INPUT

MARKET ACTION PROJECT

The Impact of Procurement Reform on the Federal IT Market

Defense Agencies

Electronic Government Program

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Defense Agencies

INPUT®

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The Impact of Procurement Reform on the Federal IT Market

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Abstract

This report, a multi-client market action project, *The Impact of Procurement Reform on the Federal IT Market* answers the all important question of how federal agencies will buy information technology in the wake of procurement reform. These reforms have changed the way the government buys and will buy over $128 billion in IT related purchases from 1997-2002.

The Federal Acquisition Reform Act of 1996 (FARA) and the Information Technology Management Reform Act of 1996 (ITMRA) ushered in a new era of information technology acquisition and management in the federal government. New rules and initiatives have dramatically changed the way the government buys information technology. With all of the options available for procuring information technology, how will federal agencies buy?

INPUT's market action project, *The Impact of Procurement Reform on the Federal IT Market,* answers this all important question. Through extensive interviews with both technology and policy executives and other IRM personnel in the major IT purchasing agencies in the U. S. government, INPUT has uncovered the critical information companies need to assure success in the new government marketplace.

This report provides strategic intelligence and trends within specific subject areas by 22 major agencies in both the civilian and defense sectors. The major procurement analysis by agency or department included in this report are:

1. Reaction to Procurement Reform
2. Procurement Preferences by Product and Service
3. Procurement Process
4. Leasing

5. Outsourcing
6. EDI and Electronic Commerce
7. Vendor Past Performance
8. Anticipated Credit Card Usage
9. Budget Pressures and BPR
10. Preferred Sources of IT & Telecom Product Information
11. Top Agency IT Contractors
12. Top Agency Telecom Contractors
13. Major Contracts
14. Current Opportunities

As the largest single user of information technology products and services in the world, the U.S. federal government exerts great influence on IT markets. Civilian and defense agencies and military services together look to aspects of the recent procurement reform as enablers of improved acquisition and performance of computers and related services. Their collective implementation of procurement reform influences the development and movement of products and services throughout agencies as well as in related commercial markets.

Procurement reform is being implemented by each agency under initiatives specific to the agencies, depending on organizational interpretations of congressional intent as well as their own mission obligations. Every business entity within government is aggressively taking advantage of new capabilities and relaxed oversight identified broadly under reform.

Acquisition reform influences a broad spectrum of government activities, from very specific needs to improve business processes to supporting "service to the citizen." The reform of information technology acquisition as a linchpin to all program support is seen as necessary to improve performance and to reduce costs.

Some of the reaction to reform and specific initiatives follow:

- Requirements must specify more accurately the needs for effective program execution
- Component operational capabilities must achieve lower cost
- IT should be leveraged to promote increased work productivity
- Quality of products and services to customers must be improved
- Innovation in the development of products and services should be pursued.

The government as a whole has taken different approaches in revising its acquisition infrastructure. These approaches are influenced by different mission requirements:

- Adopting a business process approach to assure maximum effectiveness, economy, efficiency and accountability
- Improving decision-making processes and providing continuous feedback to customers and stakeholders
- Implementing electronic commerce/electronic data interchange to improve transaction-based environments
- Using Internet for posting business objectives
- Advancing partnerships with industry
- Emphasizing business needs to drive procurement decisions and not *vice versa*
- Adjusting strategic planning to define organizational requirements
- Identifying performance specifications rather than manufacturing specifications
- Promoting strategic interoperability policies.

Reform is expected to facilitate improvements in performance. Program progress can be measured by performance metrics, and most agencies are currently developing performance metrics for their programs. Program officials have been empowered to use their own judgment in making business decisions, but they are being held increasingly responsible for these decisions. An expected result is shortened development cycles and reductions in overhead and life-cycle costs.

In this report INPUT also forecasts information technology expenditures by agency based on spending in obligations as reported to the Office of Management and Budget. To estimate current and potential future agency spending by specific professional services delivery modes, INPUT analyzes historical spending patterns by agency and considers existing and projected market trends that may affect spending on information technology. Based on these analyses, comprehensive forecasts and program trends are provided for those agencies — both civilian and defense — with leading expenditures on total IT and specific submarkets.

In this report, INPUT also looks at the agency perceptions of the advantages and disadvantages of vendor-provided services along with preferred vendor characteristics, including vendor type, vendor qualifications and vendor performance. In addition, INPUT reports on the agency suggestions on what steps vendors can take to make their services more valuable.

This report analyzes trends, issues, agency perceptions and the competitive environment, and it gives insights that will help vendors maintain the competitive edge that will propel them into the twenty-first century.

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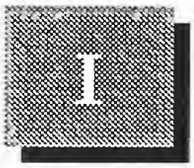


Introduction

The Impact of Procurement Reform on the Federal IT Market is produced by INPUT as part of the Electronic Government (EG) program. This multi-client market action project answers the all-important question of how will federal agencies buy in the reformed procurement environment. These reforms have changed the way the government buys and will buy over $128 billion in IT related purchases from 1997-2002.

Through extensive interviews with both technology and policy executives and other IRM personnel in the major IT purchasing agencies in the U. S. government, INPUT has uncovered the critical information companies need to assure success in the new government marketplace.

INPUT initiated the Electronic Government program for information industry clients in the federal government market. Since the program began, INPUT annually asks interested clients to identify specific business areas, service modes and issues they consider essential for their federal market planning. Their suggestions have been incorporated into the EG program and have led to the selection of this market action report as an appropriate vehicle for providing the information.

During calendar year 1997 under EG, INPUT will continue the program initiated in 1993 to publish profiles of federal agencies. These profiles provide an executive summary of information technology (IT) activities and trends in a federal agency, including mission, organization, program activities, program budget, IT budget, IT contract opportunities, top contractors and contracts, as well as issues.

The companion Electronic Government IMPACT program focuses on contract opportunities for significant new or recompete business potential for INPUT's vendor clients. This program was used for the opportunities section of the agency analysis. The Procurement Analysis Report (PAR) database, accessible via the Internet or in a desktop version, provides more than 500 of these opportunities.

A
Scope

The Federal Acquisition Reform Act of 1996 (FARA) and the Information Technology Management Reform Act of 1996 (ITMRA) ushered in a new era of acquiring and managing information technology in the federal government. New rules and initiatives have dramatically changed the way the government buys information technology. With all of the options available for procuring information technology, how will federal agencies buy?

INPUT's market action project, *The Impact of Procurement Reform on the Federal IT Market,* answers this all important question. INPUT has uncovered the critical information companies need to assure success in the coming fiscal years.

This report covers only the U.S. federal government information technology market and addresses only those expenditures expected of the executive branch agencies. INPUT bases its analysis on actual outlays from FY 1987 through FY 1995, the federal estimate for FY 1997 and the federal forecast for FY 1998. Note that embedded computer systems are not included in our data. IT outlays for classified national defense and intelligence programs are also not included.

This report provides strategic intelligence and trends within specific subject areas by major agency. The major procurement analyses by agency or department included in this report are:

1. Reaction to Procurement Reform
2. Procurement Preferences by Product and Service
3. Procurement Process
4. Leasing
5. Outsourcing
6. EDI and Electronic Commerce
7. Vendor Past Performance
8. Anticipated Credit Card Usage
9. Budget Pressures and BPR
10. Preferred Sources of IT & Telecom Product Information
11. Top Agency IT Contractors
12. Top Agency Telecom Contractors
13. Major Contracts
14. Current Opportunities

Procurement analysis for the following agencies are covered in this report:

A. Department of Agriculture
B. Department of the Air Force
C. Department of the Army
D. Department of Commerce
E. Department of Defense
F. Department of Education
G. Department of Energy
H. Environmental Protection Agency
I. General Services Administration
J. Department of Health and Human Services
K. Department of Housing and Urban Development
L. Department of the Interior
M. Department of Justice
N. Department of Labor
O. National Aeronautics and Space Administration
P. Department of the Navy
Q. United States Postal Service
R. Social Security Administration
S. Department of State
T. Department of Transportation
U. Department of the Treasury
V. Department of Veterans Affairs

The following market segments are forecasted for 35 federal departments and agencies:

1. Computer Systems
2. Software Products
3. Communications/Network Services
4. Processing Services
5. Systems Integration Professional Services
6. Professional Services
7. Systems Operations/Outsourcing
8. Computer Maintenance
9. Systems Integration

Funding information in this report is rounded to the nearest $1 million, unless otherwise noted. In general, the funding information is initially derived from plans and budget requests not yet approved by the Congress nor confirmed by the Office of Management and Budget (OMB) and may change even after approval. Such changes may be dictated by the Administration or subsequent congressional action.

B
Methodology

In developing the specification for this research project INPUT did the following:

- Consulted with each sponsor to determine its unique interests which were used to shape the survey instrument and final project deliverables.
- Developed and tested the survey instruments.
- Conducted comprehensive interviews with both IRMs and CIOs in each of the targeted agencies to establish technology as well as policy positions.
- Performed data tabulations and analysis of the results.
- Distributed the work in process via the Internet to our sponsor clients.
- Prepared project results in report format to deliver to sponsors.

For the forecasted section of the report, INPUT analyzed the Office of Management and Budget (OMB)/General Services Administration (GSA)/National Institute of Standards and Technology (NIST) documents, the Budget of the United States Government, OMB Circular A-130 information technology plans and OMB Circular A-11, Exhibit 43 information technology budget requests.

Because agencies are not required to submit supporting data for plans to OMB, INPUT requested additional documentation on their OMB A-11 submissions and long-range information resource management plans and reviewed the documentation for guidance on the forecast. Interviews with agency policy and procurement officials were conducted to identify technology trends, policy changes and issues associated with plans to improve federal information resources and the acquisition process. The section on market trends was prepared after the interviews and research on the current information technology budget submission were completed.

The INPUT forecast of five fiscal years' growth by service mode is based on the OMB Circular A-11, Exhibit 43 budget requests and off-budget plans covering various federal funds and public corporations.

Most economic observers now agree that growth should stabilize at around 2%. There is also general agreement that the economy seems to be in a minimal expansion mode, and that the long term risk of recession in 1998 is low.

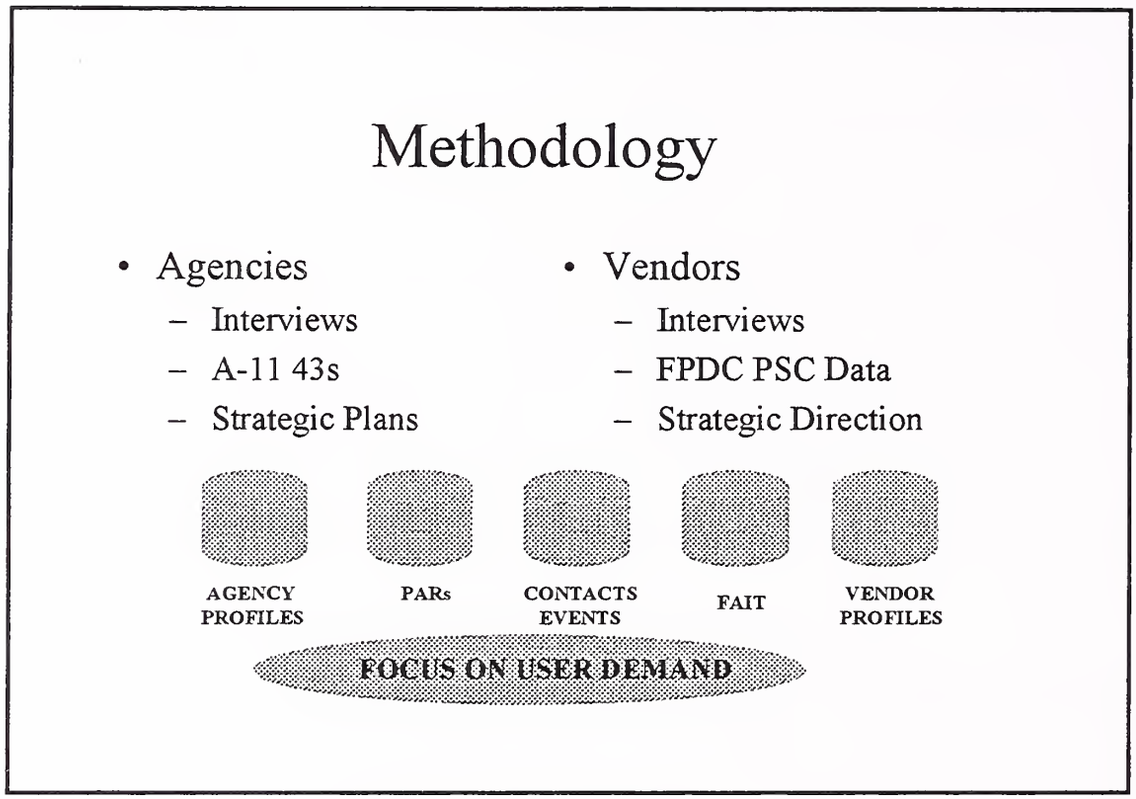
INPUT segments the market, modeling the way federal users buy products and services, into eight categories with 27 subcategories. This report focuses the total federal forecast. The following are the eight categories:

- Systems Software Products - mainframe, minicomputer, workstation/PC
- Applications Software Products - mainframe, minicomputer, workstation/PC
- Turnkey Systems - equipment, software products, professional services
- Professional Services - consulting, BPR, education/training, software development maintenance
- Systems Integration - equipment, software products, professional services, other
- Outsourcing - platform operations, applications operations, desktop services, network management, applications management
- Processing Services - transaction, utility, other
- Network-Based Services - electronic information services, network applications.

As shown in Exhibit I-1, both agency and industry perspectives are gathered to create a government user demand profile:

- INPUT pulls federal budget information from federal agency submissions made to the OMB. Agency strategic IT plans are gathered. Key agency information resource management (IRM) officers are interviewed for insights into future plans.
- INPUT gathers procurement data on 208 product/service codes (PSC) from the GSA Federal Procurement Data Center (FPDC) — federal agencies are required to report procurement data, including the contract obligation amount, on procurements exceeding $25,000.

Exhibit I-1



C
Report Organization

In addition to this introduction, this report has been organized as follows:

II Executive Summary

III Analysis of New Rules of Procurement

IV Procurement Analysis by Agency/Department

V Five Year Agency/Department Forecast

Appendices:

A INPUT Definitions

B Glossary of Federal Acronyms

C Survey Instruments

D
Related INPUT Reports

Related current reports from the Electronic Government program of interest to the reader are as follows:

Current Federal Reports

- Federal Information Systems and Services Market, 1996–2001
- Federal Professional Services Market, 1996-2001
- Financial Management Systems Market, 1996–2001
- Federal Telecommunications Market, 1996–2001
- Federal Imaging Market — 1996
- Federal IT Procurement Program, Procurement Analysis Reports
- Federal Document Management Market — 1995
- Federal Computer Security Market, 1995–2000
- Federal Wireless Technology Market, 1995–2000
- Federal Electronic Commerce/EDI Market
- Client/Server Trends in the Federal Market — 1994
- Business Process Re-engineering in the Federal Government
- Federal E-mail Market — 1994
- Federal High-Performance Computing, 1994–1999
- Geographical Distribution of Federal IT Spending.

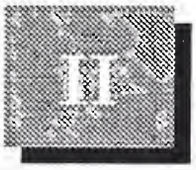
Future Federal Reports

- Federal Information Systems and Services Market, 1997–2002
- Benchmarking of Government Systems Integrators
- Y2000 Preparedness and its Impact on the Federal Government
- The Impact of Network Computers on the Federal Market
- Federal Agencies Market Briefs and IT Forecasts

Commercial Reports

In addition to the federal reports listed, the following commercial reports cover various aspects of the research conducted for this project. Commercial reports are available from a wide range of program choices including Electronic Commerce, Electronic Banking, Enterprise Applications Solutions, Internet/Intranet Technologies and Solutions, Customer Services and Support, Operational Services, and IT Vendor Analysis.

- Customer Satisfaction with Systems Integration Vendors
- Impact of the Internet on Systems Integration and Professional Services Markets
- Pricing and Marketing of Professional Services
- Strategies for Successful Alliances
- Opportunities for Outsourcing Supply Chain Management
- Impact of the Internet on Outsourcing and Processing Services
- Benchmarking of U. S. Outsourcing Service Providers
- Outsourcing Vendor Performance Analysis
- Outsourcing Services Competitive Analysis
- Desktop Services Opportunities for the U.S. - 1997
- Evaluation of Internet Integration Opportunities
- Evaluation of SAP Service Providers in the U.S. - 1997
- IT Vendor Analysis Program
- Electronic Commerce and Enterprise Application Integration



Executive Summary: Total Federal Government

A
Federal Government Overview

IT investments account for 6% to10% of agency operating budgets. This percentage is increasing slightly each year due to decreasing program spending and increasing use of IT in supporting improved program performance. Naturally, interest is high among agency planners in the impacts on IT acquisition resulting from procurement and management reform legislation.

Laws, Guidance & References

Changes in the IT procurement process respond to a number of recent laws and regulations. Some of these laws specifically target IT procurement, while others affect it indirectly. What follows is a comprehensive list of legislation, guidance and references affecting the IT procurement process:

- Clinger-Cohen Act — (includes Information Technology Management Reform Act of 1996 and Federal Acquisition Reform Act of 1996)
- PRA — Paperwork Reduction Act of 1995
- GPRA — Government Performance and Results Act of 1993
- ITMRA — Information Technology Management Reform Act of 1996 (now part of Clinger-Cohen)
- FASA — Federal Acquisition Streamlining Act of 1994
- FARA — Federal Acquisition Reform Act of 1996 (Now part of Clinger-Cohen)
- Executive Order 13011 — Federal Information Technology
- OMB Circular A-11, Part 2 — Preparation and Submission of Strategic Plans
- OMB Circular A-11, Part 3 — Planning, Budgeting and Acquisition of Fixed Assets
- OMB Circular A-130 — Management of Federal Information Resources

- OMB Memorandum from Franklin D. Raines "Interagency Support for Information Technology"
- OMB Memorandum from Franklin D. Raines "Multiagency Contracts Under the Information Technology Management Reform Act of 1996"
- OMB Memorandum from Franklin D. Raines "Funding Information Systems Investments"
- OMB Memorandum from Alice C. Rivlin "Implementation of the Information Technology Management Reform Act of 1996"
- United States General Accounting Office — Information Technology Investment Guide
- An Analytical Framework for Capital Planning and Investment Control for Information Technology
- Office of Management and Budget's Evaluating Information Technology Investments: A Practical Guide
- Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs
- OMB Circular No. A-94

1. Reaction to Reform and Specific Initiatives

As the largest single user of information technology products and services in the world, the U.S. federal government exerts great influence on its markets. Civilian and defense agencies and military services together look to aspects of the recent procurement reform as enablers of improved acquisition and performance of computers and related services. Their collective implementation of procurement reform influences the development and movement of products and services throughout agencies as well as in related commercial markets.

Procurement reform is being implemented by each agency under initiatives specific to agencies, depending on organizational interpretations of congressional intent as well as their own mission obligations. Every business entity within government is aggressively taking advantage of new capabilities and relaxed oversight identified broadly under reform. Although individual officials may feel very positively that reforms are moving in the proper direction, some drawbacks are possible, such as a streamlined workforce--a decrease in employment levels. Some believe that reform has merely provided statute to cover behavior that already existed.

Acquisition reform influences a broad spectrum of government activities, from very specific needs to improve business processes to supporting "service to the citizen." The reform of information technology acquisition as a linchpin to all program support is seen as necessary to improve performance and to reduce costs.

A number of reform issues were cited by agencies as critical to more effective performance:

- Requirements must specify more accurately the needs for effective program execution
- Component operational capabilities must achieve lower cost
- IT should be leveraged to promote increased work productivity
- Quality of products and services to customers must be improved
- Innovation in the development of products and services should be pursued.

Procurement reform is seen as an enabler. Many government organizations operate in environments that impose multiple, often contradictory tensions that affect procurement strategies. These tensions affect how IT can be justified and under what circumstances IT solutions can be most effective. Many trade-offs were cited by agency officials as concerns in how reform is implemented. Major trade-offs include:

- Between cost and performance
- Between systems that support tactical operations and those that support strategic business processes
- Between solutions that address privacy and secrecy requirements and those that support openness and interoperability
- Process *versus* results.

The government as a whole has taken different approaches in revising its acquisition infrastructure. These approaches are influenced by different mission requirements:

- Adopting a business process approach to assure maximum effectiveness, economy, efficiency and accountability
- Improving decision-making processes and providing continuous feedback to customers and stakeholders
- Implementing electronic commerce/electronic data interchange to improve transaction-based environments
- Using Internet for posting business objectives
- Advancing partnerships with industry
- Emphasizing business needs to drive procurement decisions and not *vice versa*

- Adjusting strategic planning to define organizational requirements
- Identifying performance specifications rather than manufacturing specifications
- Promoting strategic interoperability policies.

Reform is expected to facilitate improvements in performance. Program progress can be measured by performance metrics, and most agencies are currently developing performance metrics for their programs. Program officials have been empowered to use their own judgment in making business decisions, but they are being held increasingly responsible for these decisions. An expected result is shortened development cycles and reductions in overhead and life-cycle costs. Other benefits include solutions to the following:

- Outdated systems architectures that are becoming progressively more difficult to maintain and sustain effectively
- Systems architecture reengineering that ensures communication and interoperability between the systems
- The Year 2000 problem, which is forcing possible short-term fixes rather than longer-term, requires strategic information technology planning solutions
- Changes in federal law relating to document declassification and freedom of information place additional document management burdens on an already overburdened system.

Specific implementations are following reforms. Collectively, the federal government has addressed a broad range of programs to take advantage of reform legislation:

- Streamline its IT procurement process by modeling it after private industry
- Competitive procurements include a contractor's past performance as an evaluation factor
- The contracting officer has increased authority to enter into, administer and terminate a contract. Appointed contracting officer's technical representatives now receive increased training to support the CO
- Resulting from National Performance Review procurement reform activities, government is exploring new, innovative methods to challenge and streamline current processes

- The Federal Acquisition Regulations provides for pre-qualification of competitors
- Increased credit card usage puts more procurement authority in the hands of program officials and users
- Increased use of oral proposals as part of contracting methods
- Agency focus has been reoriented to life-cycle processes to design and build systems
- Creation of Chief Information Officers (CIO) as principal architects of IT acquisition, implementation and management.

The Chief Information Officer serves as the principal advisor to top agency management on all matters related to IT. The CIO provides leadership in a visionary and collaborative manner to leverage IT resources that improve business processes and accomplish strategic goals and program objectives. The CIO is expected to maximize the value returned from investments in information technology.

The CIO is also responsible for the preparation of IRM strategic plans. The strategic plan focuses on the need to institutionalize IT performance and results-based management with particular attention to mission-based results. Included in the role of most CIOs is responsibility for the following:

- Effective and efficient IT investment through capital planning
- Anticipate future information, telecommunications and automation needs
- Determine IT commonality and compatibility needs
- Develop policies for the protection and security of IT activities
- Ensure compliance with government-wide IT policies
- Promote adequate IT training for workforce
- Ensure full and accurate accounting and inventory of IT resources
- Represent the agency at government-wide and industry IT forums.

2. Procurement Preferences by Product and Service

Government officials differ on how they see procurement over the next five years. Differences appear to be based on preferences each agency displayed in the past. Agencies react to reform based on where they are and have been.

In some cases, reaction is minor. In general, reaction moves more consistently toward procurement vehicles that take less time and which provide commodity solutions.

In almost all cases, the GSA schedule contracts will play a larger role in acquisition of IT products and services in the future, but the level of use and rate of increase will differ. Agencies that have implemented mandatory buying rules based on existing in-house IDIQ vehicles will see only minor increases in schedule use. Other agencies expect product acquisition to be satisfied entirely through the GSA schedule program.

In Exhibit II.A-1, every combination of change in the procurement preferences of agencies is demonstrated. All agencies indicated an effect on its use of GSA schedule contracts. The increase in use has different levels in different agencies, but all report some increase. Even the U.S. Postal Service indicates increased use of special commodity IDIQ contracts, although it does not use GSA's contracts.

Agencies that use Blanket Purchase Agreements (BPAs) expect to increase their use. Others expect no movement toward them. No change in use of in-house IDIQ contracts is expected. Some agencies will experience a decline in use of in-house non-IDIQ contracts. Although there are some exceptions, agencies reported no interest in increasing their use of government-wide IDIQ contracts. A high use is already occurring, and this use will not change.

Exhibit II.A-1

Impact Government-wide of Procurement Reform on Different Procurement Channels

	Increased/Decreased Use *	Effect *
GSA Schedule	Increased - All	Yes - All
Blanket Purchase Agreements	Increased - Some	Yes - Some
In-house IDIQ Contracts	None	No - All
In-house Non-IDIQ Contracts	Decreased - Some	Yes - Some
Government-wide IDIQs	Increased - Some	Yes - Some

Source: INPUT

* See individual agency sections.

In Exhibit II.A-2, a composite of government preferences shows the changes in levels of use of different procurement channels over the next five years. Note that overall increases in use of GSA schedule and government-wide IDIQ contracts will come at the expense of in-house non-IDIQ contracts. The government will be using traditional systems integration contracts less as vehicles for purchasing commodity products.

Exhibit II.A-2

Federal Government Usage of Different Procurement Channels

	TODAY	FY 2000
GSA Schedule	5%-30%	10%-35%
Blanket Purchase Agreements	0%-30%	10%-30%
In-house IDIQ Contracts	5%-80%	15%-80%
In-house Non-IDIQ Contracts	10%-80%	10%-65%
Government-wide IDIQs	<5%-5%	<5%-25%

Source: INPUT

The increased reliance on the GSA schedule and government-wide IDIQ contracts for products and services simplifies the acquisition scenario for agencies and creates an environment that depends on standard interoperable commercial products and support services integral to their effective operation. Outsourcing the desktop ("seat management") is a logical next step.

Different product and service mixes are available through the channels listed in Exhibit II.A-2. Each channel has different appeal based on the type of product or service required by the agency. Exhibit II.A-3 shows how the government will separate acquisition of the different products and services by preferred channel over the next five years. In some cases, the government is unanimous in the channels it selects. In other cases, agencies will differ in their choices of preferred channels.

Exhibit II.A-3

Composite Primary Procurement Methods For Products and Services

Product/Service	Current Procurement Method	Future Use
Central Mainframe Hardware	GSA Schedule and In-house IDIQ	More
Server Hardware	GSA Schedule and In-house IDIQ	More Schedule Same IDIQ
Client PC/Workstation H/W	In-house IDIQ	More
Software Products	GSA Schedule and In-house IDIQ	More Schedule Same IDIQ
Comm/Network Services	In-house IDIQ and other Contracts	Same
Processing Services	In-house IDIQ	More
Professional Services	In-house Contracts	Less
Systems Integration	In-house Contracts	Same
Systems Operations/ Outsourcing	In-house Contracts	More - All
Computer Maintenance	GSA Schedule and In-house Contracts	Same

Source: INPUT

Some general conclusions can be drawn from the composite responses of agencies regarding their preferred procurement channels. As an example, for central mainframe hardware, agencies that prefer in-house IDIQ contracts will increase the use of this channel over the next five years. Agencies that prefer GSA schedule contracts for acquisition of central mainframe hardware will increase their use of this channel. The following summarization characterizes the government's expected change in using different procurement channels:

- **Central Mainframe Hardware:** Users of GSA schedule contracts will increase their use. Users of in-house IDIQ contracts will increase their use
- **Server Hardware:** Users of GSA schedule contracts will increase their use. Users of in-house IDIQ contracts will purchase at the same levels
- **PC/Workstations:** Agencies appear to prefer in-house IDIQ contracts for client workstation acquisition and will likely increase use of these vehicles for workstations over the next five years
- **Software Products:** Users of GSA schedule contracts will increase their use. Users of in-house IDIQ contracts will purchase at the same levels
- **Communications and Network Services:** No change in the preferred channel is expected
- **Processing Services:** Virtually all agencies intend to use in-house IDIQ contracts more over the next five years
- **Professional Services:** Virtually all agencies currently prefer in-house contracts but will decrease their use in favor of IDIQ services contracts
- **Systems Integration:** Agencies do not expect to change their sources from in-house contracts for systems integration
- **Systems Operations/Outsourcing:** Agencies expect to increase the use of in-house contracts for systems operations/outsourcing as they increase their outsourcing activity. It follows that agencies not moving to outsourcing systems operations will not increase their use of in-house contracts for this purpose
- **Computer Maintenance:** Maintenance is obtained most often through in-house contracts. This will not change over the next five years

In general, procurement reform has had the most effect on acquisition of commodity products and services; federal agencies already use credit cards for small purchases. Over the next five years, the quantity of purchases for lower dollar amounts (<$2,500) through credit cards will increase, but the threshold will increase for some agencies. That means higher priced items, specifically computer-based products, will be obtained through credit card purchases.

3. Procurement Process

The federal government does not present a uniform response to changes in statute and regulations governing the procurement process. However, greater opportunities for streamlined procurements exist at all contracting

levels in each of the agencies interviewed. The most visible effect of procurement reform has been the focus on streamlining existing processes rather than implementing radical new processes.

Many elements of prior procurement processes continue, but with modification:

- Cost and pricing data are still important, but alternative methods for determining such data are acceptable to agencies in making procurement decisions
- The definition of commercial items has been expanded, making purchases of IT products easier
- Under the new rules, program officials have more freedom to procure under their own authority
- New tools, such as the Internet, are used to improve existing processes
- Greater communication between government and industry should increase. Vendors are given more significant roles in the procurement process through procurement reforms.

New procurement authorities are shortening buying cycles. More and more acquisition decisions are transferred to the contracting official. For small purchases, except credit card purchases, the CO controls the process. For larger acquisitions, including agency-wide IDIQ contracts, the acquisition strategy is formulated by both contracting officials and program officials working together. The most critical element in their decision regarding strategy is speed in implementation.

- The acquisition function in most organizations consists of a central office as well as local offices nation-wide, each with varying degrees of contracting authority
- The decision authority on which channel should be used lies with the contracting officer. Usually, the CO makes the decision jointly with the program officer
- In general, the Chief Information Officer makes major purchasing decisions. In addition, the CIO is responsible for managing and formulating the office's budget, serving as the procurement executive for the agency, performing special projects and managing the office's activities throughout the nation.

The source selection process may be an unnecessary burden, time-consuming and expensive. Reform measures that address source selection are:

- Standardizing "blackout periods"
- Giving industry easy access to current RFPs and procurement schedules
- Reducing time to evaluate proposals
- Establishing a more rigorous and consistent approach to determining cost realism
- Maximizing use of the "adequate price competition" exception to certified cost and pricing data
- Establishing as a working goal competitive ranges that are more manageable.

The performance-based contracting initiative entails structuring all aspects of an acquisition around the purpose of the work to be performed, as opposed to how the work is to be performed or broad and imprecise statements of work. It emphasizes objective, measurable performance requirements and quality standards in developing statements of work, selecting contractors, determining contract type, incentives and performing contract administration, including surveillance.

Use of less than optimal contracting methods has contributed to cases of unsatisfactory performance and contract administration problems. In particular, the agency's reliance on level-of-effort contracts has led to the use of unnecessarily vague statements of work, inadequate cost control, the lack of quantifiable performance standards and a resource intensive contract administration burden.

Because government agencies have their own unique set of requirements, a contractor can have several very similar systems or processes set up to accommodate each agency. Maintaining many similar set-ups required by the government is inefficient and costly to the contractor and to the government.

The Internet provides its own reform to the acquisition processes. Its value to the procurement reform includes the following:

- Time savings and reduction in procurement costs
- Easier public access to acquisition documents
- Facility in executing an acquisition program
- Improved open communication with industry
- Flexibility in procurement alternatives.

Some agencies look to the Internet as the most significant technological change in IT procurement. It provides general public access to releasable information. It also provides new ways of interacting with customers, suppliers and other agencies. Agencies can maintain or improve operating capabilities while reducing costs normally associated with dedicated communication lines/systems and dissemination/publication.

Procurement streamlining pilot initiatives are being led by the Federal Aviation Administration (FAA). The 1996 Department of Transportation Appropriations Act (Public Law 104-50) directed FAA to develop an Acquisition Management System that addresses the needs of the agency and provides for a more timely and cost-effective way of acquiring equipment, materials and services. Section 348 of this law exempts the FAA from many existing federal procurement laws. Benefits gained through FAA initiatives are expected to be transferred to the procurement processes of other agencies.

Simplified purchasing was the focus of earlier procurement reform across government. Agencies were required to implement a Federal Acquisition Network (FACNET) capability in order to benefit from the revised rules for simplified purchases, but the move toward FACNET appears to be stalled due to effectiveness in Internet use, as well as the complexities in implementing FACNET. Parts of the military, however, are still on track to implementing a full FACNET capability.

Agency officials did not discuss whether there would be an increase in thresholds for the use of credit cards, but it is unlikely that in the future credit card sales will be limited to $2,500.

Some of the drawbacks of greater delegation of procurement authority cause officials to be wary of the reform. A dangerous result is that many agency officials do not understand the reforms or how to use the new process. Turbulence created by multiple, closely-spaced reform initiatives deprives the workforce of any baseline understanding for obtaining IT solutions. Recent policy changes have created anxiety and confusion among acquisition officials, and a new class of "pathfinders" is actively at work. This may not lead to systematic solutions.

The General Services Administration has been very liberal in its Federal Supply Schedule program (now includes the Multiple Award ADP Schedules). Some vendors are expressing dissatisfaction with this easy attitude. Competition is more difficult because "anything goes." The agencies also have difficulty when GSA allows vendors to change terms and conditions in their contracts. Licensing agreements with software vendors are an area where problems are expected between vendors, GSA and the agencies.

4. Leasing

Although government-wide dialog related to leasing equipment is increasing, most government officials have not expressed any particular interest in using this option.

There is no set of regulations governing the leasing of IT products and services in the government, although leasing is permitted as an acquisition option under the Federal Acquisition Regulations.

Leasing is addressed by agencies based on their specific needs and other factors, such as source of funding, that influence procurement strategy decisions. Basic observations include:

- U.S. Postal Service leases equipment that is used for training. This equipment is retained only for the training duration and is replaced after 3-4 months
- HUD acquires all its IT support through outsourcing contracts (HIIPS) and avoids the issue of leasing. Other agencies would consider leasing possibilities through outsourcing contracts
- NASA will probably directly lease only its super-computers in the future
- Most leased computer equipment in the government is for data centers
- Agencies that operate with working capital funds are more likely to consider leasing equipment as an option
- Agencies that lease typically spend no more than 5% of their IT budgets for leased equipment
- Decisions to lease or buy are usually made at the regional office level.

Some exceptions to a no-lease practice can be found in the government. Defense officials are examining leasing options, although there have not been any recent policy changes or large procurements related to leasing. When deciding whether to lease computer equipment, DOD considers the technological life-cycle of the relevant equipment and cost benefits.

NASA is also starting to look into leasing of IT and even plans to include it as an option under its SEWP contract.

Outsourcing desktop services may be an area where agencies might consider leasing based on a reluctance to purchase equipment with short life-cycle value. Agency officials interviewed were generally not familiar with efforts of other agencies in seeking a leasing solution through desktop outsourcing or GSA's Seat Management effort, but this will likely change with the release of the GSA Seat Management solicitation.

It is not expected that the government will change its perspective on leasing over the next few years. Leasing requirements may evolve, but they would be created by program specific needs. In such cases, past performance would become a difficult factor to include in evaluating vendors.

5. Outsourcing

A large degree of polarity exists based on what the government regards as outsourcing, and also to what extent the agencies believe they perform outsourcing. Traditionally, when the government referred to outsourcing, it meant facilities management. Today, based largely on industry's push to get more sales at the program management level, outsourcing covers a broader spectrum of business activities.

Officials in DOD differ in the degree to which they believe the department has outsourced in the past and how much more outsourcing is possible. In order for vendors to gain outsourcing business in DOD, the Under Secretary for Acquisition and Technology has highlighted special experience criteria that must be met.

The importance of different functions as candidate for outsourcing between now and the Year 2000 for DOD as a whole is provided in Exhibit II.A-4. Virtually everything becomes a candidate for outsourcing by the Year 2000, although application-based responsibilities received lower ratings.

Exhibit II.A-4

Range of Ratings for Different Categories of Outsourcing at DOD

CATEGORY	TODAY	FY2000
Total Agency IT Outsourcing	1-3	4
Network Management	1-4	4
Desktop Services	2	5
Platform Operations	1-4	3-5
Application Operations	1-3	2-4
Application Management	1-3	2-4
Business Operations (telephone support, help desk, etc.)	2-4	4-5

1=not important; 5=very important *Source: INPUT*

Variation exists for every outsourcing category shown in Exhibit II.A-4 (except for desktop services), and by the Year 2000, the levels of outsourcing will all increase.

Civilian agencies also reported variability in their interest in outsourcing. In almost every category of outsourcing investigated, interest ranged from highest to lowest and remained at the same wide range through the Year 2000. Exhibit II.A-5 shows the mean rating for each of the categories across all civilian agencies.

Exhibit II.A-5

Mean Ratings of Different Categories of Outsourcing at Civilian Agencies

CATEGORY	TODAY	FY 2000
Total Agency IT Outsourcing	2	3
Network Management	3	3-4
Desktop Services	3	4
Platform Operations	2-3	3
Application Operations	2	3
Applications Management	2	3
Business Operations (telephone support, help desk, etc.)	2-3	3-4

1=not important; 5=very important *Source: INPUT*

Some agencies, such as Social Security Administration and Veterans Affairs, have low expectations for outsourcing to begin with and will not likely change their low interest for the future. Others, such as NASA and Transportation, have moderately low interest at the present but move up during the next few years. Others, such as Justice and Treasury, have high interests and hold these levels.

