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Report to the Chairman, Subcommittee  
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Appropriations, U.S. Senate

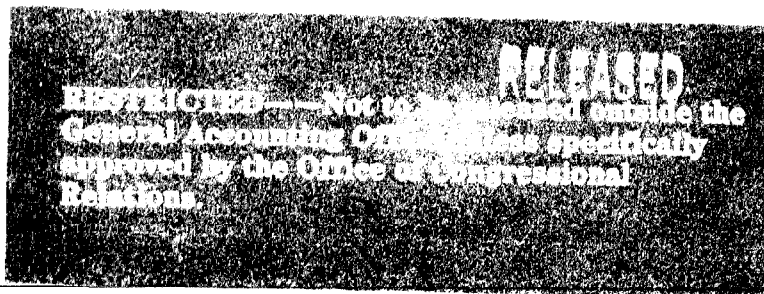
August 1991

# ADP CONSOLIDATION

## Defense Logistics Agency's Implementation Approach Is Not Justified



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**Information Management and  
Technology Division**

B-243182

August 6, 1991

The Honorable Daniel K. Inouye  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
U.S. Senate

Dear Mr. Chairman:

This report responds to your request that we review the Defense Logistics Agency's (DLA) regional information processing center consolidation. As agreed, we assessed whether DLA adequately justified the decision to consolidate its 23 automated data processing (ADP) facilities into six regional processing centers. Appendix I details our objectives, scope, and methodology.

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**Results in Brief**

DLA's decision to consolidate its 23 ADP facilities into six regional information processing centers was not adequately justified. The decision was made without an economic analysis of other competing alternative solutions. Furthermore, the cost and benefits analysis of the six-site alternative was incomplete and not adequately supported. Consequently, DLA does not know if the alternative it is implementing is the most cost effective. DLA needs to evaluate viable alternatives before continuing its consolidation.

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**Background**

DLA is a worldwide Defense military logistics organization whose major missions are to provide supplies (e.g., food, clothing, and equipment), administer contracts, and dispose of property for the military services and other Defense agencies.

DLA is highly dependent on automated information systems to accomplish its missions. The agency's current ADP environment consists primarily of decentralized, local data processing installations located throughout the United States.

DLA's Office of Telecommunications and Information Systems is responsible for developing and implementing plans and programs for the agency's information systems and resources. In an effort to improve operations, this office is consolidating 23 of the agency's data processing installations into six information processing centers. These centers will be located in Columbus, Ohio; Ogden, Utah; Dayton, Ohio; Battle Creek,

Michigan; Philadelphia, Pennsylvania; and Richmond, Virginia. According to DLA officials, consolidation will make computer operations more cost efficient, and will respond to Defense directives to streamline management and operations.<sup>1</sup>

From fiscal years 1989 through 1991 DLA obligated \$47.5 million to establish the first of these consolidated information processing centers in Columbus, Ohio. DLA designated this center to be a model for establishing the remaining five centers, which are planned for completion by the end of fiscal year 1993. The agency estimated that consolidating its remaining major automated information systems at five additional centers would require an investment of \$26.7 million for fiscal years 1991 through 1993. According to DLA's estimates, the six-site consolidation would reduce agency staff requirements by 606 people, for a cost savings of \$206 million over a 10-year period beginning in 1991.

In September 1990, DLA's Office of Telecommunications and Information Systems established a consolidation project office and appointed a senior program manager to oversee the consolidation.

## DLA's Decision to Consolidate Was Not Based on an Economic Analysis

DLA has not adequately justified the decision to consolidate its 23 ADP facilities into six information processing centers because it did not perform an economic analysis.<sup>2</sup> As a result, the agency is not sure that the selected six-site configuration will be the most cost effective.

Defense policy states that when developing and justifying resource requirements, an economic analysis is required for proposals that involve a choice or trade-off between two or more alternatives, even when one of the alternatives is to maintain the status quo. By developing and analyzing several strategies, an agency can avoid prematurely selecting one approach that may not offer the best costs and benefits.

In 1985 and 1989, DLA performed studies to determine if consolidation of its decentralized ADP operations and facilities would be cost effective and efficient. These studies provided the agency with assurances that

<sup>1</sup>In July 1989, the Department of Defense completed a Defense Management Review that identified various initiatives that would achieve substantial dollar savings by streamlining management and operations across Defense and its components.

<sup>2</sup>Department of Defense Instruction 7041.3, Economic Analysis and Program Evaluation for Resource Management, describes an economic analysis as a systematic approach to choosing how best to employ scarce resources. The analysis identifies the benefits and costs of alternative programs, missions, and functions and/or alternative ways of accomplishing a given program.

consolidation would be cost effective, but the studies did not develop complete cost and benefit data for alternative configurations. Specifically, Advanced Technology, Inc., recommended in a draft report that DLA realign its ADP operations and suggested that eight sites would probably be the most cost-effective alternative to consider. Also in a draft report, Coopers & Lybrand stated that a configuration of two to four sites would probably yield the most return on investment, but the agency must first conduct an economic analysis and compare this with the current 23-site configuration. Further, in 1990, DLA's own Information Resources Management (IRM) Review Task Group recommended that the agency consolidate its ADP resources into five information system centers and perform an economic analysis before proceeding with implementation.

