROAD, INGERSOLL HALL MONTEREY, CALIFORNIA 93943