Several factors contribute to levels of interest in outsourcing:

- With the current emphasis on cost control in the government, the need to expend greater amounts of money at first to save money and time later may be a difficult argument to make

- While total agency IT outsourcing remains an unlikely proposition, network management and desktop services are expected to join facilities management as outsourcing candidates over the next several years

- Outsourcing requirements are occasionally embedded in contracts primarily for other services
- One data processing function that is undergoing transition to outsourcing of business operations is setting up customer call centers
- High security concerns are issues that might prevent outsourcing
- The integration of data across the enterprise is considered critical to the mission of an agency. The need for outsourcing this function would have to be compelling before the agency would consider it
- Outsourcing of desktop services is in very early exploratory stages
- Managing data across an enterprise is considered critical to the mission of the agency and prevents serious consideration of outsourcing

6. EDI and Electronic Commerce

Electronic commerce is defined here as the exchange of business information with the assistance of technologies such as the Internet, electronic data interchange (EDI), electronic mail (e-mail) and electronic funds transfer (EFT). Electronic funds transfer, where possible, is being implemented throughout government as a result of new statutory requirements.

Although other justifications exist for increased transition to electronic commerce, the most frequently cited reason the government gave was an end-to-end paperless environment. EC can expedite all facets of the contracting business and can move procurement transactions from traditional paper-based systems to electronic processing.

Agency groups are working together to promote EC. GSA and the Treasury Department are working with DOD to extend the use of credit cards in intra-governmental transfers, such as those involved in government-wide acquisition contracts. NASA is working with other federal agencies and departments to establish an Internet approach to the federal acquisition process.

Agencies appear to be moving to all aspects of electronic commerce for all levels of acquisition. Exhibit II.A-6 shows this distribution. EFT is used extensively for high dollar acquisitions, and it will be used increasingly in the future for low dollar acquisitions. FACNET is used extensively now, but will be used decreasingly in the future as agencies lose confidence in its security.

Exhibit II.A-6

Federal Government Use of Electronic Commerce

	TODAY	FY 2000
Electronic Mail	All Levels	All Levels
Electronic Funds Transfer	>$100,000	All Levels
FACNET	All Levels	Decreased Use
GSA Advantage!	<$100,000	<$100,000

Source: INPUT

FACNET certification has been a major interest to military services. As the implementation leader in this legislated solution to small purchases, the military has by far the greatest track record of success. It expects to increase its use of FACNET in the near future.

With the growing number of Internet sites for the government, and the difficulty some agencies are having in adjusting to FACNET, the future of FACNET is not assured. Acceptance of FACNET over the long term may be seriously threatened. Electronic commerce may take place across a different business network. With many government organizations moving toward Internet-based contracting, broad experiences will improve confidence and encourage industry to develop a wider portfolio of solutions.

In the meantime, the Internet and World-Wide Web support a wider variety of file formats, so it is much easier to provide electronic copies to solicitations with existing word processing tools. Since industry is already becoming accustomed to the Internet and its many useful applications, agencies will increase their confidence. The availability of inexpensive Internet access throughout the country has practically eliminated the "barriers to entry."

7. Vendor Past Performance

Past performance is considered a strong evaluation metric for procurements. Quality of product and service and overall past performance are considered the most important elements of a contractor's credentials.

Different aspects of past performance were reviewed in this study. Criteria identified as metrics to gauge past performance are listed in Exhibit II.A-7, along with the mean ratings of agency attitudes toward importance, as reflected by contracting and program officials. In general, high importance was assigned to each of the criteria measured.

Exhibit II.A-7

Federal Government Vendor Past Performance Criteria & Importance Ratings

CRITERIA	RATING:
Overall Past Performance	4-5
Quality of Product or Service	4-5
Timeliness of Performance	4
Cost Control	4
Business Practices	3-4
Customer (end user) Satisfaction	4
Key Personnel Past Performance	4
Overall Satisfaction	4

1=not important; 5=very important *Source: INPUT*

There was variation across agencies regarding importance levels shown in Exhibit II.A-7. Some agencies reported high importance across all criteria measured. Other agencies showed a clear preference for importance of some of the criteria but not for others. Other agencies reflected a different level of importance for the criteria depending on the type of official interviewed.

Contractors must be fully responsible for the quality of their products and services regardless of the past performance criteria used. They also need to realize that the user assumes that any problems in performance must be resolved not only in terms of the specifics of the case, but also in terms of systemic improvement actions that will ensure the problems will not reoccur in other situations.

Some civilian agencies are working together to develop a government-wide database for past performance information. This parallels similar efforts in the defense industry, with the Defense Logistics Agency tasked with developing past performance measurement standards. The problem with past performance databases is that there are still no detailed standards for including or omitting data. Therefore, users will have a central location to acquire past performance data, but they will still need to verify that data through interviews.

8. Anticipated Credit Card Usage

Credit card purchases within the federal government are not tracked by product area, so their direct impact on IT purchases must be inferred from overall trends.

Total government use of credit cards is increasing significantly, as shown in Exhibit II.A-8. Within most agencies, growth in credit card use has increased in terms of number of cards, number of sales transactions and sales volume for each card. Credit cards are also being used for higher priced sales, in some agencies higher than the $2,500 small purchase threshold.

Exhibit II.A-8

U.S. Federal Government Growth in Credit Card Usage

	FY 1994	FY 1995	FY 1996
Number of Cards	83,000	130,000	209,000
Number of Transactions	1,672,000	4,248,000	7,328,000
Purchases per Card	$9,747	$12,246	$13,943
Total Purchases	$809,000,000	$1,592,000,000	$2,914,000,000

Source: GSA

Even with the normal ceiling of $2,500 per transaction, the average sales per card is relatively low — below $500 in each of the last three years. It is difficult to determine from these numbers how much is attributed to the purchase of information technology products. However, since agencies report that most desktop products are purchased through IDIQ contracts, and since the average sale per credit card is low, not much IT is contained in the reported numbers.

With the aggressive movement in agencies toward faster purchasing, and with the complete delegation of purchasing below $2,500 to the user, purchase card use could grow, not only to increase the number of purchases, but also to increase the size of purchases on the credit cards. One likely drawback in the expanded use of credit cards for the purchase of computers and equipment is in the fact that as a matter of policy, the agencies' respective office of information technology may control such credit card purchases.

9. Budget Pressures and BPR

The Information Technology Management Reform Act (ITMRA) (Division E of Public Law 104-106) of 1996 requires that each agency undertake capital planning and investment control by establishing a "process for maximizing the value and assessing and managing the risks of the information technology acquisitions of the executive agency." Furthermore, Executive Order 13011, Federal Information Technology, issued July 19, 1996, states that executive agencies shall "implement an investment review process that drives budget formulation and the execution for information systems."

Both of these initiatives create a vehicle for business process reengineering. Each agency is required to develop its own procedures for satisfying these requirements. Implementation has typically occurred at the program level. Individual agencies and offices are being compelled to take direct responsibility for funding BPR efforts themselves as overall funding is not available other than through normal program budget line items.

As part of the Administration's continuing support for innovative applications of information technology, the Government Information Technology Services Board (GITSB) and the Interagency Management Council (IMC) are sponsoring a pilot program to seed innovative, multi-agency projects. The Innovation Fund is intended to provide seed money for innovative projects that: (1) benefit multiple agencies, (2) provide for more efficient or effective delivery of service to the public, and (3) are self-sustaining by a two-year time frame. BPR funding sources can be identified through this fund to the extent they are identified as pilots or prototypes with inherent value for other agency programs. Inherent value may be identified by:

- Providing substantial benefits to the public, such as increased/improved information dissemination, increased/improved timeliness or quality of service delivery, or reduced burden

- Providing substantial benefit to multiple agencies or programs through lower operating costs

Program responsibilities for BPR are stronger in some organizations than others. The emphasis on cost reduction through reengineering of processes extends to both the processes themselves and the products being acquired. Therefore, contractors with BPR solutions should target areas where process improvement and cost reduction are specific requirements.

Although there have been no specific directives for agencies to conduct BPR, all interviewees agreed that there is definite pressure to increase BPR initiatives and cost savings at all levels. Motivations toward BPR, as reported by agency officials, are listed below:

- With decreasing budgets and increasing pressures for all agencies of the federal government to reduce their spending, controlling costs continues to be a major issue
- Allows for a more continuous effort to make an agency work better and cost less
- Contract cost control is critical to protect the viability of current programs and to ensure that resources will exist to start new ones
- The role of the agency CIO includes improving business processes to accomplish strategic missions, goals and program objectives
- The Year 2000 computer date problem is also a central concern with business process and information systems reengineering
- Program performance results through gains in automation efficiency.

Business process reengineering is not viewed by agencies as a top-down process. Therefore, each program area is expected to have its own view of the relative merits. Program managers closer to the operational levels undertake the initiative to make their processes run more efficiently.

The interest level in business process reengineering as such is moderate. It was not significantly altered by procurement reform legislation. This level of interest will probably not change over the next five years.

10. Preferred Sources of IT & Telecom Product Information

There is no single repository of product information that can be characterized as the government's preferred source. Every agency appears to prefer different sources for different purposes. Virtually every source of information has value to different persons at different times.

There are, however, three classes of information that address different interest levels. Advertisers and marketers should be aware of the extent to which these sources are used by government officials. The three primary sources of information on products are:

- The agency subject matter expert
- Product literature specific to a solicitation
- Product literature in general.

Virtually all agencies rely on the internal subject matter expert to assist in understanding technologies, the impact of technologies on processes and for

assistance in the source selection process. Information that satisfies this level of interest must be detailed and relevant to the agency's business.

Since source selection determines the outcome of a product offering, these officials should understand what is available. Other than the internal subject matter expert, agency officials depend on literature specific to the solicitation. Product comparisons and product demonstrations are also helpful.

All other information is of interest but not specific to a buying activity. There are many sources of such useful information available to agency personnel. No one source is more valuable than another, although certain preferences were specified during this study. Most notably, the Internet is becoming increasingly a source of product and vendor information. Therefore, vendors who distribute marketing and product promotion through multiple channels as a necessary strategy will be more successful in selling to government entities. The following highlights some of the more common sources of product information:

- The use of the Internet to learn of products and capabilities, especially for secondary research. However, all personnel do not have access to Internet
- Commercial trade magazine product reviews
- Industry-sponsored shows and exhibits, although all agencies do not attend nor participate in them
- Market research by contracting officials, especially to support sole source contracts
- Direct mail
- Direct contact with vendor

In many areas, little reliance on unsolicited information was found.

The channel that works most effectively for information about products and services is the one that is synchronous with the proposal or the contract. If advertisers and sales personnel understand the requirements which are advertised, they can prepare the most appropriate literature to appeal not only to the agency, but to the distributors and integrators that need the products as part of an offer.

11. Top Agency IT Contractors

Thousands of firms provide information technology products and services under contract with federal agencies. Sales revenues are not distributed

equally across these firms. Fewer than 50 firms consistently receive sales revenue in excess of $100 million per year. The list of top IT contractors in the federal government for FY 1996 is provided in Exhibit II.A-9. Each of these vendors brought in more than $500 million in federal obligations during this period.

Exhibit II.A-9

Top IT Contractors in the Federal Government, FY 1996

1.	Lockheed Martin Corporation
2.	Hughes
3.	AT&T Corporation
4.	Computer Sciences Corporation
5.	Boeing
6.	Unisys Corporation
7.	IBM Corporation
8.	Northrop Grumman Corporation
9.	GTE
10.	Electronic Data Systems

Source: FPDC

A special 8(a) category was created by the Congress for disadvantaged, minority-owned firms. These firms can compete for special contracts set aside for the purpose of creating a protected market to promote business growth. Exhibit II.A-10 ranks the top 8(a) IT contractors for FY 1996. Sales figures include only set-aside contracts. Additional revenue may have been received by these vendors from contracts won through full and open competition.

Some contractors reported in this listing have since "graduated" from the program. They are included in the ranking because of significant business they still receive through contracts won as 8(a) firms.

Exhibit II.A-10

Top 8(a) IT Contractors in the Federal Government, FY 1996

1. Government Micro Resources
2. Eastern Computers
3. Digicon
4. PAI Corporation
5. Information Technology Solutions
6. Modern Technologies
7. NCI Information Systems
8. Pulsar Data Systems
9. Scientech
10. Uniband

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the federal government is provided in Exhibit II.A-11. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center at GSA for fiscal year 1996. Together these ten companies represent contract obligations totaling $3.1 billion of the $5.2 billion in this market and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Cryptologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborn
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment
- K058 - Modifications of Communication Equipment

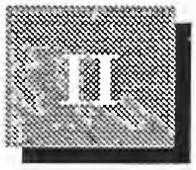
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities
- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit II.A-11

Top Telecommunications Contractors in the Federal Government, FY 1996

1. AT&T Corporation
2. ITT Corporation
3. GTE Corporation
4. MCI Telecommunications
5. Hughes
6. N.E.T. Federal
7. Harris Corporation
8. Unisys Corporation
9. Motorola, Inc.
10. General Dynamics

Source: FPDC



Executive Summary: Defense Agencies

B
Defense Agencies Overview

1. Reaction to Procurement Reform

As the largest single user of information technology products and services in the federal government, and one of the largest single user segments in the world, the Department of Defense exerts great influence on its markets. Defense agencies and military services together look to aspects of the recent procurement reform as an enabler of improved acquisition of computers and related services. Their collective implementation of procurement reform will guide the movement of products and services throughout the entire U.S. federal government IT market.

Defense agencies and military services will implement reform under different guidance, but the results will be the same. Every business entity within Defense will aggressively take advantage of new capabilities and relaxed oversight. Although individual officials may feel very positively about the reforms, some drawbacks are possible, such as a streamlined workforce — a decrease in employment levels.

Acquisition reform efforts cover a broad spectrum of activities for the defense and military establishments. From very specific needs to improve business processes to supporting combat roles, procurement is critical. The reform of information technology, as a linchpin of all program support, is seen as necessary to improve performance at reduced cost.

Each of the Defense services and agencies regard a number of issues as critical to effective performance:

- Requirements development to specify accurately its needs for effective program execution

- Research and development support to enable the most advanced solutions in carrying out mission
- Testing and evaluation of products under real-life conditions
- Sustaining capabilities to accomplish objectives under multiple operational scenarios
- Establish an information architecture to meet challenges for decision-making during both peace and war

Based on the need to address these issues, the Department of Defense organizations look to procurement reform as the enabler.

The department operates under environments that impose multiple tensions that affect its procurement strategies. These tensions affect how IT can be justified and under what circumstances IT solutions can be most effective.

- Trade-off is common between cost and performance. Although cost is always a critical success factor, performance at higher cost can mean the difference between effectiveness and program failure
- IT systems that support warfighting tasks and those that support business processes are different. Performance expectations determine measures of effectiveness. Each requires its own set of criteria to measure success
- Solutions that satisfy requirements for secrecy and those that support information systems interoperability are frequently at odds. Sensitivity to the difference assists the system designer to evaluate the trade-off
- Evaluating information technology's contribution to mission performance, rather than simply assuring efficient processes, may be a more useful technique in procuring IT
- The entire department has become more results-oriented than in the past

Due largely to procurement reform, the department as a whole has undergone several initiatives to revise its acquisition infrastructure. New directions identified by each component of Defense are discussed in other chapters of this report.

As a total entity, Defense is adopting a business process approach to its programs that assures maximum effectiveness, economy, efficiency and accountability. In this way, program units individually, and services as an integrated enterprise, can gain significant returns quickly. They can focus actions in key functional areas of past performance, funding and accounting, program management and contracting.

Improvements to decision-making processes and continuous feedback to customers and stakeholders assure funding support and other investment to continued program execution. Better business strategies will accrue maximum economies for international and U.S. national acquisition programs.

The department can be expected to optimize the many benefits of procurement reform. In its view, the greatest advantage will result from implementation of electronic commerce/electronic data interchange. In conjunction with EC, the use of credit cards for small purchases becomes the most aggressive way to save the cost of acquiring products. The Department of Defense leads the rest of government in the number of small purchases.

The use of the GSA schedule has evolved as the preferred source of supply for service units and agencies. In particular, the Navy's innovative approach to using blanket purchase agreements to improve further on the prices offered on the GSA schedule leads the government use of this method. Many other benefits to Defense organizations are seen as a result of schedule purchases, as opposed to traditional indefinite quantity vehicles.

Use of the Internet is viewed as an enabler of intentions of procurement reform. Identification of business objectives, program functional requirements, solicitation of contracts needs, ordering information and other communications as may be necessary to improve information sharing between Defense organizations and industry will be facilitated by the Internet. Use of the Internet can increase speed and convenience.

Through aspects of procurement reform, Defense is interested in advancing concepts of partnering and teaming between government and industry and within each Defense group, maximizing simplified acquisition procedures, use of EC/EDI and credit cards and performance-based contracting measures. In accomplishing these objectives, Defense agencies can be expected to take a more proactive stance toward industry. Agencies will work more closely with industry, finding out what technologies work and what do not.

Defense expects that it has work to do internally in improving the acquisition relationship with industry.

- Agencies and services will become more precise about their objectives
- Business needs of services will drive procurement decisions, not *vice versa*
- Agencies will take advantage of their positions to become more fully aware of their own needs and to specify how industry can solve them

- Strategic planning will be improved to define organizational requirements, to identify tools to be used and to establish processes for the removal of barriers

- Defense-wide move toward performance specifications rather than manufacturing specifications will better assure program success

- Development of strategic interoperability policies will ensure that different pieces of sophisticated systems can still exchange information. Given the focus on EC/EDI throughout the government, this is a necessary element of any acquisition

Ultimately, planning efforts need to focus on streamlining organizations, eliminating unnecessary redundancy and reducing the overall cost of doing business. There should be precise performance-based statements of work and specifications, as well as an effective methodology for assessment of relevant offeror past performance.

By implementing procurement reform initiatives, the Department of Defense expects to solve several existing problems.

- Program progress can be measured by performance metrics: performance specification usage, cycle time reduction, total cost reduction and procurement lead time reduction

- Empowered individuals can use their own judgment for business decisions. They can control acquisitions and manage for end results

- Procurement reform can save scarce funding resources while ensuring U.S. military capability

- Outcomes of procurement reform include streamlined management and efficient organizations, shortened development cycles and reduced overhead and life-cycle costs

In summary, the department believes that procurement reform gives both agencies and vendors opportunities to communicate more fully with each other during the procurement cycle. Through the use of the Internet, agencies can be kept informed on leading technologies, and industry can seek out government input during the research and development phases of new technologies. Many barriers to business judgment have been removed. However, many defense organizations have not taken full advantage of the streamlining offered by procurement reform and continue to rely on traditional procurement methods.

2. Procurement Preferences by Product and Service

Defense officials differ on how they see procurement evolving over the next five years. As an example, use of the GSA schedule contracts will play a larger role in acquisition of IT products and services in the future, but the level of use and nature of use will differ among the defense branches. In spite of advice from the Defense Information Systems Agency (DISA), the Air Force will not find an increased role for them due to procurement rules imposed on its buying units to use existing in-house IDIQ vehicles. DISA expects product contracts to be let entirely through the GSA schedule program. The Army expects to increase use of schedule contracts in general. The Navy will increase use of special basic purchasing agreements available under the schedule program.

For other types of contracts for products and services, there are also differences. Most of the differences are between the Air Force and other military services. In general, Air Force uses in-house IDIQs at a high level, and they expect to continue this level. Navy officials believe they will not depend as much on in-house IDIQ contracts, and the Army is not certain what its future buying trends will be for particular purchasing channels, such as IDIQs or in-house contracts.

Defense officials estimate that the largest proportion of IT procurements now takes place through in-house contracts — either IDIQ or non-IDIQ. In comparison, as shown in Exhibit II.B-1 below, the mix of procurement methods will vary among the Defense organizations. The most dramatic change will be in the use of the GSA schedule program. Schedule purchasing will increase through FY 2000 for all branches but the Air Force.

Currently, nearly 100% of Defense agency and Air Force services are procured through in-house IDIQs, but by 2000 the distribution will change dramatically for some Defense organizations.

Military officials prefer an acquisition strategy which does not increase the service's ownership of IT resources. Fee-for-service is a workable operating scenario for data centers, but increasingly for desktop environments as well. Officials emphasize that contractors should be relied on to identify the right technical solution for the required support, but the difficulty is the required service behind the solution.

The increased reliance on the GSA schedule contracts for products and services simplifies the acquisition scenario for agencies, and it creates an environment that depends on standard interoperable commercial products and support services integral to their effective operation. Outsourcing the desktop is a logical next step.

Exhibit II.B-1

Composite Defense Primary Procurement Methods for Products and Services

Product/Service:	Current Procurement Method:	Future Use:
Central Mainframe Hardware	GSA Schedule - Army In-house IDIQ - Others	More - Others More - Air Force
Server Hardware	GSA Schedule - Army In-house IDIQ - Others	More - Others Same - Air Force
Client PC/Workstation H/W	In-house IDIQ-All	More/Same
Software Products	GSA Schedule - Army In-house IDIQ - Others	More - Others Same - Air Force
Comm/Network Services	In-house Contract - Army In-house IDIQ - Others	Same More - Air Force
Processing Services	In-house IDIQ - All	More - All
Professional Services	In-house - All	Less
Systems Integration	In-house Contract - All	Same - Other Less - Air Force
Systems Ops./Outsourcing	In-house Contract - Other Task Order - Air Force	More - All
Computer Maintenance	In-house Contract - All	Same - Other Air Force - More

Source: INPUT

3. Procurement Process

The Department of Defense does not present a uniform response to changes in statutes and regulations governing the procurement process. DISA may be influential in determining how the agencies respond to changes, but each of the military services has established its own criteria for determining what organizational element contracts what products and services.

Some common responses by Defense organizations are noted.

- The entire department is accommodating a dramatically changed procurement environment for information technology

- Greater opportunities for streamlined procurements exist at all contracting levels
- Cost and pricing data are still important, but there are alternative methods for determining such data in making procurement decisions
- The expanded definition of commercial items makes it easier for DOD to purchase IT products

One significant change in the procurement arena for Defense affects the relationship between the Office of the Secretary of Defense (OSD; includes all administrative defense agencies, such as DISA and DFAS) and the military services. Previously, OSD had significantly greater oversight and decision authority for IT. Under the new rules, the services have more freedom to procure under their own authority.

Even the defense agencies have more latitude in implementing procurement reform provisions. Currently, procurements larger than $50 million need approval from the Secretary of Defense, but DISA officials believe that by the Year 2000, this need for outside approval will be eliminated.

Within the armed services, there is a decreasing need for high-level review of major IT purchases. Fewer major systems acquisitions require review at the highest service levels. With decision-making at a lower level, there are both speed and efficiency gains.

Other gains in the procurement process are more subtle. The most visible effect of procurement reform has been the streamlining of processes rather than radical new changes in those processes. New tools, such as the Internet, are being used to rationalize existing processes that remain relatively consistent over time.

Some of the drawbacks of greater delegation of procurement authority cause officials to be wary of the reform. A dangerous result is that agency officials do not understand how to use the new process. Turbulence created by multiple, closely-spaced reform initiatives deprives the workforce of any understanding baseline for obtaining IT solutions. Recent policy changes have created anxiety and confusion among acquisition officials, and a new class of "pathfinders" is actively at work. This may not lead to systematic solutions. Templates for the new process must be developed to assure successful procurements.

Dependency on communication has increased. Greater communication between government and industry should increase, but intra-industry communication on government procurement issues, and intra-government communication on technologies, interoperability and solutions should also increase.

Procurement reform thus far, one official says, is a good trend that needs to go much further in the direction of reengineering rather than simple streamlining.

4. Leasing

According to OSD officials, there is renewed interest in examining leasing options, although there have not been any recent policy changes or large procurements related to leasing. When deciding whether to lease computer equipment, DOD considers the technological life-cycle of the relevant equipment, the cost benefits to leasing and whether the equipment will be used over the long or short term. Officials expect leasing to increase over the next several years. DISA officials in particular suggest that vendors should be offering straight lease options to the government instead of leases with options to buy.

It is unclear to DOD how leasing IT products can make sense. Most existing leasing arrangements address vehicles, facilities and related equipment, rather than computer or telecommunications equipment. Life-cycle costs are the primary concern of acquisition officials when considering leasing. The intended use of the equipment is also important in deciding whether a leasing decision makes good business sense, not simply as a matter of cost.

Desktop services may be an area where the military could consider leasing because of the reluctance to purchase equipment with short life-cycle value.

5. Outsourcing

DOD operations have long been central to outsourcing discussions in the federal government. However, officials in DOD differ in the degree to which they believe the department has outsourced in the past and how much more outsourcing is possible. The Office of the Chief Information Officer predicts greater reliance on outsourcing of department IT operations to include an examination of possible total agency IT outsourcing.

Under Secretary of Defense for Acquisition and Technology has highlighted three conditions that outsourcing solutions must meet in order for DOD to consider them:

- Private sector firms must be able to perform the activity and meet DOD's core war fighting mission
- Competitive commercial market must exist for the activity
- Outsourcing the activity must result in best value for the government

The importance of different functions as candidate for outsourcing between now and the Year 2000 for DOD as a whole is provided in Exhibit II.B-2

below. Virtually everything becomes candidate for outsourcing by FY 2000, although application-based responsibilities received lower ratings.

Exhibit II.B-2

Importance Ratings of Different Functions for Outsourcing, Department of Defense

CATEGORY	TODAY	FY 2000
Total Agency IT Outsourcing	1-3	4
Network Management	1-4	4
Desktop Services	2	5
Platform Operations	1-4	3-5
Application Operations	1-3	2-4
Application Management	1-3	2-4
Business Operations (telephone support, help desk, etc.)	2-4	4-5

1=not important; 5=very important *Source: INPUT*

Data center operations have been traditional targets for facilities management and support outsourcing. DISA has resisted further data center consolidation, so the size of this outsourcing market segment within Defense is uncertain. Recent DISA procurements for data center management support have been suspended, indicating the unsettled nature of the issue at the moment.

In a broader definition of outsourcing, software development contracting and desktop services contracting are growing candidates. Military research laboratories have outsourced virtually all their work. Government employees had previously performed most of this development. As software development requirements become more complex, this outsourcing trend is likely to continue.

High-ranking military officials, following the lead of NASA, are raising the possibility of outsourcing their desktops, to include hardware, software, services, maintenance and necessary upgrades. Vendors would be responsible for providing an integrated solution for stated needs, and they would also have to upgrade existing components and renew systems as necessary. This would be a complex solicitation process to control, but there could be significant efficiency savings.

Outsourcing often leads to higher costs at the onset of a requirement. With an emphasis on cost control, the need to expend greater amounts of money at

first to save money and time later may be a difficult argument to make. The Navy, for example, has had a difficult time with budgets due to unrealized "savings" from outsourcing.

6. EDI and Electronic Commerce

DOD has high hopes for EDI in the future. Every month DOD is performing over 80,000 FACNET transactions. DOD is particularly interested in extending the use of electronic funds transfer (EFT) for large procurements and the use of credit cards for both large and small procurements. For example, GSA and the Treasury Department are working with DOD to extend the use of credit cards in intra-governmental transfers such as those involved in government-wide acquisition contracts.

DOD is also taking the lead in a government-wide project called Central Contractor Registration. The goal of this program is to collect data that DOD and other government entities need and would collect only once on individual contractors in an automated fashion.

During late 1996, DISA began to implement a more robust EC/EDI infrastructure that will provide 100% accountability, 99.5% throughput rate and an average speed of 58 transactions per minute with a traffic load of 50,000 transactions per day. As a result of these improvements, larger and more complex contracts can be added to the EC/EDI process.

For contracts below $100,000, DISA relies on electronic mail, EFT, FACNET and GSA Advantage!. For those greater than $100,000, electronic mail, EFT and FACNET make up the bulk of EC/EDI-related transactions. DISA officials predict that in the future, the use of EC/EDI for these high dollar value contracts will increase. DOD indicates less reliance on electronic mail due to security concerns.

Military officials see electronic commerce and electronic data interchange primarily as money and time saving measures. They intend to move toward end-to-end paperless commerce to expedite all facets of the contracting business. The Army in particular claims to have met most of its goals. Its Procurement Automated Data and Documentation is the data entry system for weapons systems spare parts; the Standard Army Automated Contracting System is used for all other purchases. In the near future, the Army's new Standard Procurement System (the data entry system for FACNET) will gradually replace both systems.

FACNET certification has been a major interest to military services. As the implementation leaders in this legislated solution to small purchases, the military has by far the greatest track record of success. For example, the Army claims that by December 1999, their FACNET usage goal will be 75% of previous year's total eligible contracts between $2,500-$100,000.

The Army has identified 13 sites responsible for handling FACNET transactions. The Navy has identified 8 sites. With the growing number of Internet sites for the government, and the difficulty some agencies are having in adjusting to FACNET, the future of FACNET is not assured. Especially in the Air Force, where Internet has a greater operational role in acquisition among the military units, acceptance of FACNET over the long term may be seriously threatened. Electronic commerce may happen across a different business network.

Although the Navy is following the rest of the defense-related services and agencies in depending increasingly on EDI and EC for its operations, it is pursuing various initiatives other than FACNET to move toward EC/EDI. Electronic funds transfer (EFT) is being implemented, where possible, throughout DOD and related agencies as a result of new statutory requirements for EFT.

With many government organizations moving toward Internet-based contracting, broad experiences will improve confidence and encourage industry to develop a wider portfolio of solutions.

7. Vendor Past Performance

A difference in attitude related to vendor past performance criteria exists between the defense agencies and the military services. Within DOD, the Defense Logistics Agency (DLA) is the organization responsible for maintaining past performance information, which enables DOD to meet the requirements of the Federal Acquisition Streamlining Act regarding government-wide provision of acquisition information.

DLA and DISA tend to rate all the criteria for measuring past performance equally. The military services tend to emphasize quality of product and level of service higher than business practices. As shown in Exhibit II.B-3, the lower ratings belong to the military services. In sum, the military services are less likely overall to view past performance high in establishing their contractor rating criteria.

Exhibit II.B-3

Department of Defense Vendor Past Performance Criteria & Importance Ratings

CRITERIA	RATING:
Overall Past Performance	3-5
Quality of Product or Service	4-5
Timeliness of Performance	4-5
Cost Control	3-4
Business Practices	3-5
Customer (end user) Satisfaction	3-5
Key Personnel Past Performance	2-5
Overall Satisfaction	3-5

1=not important; 5=very important *Source: DOD*

When past performance is used, it is a way to mitigate or manage the risk associated with large procurements. This also links to reengineering efforts. Acquisition officials, with newly delegated responsibilities from procurement reform, can use available tools to balance against oversight with the estimated contractor performance levels.

Contractors must be fully responsible for the quality of their products and services regardless of the past performance criteria used. They also need to realize that the users assume that any problems in performance must be resolved not only in terms of the specifics of the case, but also in terms of systemic improvement actions that will ensure the problems will not reoccur in other situations. As the Navy's Best Practices Guide states, "An offeror's past and present performance is not presumed to be perfect. Rather, the successful offeror will have demonstrated the ability to isolate past and present problems down to a root cause and to take systemic improvement management actions to resolve the root cause of the problems."

8. Anticipated Credit Card Usage

Credit card purchases within the federal government are not tracked by product area, so their direct impact on IT purchases must be inferred from overall trends. Within DOD, credit card usage has grown very rapidly. The dollar level per purchase has fluctuated over the past three years, from a high of $1,235 in FY 1994 to $570 in FY 1996. The average amount of money carried on each card per year, however, has grown in the same period from $16,875 to $28,478. Total credit card sales have also increased from $17 million to nearly $82 million.

DOD has also recently established a "process action team" to examine ways that government credit cards can be used for micro-purchases, inter-departmental transfers (as mentioned above) and as a payment vehicle for purchases over $2,500.

The Army, as the largest user of credit cards in the entire government, grew in credit card purchases in 1993 from $111 million to more than $741 million in 1996. The average dollar value of each purchase remained relatively constant around $450 per purchase. In FY 1996, Army personnel held 36,114 cards.

The Navy also has witnessed high usage. Its average dollar level has been between $540 and $575 since FY 1993. The average yearly amount of purchases per credit card has been consistently high. Each Navy credit card carried approximately $28,000 in charges a year. With 11,478 cards in use during FY 1996, that amounts to yearly purchases of more than $300 million.

If statistics on usage are considered critical in determining the future of credit cards in the military, audits show an average savings of $92 in credit card transactions as compared to purchase order transactions. The average cost for a purchase order in the military is $155, *versus* a credit card cost of $63. The savings occurred in contracting (46%), logistics (23%), resource management (19%) and the requiring organization (12%).

9. Budget Pressures and BPR

Business process reengineering is supposed to be performed for every major procurement in DOD and for all functional program offices. There is also a related department-wide effort toward process improvement. However, the individual agencies and offices are being compelled to take direct responsibility for funding BPR efforts themselves as overall DOD funds for BPR have been reduced.

DOD has also embraced the Integrated Product Team (IPT) concept increasingly being used throughout the government. In congressional testimony, DOD officials highlighted the effect of the IPT concept in the acquisition of tactical automated systems. For one Army command, an IPT working with technologists from Army labs and their related contractors shortened the acquisition cycle from 2-5 years to 2-6 months. Many other BPR efforts are aimed entirely on saving money on all processes.

Program responsibilities for BPR are stronger in the Army and Air Force than they are for the Navy. Both the Army and Air Force have program objectives to attain BPR. Navy objectives are more pragmatic, even though BPR program oversight is centralized.

The Army has implemented a strategy called Cost as an Independent Variable (CAIV), i.e., cost as a variable input in contract decisions rather than simply as an output of the requirements and acquisition processes. The emphasis on cost reduction through reengineering of processes extends to both the processes themselves and the products being acquired. In the Army's view, acquisition reform provides opportunities to change the old ways of doing business.

Navy officials reported that personnel downsizing has forced a consideration of the value of BPR, but there is no systematic effort to incorporate BPR as part of overall cost reduction or program improvement. BPR is only being considered on small scale operations. On the other hand, reduced operating budgets are making it very difficult for the Navy to acquire the IT tools necessary to implement more significant BPR. Each Navy organization is responsible for determining its own need for and development of BPR solutions.

10. Preferred Sources of IT & Telecom Product Information

Like most federal agencies, DOD indicates reliance on a number of different sources for its product information. Therefore, vendors who distribute marketing and product promotion through multiple channels as a necessary strategy will be more successful in selling to the Department of Defense entities.

The department ranked several sources of information, as follows:

- Subject matter experts in the agency or in industry
- The use of the Internet to learn of products and capabilities
- Commercial trade magazine product reviews
- Industry-sponsored shows and exhibits
- Market research by contracting officials
- Direct contact with vendor

In some areas, very little reliance on unsolicited information was found. These sources include magazine advertisements, direct mail or industry-sponsored trade shows by invitation only.

11. Top Agency IT Contractors

A list of the top IT contractors within Department of Defense agencies and the military services is provided in Exhibit II.B-4. This data is based on

fiscal year 1996 contract actions filed with the Federal Procurement Data Center (FPDC) at GSA.

Exhibit II.B-4

Top Contractors at the Department of Defense, FY 1996

	Agencies	Army	Navy	Air Force
1.	MCI	ITT Corp.	Hughes	Lockheed Martin
2.	AT&T	Lockheed Martin	Lockheed Martin	Boeing
3.	N.E.T.	GTE Corp.	AT&T	Northrop Grumman
4.	CSC	SAIC	Raytheon/E-Systems	Rockwell
5.	BDM	Raytheon	CSC	Hughes
6.	EDS	EDS	Logicon	GTE Corp.
7.	Comsat	CSC	McDonnell Douglas	IBM
8.	PRC	Hughes	Galaxy Scientific	Raytheon/E-Systems
9.	Unisys	Bell Atlantic	Litton/PRC	SAIC
10.	Lockheed Martin	TRW Corp.	Vitro	CSC

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the Department of Defense is provided in Exhibit II.B-5. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center at GSA for fiscal year 1996. Together, they represent contracts obligations totaling $660 million and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Cryptologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborn
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment
- K058 - Modifications of Communication Equipment

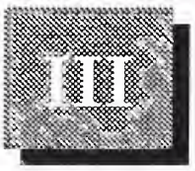
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities
- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit II.B-5

Top Telecommunications Contractors at the Department of Defense, FY 1996

	Agencies	Army	Navy	Air Force
1.	MCI Corp.	ITT Corp.	Hughes	Nortel
2.	N.E.T. Federal Systems	GTE Corp.	AT&T	Electrospace
3.	AT&T	Bell Atlantic	Rockwell	AT&T
4.	Satellite Comm.	Hughes	Raytheon	GTE Corp.
5.	GTE Corp.	General Dynamics	Lockheed Martin	Teleway Japan Corp.
6.	Harris Corp.	Harris Corp.	IBM	Ford Aerospace
7.	BBN	Lockheed Martin	SAIC	Baker Support
8.	GE American	Northrop Grumman	Harris	ITT Corp.
9.	Alcatel	Visions FCU	United Tech.	Pacific Bell
10.	RMS Technologies	Motorola	Ceridian	Siemens Rolm

Source: FPDC



Analysis of New Rules of Procurement

Recently, federal contractors have witnessed a transformation in the federal procurement process. With the repeal of the Brooks Act, control over technology acquisition has been shifted into the hands of the agencies themselves, and away from GSA's oversight. As a result, many of the programs that used to be handled by GSA are now being disabled.