However, DLA did not follow the contractors' or the Task Group's recommendations, nor did it perform an economic analysis of alternatives before the decision was made to consolidate into six sites. Instead, the official responsible for the consolidation at the time of the agency's IRM Review Task Group study said he combined some of the data from the Task Group study with data from the Coopers & Lybrand's draft study to prepare a separate cost and benefit analysis supporting a six-site consolidation. This analysis was used to brief the DLA Director in gaining approval for the concept of a six-site information processing center configuration in February 1990.

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### Cost and Benefit Analysis of Six-Site Option Was Inadequate

DLA's justification for a six-site consolidation was based on a cost and benefit analysis that contained incomplete and unverifiable data.

The analysis depicts current costs for 23 sites versus the proposed costs for the six-site consolidation over a 10-year period ending in fiscal year 2000 (see app. II). The analysis lists six cost categories—hardware, software, telecommunications, facilities, personnel, and transition. Both our review of the analysis and the results of interviews with agency officials responsible for developing the analysis indicate that it is incomplete. For example:

- Facilities' costs did not include operating costs (e.g., air conditioning, electricity, building leases) for either the 23 sites or the six-site alternative. According to DLA officials, these data were not readily available. The only facilities costs included in the analysis were \$14.1 million for planned improvements to the 23 sites during 1991 and 1992. DLA

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assumed it would spend the same amount of money on the planned improvements to the six sites.

- Transition costs included only the cost of moving personnel, and omitted costs for moving equipment from the 23 sites and installing it at the six consolidated sites. DLA officials said these data were omitted because DLA had not prepared a transition plan at the time the analysis was performed.
- Hardware, software, and telecommunications costs for the last 7 years of the consolidation (fiscal years 1994 through 2000) are listed as the same for both alternatives. In our opinion, it is not reasonable to assume that these costs would remain unchanged if the 23 sites were reduced to 6 sites.

The results of DLA's analysis were also not supported by any verifiable data sources. We requested supporting documents and other information to verify DLA's cost and benefit analysis results for the selected six-site configuration. Agency officials could not provide it.

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## Planned Economic Analysis Will Not Justify Six-Site Decision

In November 1990, DLA's new program manager requested that an economic analysis be done prior to proceeding with implementation of the remaining five consolidation centers. This request was not acted on. In March 1991, however, senior DLA officials decided to conduct an economic analysis using its six-site alternative as the baseline and comparing this to consolidation alternatives of fewer than six sites.

The official responsible for the economic analysis said it would be used in the future to decide whether to further consolidate the agency's ADP processing facilities to less than six sites. The study will not, however, validate the operating costs and benefits of its current environment, nor will it consider any alternatives larger than six sites. DLA has substantially completed one consolidated processing center, and is in the process of implementing the remaining five centers. In order to make an informed decision, DLA's economic analysis should show the costs and benefits of the current environment contrasted with other alternatives, such as the consolidation of existing sites into four, six, or eight processing centers.

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## Conclusions

DLA's decision to consolidate its ADP resources into six sites was made without adequate justification; accordingly, it may not be the most cost-effective alternative for DLA to pursue. Making such a decision requires a thorough analysis of alternatives, based upon complete and accurate

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cost and benefit data for each alternative, including the current environment. DLA does not have such an analysis.

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## Recommendations

We recommend that the Secretary of Defense instruct the Director, Defense Logistics Agency, to stop all implementing actions for the remaining five sites until a thorough economic analysis, which includes the current environment and viable alternatives, is completed and a decision is made on the most cost-effective alternative for consolidation.

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## Agency Comments and Our Evaluation

We obtained official oral comments from the Department of Defense on a draft of this report and have included those comments where appropriate. In summary, Defense officials agreed with the facts presented in the report and also agreed that errors and inconsistencies were made in DLA's cost and benefit analysis used to support the agency's decision to consolidate to six sites. However, they stated that enough information was provided in this analysis and other programmatic studies to make an informed decision on consolidating to six sites. Defense officials did not concur with our recommendation to stop all implementing actions on the remaining five sites until an economic analysis, which includes the current environment (i.e., the current baseline) is completed and a new consolidation decision is made. They stated that their analyses show significant savings can be achieved by consolidating within a range of two to six sites, and that the consolidation has already been approved by the Deputy Secretary of Defense. They also said it would be very difficult to conduct an economic analysis which would identify the baseline costs and benefits of the current number of sites because consolidation is already in process. In their view, it is imperative that consolidation efforts continue in order to assure effective support for current Defense Management Review initiatives for reducing Defense costs. The officials stated that DLA was currently performing an economic analysis to determine if consolidating to less than six sites would be cost effective in the future. However, they said this analysis would use estimated costs and benefits for six sites as the baseline.

We disagree that DLA's three earlier studies support the decision to consolidate to six sites. These studies identified anywhere from two to eight sites as "probably" being the most cost effective number of sites. Further, the studies recommended completing an economic analysis, including consideration of all viable alternatives, prior to making a decision on the exact number of sites that should result from consolidating the 23 existing sites. However, DLA never performed this analysis.