Regulations such as the FIRMR, which provided government-wide standards for acquisition, are now being replaced by programs designed to assist agencies in conducting their own procurements. GSA will continue its Trail Boss program, designed for the education of those involved with procurement and information resource management. FEDCAC will also continue its acquisition support role and the improvement of electronic procurement. Also, GSA's *1000 x 2000* program, designed at educating 1000 mid-level managers by the year 2000, will continue. Overall, GSA plans to assist OMB and IT management committees in the long run by transferring expertise and educating IT leaders, and thus helping smooth the shift to an agency-centric procurement.

Following are some highlights of recent developments in the federal IT procurement system.

A
FASA - The Federal Acquisition Streamlining Act of 1994

The Federal Acquisition Streamlining Act of 1994 (FASA) intended to reduce the amount of procurements synopsized in the Commerce Business Daily (CBD). The prerequisite was that federal agencies achieved at least an interim Federal Acquisition Computer Network (FACNET) capability.

FASA required the establishment of FACNET by all federal agencies to enable vendors to electronically review solicitation notices, access solicitations, and submit responses to those solicitations. One of FACNET's

goals is to replace the CBD as a solicitation publicizing mechanism. The implementation of FACNET follows a simple time-line.

First, federal agencies must achieve and be certified as having an interim FACNET capability. Interim capability certification requires that the agency be able to provide electronic notice of solicitations to the public, and to receive responses and requests for associated information from the public. Interim FACNET capability is certified by the agency's chief procurement official and is announced in the CBD. Interim FACNET certification raises the agency's simplified acquisition threshold to $100,000, and releases the agency from the obligation to publicize solicitations in the CBD that are valued below $100,000 and listed in FACNET.

The next step is the so-called full FACNET capability. Full capability certification requires that the agency uses FACNET for at least 75% of all eligible solicitations. Agencies with no full FACNET certification by January 1, 2000 will lose their simplified acquisition privileges. Such agencies will have to publicize in the CBD any solicitation over $25,000.

The ultimate goal is government-wide full FACNET. It will be declared when the Office of Federal Procurement Policy administrator certifies that in a full fiscal year at least 75% of all eligible federal solicitations were conducted through full FACNET. At that point, solicitations with values up to $250,000 will be exempt from CBD synopsing, provided that they are already listed in FACNET.

Over 95% of all government procurements are valued below $100,000 and are eligible for listing on FACNET, which is becoming increasingly WWW oriented. Electronic distribution of procurement information is expected to cut solicitation time by at least 50%.

B

FARA - The Federal Acquisition Reform Act of 1996

The Federal Acquisition Streamlining Act of 1994 (FASA) was followed by major proposals for continued reform from both the Administration and Congress. The ink wasn't yet dry on FASA before the newly elected Congress renewed its thrust to reduce the cost of acquiring products and services and assuring improved and efficient productivity. The resulting FARA legislation had its origins in the following areas.

1. H.R. 1388; S. 669 Set the Stage for Reform in 1995

The key elements of the Federal Acquisition Improvement Act of 1995, introduced as H.R. 1388; S. 669, are listed in Exhibit III-1 and discussed below.

Exhibit III-1

Provisions of H.R. 1388; S. 669

- Agency-level Protests
- Offeror Statements to Not Protest
- Protests in Federal Courts
- Protests of FACNET Procurements
- Payment of Costs for Frivolous Protests
- Suspension of Procurement
- Scope of Review

Source: INPUT

a. Agency-level Protests

While the Office of Management and Budget might not have been motivated to abolish the General Services Administration's Board of Contract Appeals (GSBCA), it was made clear that two distinctly different bodies were superfluous and the GAO's scope of review was preferred. Nevertheless, the more the purchasing agency could do to address protest issues within its own domain, the fewer board hearings would be required. Further, GSBCA or GAO protest costs could be avoided if the protester had brought its argument before the agency's protest forum.

b. Offeror Statements to Not Protest

Offerors were encouraged to state that they would refrain from protesting at any forum. This risky maneuver did not introduce a new procedure. However, offerors who did not agree to refrain from protesting would have had an advantage over offerors who did agree to refrain from protesting an agency action.

c. Protests in Federal Courts

The legislation attempted to limit the jurisdiction of the Federal District Courts from handling bid protests.

d. Protests of FACNET Procurements

In order to build on the simplified acquisition threshold provision of FASA, this new legislation increased the simplified acquisition threshold to

$1 million for services, and made awards under the simplified acquisition threshold unprotestable.

e. Payment of Costs for Frivolous Protests

Protesters found to have brought a protest ruled to be frivolous by the court would be liable for defense costs incurred by the agency.

f. Suspension of Procurement

This provision eliminated the current suspension authority at GSBCA. The agency could overcome such suspension if it could establish emergency or significant program performance degradation.

g. Scope of Review

Both the Congress and the Administration recommended that the scope of review of any protest be limited to the agency record. This significant change at GSBCA (1) essentially abolished *de novo* review and (2) removed the possibility for conducting investigation of the issues presented by the protester through the process of discovery.

2. Congress Introduces a New Bill, H.R. 1670, With Improvements Over H.R. 1388

Predicated largely on reports that the existing procurement process was costing the government 18% more for what it bought than it should because of the excessively long time to award a contract, Congress believed it could do more to improve acquisition. A new bill, Federal Acquisition Reform Act of 1995, was introduced. Its significant elements are listed in Exhibit III-2 and are discussed below.

Exhibit III-2

Provisions of H.R. 1670

- Competition Requirements
- Commercial Acquisition System
- Procurement Integrity
- Government Reliance on the Private Sector
- Pilot Programs
- Streamlining Disputes Resolutions

Source: INPUT

a. Competition Requirements

This provision was intended to replace the Competition in Contracting Act provisions for full and open competition to a new standard of "maximum

practicable" competition. Essentially, vendors would compete to be placed on a preferred vendor list in order to be eligible for award of any contract to be awarded competitively. The agency reduced the number of eligible competitors to those named to the list.

b. Commercial Acquisition System

Commercial items obtained by the government would be excluded from government-unique requirements such as the Truth in Negotiations Act (TINA) and cost and pricing data. Certifications have not proven to be a deterrent to prohibited conduct.

c. Procurement Integrity

Certain provisions of the Procurement Integrity Act dealing with unauthorized disclosure and receipt of procurement sensitive information were replaced. It also removed agency-implemented procedures obviated by the Ethics Reform Act (1989).

d. Government Reliance on the Private Sector

This provision codified the government "outsourcing" circular (A-76). It emphasized the government's need for commercial services.

e. Pilot Programs

The government would be more able to conduct pilots to test innovative procurement procedures, essentially obtaining waivers from existing laws and policies.

f. Streamlining Dispute Resolutions

Under this bill, a new administrative mechanism consolidated dispute resolution actions of the GAO and GSBCA into a single protest forum not part of any existing agency.

C
ITMRA - The Information Technology Reform Act of 1996

1. Reform Intent

Both the Federal Acquisition Reform Act of 1996 and the Information Technology Management Reform Act of 1996, contained in the National Defense Authorization Act of 1996, usher in a new era of acquiring and managing information technology (IT) by streamlining purchasing practices and eliminating cumbersome regulations. The reforms intended to solve the following problems:

- Oversight too late in process
- Dual review slowed down process
- Alternative or reengineered work processes not considered before automating
- Obsolete technology in use
- Wasteful IT spending
- Poor mission/program performance
- Government-wide expertise not leveraged
- Non-incremental approach to systems acquisition.

The reforms placed responsibility and accountability squarely on the agencies, while easing their regulatory burden:

- Brooks Act repeal shifted responsibility from GSA to agencies
- Agencies can buy systems in smaller, incremental phases
- OMB Director and Chief Information Officers (CIO) to be held accountable
- Simplified procedures for buying commercial off-the-shelf (COTS) items valued up to $5 million
- Office of Federal Procurement Policy (OFPP) can waive any special government contract clauses for COTS items

Agencies can limit which suppliers go into negotiation after initial proposals received.

2. Pre-, Post-Brooks Act Comparison

A comparison of the old acquisition way versus the new reformed way is shown in Exhibit III-3.

Exhibit III-3

Brooks Act - IT Management Reform Act (ITMTRA) Comparison

Aspect	Brooks Act Era ('65-'95)	ITMRA Era ('96 →)
Focus	Technology and Process	Mission, Cost-effectiveness and Performance
Emphasis	Single Agency Solutions	Interagency Coordination Sharing of Expertise
Procurement Authority	Split	Agencies
Accountability	Diffuse	Agencies
Enforcers	GSA	OMB Director and CIOs
Accountability Tactics	GSA Exclusive IT Procurement Authority	Agency Budget-linked Capital Planning and Investment Control Agency Performance and Results-based Management
Protest Jurisdiction	GSBCA	GAO
Implementation Tactics	Massive, Multi-year Systems Development	Modular 12-18 month IT Infusions
Regulation Tactics	DPA FIRMR	No-DPA FIRMR on way out
Acquisition Tactics	Agency investment	Multi-agency investment
Acquisition Process	Prove acquisition integrity	Prove mission/business processes Plan before purchasing
Negotiation Tactics	All bidders through process	Bidders excluded after initial proposals
COTS	Option	Preferred approach
Industry Communications	Cautious	Encouraged

Source: INPUT

Even though GSA's authority per the Brooks Act has been removed, they have been involved in developing regulations implementing the IT management reforms, such as innovative contracts and GSA Advantage!

3. Reform Details

The bulk of the reforms covered in ITMRA became effective on August 8, 1996. Specifics on the reforms are outlined in Exhibit III-4.

Exhibit III-4

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
Title Federal Acquisition Reform 4001 Short Title	This division represents the *Federal Acquisition Reform Act of 1996.*
4101 Efficient Competition	"The Federal Acquisition regulations (FAR) shall ensure that the requirement to obtain full and open competition is implemented in a manner that is consistent with the need to efficiently fulfill the Government's requirements."
4102 Efficient Approval Procedures	Raised limits on when higher approval is needed - to $500,000 (but equal to or less than $10,000,000) from $100,000 (but equal to or less than $1,000,000). Raised limits on when higher approval is needed - to $10,000,000 (but equal to or less than $50,000,000) from $1,000,000 (but equal to or less than $10,000,000).
4103 Efficient Competitive Range Determinations	"If the contracting officer determines that the number of offerors that would otherwise be included in the competitive range under subparagraph (A) (I) exceeds the number at which an efficient competition can be conducted, the contracting officer may limit the number of proposals in the competitive range, in accordance with the criteria specified in the solicitation, to the greatest number that will permit an efficient competition amount offerors rated most highly in accordance with such criteria."
4104 Preaward Debriefings	"When the contracting officer excludes an offeror submitting a competitive proposal from the competitive range (or otherwise excludes such an offeror from further consideration prior to the final source selection decision), the excluded offeror may request in writing, within three days after the date on which the excluded offeror receives notice of its exclusion, a debriefing prior to award. The contracting officer shall make every effort to debrief the unsuccessful offeror as soon as practical but may refuse the request for debriefing if it is not in the best interest of the Government to conduct debriefing at that time."
Title XLII Commercial Items 4201 Commercial Items Exception to Requirement for Certified Cost or Pricing Data	Certified cost or pricing data is no longer required by the statute. The head of the procuring activity may require certified cost or pricing data.
4203 Commercially Available Off-the-Shelf Item Acquisitions: Lists of Inapplicable Laws in FAR	The FAR shall include a list of provisions of law that are inapplicable to contracts for the procurement of commercially available off-the-shelf items. 'Commercially off-the-shelf item' means the item is: • a commercial item • sold in substantial quantities in the commercial marketplace • offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
Title XLIII Additional Reform Provisions 4301 Elimination of Certain Certification Requirements	"Not later than 210 days after the date of the enactment of this Act, the Administrator for Federal Procurement Policy shall issue for public comment a proposal to amend the FAR to remove from the FAR certification requirements for contractors and offerors that are not specifically imposed by statute." The heads of executive agencies have to do the same with agency procurement regulations.
4302 Authorities Conditioned on FACNET Capability	Executive agencies now have until January 1, 2001 to use the full FACNET capability. Removed FASA incentives for achieving immediate, interim FACNET capability.
4304 Procurement Integrity	Restrictions on employment of former government employees apply to procurements above $10,000,000. These government employees are under a one year ban. Criminal fines of no more than 5 years imprisonment. Civil fines for individuals up to $50,000 plus two times the unlawful compensation. Civil fines for corporations up to $500,000 plus two times the unlawful compensation.
Title LI Responsibility for Acquisitions of IT 5001 Short Title	This division represents the *Information Technology Management Reform Act of 1996.*
5002 Definitions	IT broadly defined as "any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency. For purposes of the preceding sentence, equipment is used by the executive agency if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency which (i) requires the use of such equipment, or (ii) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product."
5101 Repeal	Eliminated the central procurement control of GSA.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5112 Capital Planning and Investment Control	OMB Director to be "responsible for improving the acquisition, use and disposal of information technology by the Federal Government to improve the productivity, efficiency and effectiveness of Federal programs ..." OMB Director must track, as part of the budget process, all major capital investments made by an executive agency for information systems. *This has A-11 implications.* OMB Director must submit annual report to Congress on the benefits of the IT investments made and how those investments accomplish agency goals. National Institute of Standards and Technology (NIST) standards and guidelines pertaining to Federal computer systems must be developed. OMB Director shall designate one or more executive agency heads as "executive agent" for Government IT acquisitions. OMB Director shall encourage "best practices" in IT acquisition. OMB Director shall assess, on a continuing basis, other models for managing information technology. OMB Director shall compare and disseminate agency performance in using IT. OMB Director shall monitor the development and implementation of training in information resource management for executive agency personnel.
5113 Performance-based and Results-based Management	OMB Director is now tasked with evaluating the performance and results of agency IT investments. *OMB replaces GSA as "bad guy".* In their capital planning, before making investment in new system, agency heads must determine whether to privatize the function or if the function should be performed by the agency, whether the function should be contracted out or performed by agency personnel. *A-76 process gets used more.* OMB Director is to issue guidance regarding multi-agency investments in IT. OMB Director "may take any authorized action that the Director considers appropriate, including an action involving the budgetary process or appropriations management process, to enforce accountability" of an agency head for IT management. Enforcement options include: • recommending reduction or increase in IT resources • reducing/adjusting apportionments of appropriations for IT • using administrative controls to restrict availability of funds • designating that agency contract for IT acquisition/management.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5122 Capital Planning and Investment Control	Each agency head is tasked with designing and implementing a process for maximizing the value and managing the risks of IT acquisitions. The process must: • provide for the selection, management and evaluation of the results of IT investments • be integrated with the budget process • include minimum criteria related to quantitatively expressed projected net, risk-adjusted return on investment and comparing/prioritizing alternative projects • identify investments that would result in shared benefits or costs for other Federal agencies or state or local governments • include quantifiable measurements for determining the net benefits and risks of the investment • provide means for timely progress information, such as milestones in terms of cost, capability of the system to meet specified requirements, timeliness and quality.
5123 Performance and Results-based Management	Each agency head shall: • establish goals for improving the efficiency and effectiveness of agency operations and, as appropriate, the delivery of services to the public through the effective use of IT • prepare an annual report, to be included in the executive agency's budget submission to Congress, on the progress in achieving the goals • ensure that performance measurements are prescribed for IT used by or to be acquired for, the executive agency and that the performance measurements measure how well the IT supports programs of the executive agency • where comparable processes and organizations in the public or private sectors exist, quantitatively benchmark against such processes in terms of cost, speed, productivity, and quality of outputs and outcomes • analyze the missions of the executive agency and, based on the analysis, revise the executive agency's mission-related processes and administrative processes as appropriate before making significant investments in IT that is to be used in support of the performance of those missions • ensure that the information security policies, procedures, and practices of the executive agency are adequate.
5124 Acquisitions of IT	Agency head has authority to acquire IT directly. Agency head has authority to enter into contract for multi-agency acquisitions of IT. The OMB Director may mandate agencies use multi-agency contracts or seek a waiver. GSA to continue to manage the FTS2000 program.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5125 Agency CIO	Authorizes the establishment of CIO at each executive agency. CIO is responsible for: • providing advice and other assistance to the head of the executive agency and other senior management personnel of the executive agency to ensure that IT is acquired and information resources are managed for the executive agency in a manner that implements the policies and procedures of this division, consistent with Chapter 35 of Title 44, United States Code (Paperwork Reduction Act), and the priorities established by the head of the executive agency • developing, maintaining, and facilitating the implementation of a sound and integrated IT architecture for the executive agency • promoting the effective and efficient design and operation of all major information resources management processes for the executive agency, including improvements to work processes of the executive agency.
5125 Agency CIO (cont.)	CIO duties and qualifications include: • having information resources management duties as the official's primary duty • monitoring the performance of IT programs • advising the agency head whether to continue, modify, or terminate a project • performing an annual assessment of the knowledge and skill of agency IT personnel and their ability to meet agency requirements • rectifying deficiencies through hiring, training, and professional development.
5126 Accountability	Head of each agency, in consultation with the CIO and CFO, shall establish procedures to ensure that accounting /financial systems are: • used effectively • ensure financial and related program performance data are available to executive agency financial management systems • ensure that financial statements support assessments of mission-related processes and performance measurements.
5127 Significant Deviations	Any IT program that significantly deviates from cost, performance or schedule goals must be identified in the strategic IRM plan.
5128 Interagency Support	Agency funds may be used to support interagency IT groups.
5131 Responsibilities Regarding Efficiency, Security, and Privacy of Federal Computer Systems	Secretary of Commerce, working with NIST, shall promulgate standards and guidelines for federal computer systems. Agency head may apply more stringent standards. Secretary of Commerce may waive standards if compliance would adversely affect the accomplishment of the mission or cause a major adverse financial impact which is not offset by government-wide savings.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5132 Sense of Congress	"It is the sense of Congress that, during the next five-year period beginning with 1996, executive agencies should achieve each year at least a 5% decrease in the cost (in constant fiscal year 1996 dollars) that is incurred by the agency for operating and maintaining IT and each year a 5 percent increase in the efficiency of the agency operations, by reason of improvements in information resources management by the agency."
5141 Applicability to National Security Systems	Basically, Act does not apply to national security systems (except for sections 5123, 5125, 5126 and, to the extent practicable, 5112/5122).
5142 National Security System Defined	National security system means any telecommunications or information systems which • involve intelligence activities • involve cryptologic activities related to national security • involve command and control of military forces • involve equipment that is an integral part of a weapon or weapons system • subject to subsection (b), is critical to the direct fulfillment of military or intelligence missions [subsection (b) exempts routine administrative and business applications].
Title LII Process for Acquisition of IT 5201 Procurement Procedures	FAR Council is tasked with ensuring that the process for IT acquisition "is a simplified, clear and understandable process" that specifically addresses risk and the need to incorporate commercial IT.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5202 Incremental Acquisition of IT	Agencies should use "modular contracting" to acquire major IT systems; "grand projects" are discouraged. Modular contracting means an agency's need for a system is satisfied in successive acquisitions of interoperable increments; the increments are compatible with other increments of IT compromising the system. FAR is to be amended as follows: • under the modular contracting process, an acquisition of a major system of IT may be divided into several smaller acquisition increments that: 1. are easier to manage individually than would be one comprehensive acquisition 2. address complex IT objectives incrementally in order to increase the likelihood of achieving workable solutions for attainment of those objectives 3. provide for delivery, implementation, and testing of workable systems or solutions in discrete increments each of which compromises a system or solution that is not dependent on any subsequent increment in order to perform its principal functions 4. provide an opportunity for subsequent increments of the acquisition to take advantage of any evolution in technology or needs that occur during conduct of the earlier increments • a contract for an increment of an IT acquisition should, to the maximum extent practicable, be awarded within 180 days after the solicitation is issued and, if the contract for that increment cannot be awarded for such period, the increment should be considered for cancellation. • the IT provided for in a contract for acquisition of IT should be delivered within 18 months after the date on which the solicitation resulting in award of the contract was issued.
Title LII IT **Acquisition Pilot Programs** 5301 Authority to Conduct Pilot Programs	OFFP Administration is authorized to conduct pilot IT programs. Two programs are authorized: • share-in-savings • solution-based contracting Aggregate value of contracts under the program may not exceed $750,000 for 5 years.
5302 Evaluation Criteria and Plans	Before commencing pilot program, OFPP Administrator must submit a report on the results to the Director and Congress.
5303 Report	Within 180 days after completion of pilot program, OFPP Administrator must submit a report on the results to the Director and Congress.
5304 Recommended Legislation	If the OMB Director determines that, as a result of pilot program, new legislation is necessary, he may propose recommendations to Congress.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
5311 Share-In-Savings Pilot Program	OFPP Administrator may authorize two executive agencies to contract on a competitive basis with private sector source on a solution to improve government processes, and to pay that source a portion of the savings. Not more than 5 contracts for the project may be awarded.
5312 Solutions-Based Contracting Pilot Program	OFPP may authorize any number of agencies to use this approach. Defined as approach where government user defines acquisition objectives, a streamlined source selection process is used, and industry sources provide solutions to attain the objectives effectively. Process requirements are: • acquisition plan emphasizing desired result • result-oriented SOW • small acquisition organization • use or source selection factors emphasizing source qualifications and costs • open communications with contractor community • simple solicitation • simple proposals (qualifications, past performance, conceptual approach, costs) • simple evaluation (completion within 45 days after receipt of proposals) - oral presentations by and discussions with at least 3 and not more than 5 offerors • selection of most qualified offeror - conduct of program definition phase (30-60 days); if most qualified offeror's plan fails, agency should work with next most qualified offeror • system implementation phasing • mutual authority to terminate without penalty at the end of each phase • time management (contract award within 105-120 days after solicitation issuance) GAO charged with monitoring the conduct/results of the pilot program.

Exhibit III-4 (cont.)

Federal Acquisition Reform Act (FASA II) and IT Management Reform Act (ITMRA) Details

Section	Key Points
Title LIV Additional IRM Matters 5401 On-line MAS Contracting	Before January 1, 1998, GSA Administrators shall provide government-wide on-line computer access via FACNET to MAS products and services. System must provide basic information on prices, features and performance, and permit orders equal to 60% of the total amount spent for all MAS orders in the fiscal year. OFPP Administrator may establish pilot program to test streamlined procedures through the FACNET/MAS system: • one such procedure would limit negotiations to terms other than price • another procedure would permit MAS award to any responsible offeror with a good record of past performance that agrees to update prices electronically • GAO is required to issue report on pilot program 3 years after it is established.
5402 Identification of Excess and Surplus Computer Equipment	Head of executive agency is required to inventory all computer equipment 6 months after date of the Act's enactment. Inventory of excess or surplus equipment must be maintained.
Title LV Procurement Protest Authority of the Comptroller General 5501 Period of Processing Protests	Changes certain deadlines in GAO protests: • agency reports are due 30 calendar days after notice of protests instead of 35 calendar days • GAO must issue decisions on protests within 100 calendar days after filing instead of 125 calendar days.
Title LVII Effective Date, Savings Provisions and Rules of Construction 5701 Effective Date	IT provisions take effect on August 9, 1996.
5702 Savings Provisions	Contracts, orders, proceedings, determinations in effect on the effective date shall continue in effect until suspended, set aside or revoked.

Source: INPUT

4. Impact Analysis

The impact of procurement reform can already be seen in the following ways:

- **Procurements become more of a relationship buy** — this favors larger vendors and drives vendors to lure more government employees away
- **Vendor capture costs are increasing** — agencies are letting a series of smaller contracts, thereby reducing pricing margins afforded by large, multi-year contracts
- **Blink and you miss opportunities** — agencies are filtering out a majority of bidders and start awarding within 180-days and expect delivery 18 months later
- **Subcontractors at risk** — over certification requirements
- **Procurement process less predictable** — FIRMR is going away
- **IRM plans become real** — now that IRM plans are tied to agency budgets
- **Capital expenditures easier to identify** — A-11 is tracking major capital investments better
- **Outsourcing opportunities grow** — in their capital planning, agency heads must determine whether to privatize, outsource or insource
- **Electronic Commerce deployment slows** — agencies allowed to slip FACNET implementation till 2000. The impact of the Internet on FACNET implementation is unclear

Local services have potential over FTS2000 — FTS2000 saved under GSA is limited opportunity to big players, but local telecommunications future up-in-air, could prove a huge opportunity for many vendors. FTS2000 is expiring in December of 1998. The RFP for its successor, FTS2001, will be published in the second quarter of 1997. A draft of this RFP can be found at:http://post.fts2k.gsa.gov

D
Players in the Reform Game

In the previous sections we outlined some of the responsibilities of the CIO, the OMB Director, and other government officers as they pertain to the new IT legislation. Here, we examine the issue in further detail.

1. Director of the Office of Management and Budget

The new legislation assigned the responsibility for the efficient use and acquisition of information resources by the executive agencies to the Director of OMB. The Director is responsible for maximizing the productivity, efficiency and effectiveness of information resources in the government, and for establishing policies and guidelines related to improving the performance of information resources. The Director has the authority and responsibility to terminate any high risk IT program that exceeds its established goals for cost or schedule by 50% or does not achieve at least 50% of its performance goals.

The OMB Director is developing clear, concise information technology acquisition procedures and guidelines. The guidelines are based on the following cost thresholds: under $5 million, $5–$25 million, $25–$100 million and $100 million or greater. Procurements of commercial off-the-shelf (COTS) IT are exempt from all procurement laws except those which require full and open competition.

The current OMB Director is Franklin D. Raines.

2. Chief Information Officer

Each executive agency was required to establish a CIO to ensure the agency mission-related and administrative processes are reviewed and improvement opportunities identified. Most have complied. Agencies are allowed to procure IT costing less than $100 million under the guidance of the agency CIO.

3. The CIO Council

The legislation establishes a council composed of agency CIOs and others designated by the Director of OMB. The Council is co-chaired by the Deputy Director of OMB and an elected agency CIO. Currently these are John Koskinen (OMB) and Alvin Pesachowitz (EPA). The council will establish strategic direction for the federal information infrastructure, offer information resource management advice and recommendations to the Director of OMB, and form a committee of senior managers to review high risk IT programs.

The Council is authorized to implement several pilot programs designed to evaluate alternative approaches for acquiring and implementing IT programs. None have been launched so far, but we expect to see some in the very near future.

For more information on the CIO Council, you can visit their Web Site at: http://www.cio.fed.gov

E
Inter-agency Procurement Channels (GWACs, IDIQs, MAS)

With the recent acquisition reforms, agencies are evaluating their procurement options. Program office and information resource management (IRM) officials seek the path of least resistance to acquiring information technology (IT) goods and services. The reform has shifted the most desirable procurement vehicle from indefinite delivery, indefinite quantity (IDIQ) contracts to GSA Multiple Award Schedules (MAS). One can see why by examining the degrees of resistance associated with the following agency procurement vehicles:

- 8(a) Set-Aside
- Credit Cards
- Full and Open
- GSA MAS
- IDIQ
- Sole Source

1. Degrees of Resistance

Agencies judge the usefulness of a procurement vehicle by these five criteria (in order of importance):

- **Limited procurement process** — obtain goods or services in a timely manner with minimal use of procurement resources
- **Reduced exposure to risk** — minimize protests and commitment to buy while maintaining control and discretion in the procurement process
- **Best solution obtained** — achieve mission objectives efficiently and effectively (includes cost effectiveness)
- **Able to purchase enough** — acquire necessary quantities when needed
- **Satisfies unique needs** — acquire goods and services to special agency specifications

Agencies are finding that using GSA MAS and other agency IDIQ contracts gets them to their acquisition goals more quickly and effectively.

2. Path of Resistance

Doing business with 8(a)s allows agencies to seek the best solution in the quantity and/or uniqueness required. The real down side is that agencies must go through a procurement process which has its risks, particularly on

selecting a quality company and the chance of protest. When agencies use 8(a)s to get at desired contractor(s), the risk becomes acceptable.

Credit cards offer agencies a minimal procurement process with little paperwork, total control of the procurement, and good economy due to the commodity nature of credit card buying. Unfortunately, only small (and typically non-unique) ticket items can be purchased this way — some agencies now allow single purchases up to $25,000.

Full and open competition is viewed as a difficult procurement process, fraught with risk, which may not deliver the best solution. The up side is the ability to obtain sufficient quantities of products and services — even when unique requirements exist.

GSA schedules offer the same advantages as credit cards but with the ability to buy in quantity. The agency must rely on GSA's ability to get the best price and follow a modest procurement process. The only real down side is that unique needs may not be met by the products (and now services) on the schedules.

IDIQ contracts provide the best solution, with sufficient quantities and unique needs satisfied. This comes at a cost of the agency procurement process to set up and maintain the contract. The typical exposure to risks of protest, etc. continues to exist.

When agencies use another agency's IDIQ contract, they minimize their risk and get a good solution. This comes at a cost of limited quantities, a lesser procurement process, and not being able to support any unique needs. Agencies seem more willing to trust another agency's procurement solution.

When sole source contracts are warranted, agencies trade off a tiresome procurement process with many of the usual risks for being able to acquire a good solution in the right quantities while addressing their unique needs. If agencies interpret the recent acquisition reforms to mean more discretion on "calling all the shots" then use of this procurement option will increase.

3. Electronic Commerce Wild Card

GSA Advantage! further strengthens the schedule buys approach by providing a faster, less paper-intensive process. FACNET, on the other hand, strengthens full and open competition, but presents the agencies with problems of implementation and what to do with potentially large numbers of respondents. With the acquisition reform giving agencies more time to implement FACNET, INPUT sees little impact over the next few years.

4. Vendor Survival Tactics

Agencies have been placed in a position where the GSA schedules will more often than not be the procurement vehicle of choice. Credit cards would be great if one could order in much greater dollar volumes. If the GSA schedules do not fit the bill, agencies will look into using IDIQs from other agencies or use 8(a)s. In-house IDIQs are considered as cumbersome to use as sole source procurements.

Vendors should heed the following:

- **You had better be on a schedule** — or be on someone else's schedule
- **Pick your IDIQs wisely** — look for agency's who are catering to other agencies use of their IDIQ contracts
- **8(a) relationships are still valuable** — agencies will continue to use 8(a)s
- **Path of least resistance** — ensure your products and/or services are obtainable in the least painful manner by agencies
- **Educate your customers/prospects** on how your products and services can be obtained

F
Procurement Oversight

GSBCA stopped receiving new ADP bid protests on August 7, 1996. GSBCA acted in accordance with ITMRA, which took effect on August 8, 1996.

1. The New Deal

In the wake of ITMRA, vendors are left with the following options for satisfying a bid dispute:

- File a bid protest with the General Accounting Office
- Pursue alternative dispute resolution (ADR)
- File suit in US District Court

Alternative dispute resolution is a way for agencies and vendors to settle procurement disputes without the cost and time of a formal protest. GSBCA is hoping to offer its experience as a mediator for ADR proceedings. However, ADR will not provide the independent scrutiny of a case that may be necessary in many procurement disputes.

Filing a Scanwell Suit in US District Court will achieve an independent review of the facts of a case. It will also result in a legally binding decision.

However, a federal suit is costly and complicated. US District Court also places a heavy burden of proof on the plaintiff.

As a result, vendors seeking an independent review of a procurement dispute without the cost and effort associated with a federal suit (which may not even be an option much longer) must file a protest with the General Accounting Office.

2. The GAO Bid Protest

The General Accounting Office bid protest procedures have been criticized for strict deadlines, limited opportunity for discovery and a predisposition in favor of federal agencies. All of these points are arguably valid and are the reasons most IT vendors preferred GSBCA as a bid protest forum.

However, in facing the fact that GSBCA no longer exists as an option, vendors must consider the procedural differences and their chances for success before proceeding with a bid protest at GAO. Exhibit III-5 summarizes the procedural differences between GAO (post-ITMRA) and GSBCA. Of course, the most important procedural differences center around the rules of discovery. Nevertheless, the various GAO deadlines are also extremely important to be aware of. A missed deadline will almost always result in dismissal.

Vendors should also consider the fact that a GAO decision is not a legally binding or enforceable directive. It is merely a recommendation that federal agencies may accept or reject at their own discretion. Of course, both in the interest of public relations and because of the generally valuable nature of GAO decisions, agencies do ordinarily follow GAO's recommendations. In fact, out of 2,529 cases reviewed by GAO in FY 1995, and 2,296 cases reviewed in FY 1996, there was not one instance of an agency not fully implementing a GAO decision. Still, the strength of GAO decisions warrant a vendor's consideration before pursuing a bid protest.

Exhibit III-5

Bid Protest Procedural Comparison

Action	GSBCA	GAO
Filing	Pre-award - Before bid opening or proposal due date. Post Award - within 10 working days from the date the protested matter is, or should have been, known.	Same.
Notification	Notify Contracting Officer on day of filing.	Notify agency within 1 working day of filing.
Document Collection	Documents requested during discovery conference held within 6 working days of filing.	Documents requested concurrent with filing. Additional documents may be requested within 2 working days of agency report.
Contract Suspension	Requested at filing, hearing within 10 working days of filing.	Automatic immediately after agency notification. Suspension may be waived if agency shows sufficient reason for continuation.
Agency Report	Within 10 working days of filing.	Within 30 calendar days of agency notification.
Hearings	Hearing on the Merits within 25 working days of filing.	Hearing held as soon as practicable after receipt of agency report.
Decision	Within 45 working days of filing.	Within 100 calendar days of filing. An express option is available which requires a decision within 65 calendar days.
Reconsideration	Within 7 calendar days of receipt of decision.	Within 10 days of basis for reconsideration is, or should have been, known.
Award of Costs	Interested party must file for costs within 30 calendar days of sustaining decision. Respondent has 20 calendar days to respond.	GAO may decide to recommend cost reimbursement concurrent with decision

Source: INPUT

Procurement Analysis By Agency/Department

B
Department of the Air Force

1. Reaction to Procurement Reform

On August 8, 1996 the Secretary appointed Arthur L. Money as CIO and Lt. General John S. Fairfield, Deputy Chief of Staff for Communications and Information, as deputy CIO. On December 1, 1996 Lt. General William J. Donahue replaced General Fairfield, who retired.

The stated vision of the CIO is to create "an Air Force that works better and costs less through the smart use of information." The goals of the CIO are to:

- Accelerate business process reengineering (BPR), data element standardization, and information architectures management within the Air Force.
- Implement an Air Force information infrastructure capable of supporting Air Force missions in an integrated and cost effective manner.
- Establish an information architecture management process which will fully integrate information systems across functional areas and incorporate data standards and data sharing.
- Use information resources and information technology solutions to enhance accomplishment of the Air Force mission.

The Air Force saw the reforms and initiatives enacted by the ITMRA as an opportunity to improve the performance and capability of the Air Force in all aspects of their mission to support and defend the United States. Because of the evolving information dominance mission, the Secretary of the Air Force recognized a need to establish a CIO with two major responsibilities. The

first was for business processes which are common to all federal agencies. The second was to support combat roles which use information and information technology for crucial command and control decisions impacting the lives and well being of Air Force combat forces and affecting the outcome of their military missions.

The Secretary's decision brings together three of the four crucial elements of the ITMRA: acquisition authority, information management, and management of agency communications and computer resources. The fourth element, financial management, remains in the Office of the Assistant Secretary for Financial Management (SAF/FM) as mandated by the Chief Financial Officers Act. The Office of Management and Budget, the regulatory agency charged with oversight of information resources management and implementation of the ITMRA in all federal agencies, recently approved this structure.

In one of his first acts as CIO Mr. Money established a CIO Management Board composed of two, three and four star members of the Air Staff and Secretariat whose role is to issue policy, plans and reports. In addition, in order to meld the SC and AQ staff efforts, the deputy CIO and Mr. Money agreed on a CIO Integrated Process Team-primarily composed of members of AF/SC and SAF/AQ-who work cross-cutting issues such as architectures, standards, and performance measurement of IT systems. In April of 1997, the Air Force formed the Air Force Communications and Information Center from the assets of the DCS for Communications and Information. The Deputy CIO heads the center with Systems, Plans and Resources and CIO Support Directorates which provide direct support to the Air Force CIO and Deputy CIO. Additionally the Integrated Process Team concept was expanded to include major stake-holders from the business units across the Secretariat and Air Staff. The IPT's cross-cutting issues now include systems migration to the DII COE, Year 2000 issues, information protection and other tough CIO issues.

In late 1995 the Air Force reengineered the information management and command, control, communications and computers (C4) functions into a single functional area-communications and information (AF/SC). The acquisition of information technology resides within SAF/AQ, reporting directly to the Secretary in accordance with several federal laws. Since the ITMRA and the Paperwork Reduction Act (PRA) require the CIO to report directly to the head of the agency and the Air Force has established the SC function with a predominant IRM role, the designation of the heads of these two functions as CIO and deputy made sense. That same year the Air Force also developed VISTAS, the Air Force IRM Strategic Plan.

The communications and information reengineering also created an integrated information resource management organization at major command and wing levels. These organizations already perform most of the

duties mandated by the ITMRA, PRA and the Computer Security Act. Essentially, the SCs in these organizations are "virtual" CIOs. They already report to the appropriate commander, provide technical advice and guidance to the functional staffs, establish specific technical architecture, set IRM policy and guidance, accomplish information management, assessment and strategic planning for information resource management, and are responsible for the security and operation of most of IT resources. In addition, they accomplish technical review and approval over most of IT acquisitions through the Command's C4 Systems Requirements Document (CSRD) process.

For some time the Air Force has had in place an effective capital planning process called the *Air Force Corporate Process* which encompasses the intent of the ITMRA capital planning and investment control process. The Air Force intends to use this existing process to the maximum extent and will continue to review the process against the requirements of the ITMRA to ensure that it fully supports the letter and intent of the law. In short, the process is a deliberate, cross-functional look at all potential Air Force investment opportunities in what the Air Force calls Mission Support Areas (including logistics, information technology and installation support) and Core Programs, (including the mission roles of air superiority, global mobility, space superiority, power projection, and information dominance). Members of all functional communities review each resource issue starting at the integration process team level and proceeding upward through Panel (Colonel and GM-15 level) review, to Group and Board (one and two star level) reviews. These reviews build a consensus position on resource allocation issues for the Air Force Council at the 3-4 star level, or in CIO terms, the "senior management table."

While the Air Force has been managing investments in this manner for some time, it was apparent that information technology investments did not always receive the approval levels that some thought appropriate. The reason behind this was that the system lacked performance measures. The Air Force relied on "gut feel" as to the advantage of investing in information technology. The result was that mission focused investments such as air planes, missiles or satellite systems often took precedence in the resource war. The Air Force sees the performance-based management of information technology as a key aspect of the ITMRA which will enable them to manage and control information technology. By centralizing their focus on capital planning, investment concepts and evaluation of information technology through outcome-based performance measures, the Air Force will provide greater accountability concerning their information technology investments, while at the same time providing a mechanism to track and report the success of achieving the goals of that investment over the system life-cycle.

The stated objective of the new procurement structure at the Air Force is "in-sight, not oversight and control."

2. Procurement Preferences by Product and Service

The Air Force does not track IT procurements by channel but interviewees were willing to offer the following information about what channels are being used now for IT procurement and where which channels will be used between now and FY 2000.

- The GSA schedule is currently used for small buys and represents approximately 5% of the Air Force IT procurements. This channel will be used less between now and FY 2000 due to internal Air Force requirements to standardize hardware and software. Products and services traditionally bought using this channel will move to Air Force IDIQs.

- Blanket purchase agreements are used for approximately 5% of the Air Force IT procurements. This percentage will not change between now and FY 2000.

- In-house IDIQ contracts are the principal procurement channel used for IT procurements. Currently the channel is used for approximately 60% of the Air Force's procurements, primarily hardware. INPUT estimates that this channel will remain the primary method used to procure hardware and will see increased use as the contracts begin to include services in addition to hardware. Air Force IDIQs will be the primary IT acquisition channel between now and FY 2000.

- Other non-IDIQ in-house contracts account for approximately 35% of Air Force IT procurements. Traditionally, these "cost plus" contracts have been used to procure large systems integration services. Between now and FY 2000 the use of these contract types will decrease significantly in favor of in-house IDIQ contracts.

- Government-wide acquisition contracts (GWACS) are used by the Air Force on an as-needed basis and account for approximately 5% of their IT procurements. They have used Navy's Super Mini contract and NASA's SEWP contract, but overall they feel the overhead is too high on GWACS and they prefer to do their own. There is also some distaste for GWACS because of the determinations and findings requirements under the Economy Act. The determination and finding must state that:

  a) Use of an interagency acquisition is in the best interest of the government

b) The supplies or services cannot be obtained as conveniently or economically by contracting directly with a private source.

The primary procurement methods used to procure specific products and services are shown in Exhibit IV.B-1.

Exhibit IV.B-1

Primary Procurement Methods for Products and Services

Product/Service	*Current Procurement Method*	*Future Use*
Central Mainframe Hardware	In-house IDIQ	More
Server Hardware	In-house IDIQ	Same
Client PC/Workstation H/W	In-house IDIQ	Same
Software Products	In-house IDIQ	Same
Comm./Network Services	In-house IDIQ	More
Processing Services	In-house IDIQ	More
Professional Services	In-house IDIQ In-house Contract	Less
Systems Integration	In-house IDIQ	Less
Systems Ops./Outsourcing	Task Order	More
Computer Maintenance	In-house Contract	More

Source: INPUT

3. Procurement Process

Procurement authority in the Air Force is delegated to the following eight major commands:

- Air Combat Command
- Materiel Command
- Air Mobility Command
- Space Command
- Special Operations Command
- Air Education and Training Command
- Pacific Air Forces
- Air Forces In Europe

Each command has procurement authority at $20 million and below. Air Force Material Command, the USAF's main procurement command, has a procurement authority at $50 million per contract. Smaller buys can occur at the base and local command levels. IT purchases at or below the $5 million threshold can be conducted through a Communications Systems Requirements Document and can be managed by functions at the major command level. Procurements over $5 million require a "mission needs statement" and a senior acquisition executive. They also require the approval of the Air Force staff, either Chief or Vice Chief, before a go ahead to start can be given.

The channel selected for the procurement is done during the acquisition strategy by the acquisition team. Between now and the end of the decade the Air Force intends to have more decentralized procurements being done by bases and local commands, but using centralized contracts.

4. Leasing

To date the Air Force has done little leasing. They estimate only 5% of their computer equipment is leased at present. There have been mixed reviews with the strategy. The decision to lease equipment is controlled by the investment centers within each command. It is expected that the use of leased computer equipment within the Air Force will increase between now and the end of the decade.

5. Outsourcing

The Air Force estimates that between 15% and 20% of their external IT expenditures are delivered through outsourcing today. By the end of the decade they expect this proportion to increase to between 30% and 40%. The single largest area of outsourcing is telecommunications. The importance of different categories of outsourcing between now and FY 2000 for the Air Force are provided in Exhibit IV.B-2 below.

Exhibit IV.B-2

Importance Ratings of Different Categories of Outsourcing

CATEGORY	TODAY	FY 2000
Total Agency IT Outsourcing	2	4
Network Management	3	4
Desk Top Services	4	5
Platform Operations	3	4
Application Operations	3	4
Applications Management	3	4
Business Operations (telephone support, help desk, etc.)	4	5
Other: Data Center Outsourcing	4	5

1=not important; 5=very important *Source: INPUT*

6. EDI and Electronic Commerce

In July 1993, the Deputy Under Secretary of Defense for Acquisition Reform chartered the Electronic Commerce in Contracting (ECIC) Process Action Team (PAT) to conduct a review of existing and future use of electronic commerce (EC) and electronic data interchange (EDI) within the Department of Defense. With representatives from across the DOD and advisors from several federal agencies and industry, the ECIC PAT developed an implementation plan for an integrated DOD-wide approach to electronic procurement. Reinforcement of this plan came in two forms — the September 1993 NPR, which recommended that EC and EDI be expanded within the entire federal acquisition system, and an October 1993 Executive Memorandum from President Clinton directing the broad and rapid implementation of EC to support a full-scale federal system of electronic payments, document interchange and government purchases (FACNET).

In January 1994, PAT report approval came from the Under Secretary of Defense in the form of a memorandum which mandated the execution of the DOD Electronic Commerce in Contracting Implementation Plan. Immediate authorization was given for Defense agencies to use existing CALS funds to support this effort. Stated goals of the plan included:

- Establish a flexible, responsive infrastructure to meet current and emerging requirements and take advantage of new technologies
- Establish a Centralized Contractor Registration (CCR) capability to do business electronically

- Provide a standard method of implementing the national (ANSI X12) and international (UN/EDIFACT) EDI transaction formats
- Modify existing legacy systems to be EC and EDI capable
- Establish an electronic commerce information center
- Use the Acquisition Reform Communications Center (ARCC) for education
- Develop a supportive electronic funds transfer (EFT) architecture and use EFT as the principal method of payment
- Allow federal contractors not using EDI to benefit from EC by accessing government requirements through the Internet

Initially, the EC in contracting PAT found that most DOD components (Navy, Army, Air Force, DLA, DISA, DFAS and DECA) pursued independent EC/EDI solutions for their automated small purchase procurement systems, while a strategic goal of DOD is to present a "single face to industry." Although advancements are being made to enhance interoperability, much remains to be completed. Only as recently as May 10, 1996 did DUSD, DISA and Armed Services senior contracting officials agree on a DOD EC/EDI Vision Statement for contracting: "Utilize electronic commerce to enable process reengineering of all aspects of the acquisition process."

The Air Force also has much to accomplish before it is fully capable of electronic contracting, though a great deal has been done to date. The Air Force currently has 91 FACNET certified contracting sites, representing 29% of 313 total sites within the Department of Defense. See Exhibit IV.B-3 The only DOD service with a higher number of EC-capable sites is the Army with 191 installations. The original PAT report targeted 90 sites within the Air Force to be compliant with ECIC and 19 of those sites have since been removed due to mission changes and base closures. The current status of 91 sites is well beyond the remaining 71 sites identified in the PAT report. Currently, the Department of the Air Force is actively working with the U.S. Marine Corps to develop a plan of action resulting in the interim FACNET certification of nine additional buying activities — one for the Air Force and eight for the Marine Corps. Representatives from both services are discussing EC/EDI education and training requirements for these sites, as well as assessing their technological capabilities for EC. The following exhibit contains a complete listing of Air Force FACNET-certified deployments as of March 17, 1997. While all have interim FACNET capabilities, those locations in italics below have not been verified to date for compliance with complete ECIC implementation:

Exhibit IV.B-3

Air Force Interim FACNET Certified Deployments

ACC CONS, Langley AFB, VA	*Izmir AB, Turkey*	*Patrick AFB, FL*
Altus AFB, OK	Kadena AB, Japan	Peterson AFB, CO
Andersen AFB, Guam	Keesler AFB, MS	*Pope AFB, NC*
Andrews AFB, MD	Kelly AFB, TX	*RAF Alconbury, UK*
Aviano AB, Italy	*Kirtland AFB, NM*	*RAF Feltwell, UK*
Barksdale AFB, LA	Lackland AFB, TX	Ramstein AB, Germany
Beale AFB, CA	Langley AFB, VA	Randolph AFB, TX
Bolling AFB, DC	Laughlin AFB, TX	*Reese AFB, TX*
Brooks AFB, TX	Little Rock AFB, AR	*Rhein-Main, Germany*
Cannon AFB, NM	*AFS Los Angeles AFB, CA*	*Rhein Ordance, Germany*
Charleston AFB, SC	Luke AFB, AZ	SA-ALC, San Antonio, TX
Columbus AFB, MS	Malstrom AFB, MT	*Seymour-Johnson AFB, NC*
Davis Monthan AFB, AZ	Maxwell AFB, AL	SM-ALC, Sacramento, CA
Dover AFB, DE	*Maxwell - Gunter AFB, AL*	*Shaw AFB, SC*
Dyess AFB, TX	MCCDC Quantico, VA	Scott AFB, IL
Edwards AFB (AFFTC), CA	*McChord AFB, WA*	Sheppard AFB, TX
Eglin AFB (AFDTC), FL	McClellan AFB, CA	*Spangdahlem AB, Germany*
Eielson AFB, AK	McConnell AFB, KS	Tinker AFB, OK
Ellsworth AFB, SD	McDill AFB, FL	*Travis AFB, CA*
Elmendorf AFB, AK	McGuire AFB, NJ	Tyndall AFB, FL
Fairchild AFB, WA	*Minot AFB, ND*	*USAF Academy, CO*
Falcon AFB, CO	Misawa AB, Japan	Vandenberg AFB, CA
Goodfellow AFB, TX	Moody AFB, GA	Warner Robins AFB, GA
Grand Forks AFB, ND	*Moron AB, Spain*	WR-ALC, Warner Robins, GA
Hanscom AFB, MA	Mountain Home AFB, ID	Warren, F.E. AFB, WY
Hickam AFB, HI	Nellis AFB, NV	*Whiteman AFB, MO*
Hill AFB, UT	Offutt AFB, NE	Wright-Patterson AFB, OH MADES
Holloman AFB, NM	OO-ALC, Ogden, UT	Yokota AB, Japan
USAFE/LGC, Ramstein, Germany	OC-ALC, Oklahoma City, OK	*38th LS/LGCW, TinkerAFB, OK*
Hurlburt Field, FL	*Onizuka AFB, CA*	*65 CONS, McGuire AFB, NJ*
Incirlik AB, Turkey		

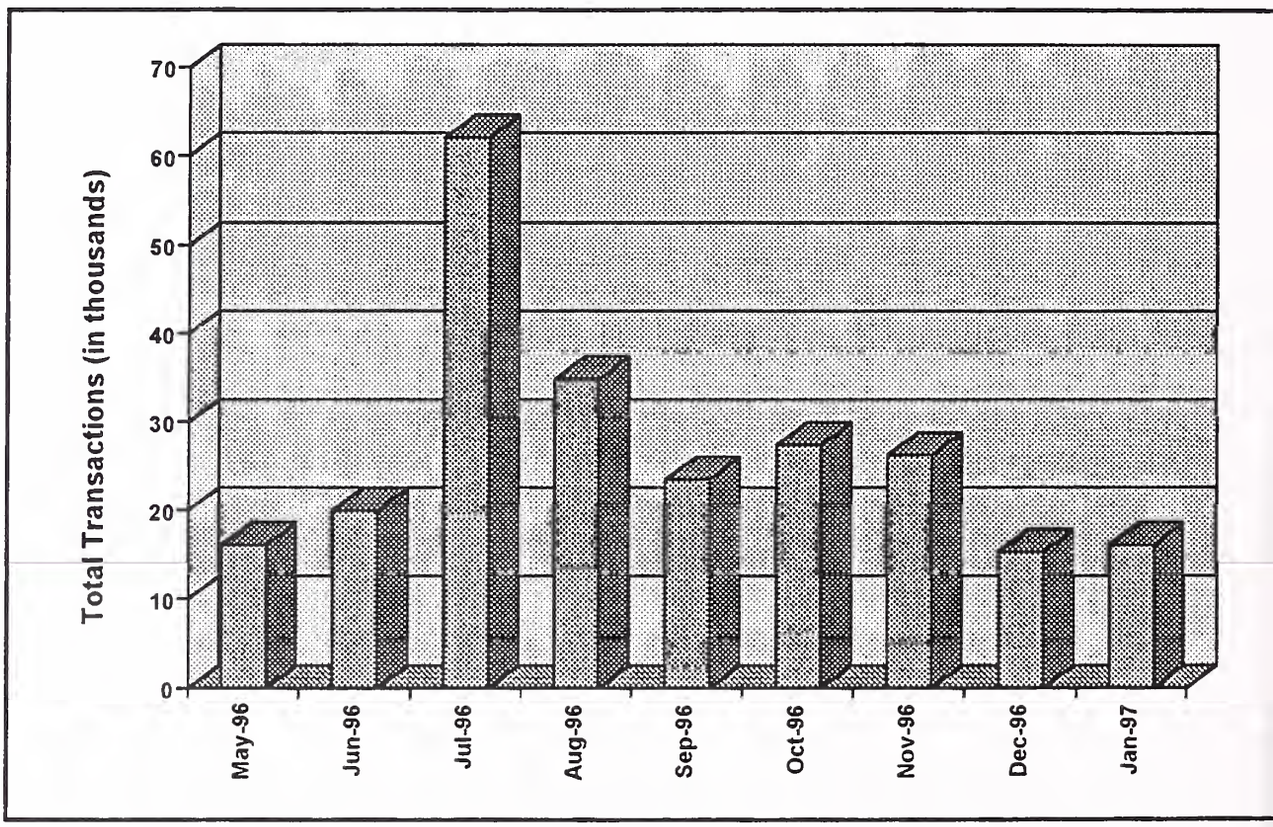
Source: Office of the Secretary of Defense

The available data on the total number of electronic transactions at the Air Force is shown in Exhibit IV.B-4. No discernible trend is apparent because

of the short time frame involved. INPUT speculates that the long-term trend in such transactions will steadily increase at the Air Force.

Exhibit IV.B-4

Total Monthly E/C Transactions - Air Force

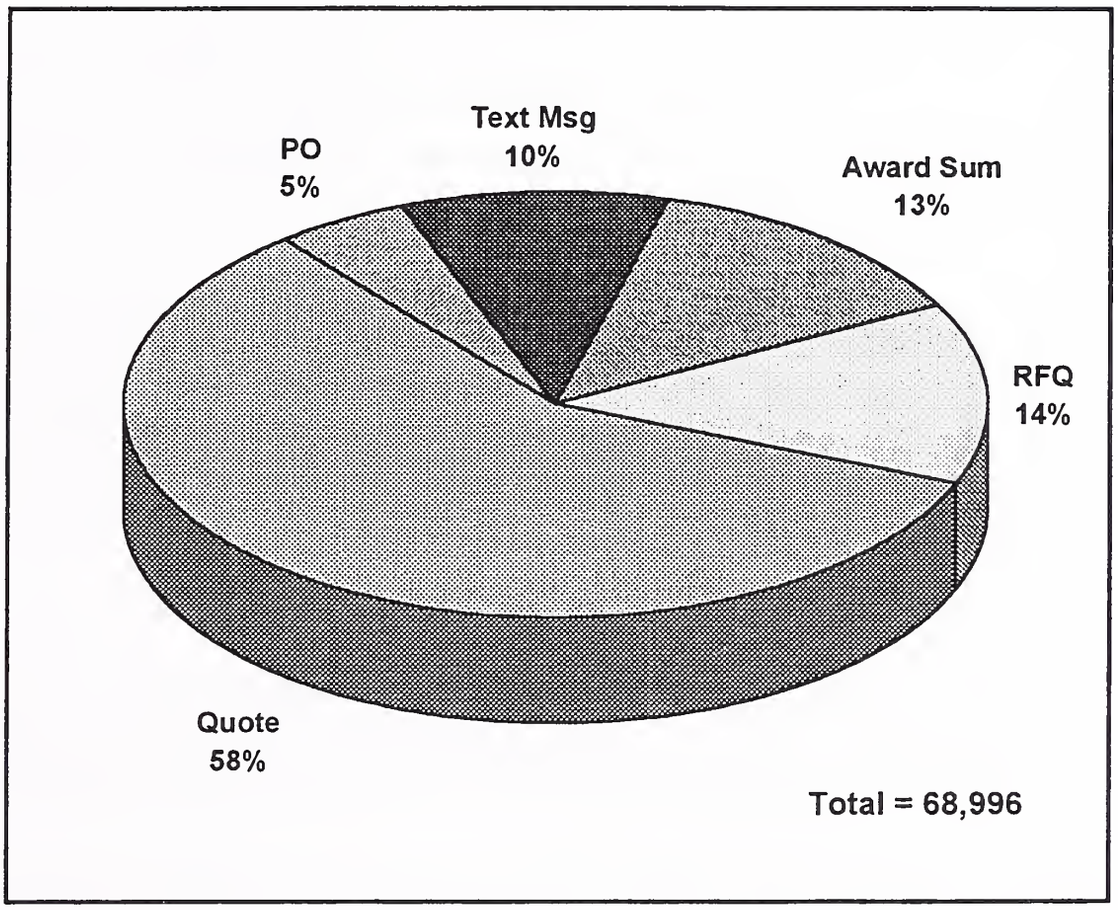


Source: EC/EDI Newsletter

A majority of EC activity within the Air Force is comprised of receiving quotes from industry, followed by posting RFQs and text messages. Within the last quarter of calendar year 1996, quotes accounted for 58% of the Air Force's total electronic transactions of approximately 69,000. See Exhibit IV.B-5. RFQs accounted for 14%, while award summaries represented the third largest share at 13% during this time period.

Exhibit IV.B-5

Distribution of Air Force Electronic Transactions, 4QCY 1996



Source: ODUSD (AR/EC), DoD

Two major initiatives undertaken by the department to implement the single face to industry in EC/EDI are the Menu Assisted Data Entry System (MADES) I & II and the Government Acquisition Through Electronic Commerce (GATES) programs. These systems offer interoperable EC and EDI with their counterpart systems in other DOD branches. MADES is operated out of the Ogden Air Logistics Center at Ogden AFB, Utah and GATES is operated out of the Aeronautical Systems Center (ASC) at Wright-Patterson AFB, Ohio. While these programs offer a basic environment, a more recent and specific initiative is the Air Force's on-line Country Store — a central repository providing Air Force Materiel Command (AFMC) managers and other DOD end-users with the tools needed to satisfy IT requirements, including operating information systems and purchasing products and services. The Country Store is part of the Defense-wide Electronic Shopping System (ESS) initiative offered by DISA.

The Defense Enterprise Integration Services (DEIS) I & II contracts held by Boeing, BDM, CSC, EDS, Lockheed Martin and Unisys will provide much of

the support needed by the Air Force to continue the implementation of the ECIC initiative. While fulfilling a host of requirements, the combined $3.9 billion contracts will offer full-scale and department-wide integration services to offer a common platform for electronic commerce.

For the future of electronic commerce at the Air Force, Kelly AFB in Texas is the location to watch. The installation was recently chosen to represent the Air Force in the Department of Defense model facility demonstration program. The program recognizes excellence in several functional arenas, including EDI.

While major advances in electronic commerce and electronic data interchange took root within the Air Force and DOD before the latest rounds of acquisition reform, the Federal Acquisition Streamlining Act of 1994 bolstered the impetus behind Defense-wide EDI. Similarly, the Clinger-Cohen Act of 1996 does not significantly alter the existing plans and efforts within the Air Force. It does, however, reinforce the importance of electronic commerce to the efficient acquisition and utilization of IT resources.

7. Vendor Past Performance

The Air Force philosophy on past performance is "recent and relevant." Data older than three years should be given much less weight in past performance evaluations than more recent data. The Air Force plans on developing an electronic database that will reference contractor's past performance.

When asked about vendor past performance, the Air Force provided the importance ratings to the criteria listed in Exhibit IV.B-6.

Exhibit IV.B-6

Air Force Vendor Past Performance Criteria & Importance Ratings

CRITERIA	RATING:
Overall Past Performance	4
Quality of Product or Service	5
Timeliness of Performance	4
Cost Control	4
Business Practices	4
Customer (end user) Satisfaction	5
Key Personnel Past Performance	3
Overall Satisfaction	4

1=not important; 5=very important *Source: Department of the Air Force*

According to Appendix AA, of the AF FARs "When the integrated assessments of all aspects of the evaluation is accomplished, it is Air Force policy that the assessment of past performance (1/3) is of equal importance to either factor assessment(1/3) or proposal risk (1/3)." Flexibility rests with the individual source selection authority and the source selection plan, but any deviations from the appendices should be approved.

Vendor past performance is an integral part of the Air Force procurement process. Vendors are required to provide 3 past contracts of a similar size. The Air Force will check these references.

8. Anticipated Credit Card Usage

Credit card purchases within the federal government are not tracked by product area so their direct impact on IT procurements must be inferred. Credit cards usage in the Air Force has seen exponential growth over the past several years. Usage is expected to grow in light of the transactions savings cards represent and the relative ease of purchasing with credit cards, particularly in procuring lower cost IT products and services.

Credit card transactions accounted for over $274 million worth of purchases in 1996, up 107% from $132 million spent in 1995. There were 24,211 cards issued to Air Force personnel in 1996 versus 13,788 in 1995, an increase of 76%. Only 5,714 cards were issued in 1994. The number of credit cards transactions increased 116% in 1996, from 341,236 to 739,067. The average transaction however, dropped from a high of $521 in 1995 to $371 in 1996, indicating a dramatic increase in low dollar, commodity purchases.

9. Budget Pressures and BPR

The attention given to business process reengineering within the Air Force is strong and, according to interviewees, is "incorporated into our culture." VISTA, which is the Air Force Information Resources Management Strategic Plan written in 1995, requires that processes be redesigned and improved before the acquisition of technology. "It is the goal of the Air Force to make process improvement continuous so it is responsive to the requirements of the Air Force leadership and the strategic mission of the Air Force."

AF/XPM is the Air Force advocate for Functional Process Improvement/Business Process Reengineering. The Air Force Center for Quality and Management Innovation (AFCOMI), formerly the Air Force Management Engineering Agency, is the "BPR Field Operating Agency" and is responsible for reimbursing BPR project support activities.

NOTE: VISTA will be updated in 1997 after the DOD Information Management/Information Technology (IM/IT) Strategic Plan is published, but it is unlikely that the Air Force stance on BPR will change.

10. Preferred Sources of IT & Telecom Product Information

Air Force procurement officials use a wide variety of sources to obtain information on IT products and services. The primary method is sales calls from vendors. Special attention is also given to commercial trade magazine product reviews and agency subject matter experts and peers. Industry sponsored shows and exhibits, both private and open, where Air Force personnel have the opportunity to see new products, learn about new services and interact with the vendor community are also popular.

11. Top Agency IT Contractors

A list of the top IT contractors with the Department of the Air Force is provided in Exhibit IV.B-7. This data is based on fiscal year 1995 contract actions filed with the Federal Procurement Data Center (FPDC) at GSA.

Exhibit IV.B-7

Top Contractors at the Air Force, FY 1996

1. Lockheed Martin Corporation
2. The Boeing Company
3. Northrop Grumman Corporation/Westinghouse
4. Rockwell International
5. Hughes Aircraft Company
6. GTE Corporation
7. IBM Corporation
8. Raytheon Company/E Systems
9. Science Applications International Corporation
10. Computer Sciences Corporation

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the Department of the Air Force is provided in Exhibit IV.B-8. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center (FPDC) at GSA for fiscal year 1996. Together they represent contracts obligations totaling $735 million and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Crytologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborn
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment
- K058 - Modifications of Communication Equipment
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities

- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit IV.B-8

Top Telecommunications Contractors at the Air Force, FY 1996

1.	Nortel
2.	Electrospace Systems, Inc.
3.	AT&T Corporation
4.	GTE Corporation
5.	Teleway Japan Corporation
6.	Ford Aerospace Services, Inc.
7.	Baker Support
8.	ITT Corporation
9.	Pacific Bell
10.	Siemens Rolm Communications

Source: FPDC

13. Major Contracts

At least 80 major IT contracts are currently active at the Department of the Air Force. Due to their volume, Exhibit IV.B-9 provides a brief overview of only those contracts with known values exceeding $50 million. Currently, the agency has 29 major indefinite delivery/indefinite quantity (IDIQ) contract vehicles in place, which have a potential combined life-time value of $11.7 billion. INPUT speculates increased use of agency and interagency IDIQ contracts in response to the simplification of regulations governing the purchase of commercial items. This information is taken from INPUT's IMPACT database of active and awarded IT programs.

Exhibit IV.B-9

Major Contracts at the Department of the Air Force

Program	Type	Size	Description
1. Independent Verification and Validation of Inertial Upper Stage Software (IUS IV&V)	Professional Services — Cost Plus Fixed Fee	$50M 17 yrs.	Lockheed Martin provides independent verification and validation (IV&V) of Boeing Defense and Space Group generated Inertial Upper Stage (IUS) flight software. Awarded in October 1985.
2. Strategic War Planning Systems Baseline (SWPS)	Hardware/ Software — Firm Fixed Price	$165M 10 yrs.	General Dynamics provides ADP equipment, software, facilities maintenance, systems engineering services and training in support of the Joint Strategic Target Planning Staff and the Strategic Air Command. Awarded in July 1989.
3. Air Force Equipment Management System (AFEMS)	Hardware/ Software — Firm Fixed Price	$70M 12 yrs.	Lockheed Martin provides computer hardware, software and integration services to combine ten dedicated data systems into a single equipment requirements tracking system. Awarded in January 1990.
4. Joint Staff Automation for the Nineties (AFCAC 303)	Hardware/ Software — IDIQ	$92M 8 yrs.	GTE Corporation provides ADP equipment, software and technical support services for the Washington offices of the Joint Staff. Awarded in December 1991.
5. Test Range Support	Professional Services — Cost Plus Award Fee	$575M 8 yrs.	CSC provides engineering services, technical support and program management for the Flight Test Range at Edwards AFB, California. The contract also calls for various systems and equipment support. Awarded in April 1992.
6. Systems Engineering Technical Assistance (SETA)	Professional Services — IDIQ	$80M 5 yrs.	I-Net and Potomac System Engineering provide the Air Force with technical communications services and computer systems engineering on a worldwide basis. Awarded in July 1992.
7. Defense Management Review Decision 924 (DMRD 924)	Hardware/ Software — IDIQ	$362M 5 yrs.	BDM provides technical and management services, hardware, CPUs and peripherals to consolidate the Air Force Logistics Command's automated data processing systems, as directed by Defense Management Review Decision 924. Awarded in February 1993.
8. Database Machines (AFCAC 305)	Hardware/ Software — IDIQ	$328M 5 yrs.	AT&T, Wang and Technology Management Analysis provide relational database machines for the Army, Navy, Air Force, DISA, DLA and the IRS in a networked environment. Awarded in June 1993.
9. Range Technical Services (RTS)	Professional Services — Cost Plus Award Fee	$221M 6 yrs.	CSC and Raytheon are joint contractors for the operation, maintenance and management of the Air Force's Eastern Space & Missile Center and Test Range facilities. Awarded in June 1993.

Program	Type	Size	Description
10. Specialized Cost Services (SCS)	Professional Services — IDIQ	$69M 5 yrs.	Tecolote Research and Management Consulting Research provide cost studies and analyses on weapon system acquisition, life cycle management, operation and support and related matters. Awarded in October 1993.
11. Information Systems Engineering Prototype Development II (ISEPD II)	Professional Services — IDIQ	$140M 5 yrs.	Lockheed Martin, SAIC, Systems Research, Logtech and Ares provide the Materiel Command with technical services for systems development and integration, training, technical documentation, independent verification and validation and facilities management. Awarded in March 1994.
12. Integrated Computer-Aided Software Engineering (I-CASE)	Hardware/ Software — IDIQ	$671M 10 yrs.	Logicon develops and maintains an integrated set of portable, Ada-based software applications to support software production and maintenance throughout the DOD and other federal agencies. Awarded in April 1994.
13. Hardware and Software Integration Support Services	Professional Services — Firm Fixed Price	$70M 3 yrs.	SAVI Technology provides hardware and software integration support and feasibility studies for DOD-wide automatic identification technology (AIT) efforts. Awarded in April 1994.
14. National Test Facility Operation and Maintenance (NTF)	Professional Services — IDIQ	$300M 7 yrs.	Lockheed Martin and TRW provide research and development support to the Ballistic Missile Defense Organization National Test Facility, covering design, development, analysis and engineering activities. Awarded in October 1994.
15. Unified Local Area Network Architecture II (ULANA II)	Network Services — IDIQ	$595M 4 yrs.	While still under protest by Unisys, EDS and TRW are to acquire, install, integrate, test and maintain the local area network architecture throughout the DOD and a number of civilian agencies. Awarded in December 1994. Protested in December 1994.
16. Space Systems Acquisition Support II (SSAS II)	Professional Services — Various	$300M 5 yrs.	PRC, BD Systems and Anacomp provide technical support and management services for the Air Force Space & Missile Systems Center. Awarded in April and May 1995.
17. Cheyenne Mountain Complex Integrated System Support Contract (CMC-ISSC)	Professional Services — IDIQ	$110M 5 yrs.	Lockheed Martin provides the Cheyenne Mountain Complex with on-site space and warning systems equipment maintenance, developmental engineering, technical documentation, COTS software and logistics support. Awarded in December 1995.
18. Supercomputer Maintenance Program (SMP)	Professional Services — Firm Fixed Price	$59M 5 yrs.	Alpha Data Corporation provides the Air Force Development Test Center with on-site hardware and software maintenance of existing Cray computer equipment located at Eglin AFB. Awarded in December 1995.

Program	Type	Size	Description
19. Integration Command Control Communications Computers Intelligence (IC4I)	Professional Services — IDIQ	$2.8B 8 yrs.	BTG, Cordant and SRA provide the Electronic Systems Center with delivery and support services for worldwide integrated intelligence systems and applications. Awarded in December 1995 and June 1996.
20. Air Force Workstations (AFWS)	Hardware/ Software — IDIQ	$956M 7 yrs.	Sun Microsystems and Hughes Data Systems provide the Air Force with high performance workstations, peripherals, maintenance and support services. Awarded in March 1996.
21. Desktop V (DT V)	Hardware/ Software — IDIQ	$2.0B 5 yrs.	Hughes Data Systems and Zenith Data Systems provide the Air Force with up to 360,000 microcomputers, applications software, user-installable components and support services to operate primarily in a networked environment. Awarded in May 1996.
22. Technical and Engineering Acquisition Support (TEAS III)	Professional Services — Cost Plus Award Fee	$107M 5 yrs.	Sverdrup Technology provides the Aeronautical Systems Center at Eglin AFB with support services in a variety of engineering, technical and acquisition management disciplines. Awarded in June 1996.
23. Software Engineering Support	Professional Services — Cost Plus Award Fee	$98M 5 yrs.	Tybrin Corporation provides the 96th Communications Group in the Air Force Development Test Center (AFDTC) with software engineering services. Awarded in June 1996.
24. Integrated Maintenance Data System (IMDS)	Professional Services — Cost Plus Award Fee	$72M 6 yrs.	Andersen Consulting provides the Air Force with an integrated maintenance system that will incorporate existing DOD systems to enhance interoperability, such as JCALS, MMSS and RRP. Awarded in July 1996.
25. Global Combat Support System/Base Level System Modernization II (GCSS-AF/BLSM II)	Hardware/ Software — IDIQ	$900M 5 yrs.	Lockheed Martin performs integration, systems engineering and software development services in an agency-wide effort to modernize standard Air Force information systems. Awarded in August 1996.
26. Western Range Operation/Maintenance Technical and Support Services (ROMSSC)	Professional Services — Cost Plus Award Fee	$165M 5 yrs.	IIT Research Institute provides the 30th Space Wing at Vandenberg AFB with technical and support services to maintain and upgrade existing Western Range instrumentation. Awarded in August 1996.
27. Visual Upgrade Effort (VUE)	Hardware/ Software — Firm Fixed Price	$70M 5 yrs.	Evans & Sutherland provides image generators, database generation systems, spares and training support in an effort to upgrade 25 flight simulator visual systems for the Air Mobility Command. Awarded in August 1996.

Program	Type	Size	Description
28. Uninterruptible Power Systems (UPS)	Hardware/ Software — IDIQ	$625M 5 yrs.	While currently under protest by Liebert, Exide is to provide up to 600 uninterruptible power systems (UPS) and related equipment throughout the DOD and civilian agencies. Awarded in September 1996. Protested in September 1996.
29. Theater Deployable Communications - Integrated Communications Access Package (TDC - ICAP)	Hardware/ Software — IDIQ	$264M 7 yrs.	Motorola provides commercial off-the-shelf (COTS) switching, multiplexing and transmission equipment to upgrade communications systems used by Air Force wings, operation centers, combat communications units and special operations squadrons. Awarded in October 1996.
30. Management Information Systems Technical Support II (MISTS II)	Professional Services — IDIQ	$674M 5 yrs.	GTE Corp. and Litton/PRC provide communications, computer system development, implementation and operations at HQ AFSC and AFMC. Support services include ADP and communication planning, systems analysis, systems engineering, software development and maintenance, database administration, systems integration, support of research and development activities, data reduction, computer and communications facilities operations and user support activities. Awarded in November 1996.
31. Joint Simulation System (JSIMS)	Hardware/ Software — Cost Plus Award Fee	$69M 7 yrs.	TRW provides the Unified Combatant Commands Services and other joint organizations with a joint simulation system to jointly train, educate, develop doctrine and tactics, formulate and assess operational plans, assess war fighting situations and define operational requirements. Awarded in December 1996.
32. Command and Control Product Line (CCPL)	Hardware/ Software — IDIQ	$500M 5 yrs.	Hughes, Raytheon and TRW will initially address three product lines within C2: data fusion and analysis, command centers, and mission planning, simulation and modeling. The objective of this program is to quickly reconfigure, or develop, if necessary, individual components into proof-of-concept prototypes and deliverable systems. Awarded in February 1997.