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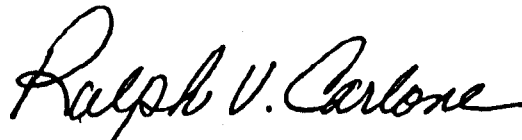
Instead, DLA officials said that they refined the second study with updated data to create a cost and benefit analysis supporting the six-site alternative—an analysis that we found contains errors and inconsistencies and for which supporting data are not verifiable. In our view, sound management decisions should not be based on such analyses. Further, we believe that the Defense Management Review decision to accept DLA's consolidation plans would be more credible if supported by current Defense policy, which requires Defense agencies to perform thorough economic analyses prior to making decisions on large, resource-intense programs such as DLA's consolidation. Finally, while we are encouraged that DLA has decided to perform an economic analysis to study consolidating to less than six sites, we believe the analysis should use the costs and benefits of maintaining DLA's current operational sites as the baseline and should not presume that six or fewer sites are all that warrant consideration. We also continue to believe that DLA should halt further implementation of its consolidation until this study is complete and a more informed decision is made.

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As arranged with your office, unless you publicly release the contents of this report earlier, we plan no further distribution until 30 days after the date of this letter. At that time, we will send copies to the appropriate House and Senate committees, and other interested parties.

This report was prepared under the direction of Samuel W. Bowlin, Director, Defense and Security Information Systems, who can be reached at (202)275-4649. Other major contributors are listed in appendix III.

Sincerely yours,



Ralph V. Carlone  
Assistant Comptroller General





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## Abbreviations

ADP	automated data processing
DLA	Defense Logistics Agency
GAO	U.S. General Accounting Office
IMTEC	Information Management and Technology Division
IRM	Information Resources Management



# Objectives, Scope, and Methodology

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In July 1990 the Chairman, Senate Committee on Appropriations, Subcommittee on Defense, asked us to review DLA's information processing center consolidation and expected costs and benefits to determine whether DLA adequately justified the decision to consolidate its 23 ADP facilities into six regional processing centers. Specifically, we assessed the information developed by DLA officials to justify the decision to consolidate to six sites and whether the agency validated the project's cost and benefit estimates.

To determine whether the agency validated the project's cost and benefit estimates, we

- interviewed officials from DLA's Office of Telecommunications and Information Systems, responsible for managing ADP resources and the consolidation, concerning implementation of the remaining five information processing centers; and
- interviewed officials from the office of the DLA Comptroller and the consolidation program manager's office, concerning the validity and support for cost and benefit estimates contained in the agency's justification documentation, and the decisions related to the consolidation program manager's request for an economic analysis; and
- assessed whether DLA's cost and benefit estimates were developed in accordance with Defense Instruction 7041.3, Economic Analysis and Program Evaluation for Resource Management.

Our review was conducted between August 1990 and May 1991 at DLA Headquarters, Cameron Station, Alexandria, Virginia, and was performed in accordance with generally accepted government auditing standards. We obtained official oral comments on a draft of this report from the Offices of the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, and the Defense Comptroller's office. Their comments are included as appropriate.

# ADP/Telecommunications Consolidation Cost Factors

Dollars in thousands							
Cost category	1991	1992	1993	1994	1995	1996-00	Total
Hardware:							
current	\$8,166	\$16,334	\$16,334	\$9,341	\$7,147	\$68,939	<b>\$126,261</b>
proposed	12,366	21,334	18,334	9,341	7,147	68,939	<b>137,461</b>
Software:							
current	5,470	3,180	2,498	2,266	2,266	10,182	<b>25,862</b>
proposed	5,970	5,680	2,998	2,266	2,266	10,182	<b>29,362</b>
Telecommunications:							
current	5,600	5,600	5,600	5,600	5,600	28,000	<b>56,000</b>
proposed	6,600	10,100	7,100	5,600	5,600	28,000	<b>63,000</b>
Facilities:							
current	13,000	1,100	a	a	a	a	<b>14,100</b>
proposed	13,000	1,100	a	a	a	a	<b>14,100</b>
Personnel:							
current	166,080	166,080	166,080	166,080	166,080	830,400	<b>1,660,800</b>
proposed	166,080	158,380	148,080	140,880	135,780	678,900	<b>1,428,100</b>
Transition							
current	a	a	a	a	a	a	<b>0</b>
proposed	1,000	2,000	2,000	a	a	a	<b>5,000</b>
Total cost:							
current	\$198,316	\$192,294	\$190,512	\$183,287	\$181,093	\$937,521	<b>\$1,883,023</b>
proposed	205,016	198,594	178,512	158,087	150,793	786,021	<b>1,677,023</b>
Savings (loss)	(6,700)	(6,300)	12,000	25,200	30,300	151,500	<b>206,000</b>
	(6,700)	(13,000)	(1,000)	24,200	54,500	206,000	

<sup>a</sup>Figures were not available.

Source: This table was taken directly from the information processing center consolidation package that was presented to the DLA Director for approval in February 1990.

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# Major Contributors to This Report

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