Source: INPUT

14. Current Opportunities

The Department of the Air Force is currently pursuing at least 29 major IT contract vehicles. Due to the volume of anticipated programs, the acquisitions summarized below are only those in the pre-solicitation stage:

a. Desktop VI (DT VI)

Type: Firm Fixed Price, IDIQ
This program will provide desktop personal computers, portables (laptops, notebooks, PDAs), PC peripherals, and PC software to operate primarily in an Air Force networked environment.

b. Management Information Systems Technical Support III (MISTS III)

Type: TBD
The Air Force has an ongoing requirement for Management Information Systems Technical Support (MISTS). Communications, computer system development, implementation and operations services are to be provided to 20 bases as well as other key Air Force installations.

c. Unified Local Area Network Architecture III (ULANA III)

Type: Firm Fixed Price, IDIQ
A follow-on to Unified Local Area Network Architecture II (ULANA II) program, this opportunity will acquire commercial off-the-shelf (COTS) solutions for local communications and connection to wide area networks.

d. Engineering and Technical Support Services

Type: TBD
The Air Force has an on-going requirement for Engineering and Technical Support Services at Edwards AFB.

e. Technical/Management Support for ASC

Type: Time and Materials
Wright-Patterson Air Force Base has a requirement for technical and management support for the Aeronautical Systems Center (ASC).

f. Computing Environment STRATCOM Architecture (CESAR)

Type: TBD
Computing Environment STRATCOM Architecture (CESAR) will provide Offutt AFB with a consolidated infrastructure to support the U.S. Strategic Command's (USSTRACOM's) war planning and command/control (C2) missions.

g. Program Management Support System (PMSS)

Type: Firm Fixed Price, IDIQ
The Air Force has a requirement for services to support the operation and maintenance of the Program Management Support System (PMSS)..

h. Air Force Mission Support System Software Support (AFMSS)

Type: TBD
The Electronic Systems Center (ESC) expects to recompete its contract for software development and maintenance of the Air Force Mission Support System (AFMSS) currently held by Lockheed.

i. C4I2SR Engineering and Technical Support Services

Type: Cost Plus Award Fee
The Air Force Space Command intends to acquire on-going engineering and technical services to support its command, control, communications, computer information, intelligence, surveillance and reconnaissance (C4I2SR) systems.

j. Static Uninterruptible Power Supply (SUPS)

Type: TBD
McClellan Air Force Base is procuring supplies, services, installation and maintenance for static uninterruptible power supply (SUPS) systems.

k. National Polar-Orbiting Operational Environmental Satellite System (NPOESS)

Type: Cost Plus Fixed Fee
The Air Force is currently seeking sources to perform a system level demonstration and validation effort in support of the National Polar-Orbiting Operational Environmental Satellite System (NPOESS).

l. Contracted Analytical and Technical Services (CATS)

Type: TBD
The Air Force has an on-going requirement for Contracted Analytical and Technical Services (CATS) regarding the translation of operational requirements into documented systems needs, operational concepts and performance criteria.

m. Software Services for Warning Systems

Type: TBD
The Air Force has an on-going requirement for software services to support the operational warning mission of North American Aerospace Defense Command (NORAD), United States Space Command (USSPACECOM) and Cheyenne Mountain Air Force Base (CMAFB).

n. NORAD/USSPACECOM Mission Architecture and Support

Type: TBD
The Air Force's North American Aerospace Defense Command (NORAD) and United States Space Command (USSPACECOM) have a continuing requirement for mission and architecture support services.

o. General ADP Support for HQ US Central Command

Type: Cost Plus Award Fee
The Air Force Headquarters, US Central Command (USCENTCOM), at MacDill AFB has an on-going requirement for general ADP support services.

p. Interoperability and Tactical Systems Program Support

Type: Cost Plus Award Fee
The Air Force's Air Combat Command intends to acquire interoperability and tactical systems (ITS) program support at Langley AFB.

q. Intelligence System Support (ISS)

Type: Cost Plus Award Fee
The North American Aerospace Defense Command (NORAD) and United States Space Command (USSPACECOMM) is expected to recompete an existing contract for professional services.

r. ATP Modeling and Simulation Support III (AMASS III)

Type: TBD
The Air Force's Phillips Laboratory has a continuing requirement for ATP Modeling and Simulation Support (AMASS II) in connection with the Airborne Laser Technology Division at Kirkland Air Force Base.

s. Software Engineering and Technical Support for VAMOSC (VAMOSC)

Type: TBD
The Air Force has a requirement for software engineering and technical support for the Air Force's Visibility and Management of Operations and Support Costs (VAMOSC).

t. Data and Security Management and Database Operations (CLD/SM)

Type: Firm Fixed Price
The Air Force intends to acquire continued data and security management and database operations support services for the Joint Munitions Test and Evaluation Program Office.

u. High Performance Computing (HPC)

Type: TBD
The Air Force has a requirement to field new technologies in the area of High Performance Computing (HPC). This opportunity involves research, delivery and integration of new commercial off-the-shelf (COTS) technologies in support of the Air Force Development and Test Center's (AFDTC) HPC capabilities.

v. Global Broadcast Service Phase II System Integration (GBS SI)

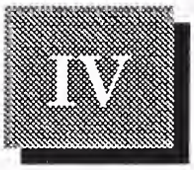
Type: TBD
The Air Force intends to acquire the system integration services in support of the Defense-wide Global Broadcast Service (GBS).

w. Base Level System Modernization Global Combat Support System - Air (BLSM III)

Type: Firm Fixed Price, IDIQ
The Air Force has an on-going requirement for the Base Level System Modernization (BLSM) program to support the Air Force and Department of Defense in preparing their Standard Automated Information Systems (AIS) through the first quarter of the next century.

x. Strategic War Planning System (SWPS)

Type: Firm Fixed Price, IDIQ
The Strategic War Planning System (SWPS) provides software, maintenance, integration, training and data site preparation.



Procurement Analysis By Agency/Department

C
Department of the Army

1. Reaction to Procurement Reform

The Department of the Army has moved across the board to take advantage of the opportunities engendered by government procurement reform. From the comments of Army officials and Army documentation, it becomes clear that the Army sees procurement reform most directly as a way to save scarce funding resources while ensuring U.S. military capability. For example, the Army identifies its overarching acquisition reform strategy as to "empower our workforce to achieve continuous, measurable improvements in Army acquisition processes to field a technologically superior twenty-first century Army, Army XXI, cheaper and faster."

Army XXI is the service's goal for integrating advanced technologies that may be changing the nature of armed conflict into the Army of the next century. For example, geographic information systems that can provide detailed maps of enemy territory for use in the guidance systems of cruises missiles would provide great improvements in that missile's reliability. Changes such as these are said to be producing a "Revolution in Military Affairs," and the Army XXI concept describes the Army's attempts to integrate these changes into the way the Army operates.

The Army's acquisition reform directorate was formed to help all other Army organizations meet eight strategic goals set out by the Army leadership. These goals are as follows:

- **Define Desired Outcomes.** The overall outcomes include streamlined management and efficient organizations, shortened development cycles, reduced overhead and life cycle costs, and increased use of commercial

products and services. Each organization is responsible for defining its own particular goals in more precise terms.

- **Remove Barriers to Business Judgment.** Army officials should take full advantage of new federal laws and regulations, and revisions of Army processes, including seeking waivers of those directives that do not add value to Army-purchased products or services, and replacing stovepiped acquisition structures with integrated product teams.

- **Provide Acquisition Reform Tools.** These are meant to include partnering and teaming between government and industry, and within each group simplified acquisition procedures, use of EC/EDI and credit cards, and performance-based contracting measures.

- **Put Metrics in Place To Measure Progress.** Key metrics are performance specification usage, cycle time reduction, total cost reduction and procurement lead time reduction.

- **Empower Individuals To Use Their Own Judgment for Business Decisions.** To do so, Army officials should delegate authority and reward results, encourage innovation by issuing guidance rather than strict rules, support risk management rather than simply risk avoidance, and resolve issues at the lowest possible management level.

- **Manage for End Results.** There should be a focus on customer needs and customer service, the use of past performance measures to mitigate risk, and tailor oversight requirements so as to avoid highly burdensome oversight structures.

Every Army organization must provide a strategic plan to meet these goals that define organizational outcomes, identifies the tools to be used, and establishes a process for the removal of barriers. Ultimately, planning efforts need to focus on streamlining organizations, eliminating unnecessary redundancy, and reducing the overall cost of doing business.

One key element of acquisition reform is the Army's move toward performance specifications rather than manufacturing specifications. By focusing on performance, the Army can use commercial or modified commercial products much more frequently rather than relying on complicated unique military specifications. Acquisition managers are tasked to analyze the possible use of commercial parts and components for every single piece of what the Army purchases.

Army officials echo the focus on cost savings that Army documentation specifies. Officials also highlight the greatly streamlined processes in place now that practically compel them to find better, faster and cheaper ways to do virtually everything. Lower level decisionmaking is a strong benefit for

Army officials, who can save not only procurement time, but also the time of supervisors who no longer have to oversee every piece of the acquisition puzzle.

Army officials also argue that industry needs to be aware of the implications of procurement reform in order to succeed in a rapidly changing procurement environment. New regulations are being developed continually and industry should keep the overarching concerns with cost and efficiency in mind when working with the Army.

Similarly, Army officials suggest to other agencies that the performance of market analysis is crucial, particularly given the focus on commercial off-the-shelf products and solutions. If agencies can do their own homework to see what is available, they will save time and money on all sides when procuring information technology goods and services.

Officials also urge other agencies to develop strategic interoperability policies to ensure that different pieces of sophisticated systems can still exchange information. Given the focus on EC/EDI throughout the government, this is a necessary element of any acquisition, Army officials state.

2. Procurement Preferences by Product and Service

Army officials find it difficult to predict future buying trends for particular purchasing channels, such as IDIQs or in-house contracts. However, they do agree that blanket purchasing agreements and government-wide acquisition contracts are likely to be used much more in the future than they have been.

Currently, Army officials estimate that the largest proportion of Army procurements now take place either through in-house IDIQ or non-IDIQ contracts. In comparison, examining the chart below, it appears that in the future GSA schedule purchasing will increase through FY 2000.

The primary procurement methods used to procure specific products and services are shown in Exhibit IV.C-1.

Exhibit IV.C-1

Primary Procurement Methods for Products and Services

Product/Service	*Current Procurement Method*	*Future Use*
Central Mainframe Hardware	GSA Schedule	More
Server Hardware	GSA Schedule	More
Client PC/Workstation H/W	In-house IDIQ	More
Software Products	GSA Schedule	More
Comm./Network Services	In-house Contract	Same
Processing Services	In-house IDIQ	More
Systems Integration	In-house Contract	Same
Systems Ops./Outsourcing	In-house Contract	More
Computer Maintenance	In-house Contract	Same

Source: INPUT

3. Procurement Process

One of the most significant changes to the Army procurement process is the decreasing need for high-level review of major IT purchases. For example, of 17 major systems acquisitions recently, only four had to go to the highest levels of the department for decision. With decisionmaking at a lower level, there are both speed and efficiency gains.

The increasing use of IDIQ contracts is seen by Army officials as a good thing for both acquisition organizations and the eventual users of the goods or services. More competition among vendors makes prices lower, and the desire for future business helps ensure good performance from vendors. The use of blanket purchase agreements will also help lower prices for Army customers.

Exhibit IV.C-2 below shows all Army organizations that have their own acquisition functions.

Exhibit IV.C-2

Army Organizations with Acquisition Functions

1. Assistant Secretary of the Army for Research, Development, and Acquisition
2. Program Executive Officers (Air and Missile Defense; Armored Systems Modernization; Aviation; Command, Control, and Communication Systems; Field Artillery Systems; Intelligence and Electronic Warfare; Standard Army Management Information Systems; Tactical Missiles; Tactical Wheeled Vehicles; and Reserve Component Automation System)
3. Director of Information Systems for Command, Control, Communication, and Computers
4. Army Materiel Command
5. Army Space and Strategic Defense Command
6. Army Information Systems Command
7. Army Medical Command Health Care Acquisition Activity
8. Army Aviation and Troop Command
9. Army Communications-Electronics Command
10. Army Chemical-Biological Defense Command
11. Army Industrial Operations Command
12. Army Medical Research and Materiel Command
13. Army Missile Command
14. Army Operational Test and Evaluation Command
15. Army Tank-Automotive Command
16. Army Test and Evaluation Command
17. Army Simulation, Training, and Instrumentation Command
18. Army Soldier Systems Command
19. Army Research Laboratory
20. Army Materiel Systems Analysis Activity

21. Army Cost and Economic Analysis Center

22. Army Acquisition Executive Support Agency

23. Army Training and Doctrine Command

24. Contracting and other acquisition activities in: Army Forces Command, Army Corps of Engineers, U.S. Army Pacific, U.S. Army Europe, U.S. Army South, Military District of Washington, Military Traffic Management Command, Intelligence and Security Command, 8th U.S. Army, and U.S. Army Safety Center

Source: U. S. Army

4. Leasing

As part of the Army's overall acquisition reform process, officials are urged to consider leasing of equipment more seriously than in the past. However, it is unclear if this pattern has developed in the information technology arena. To date, most leasing that is highlighted in Army documentation addresses vehicles, facilities, and related equipment, rather than computer or telecom equipment.

The primary concern of acquisition officials when considering leasing is the overall life cycle cost of the system. Secondarily, the intended use of the equipment is important as is whether a leasing decision makes good business sense, not simply as a matter of cost. In principle, Army officials say they are open to leasing solutions, but there needs to be a detailed case-by-case analysis of the usefulness of leasing rather than purchasing equipment.

5. Outsourcing

Two of the more significant types of outsourcing being performed or discussed in the Army are software development outsourcing and desktop hardware and services outsourcing.

The Army Research Lab (ARL) and its associated elements formerly were responsible for software development requirements throughout the Army. Government employees previously performed most of this development. However, currently virtually no government employees at ARL are performing development tasks. These requirements are being outsourced to private companies and being overseen by government employees. As software development needs become more complex, this trend is likely to continue.

Some high-ranking Army officials have raised the possibility of outsourcing the desktop within the Army, to include hardware, software, services, maintenance and necessary upgrades. The requesting organization would

write requirements stating what functionality it needed: for example, database manipulation, basic word processing, spreadsheet and presentation software, or other needs. Vendors would then be responsible for providing an integrated solution for this need, and would also have to upgrade and renew the system as necessary. This would be a complex solicitation process to control, but there could be significant efficiency savings.

However, often outsourcing leads to higher costs at the outset of a requirement, which may be an explanation for the lack of attention to outsourcing in Army documentation. With an emphasis on cost control, the need to expend greater amounts of money, at first to save money and time later may be a difficult argument to make.

6. EDI and Electronic Commerce

Army officials see electronic commerce and electronic data interchange primarily as money and time saving measures. The Army intends to move toward end-to-end paperless commerce to expedite all facets of the contracting business. So far, the Army has met most of its goals:

- The Procurement Automated Data and Documentation System was installed during FY 1996. This system is the data entry system for weapons systems spare parts.

- The Standard Army Automated Contracting System is being installed through FY 1997. This system is used for all other purchases.

- From June 1997, the new Standard Procurement System (the data entry system for FACNET) will gradually replace both of the above-mentioned systems.

The Army is also moving toward Internet-based contracting. In one of its best practice guides, the Army highlights the experience of the Army Space and Strategic Defense Command (SSDC). SSDC issued its first competitive solicitation over the Internet for 14 specially configured computers. This significantly reduced procurement lead time. The requirement was issued, evaluated and awarded within 36 days after the contracting office received the procurement request. Overall, the resulting cost of the procurement was 30% less than the Army estimated.

Currently, more than 90% of 210 Army sites worldwide are currently certified for FACNET. By December 1999, the FACNET usage goal will be 75% of the previous year's total eligible contracts between $2500-$100,000.

Exhibit IV.C-3 below contains a complete listing of Army FACNET-certified deployments as of March 28, 1997 – a total of 190. While all have interim

FACNET capabilities, those locations marked in italics have not been verified to date for compliance with complete ECIC implementation.

Exhibit IV.C-3

Army Interim FACNET Certified Deployments

Aberdeen Proving Ground, MD	Red River Army Depot, TX	USACOE San Francisco, CA
Anniston AD, AL	Rocky Mountain Arsenal, CO	USACOE Savannah, GA
Bluegrass Army Depot, KY	Sierra Army Depot, Herlong, CA	USACOE Seattle, WA
Brooke AMC, TX-MEDCOM Central Cont. Activity	TECOM White Sands Missile Range, NM	USACOE St. Louis, MO
CBDCOMM (APC-EA)	TECOM Yuma Proving Grounds, AZ	USACOE St. Paul, MN
CECOM Ft. Monmouth, NJ	Tobyhanna Army Depot, PA	USACOE Topographic Eng. Center, Alexandria, VA
CECOM U.S. Army Military Academy, West Point	Tooele Army Depot	USACOE Transatlantic Div., Winchester, VA
CECOM Vint Hill Farms, VA	TRADOC Carlisle Barracks, PA	USACOE Transatlantic Europe
Charles Kelly Support Facility, Oakdale, PA	TRADOC Defense Language Institute	USACOE Tulsa, OK
CMPSC Granite City, IL	TRADOC-Ft. Eustis, VA	USACOE Vicksburg, MS
Corpus Christi Army Depot, TX	TRDC-Ft. Huachuca, AZ	USACOE Walla Walla, WA
Crane Army Ammo Activity	Tripler AMC, HI	USACOE Waterways Experiment
DCSLOG 5TH Signal Command, Worms, GE	U.S. Army Medical R&D Command, Frederick, MD	USACOE Wilmington, NC
DOC, Ft. Eustis, VA	U.S. Army Research Laboratory, Adelphi, MD	USPFO Alaska
DSSW, Pentagon	U.S. Army Soldiers Systems Command, Natick	USPFO Annville, PA
Eisenhower AMC, GA	U.S. Tank-Automotive & Armaments (TACOM)	USPFO Arizona
Fitzsimmons AMC, CO	USA Rock Island Arsenal	USPFO Arkansas
Ft. Belvoir, VA	USACC Korea	USPFO Camp Lincoln, IL
Ft. Benning, GA	USACCE Bad Krueznach	USPFO Camp Ripley, MN
Ft. Bliss, TX	USACCE Benelux	USPFO Colorado

Ft. Bragg, NC	USACCE Grafenwoer	USPFO Concord, NH
Ft. Campbell, KY	USACCE Kaposvar	USPFO Connecticut
Ft. Carson, CO	USACCE Livorno	USPFO Delaware
Ft. Dix, NJ	USACCE Sekenheim	USPFO District of Columbia
Ft. Drum, NY	USACCE Stuttgart	USPFO Georgia
Ft. Gordon, GA	USACCE Tuzla	USPFO Hawaii
Ft. Hood, TX	USACCE Vicenza	USPFO Idaho
Ft. Huachuca, AZ	USACCE Wiesbaden	USPFO Indiana
Ft. Indiantown Gap, PA	USACCE Wuerzburg	USPFO Iowa
Ft. Irwin, CA	USACOE Albuquerque, NM	USPFO Jackson Barracks, LA
Ft. Jackson, SC	USACOE Anchorage, AK	USPFO Jackson, MS
Ft. Knox, KY	USACOE Baltimore, MD	USPFO Kansas
Ft. Leavenworth, KS	USACOE Buffalo, NY	USPFO Kentucky
Ft. Lee, VA	USACOE Camp Zama, Japan	USPFO Lansing, MI
Ft. Leonardwood, MO	USACOE Charleston, SC	USPFO Latham, NY
Ft. Lewis, WA	USACOE Cold Region R&D, Hanover, NH	USPFO Maine
Ft. McClellan, AL	USACOE Construction Eng. Lab, Champagne, IL	USPFO Maryland
Ft. McCoy, WI	USACOE Detroit, MI	USPFO Massachusetts
Ft. McPherson, GA	USACOE Far East District, Korea	USPFO Missouri
Ft. Mead	USACOE Ft. Worth, TX	USPFO Montana
Ft. Meyers (formerly MDW Cameron Station)	USACOE Galvaston, TX	USPFO Montgomery, AL
Ft. Polk, LA	USACOE Honolulu, HI	USPFO Nebraska
Ft. Richardson, AK	USACOE Humphries Center, Alexandria, VA	USPFO Nevada
Ft. Richie, MD	USACOE Huntington, WV	USPFO New Jersey
Ft. Riley, KS	USACOE Huntsville, AL	USPFO New Mexico
Ft. Ritchie, MD	USACOE Jacksonville, FL	USPFO North Carolina
Ft. Rucker, AL	USACOE Kansas City, MO	USPFO North Dakota
Ft. Sam Houston, TX	USACOE Little Rock, AR	USPFO Ohio

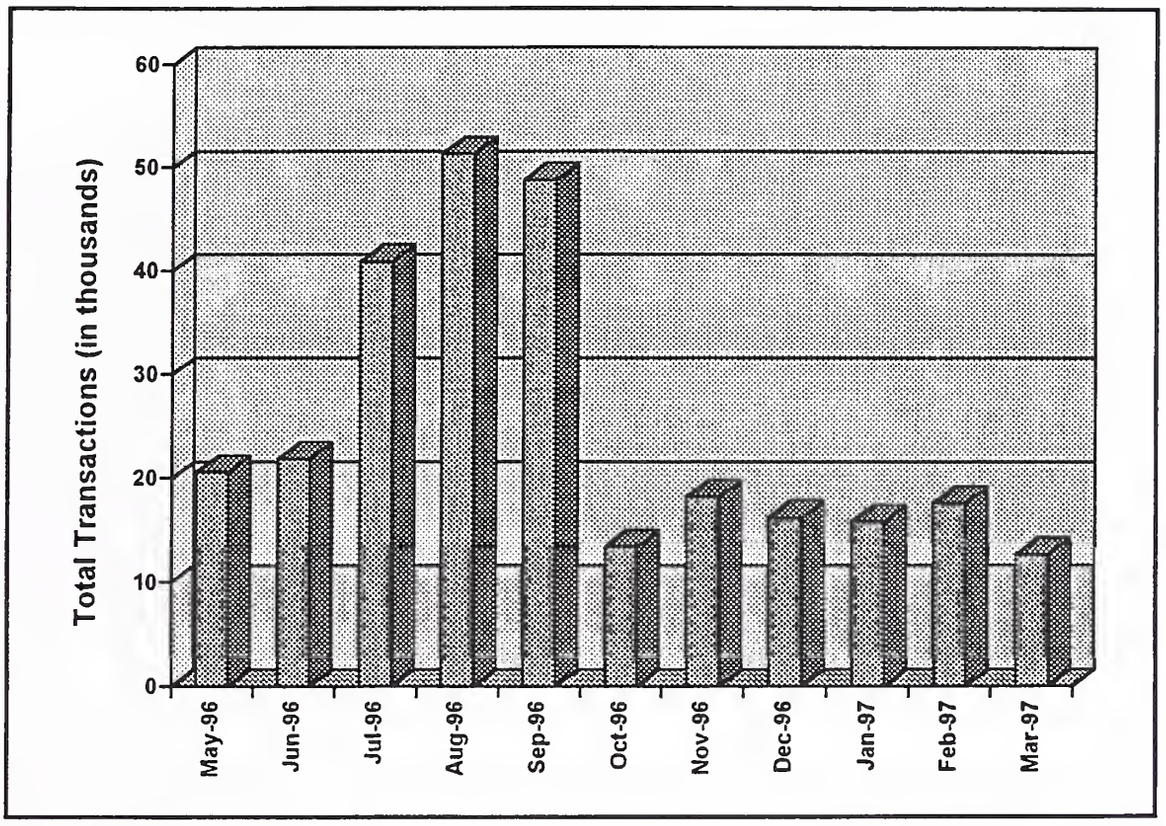
Ft. Shafter, HI	USACOE Los Angeles, CA	USPFO Oklahoma City, OK
Ft. Sill, OK (Supports Ft. Chaffee)	USACOE Louisville, KY	USPFO Rhode Island
Ft. Stewart, GA	USACOE Memphis, TN	USPFO South Carolina
ISC-Fort Huachuca, AZ	USACOE Mobile, AL	USPFO South Dakota
Letterkenny Army Depot, PA	USACOE Nashville, TN	USPFO Tennessee
Madigan AMC, WA	USACOE New England, Waltham, MA	USPFO Texas
MICOM, AL	USACOE New Orleans, LA	USPFO Utah
MTMC, Charleston, SC	USACOE New York, NY	USPFO Virginia
MTMC, Eastern Area	USACOE Norfolk, VA	USPFO Washington
MTMC, Falls Church, VA	USACOE Omaha, NE	USPFO West Virginia
MTMC, Oakland	USACOE Philadelphia, PA	USPFO Wisconsin
MTMC, Sunny Point, NC	USACOE Pittsburgh, PA	USPFO Wyoming
National Defense University	USACOE Portland, OR	Walter Reed AMC, DC
National Guard Bureau HQ Falls Church, VA	USACOE Rock Island	Watervliet Arsenal, NY
OPTEC, Ft. Hood, TX	USACOE Sacramento, CA	William Beaumont AMC, TX
Picatinney Arsenal, NJ		

Source: Office of the Secretary of Defense

The available data on the total number of electronic transactions at the Army is shown in Exhibit IV.C-4. No discernible trend is apparent because of the short time frame involved, but INPUT speculates that the long-term trend in such transactions will steadily increase.

Exhibit IV.C-4

Total Monthly Electronic Commerce Transactions - Army

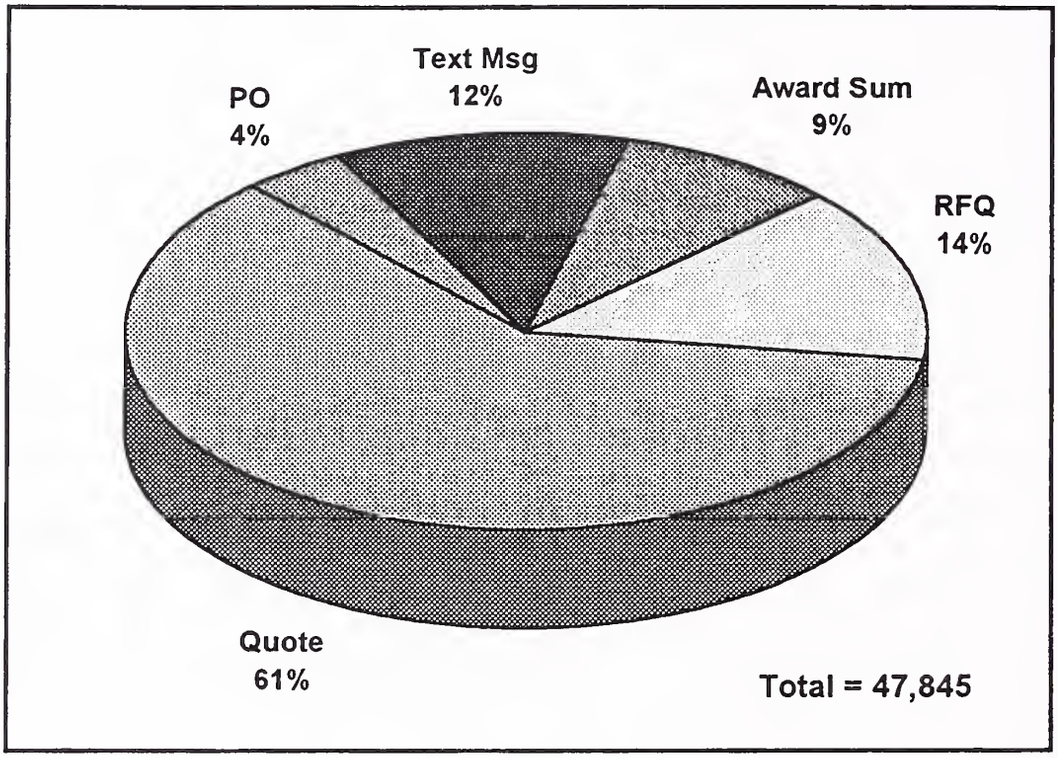


Source: EC/EDI Newsletter

Looking at transaction types, a majority of EC activity within the Army is comprised of receiving quotes from industry, followed by posting RFQs and text messages. Within the last quarter of calendar year 1996, quotes accounted for 61% of the Army's total electronic transactions of approximately 48,000. See Exhibit IV.C-5. RFQs accounted for 14%, while text messages represented the third largest share at 12% during this time period.

Exhibit IV.C-5

Distribution of Army Electronic Transactions, 4QCY 1996



Source: ODUSD (AR/EC), DoD

Exhibit IV.C-6 shows the number of FACNET transactions each organization in the Army has processed during FY 1997 to approximately mid-April 1997. The number indicates there should be a dramatic increase in usage for FY 1997.

Exhibit IV.C-6

FACNET Transactions in Army Commands

ORGANIZATION	*FACNET TRANSACTIONS THRU APRIL, FY1997*
Army Materiel Command	15,158
Army Corps of Engineers	8187
Defense Supply Services – Washington	1429
Eighth U.S. Army (Korea)	1483
Forces Command	4863
Military District of Washington	1513
Army Medical Command	15,583
Military Traffic Management Command	434
National Guard Bureau	5281
Army Space and Strategic Defense Command	89
Army Training and Doctrine Command	7317
U.S. Army, Europe	371
U.S. Army, Pacific	2431
TOTAL ARMY TRANSACTIONS	**64,139**

Source: U.S. Army

7. Vendor Past Performance

The Army views past performance as a way to mitigate or manage the risk associated with large procurements. This also links to reengineering efforts discussed below, as the Army urges contracting officials and contractors themselves to save money and time on oversight requirements by focusing on past performance as an element of best value contracting.

Oversight is directly related to the risk of nonperformance. Acquisition officials can use available tools to balance against oversight with the estimated contractor performance levels. Contractors must be fully responsible for the quality of their products and services.

Army activities, in turn, should operate on the basis of trust that deliverables will adhere to all requisite quality and performance standards. Past performance is seen as a good primary indicator of the risk of nonperformance. In addition, best value contracting techniques can also help resolve risk issues.

When asked about vendor past performance, the Army provided the importance ratings to the criteria listed in Exhibit IV.C-7.

Exhibit IV.C-7

Army Vendor Past Performance Criteria & Importance Ratings

CRITERIA	RATING:
Overall Past Performance	5
Quality of Product or Service	5
Timeliness of Performance	5
Cost Control	4
Business Practices	4
Customer (end user) Satisfaction	5
Key Personnel Past Performance	5
Overall Satisfaction	5

1=not important; 5=very important *Source: U. S. Army*

8. Anticipated Credit Card Usage

The Department of the Army is far and away the largest user of credit cards in the entire government. In FY 1993, the Army had more than $111 million in credit card purchases. By 1996, that number had increased to more than $741 million. Average dollar value of each purchase has remained relatively constant around $450 per purchase, except for FY 1994 which showed $616 per purchase. In FY 1996, Army personnel held 36,114 cards; the closest agency behind the Army was the VA with 26,572 cards.

The Army has set specific goals for credit card usage. The Army Chief of Staff set a goal of 80% credit card usage for micropurchases (those below $2500), and the Army is on track to exceed that level. Audit statistics also show that there is an average savings of $92 in credit card transactions as compared to purchase order transactions. The average cost for a purchase order is $155 versus a credit card cost of $63. The savings occurred in contracting (46%), logistics (23%), resource management (19%) and the requiring organization (12%).

9. Budget Pressures and BPR

Within the Army, business process reengineering efforts seem to be almost entirely a function of the need to save money on all processes. For example, all program, project, or product managers are required to develop formal cost reduction plans which document the commitment to achieve needed savings for the Army.

Additionally, all members of the Army acquisition community have been tasked to vigorously seek out opportunities to realize efficiencies in the way the Army develops, tests, and/or procures materiel.

A key principle of these efforts is the use of a strategy called Cost as an Independent Variable (CAIV). CAIV is meant to treat cost as a variable input in contract decisions rather than simply as an output of the requirements and acquisition processes. According to Army acquisition reform documentation "Aggressive management to include continual cost-performance-schedule trades sponsored by the combat developer, materiel developer, and industry ensure that processes and products remain focused on dramatically reduced total life cycle costs."

This emphasis on cost reduction through reengineering of processes extends to both the processes themselves and the products being acquired. In the Army's view, acquisition reform provides opportunities to change the old ways of doing business. Any activity that provides no or low value-added to a given product or service must be closely scrutinized for tailoring or elimination.

10. Preferred Sources of IT & Telecom Product Information

According to Army IRM and contracting officials, the most important sources of information are commercial trade magazine product reviews, agency subject matter experts, and industry sponsored shows and exhibits. This shows the increasing focus on the performance of market research by contracting officials when considering vendors, which means vendors must aggressively market their products through a wide variety of channels.

As is becoming increasingly common throughout the government, officials also highlight the importance of the Internet as a source of information. This includes not only corporate web sites themselves, but also web sites that evaluate and/or rank products of other companies. Again, marketing and product promotion through multiple channels is a necessary strategy to compete in the reforming acquisition market.

11. Top Agency IT Contractors

A list of the top IT contractors with the Department of the Army is provided in Exhibit IV.C-8. This data is based on fiscal year 1996 contract actions filed with the Federal Procurement Data Center (FPDC) at GSA.

Exhibit IV.C-8

Top Contractors at the Army, FY 1996

1. ITT Corporation
2. Lockheed Martin
3. GTE Corporation
4. Science Applications International Corporation
5. Raytheon Company
6. Electronic Data Systems
7. Computer Sciences Corp.
8. Hughes
9. Bell Atlantic
10. TRW Corporation

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the Department of the Army is provided in Exhibit IV.C-9. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center (FPDC) at GSA for fiscal year 1996. Together they represent contract obligations totaling $1,366 million and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Cryptologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborne
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment
- K058 - Modifications of Communication Equipment
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities

- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit IV.C-9

Top Telecommunications Contractors at the Army, FY 1996

1. ITT Corporation
2. GTE Corporation
3. Bell Atlantic
4. Hughes
5. General Dynamics
6. Harris Corporation
7. Lockheed Martin
8. Grumman Aerospace
9. Visions Federal Credit Union
10. Motorola

Source: FPDC

13. Major Contracts

At least 84 major IT contracts are currently active at the Department of the Army. Due to their volume, Exhibit IV.C-10 provides a brief overview of only those contracts with known values exceeding $50 million. Currently, the agency has 43 major indefinite delivery/indefinite quantity (IDIQ) contract vehicles in place, which have a potential combined life-time value of $12 billion. INPUT speculates increased use of agency and interagency IDIQ contracts in response to the simplification of regulations governing the purchase of commercial items. This information is taken from INPUT's IMPACT database of active and awarded IT programs.

Exhibit IV.C-10

Major Contracts at the Department of the Army

Program	Type	Size	Description
1. Army Tactical Command and Control System (ATCCS)	Professional Services – Various	$17.0B Various	Nine contractors provide the Army with hand-held and portable computers, peripheral devices and software to develop numerous battlefield command and control systems that share and process data. Awarded from August 1990 to April 1993.
2. Lightweight Computer Units (LCU)	Computer Equipment – IDIQ	$430M 11 yrs.	SAIC provides ruggedized, lightweight personal computers for use in the Army's battlefield Common Hardware/Software System. Awarded in May 1991.
3. Reserve Component Automation System (RCAS)	Professional Services – Cost Reimburse	$1.6B 12 yrs.	Boeing Computer Services and CSC provide a comprehensive office automation computer network to link over 9,800 Army National Guard and Army Reserve units at 4,700 locations. Awarded in September 1991.
4. Medical Diagnostic Imaging Support System (MDIS)	Network Services – IDIQ	$352M 8 yrs.	Lockheed Martin provides the Corps of Engineers with hospital networks and imaging systems that produce, display and archive radiological images and patient data for use in health care delivery. Awarded in September 1991.
5. CONUS Telephone Modernization Program (CTMP)	Network Services – IDIQ	$573M 10 yrs.	GTE provides engineering, installation, testing and maintenance of a COTS ISDN telecommunications system to upgrade 42 Army sites within the continental United States (CONUS). Awarded in September 1991.
6. Personnel Electronic Records Management System (PERMS/ODIS)	Professional Services – IDIQ	$51M 6 yrs.	PRC and I-NET provide for an optical digital imaging system (ODIS) to store, retrieve, transmit and receive the Army's records on active, retired and reserve personnel. Also provided is off-the-shelf software to manipulate images, support the DDN interface and convert paper records to digital form. A database management system and a network operating system will also be acquired. Awarded in October 1991.

Program	Type	Size	Description
7. Telecommunication Modernization Program (TEMPO)	Network Services – IDIQ	$600M 10 yrs.	Bell Atlantic provides a complete digital voice administrative telecommunications system to serve 250 Department of Defense locations in the Washington, DC area. Awarded in November 1991.
8. Joint Computer Aided Logistics Services (JCALS)	Systems Integration – Various	$744M 15 yrs.	CSC provides the hardware infrastructure for the Army's overall CALS program. Deliverables include computer hardware, software, telecommunications equipment and professional services for 11 individual Army CALS projects. Awarded in December 1991.
9. Operation and Maintenance of the Army Information Processing Centers	Professional Services – TBD	$550M TBD	Integrated Systems Group, Pacific Corp., Federal Systems Group and Storage Technology Corp. provide support for continuing the Army Information Processing Centers (AIPC) operations. Awarded in June 1992.
10. High Energy Laser System Test Facility (HELSTF)	Professional Services – Cost Plus Award Fee	$65M 5 yrs.	AerolTherm provides technical support services for the High Energy Laser System Test Facility (HELSTF), on site at the White Sands Missile Range in New Mexico. In addition, support may be provided at off-range locations. Awarded in November 1992.
11. ADP Systems Services and Installation of Applications System Software	Professional Services – Cost Plus Award Fee	$62M 5 yrs.	CSC provides for non-personal services in support of ADP technical operations for the Standard Army Management Information System (STAMMIS) located at Ft. Lee, VA. Through STAMMIS the Army has developed approximately 100 administrative software systems. Awarded in November 1992.
12. Technical Representative Services	Professional Services – Labor Hour	$65M 5 yrs.	CSC and Research, Analysis and Maintenance provide on-going technical representative services to the US Army Information Systems Command (USAISC). Awarded in February 1993.
13. Missile Command Information Mission Area Support Services (IMA)	Network Services – Cost Plus Award Fee	$124M 5 yrs.	Systems Engineering Solutions, Inc. provides support services for automation, telecommunications, visual information and records management at Redstone Arsenal in Alabama. Awarded in February 1993.

Program	Type	Size	Description
14. Defense Medical Systems Support Center Automation Support Hardware (DASH)	Computer Equipment – IDIQ	$61M 5 yrs.	Tracor (formerly Cordant) provides general purpose ADP equipment, software and support equipment to assist the Defense Medical Systems Support Center (DMSSC) in delivering high-quality patient care in each of its more than 700 clinics and hospitals CONUS and OCONUS. Awarded in April 1993.
15. Sustaining Base Information Services (SBIS)	Professional Services – IDIQ	$5.0B 10 yrs.	Lockheed Martin provides an enhanced replacement system for the Army's baseline configurations and facilitates the transfer of information processing to an open system environment. Awarded in June 1993.
16. All Source Analysis System (ASAS)	Professional Services – Cost Plus Award Fee	$115M 6 yrs.	Lockheed Martin provides systems development and operations support for the central component of the Army Tactical Command and Control System. Awarded in October 1993.
17. Automatic Identification Technologies (AIT)	Computer Equipment – IDIQ	$211M TBD	Intermec supplies scanners, printers and associated peripheral devices to provide the Army with a common baseline of bar-code equipment for tactical and non-tactical applications. Awarded in March 1994.
18. PEO STAMIS Computer Contract (SCC)	Computer Equipment – IDIQ	$100M 9 yrs.	Sysorex provides laptops, notebook computers and network file servers to support the Army's battlefield information systems. Awarded in June 1994.
19. Total Army Personnel System (TAPSYS-2)	Software Maint. – IDIQ	$110M 5 yrs.	PRC provides configuration and software development, maintenance and administration for the Total Army Personnel Database. Awarded in August 1994.
20. Battle Command Training Program (BCTP)	Professional Services – Cost Plus Fixed Fee	$104M 5 yrs.	Logicon provides the Battle Command Training Program with administrative and management support services for computer simulated training exercises. Awarded in August 1994.
21. Information Mission Area Support (IMA)	Professional Services – Cost Plus Award Fee	$157M 6 yrs.	SAIC provides the Army with scientific engineering services, including systems, design and integration engineering, as well as test and evaluation support. Awarded in November 1994.

Program	Type	Size	Description
22. Army Global Command & Control System (AGCCS)	Systems Integration – Cost Plus Award Fee	$167M 5 yrs.	Lockheed Martin provides consolidation of three major Army command and control information systems to enhance interoperability, ensure software and technology reuse and minimize system duplication. Awarded in December 1994.
23. Common Hardware/ Software II (CHS II)	Computer Equipment –	$1.2B	GTE provides hardware, software, professional services and computer processing, storage and display technology to create an integrated system of battlefield processors. Awarded in April 1995.
Program	**Type**	**Size**	**Description**
24. White Sands Missile Range-Test Support Network (WSMR-TSN)	Network Services – IDIQ	$107M 8 yrs.	GTE provides a new fiber optic backbone transmission system and digital user interfaces for the White Sands Missile Range Test Support Network. Awarded in April 1995.
25. Warfighter Simulation 2000 (WARSIM 2000)	Professional Services – Cost Plus Fixed Fee	$100M 7 yrs.	Hughes, Lockheed Martin and TRW provide the Army with a warfighter simulation system to provide command post training beyond the year 2000. Awarded in May 1995 and April 1996.
26. Lightweight, Multi-Band Satellite Communication Terminals (LMST)	Network Services – IDIQ	$70M 5 yrs.	Harris provides the U.S. Army CECOM with production quantity lightweight, multi-band satellite communications (LMST) terminals. Awarded in July 1995.
27. Small Multi-user Computer II (SMC II)	Computer Equipment – IDIQ	$902M 3 yrs.	Telos Corporation provides commercial off-the-shelf microcomputer hardware, software, servers, peripherals and installation support to meet general ADP requirements within the Army, DOD and other federal agencies. Awarded in August 1995.
28. Department of the Army Software Support Services - Umbrella 3 (DASSS-U3)	Software Products – IDIQ	$100M 5 yrs.	EDS and SRA provide software analysis, risk management and economic analysis for the Army Information Systems Software Center (USAISSC). Awarded in September 1995.
29. Professional Administrative and Management Support Services	Professional Services – Time and Materials	$118M 5 yrs.	Telos provides automated battlefield systems support and engineering services for the Army's Software Engineering Directorate. Awarded in December 1995.

Program	Type	Size	Description
30. Outside Cable Rehabilitation (OSCAR II)	Network Services – IDIQ	$500M 5 yrs.	GTE provides installation, maintenance, training and testing of cable and network interface and computers to implement installation-wide connectivity on Army posts, camps and stations. Awarded in February 1996.
31. Command, Control and Communications Technology, Engineering and Integration Support Services (C3I TE&I)	Professional Services – Time and Materials	$371M 5 yrs.	CSC provides systems engineering and integration support for the Army Tactical Command and Control System (ATCCS). Awarded in March 1996.

Source: INPUT

14. Current Opportunities

The Army is currently pursuing at least 76 major IT contract vehicles. Due to the volume of anticipated programs, the acquisitions summarized below are only those in the pre-solicitation stage:

WARFIGHTER INFORMATION NETWORK (WIN)
Type: TBD
The Army intends to acquire a new Warfighter Information Network (WIN) that will support the Force XXI requirements into the 21st century.

SMALL MULTI-USER COMPUTER III (SMC III)
Type: Firm Fixed Price, IDIQ
The Department of the Army is handling the acquisition of commercial off-the-shelf (COTS) multi-user, server and network server computer equipment, software, networking components and technical support services to support Army, Navy, Air Force and DOD agencies' office automation and network requirements.

PERSONAL COMPUTER 3 (PC 3)
Type: Firm Fixed Price, IDIQ
The Department of the Army has an on-going requirement for commercial off-the-shelf (COTS) single user computers for the Army and DOD agencies.

NATIONAL TRAINING CENTER-OBJECTIVE INSTRUMENTATION SYSTEM (NTC-OIS)
Type: Cost Plus Award Fee
The Army's Simulation, Training and Instrumentation Command (STRICOM) intends to acquire an objective instrumentation system (OIS) for the National Training Center (NTC) at Fort Irwin, CA.

CORPS OF ENGINEERS AUTOMATION PLAN (CEAP)
Type: TBD
The Army Corps of Engineers (CoE) will have a requirement for follow-on general ADP support and services for the Corps of Engineers Automation Plan (CEAP-1A).

OUTSIDE CABLE REHABILITATION III (OSCAR III)
Type: Firm Fixed Price, IDIQ
The Army has continuing requirements for the upgrade of its Outside Cable Rehabilitation (OSCAR) program to modernize their information system infrastructures with the most up-to-date COTS equipment available.

PROFESSIONAL ADMINISTRATIVE AND MANAGEMENT SUPPORT SERVICES
Type: Time and Materials
The Army's Communications and Electronics Command (CECOM) Software Engineering Directorate (SED) has continuing requirements for professional, administrative and management support services for its various divisions.

SOFTWARE ENGINEERING AND TECHNICAL SUPPORT (SWEATS)
Type: Firm Fixed Price, IDIQ
The Army Information Systems Engineering Command intends to acquire ADP and telecommunications support services.

PORTABLES 4
Type: Firm Fixed Price, IDIQ
The Army has continuing requirements for ordering vehicles to meet its portable computer needs.

FUNCTIONAL SUPPORT SERVICES (FSS-L)
Type: TBD
The Army Information Systems Software Center in Fort Lee, VA has an on-going requirement for functional support services.

PROFESSIONAL ADMINISTRATIVE AND MANAGEMENT SUPPORT SERVICES
Type: Firm Fixed Price, IDIQ
The Army's National Guard Bureau intends to acquire continued professional, administrative and management support services.

TROJAN SPECIAL PURPOSE INTEGRATED REMOTE INTELLIGENCE TERMINAL III (TROJAN SPIRIT III)
Type: TBD
The Army is expected to acquire continuing secure communications and processing capabilities for its intelligence dissemination system as a follow-on to TROJAN SPIRIT II.

QUALITY ASSURANCE ACCEPTANCE TESTING AND TEST AND EVALUATION SUPPORT SERVICES (QAATTE)
Type: Firm Fixed Price, IDIQ
The Army's Information Systems Command (ISC) intends to acquire quality assurance, acceptance testing and test and evaluation support services.

SYSTEMS AND SOFTWARE ENGINEERING SUPPORT
Type: Time and Materials
The Army intends to acquire systems and software engineering support for its TTC/TYC-39 switches.

ARMY INTEROPERABILITY NETWORK DEVELOPMENT INTEGRATION AND TECHNICAL SUPPORT (AIN)
Type: Time and Materials
The Army has a continuing need for development, integration and technical support for the Army Interoperability Network (AIN).

ENGINEER FURNISH AND INSTALL TELECOMMUNICATIONS
Type: Firm Fixed Price, IDIQ
The Army's Communications and Electronics Command (CECOM) is expected to acquire follow-on support to engineer, furnish and install telecommunications services.

COMMAND INFORMATION MANAGEMENT SYSTEM (CIMS)
Type: Cost Plus Fixed Fee
The US Army Space and Strategic Defense Command (USASSDC) has a continuing need for integration, operation, maintenance and support of the Command Information Management System (CIMS) to satisfy the business and technical requirements of Strategic Defense Initiative (SDI) research.

THREAT SIMULATOR ENGINEERING SUPPORT (TSES)
Type: Cost Plus Award Fee
The Army Missile Command intends to acquire threat simulator engineering and technical support services.

TECOM FIP SUPPORT SERVICES RECOMPETE
Type: Time and Materials, FFP
The Army's Test and Evaluation Command (TECOM) intends to acquire continuing technical and administrative support services.

SYSTEM ENGINEERING AND TECHNICAL ASSISTANCE SUPPORT (SETA)
Type: Firm Fixed Price, IDIQ
This program provides System Engineering and Technical Assistance (SETA) and program administrative support services to the All Source Analysis System Project Office (ASAS).

TECHNICAL AND TEST SUPPORT SERVICES
Type: Cost Plus Award Fee
The Army's Operational Test and Evaluation Command (OPTEC) intends to acquire continued technical and test support services for the Intelligent, Electronic and Warfare Test Directorate (IEWTD).

BUDGET MANAGEMENT INFORMATION SYSTEM SUPPORT SERVICES (BMIS)
Type: Cost Plus Fixed Fee
The Defense Supply Service - Washington, on behalf of the Assistant Secretary of the Army for Financial Management (ASAFM), Army Budget Office, Operations and Maintenance Directorate, has a continuing need for services in support of the Budget Management Information System (BMIS).

SYSTEMS COST RISK AND PROGRAM EVALUATION SUPPORT
Type: Level of Effort, CPFF
The Army Missile Command intends to acquire systems, cost, risk and program evaluation support for the Redstone Arsenal in Huntsville, AL.

SUPPORT SERVICES FOR THE AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTEM (AIMS)
Type: Firm Fixed Price, IDIQ
The Army's Training and Doctrine Command (TRADOC) had continuing requirements for site operations, hardware maintenance, and software support for the Automated Instructional Management System (AIMS).

KEYSTONE APPLICATION PROJECT II (KAP II)
Type: Cost Plus Fixed Fee
The Army has continuing requirements for technical support services for the KEYSTONE Application System.

LAN/WAN OPERATION AND MAINTENANCE
Type: Task Order
The Army's CECOM Acquisition Center, Communications, Information and Switching Systems Branch (CISSB) intends to acquire LAN/WAN operational and maintenance support services for the Army Signal Command (USASC).

COMPUTER OPERATIONS FUNCTION OF THE MILITARY ENTRANCE PROCESSING COMMAND/JOINT COMPUTER CENTER FACILITY
Type: Firm Fixed Price
The Rock Island Arsenal intends to acquire computer operations support services for the Military Entrance Processing Command/Joint Computer Center Facility.

DEC MAINTENANCE SERVICES AND ASSOCIATED NON-DIGITAL PERIPHERALS
Type: Firm Fixed Price
The Army's White Sands Missile Range intends to acquire maintenance services in support of Digital Equipment Corp. (DEC) equipment and associated non-Digital peripherals.

OCCUPATIONAL HEALTH COTS SOFTWARE
Type: TBD
The DOD Occupational Health Readiness System (DOHRS) is seeking sources capable of providing commercially available off-the-shelf (COTS) software products to access the functional and technical attributes of occupational health information systems.

ADPE TECHNICAL SUPPORT SERVICES
Type: TBD
The Army intends to acquire ADPE technical support services for Fort Meade, MD.

ENGINEERING SUPPORT SERVICES
Type: TBD
The Army TACCOM-ARDEC is seeking qualified sources to provide engineering support services to the Engineering Data Management Directorate (EDMD).

INTELLIGENCE AND SECURITY COMMAND DATABASE SYSTEM (IDBS)
Type: IDIQ
The Army Intelligence and Security Command (INSCOM) intends to acquire information technology services in support for the INSCOM Database System (IDBS).

COMMON NETWORK PLANNING SOFTWARE (CNPS)
Type: TBD
The Army's Communications and Electronics Command (CECOM) intends to acquire common network planning software (CNPS) to replace the current Defense Satellite Communications System (DSCS) Network Planning Software (DNPS).

INFORMATION MISSION AREA SUPPORT (IMA)
Type: Cost Plus Award Fee
The Army's Information Systems Command (USAISC) has a continuing requirement for Information Mission Area (IMA) support.

PORTABLES 3
Type: Firm Fixed Price, IDIQ
This acquisition will provide an ordering vehicle for the Department of the Army to meet portable computer needs.

PERSONAL COMPUTER 4 (PC 4)
Type: Firm Fixed Price, IDIQ
The Army has on-going requirements for commercial off-the-shelf (COTS) single user computers for the Army, DOD, and FEDSIM.

LOGISTICS INTEGRATION AGENCY AUTOMATION SUPPORT (LIA AS)
Type: Firm Fixed Price, IDIQ
The Army's CECOM AC Washington Operations Office (CACWOO) intends to acquire automation support services for the Logistics Integration Agency (LIA).

MOVEMENT TRACKING SYSTEM (MTS)
Type: TBD
The Army's CECOM AC Washington Operations Office (CACWOO) intends to acquire a movement tracking system and electronic equipment components.

FLYING OPERATIONS MANAGEMENT INFORMATION SYSTEM SOFTWARE
Type: TBD
The Army's National Guard Bureau (NGB) intends to acquire flying operations management information system software.

AVCSA RESOURCES FORCE STRUCTURE MISSION AREA PLANNING ANALYSIS INTEGRATION AND MANAGEMENT SUPPORT
Type: Firm Fixed Price, IDIQ
The Army Space and Strategic Defense Command intends to acquire services in support of the Office of the Assistant Vice Chief of Staff of the Army (AVCSA).

TARGET CONTROL SYSTEM OPERATIONS AND MAINTENANCE
Type: TBD
The Army's White Sands Missile Range intends to acquire operations and maintenance services in support of its target control system and equipment.

FIP/TELECOMMUNICATION SERVICES
Type: Firm Fixed Price, IDIQ
The Army Medical Command (MEDCOM) intends to acquire FIP and telecommunication services at Fort Sam Houston, Texas.

ALTERNATE DISASTER RECOVERY SITE ADPE SUPPORT SERVICE HARDWARE AND OFFICE SPACE TO SUPPORT

Type: TBD
The Army's Military Entrance Processing Command (USMEPCOM) intends to acquire disaster recovery and mobilization support services at an existing alternate permanent disaster recovery site in North Chicago, IL.

Procurement Analysis By Agency/Department

E
Department of Defense

1. Reaction to Procurement Reform

With its $10 billion information technology budget, anything that the Department of Defense (DOD) does related to procurement reform will have ramifications throughout the federal government contracting arena. DOD has attempted to take advantage of the recent reforms to aggressively reengineer its processes, with the support of the Defense Information Systems Agency (DISA), the DOD agency with overall responsibility for information technology.

According to DOD documentation, acquisition reform efforts cover a broad spectrum of activities related to the purchase of goods and services: requirements development, research and development, testing and evaluation, procurement, production and sustainment. The streamlining of acquisition regulations, implementation of electronic commerce/electronic data interchange, and the use of credit cards for small purchases also fall under this heading. As these activities all potentially relate to IT in one form or another, the scope of IT acquisition reform is obviously broad.

In making IT procurements, DOD has long faced multiple tensions that affect its procurement strategies: tensions between cost and performance, between IT systems that support warfighting tasks and those that support business processes, and between necessary secrecy and information systems interoperability. With the recent procurement reforms, these tensions have not been fully resolved but are easing in some important ways. For example, Office of the Secretary of Defense (OSD) officials are also directing attention to evaluating information technology's contribution to mission performance, rather than simply changing the bureaucratic processes used to procure IT.

DOD's focus on building successful programs is being expanded to be more results-oriented than in the past.

Use of the GSA schedule as a preferred source of supply is being highlighted throughout the DOD civilian and military infrastructure. A memorandum to all DOD and military offices from the Office of the Under Secretary of the Defense for Acquisition and Technology provides nine separate "value-added improvements" to the GSA schedule program. From the DOD point of view, these improvements are as follows: synopses of IT requirements are no longer needed; use of the government credit card is emphasized; item selection is based on "best value" and not simply lowest price; reduced paperwork; removal of maximum order limitations; possibility of blanket purchase agreements; contractor teaming arrangements; price reductions; and improved delivery.

Both DOD and DISA officials argue that procurement reform gives both agencies and vendors opportunities to communicate more fully with each other during the procurement cycle. Officials suggest to vendors that they should make special efforts to keep agencies informed on leading technologies, and also seek out government input during the research and development phases of new technologies. This way, officials argue that both sides of the procurement equation benefit.

Similarly, agency officials suggest to other agencies that they should take a more proactive stance toward industry. Agencies should work with industry, know what technologies work and what do not, and most importantly agencies should be precise about their objectives. Business needs should drive procurement decisions, not vice versa. Agencies are in a position, officials argue, to bring more to the negotiating table if they are more fully aware of their own needs and how industry can solve them.

DISA officials believe that DISA itself has not taken full advantage of the streamlining offered by procurement reform and continues to rely on traditional procurement methods. Although individual officials may feel very positive about the reforms, there is a fear that streamlined processes will lead to a streamlined workforce and, ultimately, a decrease in employment levels.

2. Procurement Preferences by Product and Service

DISA officials foresee increased use of the GSA schedule for DOD acquisition needs in the future and a decreased use of government-wide acquisition contracts. Particularly for product procurements, DISA officials advise other federal agencies to procure through the GSA schedule program.

For current product procurements, 90% are through GSA schedule contracts and 10% are through DISA IDIQ contracts. By 2000, DISA officials expect

product contracts to be let entirely through the GSA Schedule program. There is also a much more dramatic change in store for services procurements. Currently, nearly 100% of DISA services are procured through in-house IDIQs, but by 2000 only 20% of contracts will be made through this route with 80% of the procurements going through GSA schedule service contracts.

3. Procurement Process

Key changes in statutes and regulations that govern the procurement process include the following:

- Most importantly, the repeal of the Brooks Act and the implementation of the Clinger-Cohen Act dramatically changed the entire procurement environment for information technology
- There are now greater opportunities for streamlined procurements with the setting of the Simplified Acquisition Threshold at $100,000
- DOD has greater flexibility in determining whether and how to obtain cost and pricing data in making procurement decisions
- The definition of commercial items has been expanded, which makes it easier for DOD to purchase those items.

One change in the procurement arena in DOD affects the relationship between OSD and the military services. Previously, OSD approval was required for most major service contract solicitations. Under the new rules, however, the military services must provide to OSD an IT acquisition paper at least 45 days before the date of a proposed solicitation. If OSD does not respond within that period, the services are free to release the solicitation. Although this may seem like a small change to the process, it has created significant savings in paperwork, administration and time.

Tensions between cost and performance have come to the forefront of contracting issues in DOD particularly. During the height of Cold War defense budgets, cost could be a secondary consideration in the acquisition of Defense IT, but now cost is an increasingly large part of IT procurement decisions. However, some DOD officials argue that this focus may shift back toward including other elements besides simply dollar thresholds. Some of these elements might include perceived risk, whether a project cuts across different areas of DOD, and whether the project has a particularly high profile.

With the increased flexibility afforded them by procurement reform, acquisition officials are looking for ways to do business better beyond simply focusing on cost savings. For example, DOD officials state that the most

important key to ensuring effective IT procurements is to keep a close eye on interoperability. Without interoperable systems, DOD will find itself back where it started before the current procurement reforms gave it the opportunity to rationalize its systems.

When asked about future changes in the procurement process, DISA officials highlighted the likelihood that DISA will be able to procure larger dollar amounts without having to undergo external DOD review. Currently, procurements larger than $50 million need approval from the Secretary of Defense, but DISA officials believe that by 2000, this need for outside approval will be eliminated.

4. Leasing

According to OSD officials, there is renewed interest in examining leasing options, although there have not been any recent policy changes or large procurements related to leasing. When deciding whether to lease computer equipment, DOD considers the technological life cycle of the relevant equipment, the cost benefits to leasing, and whether the equipment will be used over the long or short term. Officials expect leasing to increase over the next several years. DISA officials in particular suggest that vendors should be offering straight lease options to the government instead of leases with options to buy. Much of DISA's telecommunications network consists of leased circuits, but there is relatively little leasing of computer hardware.

5. Outsourcing

DOD operations have long been central to outsourcing discussions in the federal government. Officials in the DOD Office of the Chief Information Officer predict greater reliance on outsourcing of department IT operations, to include an examination of possible total agency IT outsourcing.

Under Secretary of Defense for Acquisition and Technology Paul Kaminski has highlighted the three conditions that outsourcing solutions must meet in order for DOD to consider them:

- **First,** private sector firms must be able to perform the activity and meet DOD's core warfighting mission. DOD, however, will not consider outsourcing activities that constitute core capabilities

- **Second,** a competitive commercial market must exist for the activity. DOD will gain from outsourcing and competition when there is an incentive for continuous service improvement

- **Third,** outsourcing the activity must result in best value for the government and therefore the U.S. taxpayer.

The importance of different categories of outsourcing between now and FY 2000 for DOD as a whole are provided in Exhibit IV.E-1 below.

Exhibit IV.E-1

Importance Ratings of Different Categories of Outsourcing, Defense

CATEGORY	TODAY	FY 2000
Total Agency IT Outsourcing	3	4
Network Management	4	4
Desktop Services	4	5
Platform Operations	4	5
Application Operations	3	4
Applications Management	2	4
Business Operations (telephone support, help desk, etc.)	3	4

1=not important; 5=very important *Source: INPUT*

DISA's data center operations have been examined as significant targets for outsourcing, although DISA has resisted any further data center consolidation. Recent DISA procurements for data center management support have been suspended, indicating the unsettled nature of the issue at the moment. DISA officials, however, acknowledge that outsourcing is likely to play a larger role in future DISA operations, as shown in Exhibit IV.E-2 below.

Exhibit IV.E-2

Importance Ratings of Different Categories of Outsourcing, Defense Information Systems Agency

CATEGORY	TODAY	FY 2000
Total Agency IT Outsourcing	1	4
Network Management	1	4
Desktop Services	2	4
Platform Operations	1	3
Application Operations	1	2
Applications Management	1	2
Business Operations (telephone support, help desk, etc.)	2	4

1=not important; 5=very important *Source: INPUT*

6. EDI and Electronic Commerce

DOD has high hopes for EDI in the future. Every month DOD is performing over 80,000 FACNET transactions. DOD is particularly interested in extending the use of electronic funds transfer (EFT) for large procurements, and also the use of credit cards for all procurements. For example, GSA and the Treasury Department are working with DOD to extend the use of credit cards in intra-governmental transfers such as those involved in government-wide acquisition contracts. A major sticking point is the service charge which the government is reluctant to pay for in intra-governmental transfers.

During late 1996, DISA began to implement a more robust EC/EDI infrastructure that will provide 100% accountability, 99.5% throughput rate, and an average speed of 58 transactions per minute with a traffic load of 50,000 transactions per day. As a result of these improvements, larger and more complex contracts can be added to the EC/EDI process.

For contracts below $100,000, DISA relies on electronic mail, EFT, FACNET, and GSA Advantage!. For those greater than $100,000, electronic mail, EFT, and FACNET make up the bulk of EC/EDI-related transactions. DISA officials predict that in the future the use of EC/EDI for these high dollar value contracts will increase. DOD indicates less reliance on electronic mail due to security concerns.

7. Vendor Past Performance

Within DOD, the Defense Logistics Agency is the organization responsible for maintaining past performance information, which enables DOD to meet the requirements of the Federal Acquisition Streamlining Act regarding government-wide provision of acquisition information. DOD is also taking the

lead in a government-wide project called Central Contractor Registration. The goal of this program is to collect data that DOD and other government entities need on individual contractors once, in an automated fashion.

The charts below in Exhibits IV-3 and IV-4 show the importance that DOD and DISA officials give to different elements of past performance considerations.

Exhibit IV.E-3

Vendor Past Performance Criteria & Importance Ratings, Defense

CRITERIA	RATING:
Overall Past Performance	5
Quality of Product or Service	5
Timeliness of Performance	4
Cost Control	4
Business Practices	5
Customer (end user) Satisfaction	5
Key Personnel Past Performance	4
Overall Satisfaction	5

1=not important; 5=very important *Source: DOD*

Exhibit IV.E-4

Vendor Past Performance Criteria & Importance Ratings, DISA

CRITERIA	RATING:
Overall Past Performance	4
Quality of Product or Service	4
Timeliness of Performance	4
Cost Control	3
Business Practices	3
Customer (end user) Satisfaction	4
Key Personnel Past Performance	4
Overall Satisfaction	4

1=not important; 5=very important *Source: DISA*

8. Anticipated Credit Card Usage

Credit card purchases within the federal government are not tracked by product area so their direct impact on IT purchases must be inferred from overall trends. Within DOD, credit card usage has grown very rapidly. The dollar level per purchase has fluctuated over the past three years, from a high of $1235 in FY 1994 to $570 in FY 1996. The average amount of money carried on each card per year, however, has grown in the same period from $16,875 to $28,478. Total credit card sales have also increased from $17 million in 1994 to nearly $82 million in 1996.

DOD has also recently established a "process action team" to examine ways that government credit cards can be used for micro-purchases, interdepartmental transfers (as mentioned above), and as a payment vehicle for purchases over $2500.

9. Budget Pressures and BPR

Business process reengineering is supposed to be performed for every major procurement in DOD. One of the goals of this process is to determine even if new procurement should be made, instead of relying on already existing contracts within the department or government-wide. All the functional program offices are supposed to perform BPR, and there is also a department-wide effort toward process improvement. However, the individual agencies and offices are being compelled to take direct responsibility for funding BPR efforts themselves as overall DOD funds for BPR have been reduced.

DOD has also embraced the Integrated Product Team (IPT) concept in increasing use throughout the government. In congressional testimony, DOD officials highlighted the effect of the IPT concept in the acquisition of tactical automated systems. For one Army command, an IPT working with technologists from Army labs and their related contractors shortened the acquisition cycle from 2-5 years to 2-6 months.

10. Preferred Sources of IT & Telecom Product Information

Like most federal agencies, DOD indicates reliance on commercial trade magazine product reviews and agency subject matter experts to obtain information on IT and telecom products. In addition, officials suggest that the Internet is increasingly used to gather information, although not solely for product information. Department staff also use the Internet to gather information on problem-solving techniques. This shows that vendors who can provide technical solutions as well as sophisticated product lines may be particularly well-placed to respond to DOD needs.

11. Top Agency IT Contractors

A list of the top IT contractors with Department of Defense agencies (excluding the Departments of the Army, Air Force and Navy) is provided in Exhibit IV.E-5. This data is based on fiscal year 1996 contract actions filed with the Federal Procurement Data Center (FPDC) at GSA.

Exhibit IV.E-5

Top Contractors at Defense, FY 1996

1. MCI
2. AT&T Corporation
3. N.E.T. Federal
4. Computer Sciences Corporation
5. BDM International
6. Electronic Data Systems
7. Comsat
8. Litton/PRC
9. Unisys
10. Lockheed Martin

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the Department of Defense is provided in Exhibit IV.E-6. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center (FPDC) at GSA for fiscal year 1996. Together they represent contracts obligations totaling $266 million and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Cryptologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborn
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment

- K058 - Modifications of Communication Equipment
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities
- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit IV.E-6

Top Telecommunications Contractors at Defense, FY 1996

1.	N.E.T. Federal
2.	AT&T
3.	Satellite Communication Systems
4.	GTE Corporation
5.	Harris Corporation
6.	BBN Communication Corporation
7.	GE American Communications
8.	Alcatel Network Systems, Inc.
9.	RMS Technologies, Inc.
10.	U. S. Electrodynamics, Inc.

Source: FPDC

13. Major Contracts

At least 85 major contracts (worth more than $1 million) are currently active at Defense. Those below are all expected to be worth at least $50 million over the duration of the contract.

Exhibit IV.E-7

Major Contracts at the Department of Defense

Program	Type	Size	Description
1. DLSC Modernization and The Integrated Data System (DIDS)	Software Products--IDIQ	$61M 12 yrs.	Northrop Grumman Data Systems provides an on-line, transaction-driven integrated hardware and software capability. This contract replaces the entire computer system at the Defense Logistics Services Center (DLSC) in Battle Creek, Michigan. Awarded in December 1990.
2. ADP Hardware/Software (SASS)	Computer Equipment--IDIQ	$500M 5 yrs.	Cordant, Sun Microsystems and Digital Equipment Corp. provide high performance workstations and local area network hardware systems, microcomputers, peripherals, systems software and applications software under this DIA infrastructure program. Awarded in September 1992.
3. Worldwide Management Support Services For The Defense Switched Network	Professional Services--Cost Plus Fixed Fee	$50M 5 yrs.	GTE Corp. provides for worldwide technical and managerial support in the development, acquisition, implementation and operation of the Defense Switched Network (DSN). Awarded in November 1992.
4. DODIIS Integration and Engineering Support Contract (DIESCON)	Systems Integration--IDIQ	$50M 7 yrs.	Computer Sciences Corporation provides systems integration and engineering support services for the DOD Intelligence Information Systems (DODIIS), the Defense Intelligence Agency and other members of the U.S. intelligence community. Awarded in February 1993.
5. CIM SETA Support Contract (CIM SETA)	Professional Services--IDIQ	$200M 5 yrs.	Abacus Technologies, EDS, SAIC and Softech provide systems engineering and technical assistance (SETA) support services for the Defense Information Systems Agency (DISA) in support of the Center for Information Management (CIM). Awarded in May 1993.

Program	Type	Size	Description
6. Government Emergency Telecommunications Service (GETS)	Network Services-- Cost Plus Award Fee	$50M 7 yrs.	Sprint, AT&T, GTE Corp. and MCI provide senior government officials with emergency voice band communications support in the event of wide spread damage to the public switched network (PSN) from major natural or man-made disasters up through nuclear war. Awarded in June 1993.
7. Defense Enrollment Eligibility Reporting System (DEERS)	Professional Services-- IDIQ	$85M 5 yrs.	EDS supports the processing services required for the Defense Enrollment Eligibility Reporting System (DEERS). Other services to be supplied by the DEERS program include development, implementation and maintenance of upgrades and changes to the existing system. DEERS is operational throughout all Uniform Services within the United States. Awarded in February 1994.
8. Global Command and Control System Maintenance Contract (GCCS)	Professional Services-- IDIQ	$193M 5 yrs.	Raytheon E-Systems provides the Department of Defense with contractor support of the Worldwide Military Command and Control System (WWMCCS) which will evolve into the Global Command and Control System (GCCS). Awarded in February 1994.
9. Modern Aids To Planning Program Enhancement Follow-On (MAPP)	Professional Services-- IDIQ	$95M 5 yrs.	CSC provides on-going professional services to the Joint Chiefs of Staff for the Modern Aids to Planning Program (MAPP). Awarded in May 1994.
10. AFRTS Worldwide TV and Radio Service (AFRTS)	Network Services-- IDIQ	$59M 10 yrs.	Electro Dynamics, Inc. provides the timely coverage of American TV and Radio news and entertainment for U.S. forces stationed in foreign countries. Awarded in May 1994.
11. Computerized Maintenance Management System (CMMS)	Hardware Maint.-- IDIQ	$75M 5 yrs.	TMA Systems, Inc. provides the National Imagery and Mapping Agency (NYMA) (formerly the Defense Mapping Agency (DMA)) with a computerized maintenance system. Awarded in September 1994.

Program	Type	Size	Description
12. Defense Medical Information System Development, Operations, and Maintenance Services (DSIDDOMS)	Professional Services-- Cost Plus Fixed Fee	$1.3B 5 yrs.	American Management Systems, EDS, Litton/PRC and SAIC provide the Defense Supply Service-Washington, on behalf of the Defense Medical Support Service Center (DMSSC), with technical support services for the Defense Medical Information System (DMIS) and the System Integration, Design, Development, Operations and Maintenance Services (SIDDOMS). Awarded in March 1995.
13. Defense Message System (DMS-GOSIP)	Network Services-- IDIQ	$500M 8 yrs.	Lockheed Martin (formerly Loral Federal Systems) provides for the design and implementation of a new secure messaging system to replace the Automatic Digital Network (AUTODIN). The new system will provide for worldwide delivery of both classified and unclassified communications. Awarded in May 1995.
I4. FOSEC Technical Services Contract (CISS-ITS)	Professional Services-- IDIQ	$1.1B 5 yrs.	CSC, SAIC and Merdan Group provide technical support for information systems security (INFOSEC) applications to DoD and other federal agencies. Awarded in July 1995.
15. Defense Commissary Information Program (DCIS)	Systems Integration-- IDIQ	$58M 8 yrs.	CSC provides for the consolidation of Army, Navy, Marine and Air Force commissary management information functions under a single Defense Commissary Agency (DeCA) management information system. Awarded in July 1995.
16. SASS COTS Software (SASS)	Software Products-- IDIQ	$163M 5 yrs.	BDS provides the Defense Intelligence Agency with commercial-off-the-shelf (COTS) software, software licenses, documentation and maintenance. Awarded in August 1995.
17. Battle Management Command, Control and Communications/ Systems Engineering and Integration (BMC3/SE&I)	Professional Services--	$679M 5 yrs.	TRW provides systems engineering and integration services in support of the Ballistic Missile Defense Organization's (BMDO's) National and Theater Missile Defense (NMD and TMD) programs. TRW also provides support for the development of a battle management command, control and communications (BMC3) system. Awarded in August 1995.

Program	Type	Size	Description
18. FIP Infrastructure Services	Processing Services--IDIQ	$166M 5 yrs.	Unisys provides professional and systems integration services in support of the analysis and installation of the Defense Finance and Accounting Service (DFAS) technical infrastructure. In addition to the five DFAS financial centers, this contract supports the expansion of the infrastructure to 21 other designated operating locations throughout the country. The Department of the Navy conducted the procurement of the federal information processing (FIP) infrastructure services. Awarded in September 1995.
19. Point Of Sale Modernization (POS)	Software Products--IDIQ	$200M 8 yrs.	NCR provides hardware, software and services for the modernization of the Defense Commissary Agency's Point of Sale (POS) System for use by its worldwide commissaries. Awarded in February 1996.
20. ADP Technical and Support Services	Professional Services--Cost Plus Fixed Fee	$180M 5 yrs.	Aspen Systems, CTA, Irving Burton Associates, Sherikon and Standard Technology, Inc. provide technical, administrative, and managerial advice and assistance to the Office of the Assistant Secretary of Defense for Health Affairs (OASD/HA) and Office of the Director, Defense Information. Awarded in March 1996.
21. DISN Support Services - Global (DSSG)	Network Services--IDIQ	$750M 5 yrs.	The Defense Information Systems Agency (DISA) awarded Boeing the DISN Support Services-Global (DSS-G) contract, supporting implementation of the DISN network Awarded in June 1996.
22. Consolidated Systems Engineering Support	Professional Services--Unk.	$148M 5 yrs.	TRW and TASC provide the National Imagery and Mapping Agency (formerly DMA) with systems engineering, systems integration, and technical assistance for various systems modernization efforts. Awarded in June 1996.
23. Defense Enterprise Integration Services II (DEIS II)	Professional Services--IDIQ	$3.0B 5 yrs.	BDM, Boeing, CSC, EDS, Lockheed Martin and Unisys provide Defense Enterprise Integration Services (DEIS) for on-going support services to all phases of the technical integration functions throughout the Department of Defense. Awarded in July 1996.

Program	Type	Size	Description
24. Defense Research and Engineering Network (DREN) Inter-Site Services Contract (DISC)	Network Services--IDIQ	$430M 5 yrs.	AT&T provides the Department of Defense (DOD) Performance Computing Modernization Program with commercial-off-the-shelf (COTS) wide area network (WAN) services, to implement the Defense Research and Engineering Network (DREN) Inter-site Services Contract (DISC). Awarded in July 1996.
25. DISN Switch/Bandwidth Manager Services - CONUS (DS/BMSC)	Network Services--IDIQ	$400M 9 yrs.	MCI provides the Defense Information Systems Agency (DISA) with switch/bandwidth manager services for the continental U.S. (CONUS) in support of the Defense Information Systems Network (DISN). Awarded in August 1996.
26. Global Command and Control System Maintenance Contract (GCCS)	Professional Services--IDIQ	$193M 5 yrs.	Raytheon/E-Systems provides the Department of Defense with contractor support of the Worldwide Military Command and Control System (WWMCCS) which will evolve into the Global Command and Control System (GCCS). Awarded in September 1996.
27. FIP DFAS-FSO Financial Integrated Systems Services	Professional Services--IDIQ	$507M 5 yrs.	Through the Naval Fleet Industrial Supply Center, Boeing, CSC, EDS and Lockheed Martin provide the Defense Finance and Accounting Service (DFAS) Financial Systems Organization (FSO) services to support more than 200 automated information systems in the areas of finance, accounting, payroll, transportation, logistics, personnel and management. Awarded in September 1996.
28. DISN Transmission Services - CONUS (DTSC)	Network Services--IDIQ	$5.0B 9 yrs.	AT&T provides the Defense Information Systems Agency with transmission services for the continental United States in support of the Defense Information Systems Network. Awarded in January 1997.
29. Hawaii Information Transfer System (HITS)	Network Services--IDIQ	$291M 10 yrs.	AT&T provides a single consolidated Defense Information System (DIS) communications network for Hawaiian users. Awarded in February 1997.

Program	Type	Size	Description
30. DISN Video Services - GLOBAL (DVSG)	Network Services--IDIQ	$125M 5 yrs.	AT&T satisfies the Defense Information Systems Agency's need for global video services in support of the Defense Information Systems Network (DISN). Awarded in February 1997.
31. Joint Interoperability and Engineering Organization's Defense Information Infrastructure Integration Contract (JIEO-DIIIC)	Systems Integration--IDIQ	$285M 5 yrs.	SAIC provides the Defense Information Systems Agency with a Defense Information Infrastructure (DII) Integration Contract (DIIIC) in support of the Joint Interoperability and Engineering Organizations (JIEO). Awarded in March 1997.
32. COTS Information Technology Hardware (SASS II)	Computer Equipment--IDIQ	$155M 5 yrs.	30 vendors provide the Defense Intelligence Agency (DIA) with an infrastructure program requiring high performance workstations and Local Area Network (LAN) hardware systems, microcomputers, peripherals, systems software and applications software. Awarded in May 1997.

Source: INPUT

14. Current Opportunities

The Department of Defense is currently pursuing at least 56 major IT contract vehicles. Due to the volume of programs, the acquisitions summarized below are only those in the pre-solicitation stage:

DEFENSE ENTERPRISE INTEGRATION SERVICES III (DEIS III)
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) intends to acquire follow-on services to satisfy its requirements for Defense Enterprise Integration Services (DEIS and DEIS II) to provide a wide range of integration services, such as migration strategies, assessment support, prototyping and testing and integration engineering (See PAR V-04G-021 and PAR V-04G-052).

DISN TRANSMISSION SERVICES PACIFIC (DTS-P)
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) has an on-going requirement to procure another facet of the Defense Information Systems Network (DISN) (PAR V-04G-009), by developing the DISN Transmission Services Pacific Network (DTS-P).

INFOSEC TECHNICAL SUPPORT RECOMPETE (ITS)
Type: Firm Fixed Price, IDIQ
INPUT expects the Defense Information Systems Agency (DISA) to recompete a requirement for information security applications for DOD and other federal agencies.

DISN TRANSMISSION SERVICES EUROPE (DTS-E)
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) has an ongoing requirement to procure another facet of the Defense Information Systems Network (DISN) (PAR V-04G-009), by developing the DISN Transmission Services Europe (DTS-E) procurement .

DISN TRANSMISSION SERVICES WIRELESS (DTS-W)
Type: TBD
The Defense Information Systems Agency (DISA) has an ongoing requirement to procure another facet of the Defense Information Systems Network (DISN) (PAR V-04G-009), by developing a global wireless communication network (DTS-W).

PHASE V STANDARD BASE LEVEL COMPUTER
Type: IDIQ
The Defense Information Systems Agency (DISA) has a requirement for hardware/software acquisition, maintenance and technical support services.

RENOVATION OF THE PENTAGON INFORMATION TECHNOLOGY
Type: TBD
The Defense Supply Service Washington (DSS-W) plans to award a contract for the extensive renovation of the Pentagon's Information Management and Telecommunications (IM&T) program and facilities.

FIP INFRASTRUCTURE SERVICES RECOMPETE
Type: TBD
The Defense Finance and Accounting Service (DFAS) has an on-going requirement for federal information processing (FIP) infrastructure services. The current contract with Unisys provides systems integration services and support for the analysis and installation of the DFAS technical infrastructure.

SASS COTS SOFTWARE (SASS)
Type: Firm Fixed Price, IDIQ
The Defense Intelligence Agency (DIA) anticipates recompeting an existing contract for commercial off-the-shelf (COTS) software, software licenses, documentation and maintenance.

MODERN AIDS TO PLANNING PROGRAM ENHANCEMENT FOLLOW-ON (MAPP)
Type: Firm Fixed Price, IDIQ
The Joint Chiefs of Staff will be recompeting its contract for ADP technical support and maintenance to provide continuing development and maintenance of the Modern Aids to Planning Program (MAPP).

DODIIS INTEGRATION AND ENGINEERING SUPPORT CONTRACT (DIESCON)
Type: TBD
This contract will provide on-going systems integration and engineering support services for the DOD Intelligence Information System (DODIIS), the Defense Intelligence Agency, and other members of the U.S. intelligence community.

REAL-TIME AUTOMATED PERSONNEL IDENTIFICATION SYSTEM RECOMPETE (RAPIDS)
Type: Firm Fixed Price, IDIQ
The Department of Defense is expected to recompete its requirement for hardware and technical support services in support of the Real-Time Automated Personnel Identification System (RAPIDS).

INTERCEPTOR TECHNOLOGY SUPPORT
Type: TBD
Scientific engineering and technical assistance is needed to support the Ballistic Missile Defense Organization (BMDO).

SUPPORT SERVICES FOR THE DISTRIBUTION STANDARD SYSTEM (DSS)
Type: Time and Materials
The Defense Logistics Agency (DLA) is expected to recompete an existing contract to modernize and consolidate the Department of Defense's Defense Distribution Depots.

TECHNICAL SUPPORT FOR DISA'S INTEGRATED INFORMATION MANAGEMENT SYSTEM (IIMS)
Type: Cost Plus Award Fee
The Defense Information Systems Agency (DISA) has a continuing requirement for technical support for the Integrated Information Management System (IIMS) in the Joint Systems Support Center.

COMPUTER SYSTEMS PROGRAMMING, COMPUTER AND NETWORK OPERATIONS, AND SYSTEMS STUDIES
Type: Firm Fixed Price, IDIQ
The Defense Special Weapons Agency (DSWA) anticipates recompeting their current contracts for computer systems programming, network services and operations and systems studies.

TECHNICAL AND MANAGEMENT SUPPORT
Type: TBD
The Ballistic Missile Defense Organization (BMDO) has on-going requirements for technical and management support for the Information Systems Directorate.

SPECIAL WEAPONS INFORMATION MANAGEMENT SYSTEM (SWIM)
Type: Cost Plus Fixed Fee
The Defense Special Weapons Agency (DSWA) anticipates recompeting its existing contract for software installation, testing, maintenance and training. The software provides assistance in maintaining the nation's stockpile of nuclear weapons.

VAX H/W MAINTENANCE
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) plans to acquire maintenance for its VAX mainframes.

DCSS REPLACEMENT SYSTEM
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) intends to acquire a replacement for its Digital Conference Switch for the White House Communications Agency.

CPAS PROGRAMMING SUPPORT
Type: Cost Plus Fixed Fee
The Defense Information Systems Agency (DISA) intends to acquire programming services in support of the National Communications System (NCS).

ON-SITE PREVENTIVE AND REMEDIAL HARDWARE MAINTENANCE
Type: TBD
DISA has a requirement for on-site preventive and remedial hardware maintenance for 15 Defense Megacenters (DMCs) located throughout the United States, as well as Satellite Data Processing Installations/Information Processing Centers (DPI/IPC) at six remote locations.

DCOMP ROBOTIC TAPE LIBRARIES (DCOMP-RTL)
Type: Firm Fixed Price, IDIQ
This program will provide the Defense Information Systems Agency (DISA) with an Automated Tape Library/Robotics Tape Library (ATL/RTL).

DCOMP FRONT END PROCESSORS (DCOMP-FEP)
Type: Firm Fixed Price, IDIQ
This program will provide the DOD Megacenter consolidation program with front-end processors (FEP) compatible with 370/390 equipment and upgrades.

DCOMP MAINFRAME UPGRADES AND REPLACEMENTS (DCOMP-CPU)
Type: Firm Fixed Price, IDIQ
This program will provide System 370/390 compatible CPU replacements and upgrades to the DOD Megacenter consolidation.

DCOMP REMOTE JOB ENTRY DEVICES (DCOMP-RJED)
Type: Firm Fixed Price, IDIQ
This program will provide the DOD MegaCenter consolidation with remote job entry devices (RJED).

DCOMP DIRECT ACCESS STORAGE DEVICES (DCOMP-DASD)
Type: Firm Fixed Price, IDIQ
This program will provide the DOD MegaCenter consolidation with direct access storage devices.

DEFENSE INFORMATION INFRASTRUCTURE EQUIPMENT AND MAINTENANCE (DIIEM)
Type: IDIQ
The Defense Information Systems Agency (DISA) intends to acquire computer equipment to support the Defense Information Infrastructure (DII).

VIDEO TELECONFERENCING SYSTEM (VTS)
Type: Firm Fixed Price, IDIQ
The Defense Information Systems Agency (DISA) intends to acquire a video teleconferencing system for the White House Communications Agency.

ENGINEERING, MAINTENANCE AND OPERATIONS SERVICES
Type: TBD
The Defense Special Weapons Agency intends to acquire engineering, maintenance and operations services in support of the Large Blast/Thermal Simulator (LB/TS) located at White Sands Missile Range, NM.

COMPUTER OPERATIONS SUPPORT
Type: TBD
The Defense Special Weapons Agency intends to acquire support for its computer operations and information systems.

ADP TECHNICAL SUPPORT SERVICES
Type: IDIQ
The Defense Supply Service - Washington intends to acquire ADP technical support services for the Office of the Joint Staff Director for Logistics.

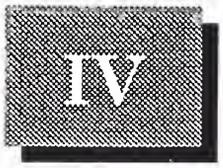
SUPPORT OF PLANNING PROGRAMMING BUDGETING AND EXECUTING SYSTEM
Type: IDIQ
The Defense Supply Service - Washington (DSS-W) in conjunction with the Information Management Center - Pentagon (IMCEN) intends to acquire technical support services in support of U.S. Army program and budget functions.

DEFENSE TRAVEL MANAGEMENT SYSTEM REENGINEERING
Type: TBD
The Department of Defense plans to reengineer its travel management system.

SOFTCOPY WORKSTATION AND TOOLS ENVIRONMENT
Type: TBD
The National Imagery and Mapping agency has a requirement for commercial exploitation tools to support the United States Geospatial Information Systems (USIGS) Office.

EXPLOITATION SUPPORT SYSTEM (ESS)
Type: TBD
The National Imagery and Mapping Agency has a requirement for a single, automated exploitation management system.

NATIONAL IMAGERY AND MAPPING AGENCY SYSTEM ENGINEERING SERVICES (NSES)
Type: CPAF, Level of Effort
The National Imagery and Mapping Agency has a requirement for systems engineering services and integration.



Procurement Analysis By Agency/Department

P
Department of the Navy

1. Reaction to Procurement Reform

Navy officials have urged contracting and program officials throughout the Navy to embrace the results of procurement reform both on a government-wide level and within the Navy itself. On April 2, 1997, the Executive Director of the Navy Office of Acquisition and Business Management promulgated a memorandum throughout Navy contracting activities highlighting the use of the GSA Schedule as a preferred source of supply for the Navy. The memo also discusses the Naval Information Systems Management Center's innovative approach to using blanket purchase agreements to improve further on the prices offered on the GSA Schedule. (For further discussion, see the DOD chapter.)

Navy contracting officials also highlight increases in speed and convenience resulting from procurement reform. Use of the Internet is a large part of this change, and Navy officials foresee increased reliance on the Internet, both for gathering IT information (as discussed below) and for providing information to industry on specific procurements. Some officials suggest the formation of central locations or sources for information on the Internet as well.

The Navy's main acquisition policy and practice organization is the Acquisition and Business Management (ABM) division within the Office of the Assistant Secretary of the Navy for Research, Development, and Acquisition. Changes in the ABM's operations as a result of procurement reform are centered around the following elements of the ABM "Concept of Operations." The Navy acquisition offices should all:

- Continually adopt business practices that maximize effectiveness, economy, efficiency and accountability

- Gain significant returns quickly by focusing actions in key functional areas of past performance, funding and accounting, program management and contracting

- Engage industry appropriately in ABM decisionmaking processes and provide continuous feedback to ABM customers and stakeholders in appropriate forums

- Identify business strategies to accrue maximum economies from international and U.S. national acquisition programs

According to Navy documentation, best value processes make up the centerpiece of Navy acquisition reform policy. Navy documents highlight the increased use of best value award decisions and go into great detail about the benefits of such awards from both the government and industry points of view. For example, best value allows industry flexibility in selection of proposal strategy through tradeoffs between cost and non-cost evaluation factors.

In the Navy's Acquisition and Business Management (ABM) office's Business Practices Guide, the following advice for writing RFP sections relating to best value is provided:

- There should be precise performance-based statements of work and specifications, and an effective methodology for assessment of relevant offeror past performance

- A Section M of the RFP which clearly states the intended best value nature of the source selection process

- Application of cost as an independent variable to ensure that best value cost/technical tradeoffs give appropriate weight to cost, treating it as more than simply a consequence of the selected technical approach

The Department of the Navy memorandum on August 14, 1996 promulgated the interim policy and procedures for information technology acquisition. This document is available on the Navy's Internet site at http://www.nismc.navy.mil/don-cio/asnitmra.htm

2. Procurement Preferences by Product and Service

The total government spends more dollars for IT services than it does for IT products, at a rate of 67% of total IT spending. The Navy demonstrates an even higher preference for IT services than most other government organizations. In FY 1996, the Navy spent 75% of its dollars for IT services. In the Navy's view, information technology implementation must be viewed as a service and not merely acquisition of commodity products.

One of the Navy's reactions to procurement reform has been to seek greater use of broad contracting vehicles, such as Indefinite-Delivery, Indefinite-Quantity and Government-Wide Acquisition Contracts. These contracts can be available from outside the service as well as from inside. Exhibit IV.P-1 indicates the extent to which the Navy will be using broad contract vehicles.

Exhibit IV.P-1

Navy Contract Preferences

	Increased Use	Decreased Use
GSA Schedules	X	
Blanket Purchase Agreements	X	
In-house IDIQ Contracts	X	
In-house Contracts (non-IDIQ)		X
Government-Wide IDIQs	X	

Source: Office of the Navy

While reported sales volumes don't reflect wide use of outside contracts--more than 90% of Navy IT dollars flow through Navy contracts as opposed to contracts awarded by other organizations--the Navy has been in the forefront of negotiating Basic Purchasing Agreements with GSA Schedule contract holders. More than $250 million Navy dollars were distributed in FY 1996 through GSA contracts.

Navy officials prefer an acquisition strategy which does not increase the service's ownership of IT resources. Fee-for-service is a workable operating scenario. Officials emphasize that contractors should be relied on to identify the right technical solution for the required support, but the hard part is the required service behind the solution.

3. Procurement Process

Contracting officials claim that so far the most visible effect of reform on actual procurement processes has been in the streamlining of processes rather than radical new changes in those processes. New tools, such as the Internet, are being used to rationalize processes that remain relatively consistent over time. Procurement reform so far, one official says, is a good trend that needs to go much further in the direction of reengineering rather than simple streamlining. As part of this, Navy officials suggest to industry that communication between government and industry should increase, as well as intra-industry communication on government procurement issues.

A dangerous result of the rapid progression of procurement reform legislation and regulation is that agency officials no longer understand how to use the new process. Turbulence created by multiple, closely-spaced reform initiatives, deprives the workforce of any understanding baseline for obtaining IT solutions. Recent policy changes have created anxiety and confusion among acquisition officials, and a new class of "pathfinders" is actively at work. This may not lead to systematic solutions. Templates for the new process must be developed to assure successful procurements.

One official suggested that the process remains somewhat "chaotic," but decisionmaking on which specific channels to use for procurements is evolving toward becoming a user level decision rather than a contracting office decision.

As part of a government-wide trend, acquisition authority in the Navy is becoming more decentralized. The centralized policy setting, established primarily through the Chief Information Officer, will be emphasized, but execution of IT contacts and purchases from these contracts are becoming more under local control.

Another shift in process is occurring as more authority is granted to the contracting official. Formerly the domain of the program office, discretion on acquisition strategies and contract vehicles are now delegated more often. Approval levels and thresholds are still controlled by policy and are to be found in SECNAVINST 5000.2B.

4. Leasing

To date the Navy has done little leasing. As is commonly the case in the military services, much of the telecommunications circuits are leased but there is little leasing of computer hardware or related software. As discussed above, the Navy has been at the forefront of creative use of procurement reform strategies to get lower prices on purchased equipment, but this creativity has not extended to the leasing arena as of yet.

Desktop services may be an area the Navy would consider for leasing. With its belief that product ownership is not desirable, and with a belief that the desktop can be effectively outsourced, leasing may be the effective method in implementing a leased equipment program. Lease-to-purchase would not be a working scenario.

5. Outsourcing

The Navy has made dramatic claims about the cost savings to be realized through outsourcing, but to date savings remain only notional. Since the 1980s, Navy budgets have been decreasing, and this decrease will not end before FY 1998. While the Navy has been aggressively reengineering

processes and infrastructure, critics argue that this has taken place at the expense of readiness and maintenance.

Related to the outsourcing question, the Navy budget includes unrealized "savings" from outsourcing of more than $2.6 billion through 2003, all of which is slated to be reapplied to much needed recapitalization. In comparison, the entire Navy IT budget for one year is only a little more than $2 billion. If the Navy is going to be able to apply savings from outsourcing to future needs, it will have to move much more aggressively than it has to date. Navy officials suggest that there will be a greater reliance on outsourcing for network management and desktop services, but it is difficult to see how such limited outsourcing can result in such significant savings.

A first step to increased outsourcing is positive motivation. In today's Navy operating environment, telephone support and help desk stand apart as the services obtained through outsourcing. By the year 2000, Navy officials expect to increase reliance on outsourcing to include application operation and even application management. Total IT outsourcing and platform operations are still not regarded as candidates for outsourcing.

6. EDI and Electronic Commerce

The Navy is following the rest of the defense-related services and agencies in depending increasingly on EDI and EC for its operations. In order to respond to both the downsizing of the acquisition workforce and the reorganization of buying commands as a result of the on-going base closing process, the Navy is pursuing various initiatives to move toward EC/EDI.

Navy contracting officials uniformly state that EC/EDI will be a larger part of Navy operations, although the details of these increases are not available. Electronic funds transfer (EFT), where possible, is being implemented throughout DOD and related agencies as a result of new statutory requirements for EFT. A memorandum from the Office of the Under Secretary of Defense for Acquisition and Technology in July 1996 required the use of EFT in eligible contracts even before relevant Treasury Department and acquisition regulations were fully developed.

Exhibit IV.P-2 below shows a listing of Navy FACNET-certified deployments as of March 17, 1997.

Exhibit IV.P-2

Navy Interim FACNET Certified Deployments

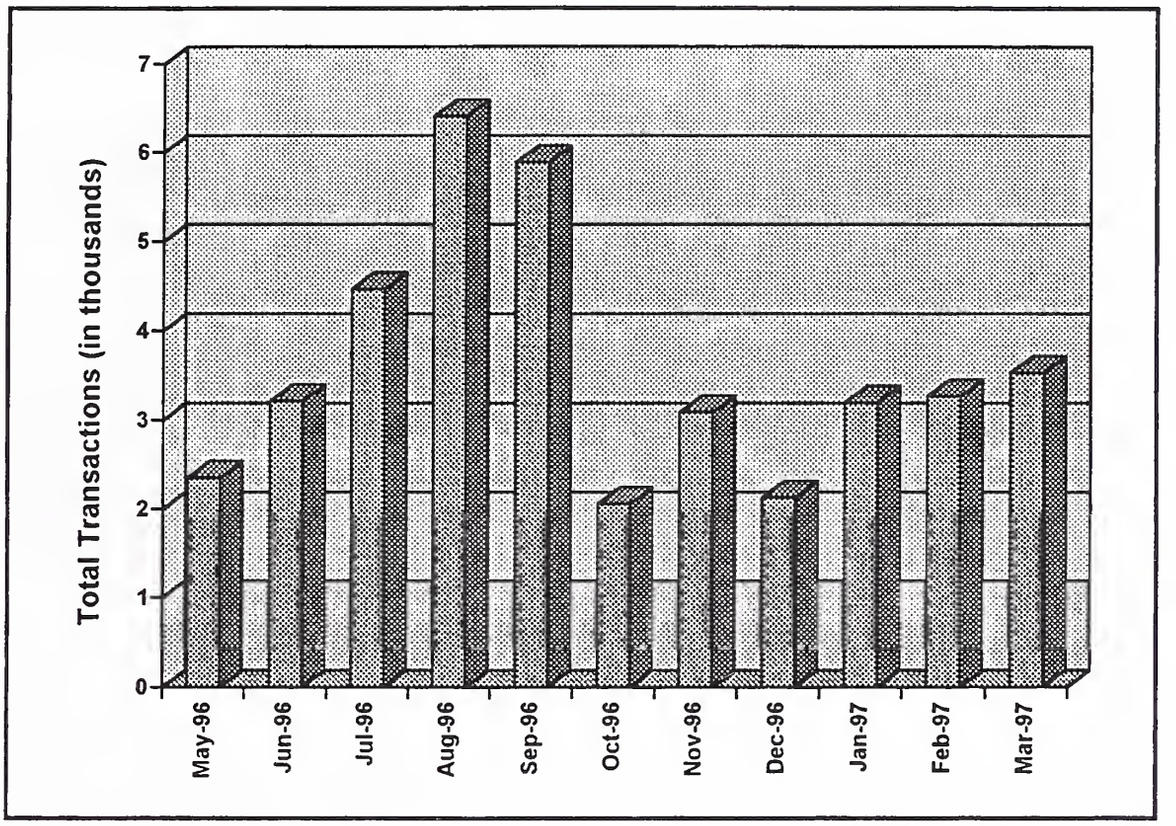
ASO Philadelphia, PA	*Naval Postgraduate School
FISC Norfolk, VA	*Naval Sea Systems Command - prism
FISC Pearl Harbor, HI	*Naval Security Station
FISC Puget Sound, WA	*Naval Undersea Warfare Center - Keyport, WA
FISC San Diego, CA	*NAVSURWARCENDIV Crane
*Great Lakes EFA	Norfolk Naval Ship Yard
*Marine Corps Logistics Base, Albany, GA	*NPWC Great Lakes
*NAS Fallon	*NSWC Dahlgren
Naval Air Weapons Station - China Lake, CA	*NSWC Port Hueneme
Naval Air Weapons Station - Point Mugu, CA	*PWC Jacksonville, FL
*Naval Amphibious Base, Little Creek, Norfolk, VA	*PWC Pearl Harbor
*Naval Medical Center, Bethesda, MD	*PWD Gulfport
*Naval Observatory	SPCC Mechanicsburg, PA
*Naval Oceanographic OFC	*USMC Reg Cont, Kansas City

Source: Office of the Secretary of Defense

The data available on the number of electronic transactions at the Navy is shown in Exhibit IV.P-3. No discernible trend is apparent due to the short time-frame involved, but INPUT predicts that the long term trend in these transactions will steadily increase.

Exhibit IV.P-3

Total Monthly Electronic Commerce Transactions - Navy

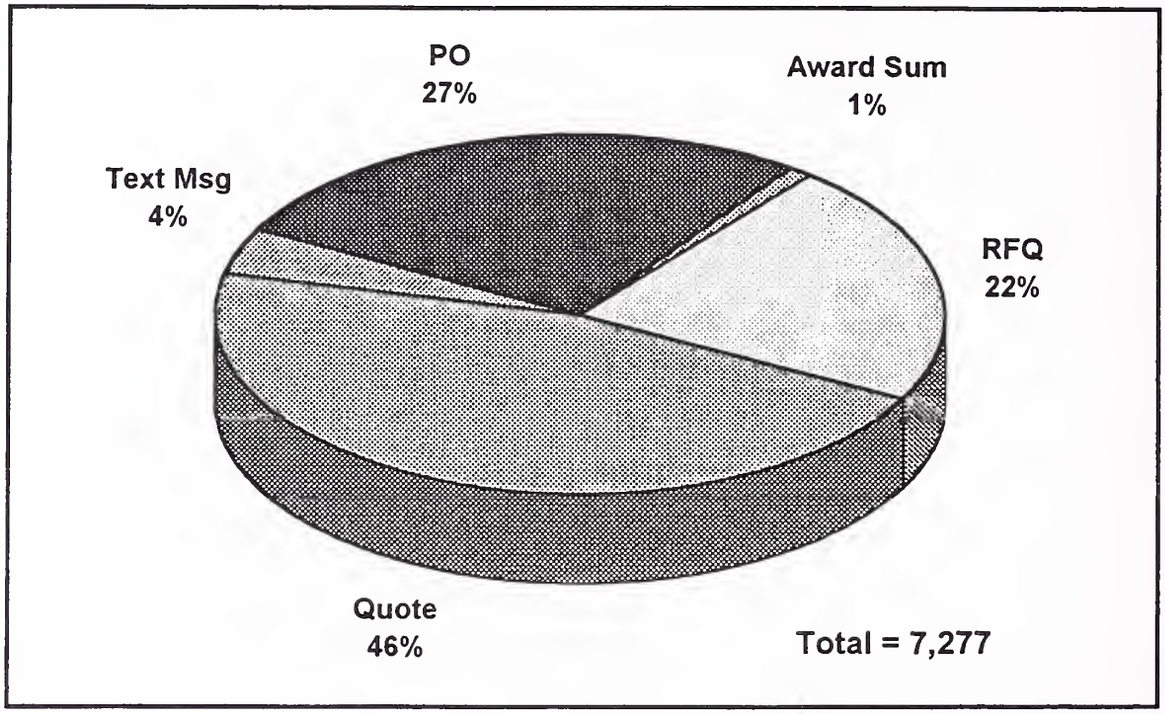


Source: EC/EDI Newsletter

Looking at transaction types, a majority of EC activity within the Navy is comprised of receiving quotes from industry, followed by posting purchase orders and RFQs. Within the last quarter of calendar year 1996, quotes accounted for 46% of the Navy's total electronic transactions of approximately 7,300. See Exhibit IV.P-4. Purchase orders accounted for 27%, while RFQs represented the third largest share at 22%.

Exhibit IV.P-4

Distribution of Navy Electronic Transactions, 4QCY 1996



Source: ODUSD (AR/EC), DoD

7. Vendor Past Performance

Navy personnel and regulations highlight an increasing reliance on past performance ratings as part of the evaluation process. A Navy "Best Practices Guide" includes suggested RFP language in order to make clear to bidders the exact parameters of past performance ratings. Evaluation of past performance will include some or all of the following elements: usage of information from data presented by the vendor, data in existing government databases, data from other government procurement and contract administration offices, and data from on-site surveys.

Vendors also need to realize that if the Navy finds problems the vendor may have in any of these sources, the Navy will assume that these problems are still in existence unless convinced otherwise. In other words, vendors need to explicitly show that the problems have been resolved not only in terms of the specifics of the case, but also in terms of systemic improvement actions that will ensure the problems will not reoccur in other situations. As the Best Practices Guide states, "An Offeror's past and present performance is not presumed to be perfect. Rather, the successful offeror will have demonstrated the ability to isolate past and present problems down to a root cause and to take systemic improvement management actions to resolve the root cause of the problems."

Navy officials also indicate reliance on Office of Federal Procurement Policy guidelines for evaluating past performance. When asked about the

importance of specific elements of past performance, officials provided the following ratings as shown in Exhibit IV.P-5 below. Timeliness and Cost Control appear to be the principles by which past performance will be determined. Personnel and Business Practices are ranked surprisingly low. One official indicated a moderately strong rating for ISO 9000 certification, but this is less performance based on the contract than on an external evaluation of performance potential.

Exhibit IV.P-5

Navy Vendor Past Performance Criteria & Importance Ratings

CRITERIA	RATING:
Overall Past Performance	3
Quality of Product or Service	4
Timeliness of Performance	4.5
Cost Control	4.5
Business Practices	3
Customer (end user) Satisfaction	3
Key Personnel Past Performance	2
Overall Satisfaction	3

1=not important; 5=very important *Source: U. S. Navy*

8. Anticipated Credit Card Usage

Credit card purchases within the federal government are not tracked by product area so their direct impact on IT procurements must be inferred. Over the past four years, the Navy has consistently had very high levels of credit card purchases. During 1994 and 1995, for example, only the Army had higher yearly purchase levels. However, in terms of average dollar level per purchase, the Navy is somewhat high but not out of the ordinary.

Average dollar levels have been between $540 and $575 since FY 1993, except for the anomalous FY 1994 level of $841 per purchase. The average yearly amount of purchases per credit card has been consistently high. Each credit card carries approximately $28,000 in charges a year. With 11,478 cards in use during FY 1996, that amounts to yearly purchases of more than $300 million.

9. Budget Pressures and BPR

Business Process Reengineering does not occupy the forefront of Navy programs. While officials reported that personnel downsizing has forced a consideration of the value of BPR, it is only being considered on small scale

operations. On the other hand, reduced operating budgets are making it very difficult for the Navy to acquire IT tools necessary to implement more significant BPR.

Each organization is responsible for determining the need for and development of BPR solutions. However, the acquisition reform office within each operating command and the Department of Navy CIO have top level responsibility to support BPR.

10. Preferred Sources of IT & Telecom Product Information

Navy officials get their information on IT and telecom products from a variety of sources, particularly the Internet. Navy officials also suggest to other agencies that they should become more comfortable and adept at using the Internet for such market research needs.

Other than the Internet, the Department relies largely on product reviews and direct contact with vendor and subject matter experts. Very little reliance on magazine advertisements, direct mail, or industry-sponsored trade shows by invitation only was found.

11. Top Agency IT Contractors

A list of the top IT contractors with the Department of the Navy is provided in Exhibit IV.P-6. This data is based on fiscal year 1996 contract actions filed with the Federal Procurement Data Center (FPDC) at GSA.

Exhibit IV.P-6

Top Contractors at Navy, FY 1996

1.	Hughes
2.	Lockheed Martin
3.	AT&T Corp.
4.	Raytheon/E-Systems
5.	Computer Sciences Corporation
6.	Logicon
7.	McDonnell Douglas
8.	Galaxy Scientific Corporation
9.	Litton/PRC
10.	Vitro Corporation

Source: FPDC

12. Top Agency Telecom Contractors

A list of the top telecommunications contractors with the Department of the Navy is provided in Exhibit IV.P-7. Contract figures were calculated using contract actions filed with the Federal Procurement Data Center (FPDC) at GSA for fiscal year 1996. Together they represent contract obligations totaling $667 million and cover the following product service codes:

- 5805 - Telephone and Telegraph Equipment
- 5810 - Communications Security Equipment and Components
- 5811 - Other Cryptologic Equipment and Components
- 5820 - Radio and TV Equipment - Except Airborne
- 5895 - Miscellaneous Communications Equipment
- B553 - Special Studies and Analysis/Communications
- D304 - ADP Services/Telecomm and Transmission
- D316 - Telecommunication Network Management Services
- J058 - Maintenance-Repair of Communications Equipment
- K058 - Modifications of Communication Equipment
- L058 - Technical Representative Services/Communication Equipment
- M127 - Operation of Government Electronic and Communications Facilities
- N058 - Installation of Communication Equipment
- R426 - Professional Services/Communications Services
- S113 - Utilities/Telephone and/or Communications Services
- W058 - Lease-Rental of Communication Equipment
- X127 - Lease-Rental of Electronic and Communications Facilities

Exhibit IV.P-7

Top Telecommunications Contractors at Navy, FY 1996

1.	Hughes
2.	AT&T Corporation
3.	Rockwell International
4.	Raytheon Company
5.	Lockheed Martin
6.	IBM Corp.
7.	Science Applications International Corporation
8.	Harris Corp.
9.	United Technologies
10.	Ceridian

Source: FPDC

13. Major Contracts

At least 134 major IT contracts are currently active at the Department of the Navy. Due to their volume, Exhibit IV.P-8 provides a brief overview of only those contracts with known values exceeding $50 million. Currently, the agency has 67 major indefinite delivery/indefinite quantity (IDIQ) contract vehicles in place, which have a potential combined life-time value of $9 billion. INPUT speculates increased use of agency and interagency IDIQ contracts in response to the simplification of regulations governing the purchase of commercial items. This information is taken from INPUT's IMPACT database of active and awarded IT programs.

Exhibit IV.P-8

Major Contracts at the Department of the Navy

Program	Type	Size	Description
1. NWSC Crane Support Services	Professional Services — Cost Plus Fixed Fee	$71M 8 yrs.	CACI provides ADP support services for the Ordnance Management System (OMS), the Fleet Optical Scanning Ammunition Marking System (FOSAMS) and the Non-Nuclear Ammunition Inventory Accuracy (NAIA) program at the Naval Weapons Support Center (NWSC) in Crane, Indiana. Awarded in February 1990.
2. Primary Environmental Processing System Upgrade/Replacement (PEPSU/PEPSR)	Hardware/ Software — Various	$205M 10 yrs.	Northrop Grumman provides replacement hardware and peripherals and the professional services necessary to meet the expanding requirements of the Primary Environmental Processing System (PEPS), the hub of the Naval Environmental Data Network (NEDN) designed to receive and analyze worldwide oceanographic and meteorological data. Awarded in April 1990.
3. Large-Scale Computer System (LSCS)	Hardware/ Software — Firm Fixed Price	$204M 10 yrs.	Northrop Grumman provides large-scale processors, a mass storage subsystem, on-line disk storage, input/output devices, a high-speed local area network, as well as facilities management and systems maintenance at the Naval Oceanographic Office. Awarded in April 1990.
4. Standard Desktop Computer Companion (COMPANION)	Hardware/ Software — Firm Fixed Price	$609M 7 yrs.	GTSI provides for worldwide delivery of hardware and software upgrades in support of 400,000 DoD Small Computer Program computers, including Zenith models 248, 120 and 184. Upgrades are mandatory for the Air Force and Defense Logistics Agency (DLA), but not for the Army and Navy. Awarded in January 1991.
5. Follow-On Scientific and Engineering Computer System (FOSECS)	Hardware/ Software — Firm Fixed Price	$69M 10 yrs.	Federal Computer Corporation provides a large-scale scientific and engineering computer system to process unclassified computer workloads for research and development activities at NWSC. Awarded in August 1991.
6. Tactical Advanced Computers III (TAC-III)	Hardware/ Software — IDIQ	$172M 7 yrs.	HBC (a joint venture between Hughes Data Systems and BTG) provides workstations and other equipment used as tactical decision aids and to provide worldwide command and control (C2) support for the Navy, Marine Corps, Coast Guard and other DoD agencies. This program runs simultaneously with TAC-IV. Awarded in March 1992.
7. Inventory Control Points Resolicitation (ICP II)	Professional Services — IDIQ	$150M 5 yrs.	Federal Data Corporation and Pacific Corporation provide maintenance services for existing IBM-based ADP systems, compatible upgrade equipment and software support services for the Navy Inventory Control Points and Trident Refit data processing workloads and communication interfaces. Awarded in September 1992.

Program	Type	Size	Description
8. Super-Minicomputer 2 (AFCAC 300)	Hardware/ Software — IDIQ	$2.9B 9 yrs.	PRC provides general purpose super-minicomputer systems to support a wide range of office automation, finance, inventory, command and control, engineering and training functions for the Navy, Army, Air Force, DLA, Coast Guard and other federal agencies. Awarded in October 1992.
9. Hardware, Software, Training and Documentation (NALCOMIS III)	Hardware/ Software — IDIQ	$72M 8 yrs.	Sysorex Information Systems provides FIP resources to the Naval Aviation Logistics Command Management Information System (NALCOMIS) through hardware, systems software, training and integrated logistics services. Awarded in December 1992.
10. Continued Phase II Deployment and Support (NALCOMIS II)	Hardware/ Software — IDIQ	$75M 7 yrs.	Eastern Computers, Integrated Systems Group and Wang provide hardware, software, peripherals, systems maintenance and training for the continued deployment of NALCOMIS, as well as common support for deployed NALCOMIS. Awarded from April to August 1993.
11. PMTC Support Services	Professional Services — IDIQ	$50M 5 yrs.	Metters Industries provides ADP support services in the areas of systems development and analysis, maintenance, test and evaluation, installation and integration consultation and training systems development for the Pacific Missile Test Center (PMTC) at Point Mugu, California. Awarded in July 1993.
12. NAVFAC CAD/CAM II (CAD II)	Hardware/ Software — IDIQ	$821M 12 yrs.	Under the Navy's umbrella CAD II program to standardize weapons design, Intergraph and Cordant provide the Naval Facilities Engineering Command with facilities engineering applications for computer-aided design/computer-aided manufacturing (CAD/CAM) integrated systems. Awarded in August 1993.
13. CAD/CAM II (CAD II)	Hardware/ Software — IDIQ	$398M 12 yrs.	Under the Navy's umbrella CAD II program to standardize weapons design, Intergraph provides CAD/CAM integrated systems for the engineering and support of Naval weapons systems. Awarded in July 1994.
14. High Speed Fleet Broadcast Systems (USQ122)	Network Services — Firm Fixed Price	$64M 5 yrs.	RJO Enterprises is responsible for the systems manufacture, integration, test and logistical support of approximately 500 High Speed Fleet Broadcast/High Frequency Data Systems (HSFB/HFDS). Awarded in December 1994.
15. Acquisition, Financial, Logistic, Management and Engineering Support Services	Professional Services — Cost Plus Fixed Fee	$53M 5 yrs.	Vitro provides the Naval Sea Systems Command with professional IRM services in support of its AN/SQQ-89 Surface Ship Anti-Submarine Warfare (ASW) Combat Systems Program and the AN/SRQ-4 Radio Terminal Set Program. Awarded in December 1994.

Program	Type	Size	Description
16. Tactical Advanced Computers 4 (TAC-IV)	Hardware/ Software — IDIQ	$673M 6 yrs.	Hewlett-Packard provides high performance tactical workstations, file servers, software, training, maintenance and spare parts to the Marine Corps and Coast Guard in support of the U.S. Navy Standard Desktop Tactical-Support Computer (DTC) Program. This program runs simultaneously with TAC-III. Awarded in January 1995.
17. Tactical Combat Training System (TCTS)	Hardware/ Software — Cost Plus Fixed Fee	$74M 4 yrs.	Raytheon provides NAVAIR with a new fleet deployable training system capable of providing single platform warfare training, multi-platform coordinated combat training and integrated battle group multi-warfare training. Awarded in March 1995.
18. Networking Support Services (NSS)	Network Services — IDIQ	$93M 5 yrs.	OAO Corporation provides network support services for naval activities at the Naval Air Warfare Center Weapons Division (NAWCWPNS) in China Lake, California. Awarded in May 1995.
19. JTASC Technical Services	Professional Services — Cost Plus Fixed Fee	$57M 5 yrs.	TRW provides the Navy's United States Atlantic Command (USACOM) with technical and general support services for its Joint Training, Analysis and Simulation Center (JTASC) in Suffolk, Virginia. Awarded in June 1995.
20. Navy PC LAN Plus (PC-LAN+)	Network Services — IDIQ	$480M 5 yrs.	EDS provides the Navy with continued development, acquisition, installation and maintenance of local area networks (LAN) throughout the DoD, FBI and other federal agencies. Awarded in September 1995.
21. Integrated Undersea Surveillance Systems Logistic Support Facility (SE&I)	Professional Services — Cost Plus Award Fee	$68M 5 yrs.	TRW provides systems engineering and integration support services for the Logistic Support Facility (LSF) in SPAWAR's Undersea Surveillance Program Directorate. Awarded in September 1995.
22. Advanced Distributed Simulation Technology II (ADST II)	Professional Services — IDIQ	$500M 5 yrs.	Lockheed Martin provides site management and general operations, Battlemaster and SAFOR (or CGF) support, senior analyst support and hardware/software field engineering support at four government-owned Simulation Test Facilities (STF). Awarded in October 1995.
23. Weapons Systems Software Activity (WSSA)	Professional Services — Cost Plus Fixed Fee	$89M 5 yrs.	EER Systems provides the NAWCWPNS China Lake site with technical support services for computer systems embedded within naval tactical aircraft, airborne weapons systems and related support and training equipment. Awarded in February 1996.

Program	Type	Size	Description
24. New Technologies for Office and Portable Systems (NTOPS)	Hardware/ Software — Firm Fixed Price	$206 M 2 yrs.	Concept Automation and Cordant fulfill department-wide requirements for portable and desktop systems, a wide range of peripherals and options, applications software and local area network interfaces to augment purchasing from the Air Force Desktop contracts. Awarded in April 1996.
25. Business and Administrative Support Services (BASS)	Professional Services — Cost Plus Award Fee	$61M 5 yrs.	Boeing Information Systems fulfills NAWCWPNS' requirements for office automation and process streamlining, including financial work, procurement assistance, human resources, property management and resource analysis and forecasting. Awarded in May 1996.
26. Submarine Engineering and Technical Support Services	Professional Services — Level of Effort	$107 M 5 yrs.	EG&G provides engineering and technical services in support of the New Attack Submarine Program Office, in the areas of Engineering Logistics Support, Submarine Electronics Systems management and the Program Office in the areas of Program Management, Engineering, Logistics Support and Acquisition. Awarded in December 1996.
27. Scientific and Engineering Support Services (SESS)	Professional Services — Cost Plus Fixed Fee	$91M 6 yrs.	Boeing Information Services will provide the Naval Air Warfare Center Weapons Division (NAWCWPNS) with scientific and engineering support services (SESS). Awarded in March 1997.
28. Program Management, Ship Integration and Configuration For AEGIS	Professional Services — Cost Plus Award Fee	$107 M 5 yrs.	Vitro Corp. will provide the Naval Sea Systems Command (NAVSEA) with services to support the Program Executive Office for Surface Combatants/AEGIS Program (PEO SC/AP) in the Technical Division (400B), Operations Division (400E) and AEGIS FMS program. Awarded in March 1997.
29. Engineering and Technical Support Services	Professional Services — IDIQ	$69M 5 yrs.	Team Logistics Joint Venture provides engineering and technical support services to the Logistics Competency within the Naval Air Warfare Center Aircraft Division. Awarded in March 1997.
30. Systems Engineering and Technical Support Services	Professional Services — TBD	$87M 5 yrs.	Planning Consultants Inc. will provide the Naval Sea Systems Command (NAVSEA) with system engineering and technical support services for the Program Executive Office for Surface Combatants/AEGIS Program (PEO SC/AP) Technical Division. Awarded in March 1997.

Program	Type	Size	Description
31. Procurement Corporate Information Management Standard Procurement System (P-CIM SPS)	Computer Equipment — IDIQ	$238 M 10 yrs.	AMS provides the Department of the Navy with a Commercial Standard Procurement System (SPS) for the entire Department of Defense (DoD). Awarded in April 1997.
32. Engineering Technical and Logistics Support Services	Professional Services — IDIQ	$73M 5 yrs.	PRC, Inc. provides engineering, technical and logistics support services to the Naval Surface Warfare Center (NSWC). Awarded in May 1997.

Source: INPUT

14. Current Opportunities

The Department of the Navy is currently pursuing at least 66 major IT contract vehicles. Due to the volume of anticipated programs, the acquisitions summarized below are only those in the pre-solicitation stage:

ENGINEERING SERVICES IN SUPPORT OF AIR TRAFFIC CONTROL SYSTEMS
Type: Cost Plus Fixed Fee
The Fleet and Industrial Service Center in Philadelphia will be recompeting the engineering & logistics services contract for the Naval Air Warfare Center Aircraft Division, Patuxent River, MD.

ADVANCED DISTRIBUTED SIMULATION TECHNOLOGY III (ADST III)
Type: Firm Fixed Price, IDIQ
The Navy is expected to recompete its existing contract for Advanced Distributed Simulation Technology (ADST II). The recompete will be followed as ADST III.

NAVY DESKTOP (NAVDESK)
Type: Firm Fixed Price, IDIQ
The Department of Navy intends to competitively acquire commercial desktop microcomputers and advanced application desktop microcomputers.

NAVY DESKTOP 2 (NAVDESK 2)
Type: Firm Fixed Price, IDIQ
The Department of the Navy will continue to acquire large scale desktop systems suitable to applications development, using short-term competitive contracts.

NAVY PC LAN III (NAVNET III)
Type: TBD
This program, a follow-on to the Navy PC LAN Plus contract held by EDS (PAR V-03-155), provides the Navy with development, acquisition,

installation, and maintenance of Local Area Networks (LANs), as well as enhancement of networks to improve the Navy's overall interoperability and connectivity.

NEW TECHNOLOGIES FOR OFFICE AND PORTABLE SYSTEMS 2 (NTOPS 2)
Type: Firm Fixed Price, IDIQ
The Navy will continue to procure advanced technology small desktop and portable computer systems, software and accessories to support office automation requirements.

NEW TECHNOLOGIES FOR OFFICE AND PORTABLE SYSTEMS 3 (NTOPS 3)
Type: Firm Fixed Price, IDIQ
As a follow-on to the New Technologies for Office and Portable Systems 2 (NTOPS 2, PAR V-03-220) contract, this procurement will continue the Navy's effort to remain current in the area of small computer systems.

NETWORKING SUPPORT SERVICES RECOMPETE (NSS)
Type: Firm Fixed Price, IDIQ
The Naval Information Systems Management Center (NISMC) is handling procurement of network support services to support Naval activities at the Naval Air Warfare Center Weapons Division (NAWCWPNS) at China Lake, CA.

CONSOLIDATED AREA TELECOMMUNICATIONS SYSTEM II (CATS II)
Type: Firm Fixed Price, IDIQ
The Navy plans to award a single contract as an interim means of providing maintenance and upgrades to the Consolidated Area Telecommunications System (CATS) in San Diego.

TACTICAL ADVANCED SIGNAL PROCESSOR (TASP)
Type: Firm Fixed Price, IDIQ
The Navy has a requirement for digital signal processing (DSP) components for use in land-based sites, as well as for use as embedded elements in airborne, surface ship, submarine and tactical weapons systems for Navy, Marine Corps, Coast Guard and other Department of Defense systems.

ACQUISITION FINANCIAL LOGISTIC MANAGEMENT AND ENGINEERING SUPPORT SERVICES
Type: Cost Plus Fixed Fee
The Naval Sea Systems Command (NAVSEA) has a continuing need for acquisition/financial management, logistic/technical management, information resource/total quality management, and systems engineering support services.

ENGINEERING AND TECHNICAL SUPPORT SERVICES
Type: Firm Fixed Price, IDIQ
NAWC plans to acquire engineering and technical services needed to provide a broad spectrum of specific high technology expertise in support of on-going programs and technology efforts at the Advanced Technology Laboratory.

DATA AUTOMATED COMMUNICATIONS TERMINAL (DACT)
Type: Firm Fixed Price, IDIQ
The Naval Air Warfare Center, Aircraft Division Indianapolis (NAWCAD) has a requirement for Data Automated Communications Terminals (DACT).

TECHNICAL AND ENGINEERING SUPPORT FOR THE SUBMARINE LAUNCHED BALLISTIC MISSILE
Type: Cost Plus Fixed Fee
The Naval Surface Warfare Center, Dahlgren Division, intends to acquire technical support for the Submarine Launched Ballistic Missile (SLBM) program in support of the Strategic Systems Department at Dahlgren.

LIGHTWEIGHT TORPEDO PROGRAM OFFICE SUPPORT RECOMPETE
Type: TBD
The Naval Sea Systems Command (NAVSEA) is expected to recompete a requirement for management and technical support services for Code PMO402P (Lightweight Torpedo Program Office).

PROFESSIONAL, ADMINISTRATIVE AND MANAGEMENT SUPPORT SERVICES
Type: Cost Plus Fixed Fee
The AEGIS Training Center (ATC) in Dahlgren, VA has a continuing need of professional, administrative and management support services.

MAINTENANCE OF COMMERCIAL FIP HARDWARE
Type: Firm Fixed Price, IDIQ
The Naval Surface Warfare Center (NSWC) in Dahlgren, VA has a continuing need for maintenance of commercial FIP hardware.

TECHNICAL AND GENERAL SUPPORT
Type: TBD
The Fleet and Industrial Supply Center (FISC), Norfolk Detachment, Philadelphia, intends to acquire support services for the continuing design, development, conversion, modification, enhancement, documentation, and maintenance of the Navy Tactical Command Support System (NTCSS) family of application software.

ENGINEERING TECHNICAL SERVICES
Type: TBD
The Fleet and Industrial Supply Center (FISC), Norfolk Detachment, Washington, intends to acquire engineering technical services for logistics and support systems.

INFORMATION TECHNOLOGY SERVICES
Type: Cost Plus Fixed Fee
The Fleet Industrial Supply Center Norfolk Detachment, Philadelphia, intends to acquire ADP software support services for the Shipboard Non-Tactical ADP Program (SNAP) systems for the Navy Management Systems Support Office (NAVMASSO).

TECHNICAL AND MANAGEMENT SUPPORT SERVICES
Type: Cost Plus Fixed Fee, IDIQ, LOE
The Fleet Industrial Supply Center Norfolk Detachment, Washington, intends to acquire technical and management support services in support of the Navy International Programs Office (IPO).

INTELLIGENCE AND INFORMATION TECHNOLOGY MANAGEMENT (IITM)
Type: Cost Plus Fixed Fee, IDIQ
The Fleet Industrial Supply Center, Norfolk, Washington, Detachment intends to acquire intelligence and information technology management services.

HARDWARE AND SOFTWARE MAINTENANCE SERVICES FOR MEASURE
Type: Cost Plus Fixed Fee
The Naval Air Systems Command has a requirement for maintenance of the hardware and software of the Metrology Automated System for Uniform Recall and Reporting (MEASURE) Automated Information System (AIS).

TECHNICAL MANAGEMENT AND FINANCIAL SUPPORT FOR THE AIR TRAFFIC CONTROL AND LANDING SYSTEMS PROGRAM OFFICE
Type: TBD
The Naval Air Warfare Center - Aircraft Division intends to acquire technical, managerial, and financial support services for the Air Traffic Control and Landing Systems Program Office.

ENGINEERING ANALYTICAL AND PROGRAM MANAGEMENT SUPPORT SERVICES
Type: IDIQ, Time and Materials
The Naval Air Warfare Center intends to acquire engineering, analytical and program management support services.

DIGITAL COMMAND CONTROL COMMUNICATIONS VEHICULAR TRAINER (DC3VT)
Type: TBD
The Naval Air Warfare Center Training Systems Division has a requirement for a Digital Command, Control and Communications Vehicular Trainer (DC3VT).

INTEGRATED PORTABLE WIREFREE COMMUNICATIONS SYSTEM (HYDRA 2)
Type: Firm Fixed Price, IDIQ
The Naval Command, Control and Ocean Surveillance Center, In-Service Engineering, East Coast Division (NISE EAST) intends to acquire an Integrated Portable Wirefree Communications System.

RESEARCH AND DEVELOPMENT SUPPORT OF THE NAVY
Type: IDIQ
The Naval Research Laboratory intends to acquire research and development support for the Navy's Tactical Electronic Warfare requirements and missions.

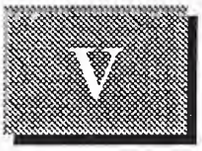
MAINTENANCE RESOURCE MANAGEMENT SYSTEM (MRMS)
Type: Firm Fixed Price, IDIQ
The Naval Sea Systems Command (NAVSEA) has a requirement for a follow-on effort that requires software and support services for the Naval Tactical Command Support Systems (NTCSS) Maintenance Resource Management System (MRMS) program.

SCIENTIFIC ENGINEERING AND TECHNICAL ASSISTANCE
Type: Firm Fixed Price, IDIQ
The Naval Surface Warfare Center - Carderock Division is in need of scientific, engineering and technical services to support personnel protection, environmental and corrosion control support programs on board ships.

ENGINEERING ANALYTICAL AND TECHNICAL SUPPORT SERVICES
Type: Cost Plus Fixed Fee, IDIQ, LOE
The Naval Surface Warfare Center (NSWC), Indian Head Division intends to acquire engineering, analytical and technical support services.

TECHNICAL SERVICES IN SUPPORT OF MISSION CRITICAL COMPUTER RESOURCE
Type: Cost Plus Fixed Fee
The Space and Naval Warfare Systems Command (SPAWAR) intends to acquire management and technical support services for the execution of various mission critical computer resources (MCCR) tasks in SPAWAR's Systems Effectiveness Engineering Division (SPAWAR 10-12).

COMMERCIAL AFLOAT TELECOMMUNICATIONS SERVICES (ATS)
Type: Firm Fixed Price, IDIQ
The Space and Naval Warfare Systems Command requires afloat telecommunications services.



IT Market Forecasts

A
Federal IT Budget Forecast

One of the features of INPUT's Electronic Government Program has created a computer-based forecast model for predicting the likely growth rates of federal IT expenditures. The model uses the data provided in Section 43 (Information Resource Plans and Budget Request) of the OMB Circular A-11 Federal Annual Budget Request Preparation Guidelines. This information provides the first two-year baseline of the five-year forecast.

Exhibit V-1 displays the overview of the four budget items and their components gleaned from the 43A documents, modified by the agency's long-range plans and interviews where the data are incomplete.

The FY 1996 column displays the estimates of the agencies of the on-going fiscal year, previously authorized by Congress. The FY 1997 column is a summation of the requests made by the Executive Branch administrations, plus outlays planned by organizations not governed by the Amended Paperwork Reduction Act that have not been authorized by Congress. The plans of the non-Executive Branch entities are summarized in the line called "Off-IT Budget Adjustments."

The columns titled FY 1998 to FY 2001 are INPUT's forecasts of the likely rate of growth or decline of the government's budget elements. A principal caveat here is that these numbers are request-based and not yet specified by the government.

The forecast uses year-to-year growth rates established by INPUT each year and estimates of the CBO, OMB and economic projections of economic outlook groups in several agencies.

Exhibit V-1

Federal IT Budget Forecast, FY 1996–2001

Federal Government Budget OMB A-11 Categories		Total 1996 Estim.	Total 1997 Forecast	Total 1998	Total 1999	Total 2000	Total 2001	CAGR '96–'01 (%)
Capital Investment	Hardware	4.8	4.9	5.1	5.3	5.5	5.8	4
	Software & Other	1.3	1.1	1.2	1.2	1.3	1.4	2
	Subtotal	6.1	6.0	6.3	6.5	6.8	7.2	4
Personnel		6.2	6.3	6.1	5.8	5.5	5.1	-4
Operating Costs	Lease of Equipment	0.2	0.2	0.2	0.2	0.2	0.2	-1
	Lease of Software	0.2	0.2	0.2	0.2	0.2	0.2	5
	Supplies & Other	1.2	1.2	1.3	1.3	1.4	1.5	4
	Subtotal	1.6	1.6	1.7	1.7	1.8	1.9	4
Commercial Services	ADPE Time	0.1	0.1	0.1	0.1	0.1	0.1	-1
	Leased Voice Telecom	2.3	2.3	2.4	2.5	2.6	2.7	3
	Leased Data Telecom	1.6	1.7	1.7	1.8	1.8	1.9	3
	Operations & Maintenance	4.4	4.4	4.6	4.9	5.2	5.6	5
	Sys Analysis/ Prog	3.5	3.6	3.9	4.2	4.6	4.9	7
	Studies/Other	1.0	1.0	1.0	1.1	1.2	1.3	6
	Use of IT	0.4	0.4	0.4	0.4	0.5	0.5	6
	Subtotal	13.3	13.5	14.1	15.0	17.0	17.0	3
Total Info. Technology		27.2	27.4	28.1	29.0	30.0	31.2	3
Subtotal of Contracted IT		20.4	20.4	21.3	22.5	23.8	25.4	5
Off-IT Budget Adjustments		0.4	0.4	0.5	0.5	0.5	0.6	5
Total to be Contracted		20.8	20.9	21.8	23.0	24.3	26.0	5

Figures in $ Billions *Sources: OMB, INPUT*

To assure a degree of compliance of the service mode/market forecasts, the database for the federal government budget elements must be developed in greater detail. Each entry is based on formulas that are adjusted each year to track with the factors noted in the preceding years.

The most notable characteristic of the federal information technology budgets of the past five years has been the decline into single-digit growth rates of the four key budget elements. For FY 1997, a change in overall spending occurred with the increase in spending for commercial services and operating costs at the expense of capital investments. The compound annual growth rate (CAGR) is used to describe the five-year change in expenditures as a percentage of the base-year value.

B
INPUT's Federal IT Expenditure Forecast

The data compiled in the Federal IT budget model (Exhibit V-1) is dissembled and regrouped in service modes that are more familiar to both INPUT's vendor clients and the technical program managers in the agencies. These are discussed in the main body of the report and defined in Appendix B.

1. Part I—Primary Service Modes

The primary service modes that closely follow the IT budget elements are listed in the Part I - IT Market in Exhibit V-2. The most significant feature of this part of the forecast model is that the summation of expected expenditures for each fiscal year equals the amount calculated as the "Total Contracted-Out Spending" for each respective year in Exhibit V-1. (If the primary service modes exceed the budget/forecast then fund availability is unlikely.)

Exhibit V-2

Federal IT Market Forecast, FY 1996–2001, Part I

INPUT Service Modes Contracted Portion		Total 1996 Estim.	Total 1997 Forecast	Total 1998	Total 1999	Total 2000	Total 2001	CAGR '96-'01 (%)
Comp Systems	Turnkey	1.5	1.6	1.6	1.7	1.8	1.9	5
	New	1.3	1.3	1.3	1.3	1.4	1.5	2
	Replacement	2.2	2.3	2.4	2.5	2.6	2.7	5
	Subtotal	5.0	5.2	5.3	5.5	5.8	6.1	4
Software Products	Application Software	1.2	1.1	1.1	1.2	1.3	1.4	3
	Sys Software	0.6	0.6	0.6	0.6	0.7	0.7	3
	Subtotal	1.8	1.7	1.7	1.8	2.0	2.1	3
Comm/ Ntwk Services	Leased Circuits	2.7	2.7	2.8	2.9	3.0	3.1	3
	Equipment	0.5	0.5	0.5	0.5	0.6	0.6	4
	Prof Services	0.5	0.5	0.5	0.6	0.6	0.7	6
	Network Svcs	1.4	1.4	1.4	1.5	1.6	1.7	3
	Subtotal	5.1	5.1	5.2	5.5	5.8	6.1	4
Processing Services	Transaction	0.1	0.1	0.1	0.1	0.1	0.1	-1
	Utility/ Batch	*	*	*	*	*	*	-1
	Subtotal	0.1	0.1	0.1	0.1	0.1	0.1	-1
Prof Services	Software Dev	1.7	1.8	1.9	2.0	2.2	2.4	7
	Design/Cons	0.6	0.6	0.6	0.7	0.7	0.8	7
	Ed/Trng	0.5	0.5	0.6	0.6	0.7	0.7	6
	Subtotal	2.8	2.9	3.1	3.3	3.6	3.9	7
SI - Prof Svcs		1.1	1.1	1.2	1.3	1.4	1.5	7
Outsourcing	Systems Ops (COCO)	0.4	0.4	0.4	0.4	0.5	0.5	5
	Systems Ops (GOCO)	1.2	1.2	1.3	1.4	1.5	1.6	5
	Subtotal	1.6	1.6	1.7	1.8	2.0	2.1	5
Comp Maint		1.8	1.8	1.9	1.9	2.1	2.3	5
Total Contracted-Out		20.8	20.9	21.8	23.0	24.3	26.0	5

** - Less than $50 million, Figures in $ Billions* *Source: INPUT*

2. Part II–Alternative Markets

The primary service/delivery modes of the preceding table do not fit the markets that most of INPUT's vendor clients track. Six additional markets are identified in greater detail in the table shown in Exhibit V-3.

Because these markets are assembled from pieces of the so-called "primary markets," these results are not additive to those in Part I.

Several of these markets have declined from double-digit growth because of stronger emphasis in Congress on reducing federal government spending. Some, like systems integration, have declined substantially from the 16%–18% foreseen in the late 1980s and 1990. Others, like electronic commerce/EDI and computer security, receive much press coverage but few significant funding increases.

Using the OMB A-11 submission of an agency, INPUT can develop a general model of how that agency is likely to spend its money. Within some limits of realism, secondary market characteristics can also be identified. However, as the level of detail increases, the sources become less reliable, even for past fiscal years. Therefore, these numbers should be used as "best available" figures.

Exhibit V-3

Federal IT Market Forecast, FY 1996–2001, Part II

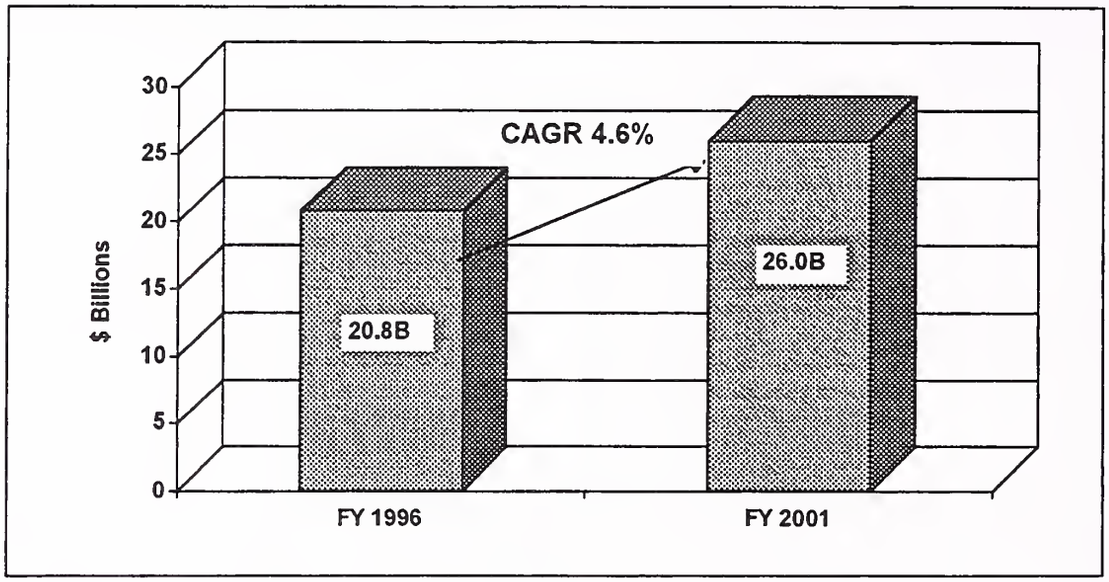
INPUT Service Modes		Total 1996	Total 1997	Total 1998	Total 1999	Total 2000	Total 2001	CAGR '96-'01
SI Market	Prof Services	1.1	1.1	1.2	1.3	1.4	1.5	7
	Equip Sys	2.2	2.2	2.3	2.3	2.5	2.6	3
	Sft Products	0.4	0.4	0.4	0.4	0.4	0.5	2
	Other Svcs	0.2	0.2	0.2	0.2	0.3	0.3	3
	Subtotal	3.9	3.9	4.1	4.2	4.6	4.9	4
OI Systems	Process Svcs	*	*	*	*	*	*	-1
	Sft Products	0.4	0.3	0.4	0.4	0.4	0.4	2
	Prof Services	0.3	0.3	0.3	0.3	0.3	0.3	7
	Turnkey Sys	0.1	0.1	0.1	0.1	0.1	0.1	3
	Equipment	0.9	1.0	1.0	1.0	1.1	1.1	4
	Subtotal	1.7	1.7	1.8	1.8	1.9	1.9	4
EC/ EDI	Comp Equip	0.1	0.1	0.1	0.1	0.1	0.1	4
	Sft Products	0.1	0.1	0.1	0.1	0.1	0.1	3
	Prof Services	*	*	*	*	*	*	7
	Networks	*	*	*	*	*	*	3
	Subtotal	0.2	0.2	0.2	0.2	0.2	0.2	4
Equip Market	PCs	1.3	1.3	1.4	1.4	1.5	1.6	5
	Workstations	0.6	0.6	0.6	0.7	0.7	0.8	5
	Midsize Sys	0.8	0.8	0.8	0.9	0.9	0.9	4
	Large Scale	2.0	2.1	2.1	2.2	2.2	2.3	3
	Super-Comp	0.4	0.4	0.4	0.4	0.5	0.5	3
	Subtotal	5.1	5.2	5.3	5.6	5.8	6.1	5
Secur Market	Prof Services	0.2	0.2	0.2	0.2	0.2	0.3	6
	Sft Products	0.1	0.1	0.1	0.1	0.1	0.1	0
	Equipment	0.4	0.4	0.4	0.4	0.4	0.5	4
	Subtotal	0.7	0.7	0.7	0.7	0.7	0.9	4
Equip Maint	Large Scale	0.7	0.7	0.8	0.8	0.9	0.9	6
	Midsize Sys	1.1	1.2	1.2	1.3	1.3	1.5	6
	PCs/ Wks	0.7	0.6	0.6	0.7	0.7	0.8	2
	Ancillary Svc	0.2	0.3	0.3	0.3	0.3	0.3	8
	Subtotal	2.7	2.8	2.9	3.1	3.2	3.5	5

Less than $50 million. Figures in $ Billions.

Source: INPUT Total

Exhibit V-4

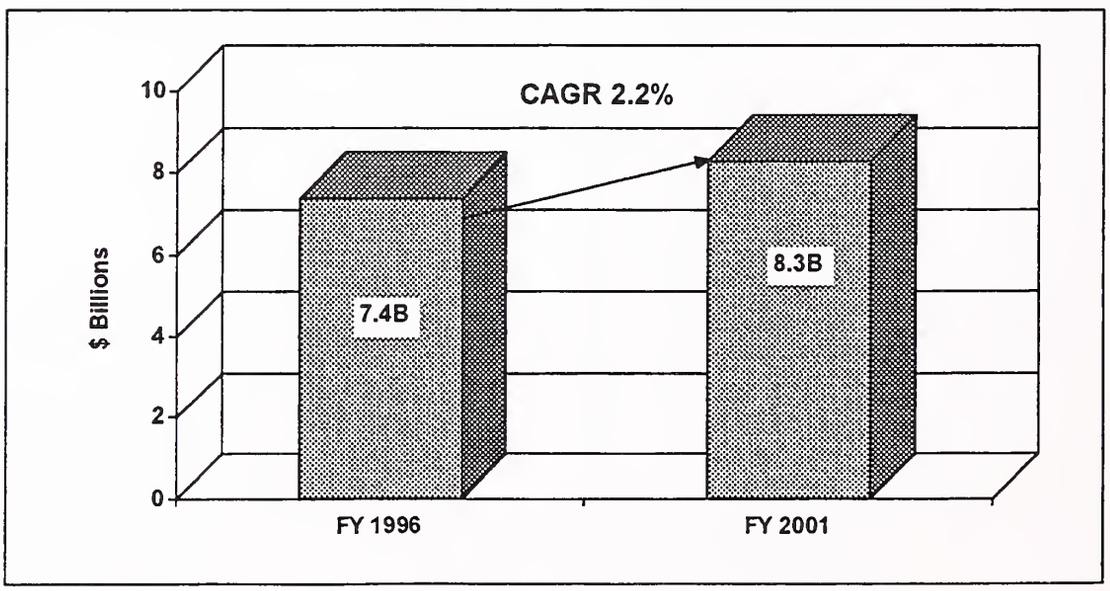
■ **Federal Information Systems and Services Market, FY 1996-FY 2001**



Source: INPUT

Exhibit V-5

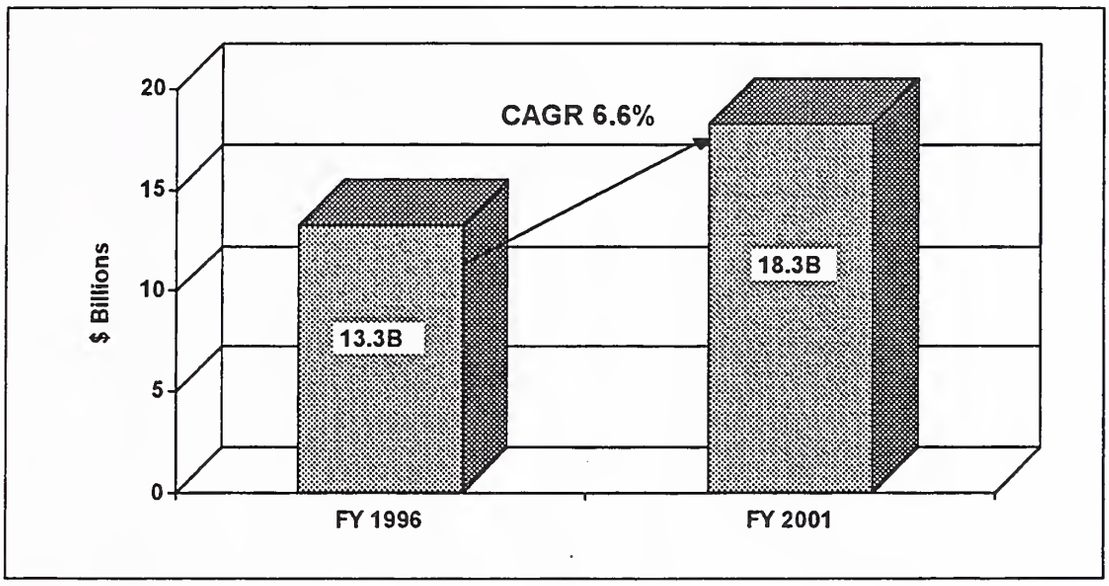
Total Defense Information Systems and Services Market, FY 1996-FY 2001



Source: INPUT

Exhibit V-6

Total Civilian Information Systems and Services Market, FY 1996-FY 2001



Source: INPUT

C
IT Budget Forecasts

Exhibit V-7

Total Defense Information Systems and Services Market

Category *Indicates Amount Is Less Than 100k	Projected Spending by FY in $ Millions						CAGR 1996-2001
	1996	1997	1998	1999	2000	2001	
Computer Systems	1,753	1,722	1,760	1,806	1,865	1,935	2%
Software Products	531	517	532	550	572	598	2%
Communications/Network Services	2,547	2,450	2,509	2,577	2,658	2,755	2%
Processing Services	69	62	57	56	58	60	-3%
Professional Services	827	809	848	894	953	1,005	4%
SI - Professional Services	327	321	337	357	379	400	4%
Systems Operations/Outsourcing	468	450	465	482	502	530	3%
Computer Maintenance	516	495	509	526	547	577	2%
Systems Integration	1,142	1,109	1,144	1,185	1,234	1,287	2%
Total Info. Systems and Services	**7,437**	**7,207**	**7,412**	**7,660**	**7,960**	**8,306**	**2%**

Source: OMB and INPUT

Exhibit V-8

Total Civilian Information Systems and Services Market

Category *Indicates Amount Is Less Than 100k	Projected Spending by FY in $ Millions						CAGR 1996-2001
	1996	1997	1998	1999	2000	2001	
Computer Systems	3,300	3,450	3,590	3,770	4,000	4,234	6%
Software Products	1,270	1,134	1,203	1,288	1,392	1,521	4%
Communications/Network Services	2,507	2,612	2,737	2,891	3,081	3,261	5%
Processing Services	56	54	51	52	55	58	1%
Professional Services	2,001	2,076	2,259	2,481	2,749	3,008	9%
SI - Professional Services	743	773	845	931	1,036	1,150	9%
Systems Operations/Outsourcing	1,142	1,166	1,249	1,350	1,472	1,614	7%
Computer Maintenance	1,221	1,243	1,328	1,432	1,558	1,730	7%
Systems Integration	2,759	2,765	2,930	3,132	3,382	3,361	6%
Total Info. Systems and Services	**13,300**	**13,700**	**14,500**	**15,600**	**16,800**	**18,400**	**7%**

Source: OMB and INPUT

Exhibit V-9

Total Agriculture Information Systems and Services Market

Category *Indicates Amount Is Less Than 100k	Projected Spending by FY in $ Millions						CAGR 1996-2001
	1996	1997	1998	1999	2000	2001	
Computer Systems	261	274	285	300	318	340	6%
Software Products	68	73	78	83	90	98	8%
Communications/Network Services	93	94	99	105	112	121	5%
Processing Services	2	1	1	1	1	2	0%
Professional Services	74	88	96	106	118	131	12%
SI - Professional Services	29	33	38	42	47	52	12%
Systems Operations/Outsourcing	42	49	53	57	62	69	10%
Computer Maintenance	46	54	58	62	68	75	10%
Systems Integration	171	183	193	206	221	239	7%
Total Info. Systems and Services	**651**	**712**	**754**	**805**	**869**	**947**	**8%**

Source: OMB and INPUT

Exhibit V-10

Total Commerce Information Systems and Services Market

Category *Indicates Amount Is Less Than 100k	Projected Spending by FY in $ Millions						CAGR 1996-2001
	1996	1997	1998	1999	2000	2001	
Computer Systems	119	174	181	190	201	215	13%
Software Products	30	34	36	38	41	45	7%
Communications/Network Services	168	192	201	211	224	241	8%
Processing Services	5	5	4	5	5	5	3%
Professional Services	43	47	51	56	63	70	10%
SI - Professional Services	17	19	20	23	25	28	11%
Systems Operations/Outsourcing	24	26	28	30	33	37	9%
Computer Maintenance	27	29	31	33	36	40	9%
Systems Integration	79	107	113	120	129	139	12%
Total Info. Systems and Services	**452**	**547**	**576**	**612**	**657**	**712**	**10%**

Source: OMB and INPUT

Exhibit V-11

Total Education Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
* Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	6	8	8	9	9	10	12%
Software Products	7	10	10	11	12	13	13%
Communications/Network Services	29	34	36	39	42	46	11%
Processing Services	.4	.4	.4	.4	.4	.4	2%
Professional Services	81	108	117	129	144	160	16%
SI - Professional Services	32	43	47	51	57	63	15%
Systems Operations/Outsourcing	46	60	64	69	76	84	13%
Computer Maintenance	50	66	70	76	83	92	14%
Systems Integration	35	47	51	56	62	69	15%
Total Info. Systems and Services	**289**	**379**	**408**	**444**	**487**	**540**	**13%**

Source: OMB and INPUT

Exhibit V-12

Total Energy Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
* Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	468	484	503	522	543	563	4%
Software Products	76	79	82	86	90	95	5%
Communications/Network Services	194	202	210	219	229	240	4%
Processing Services	10	10	10	10	11	11	1%
Professional Services	185	194	207	220	236	253	7%
SI - Professional Services	78	82	87	93	99	106	7%
Systems Operations/Outsourcing	139	147	155	163	173	183	6%
Computer Maintenance	157	166	175	184	195	206	6%
Systems Integration	283	294	308	323	339	356	5%
Total Info. Systems and Services	**1,373**	**1,436**	**1,506**	**1,579**	**1,663**	**1,751**	**7%**

Source: OMB and INPUT

Exhibit V-13

Total Health and Human Services Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	99	105	109	114	121	130	5%
Software Products	36	38	41	44	47	52	8%
Communications/Network Services	194	203	213	225	240	259	4%
Processing Services	5	5	5	5	5	5	-2%
Professional Services	169	185	202	222	248	275	15%
SI - Professional Services	67	73	81	88	98	109	16%
Systems Operations/Outsourcing	96	103	110	119	130	145	14%
Computer Maintenance	106	113	121	130	142	158	14%
Systems Integration	116	126	135	147	160	175	9%
Total Info. Systems and Services	**851**	**913**	**974**	**1,050**	**1,142**	**1,254**	**11%**

Source: OMB and INPUT

Exhibit V-14

Total Housing and Urban Development Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	8	8	8	9	9	10	5%
Software Products	6	6	7	7	8	9	8%
Communications/Network Services	54	51	54	57	61	66	4%
Processing Services	1	1	1	2	1	1	-2%
Professional Services	29	40	44	48	54	60	15%
SI - Professional Services	12	16	17	19	21	24	16%
Systems Operations/Outsourcing	17	22	24	26	28	32	14%
Computer Maintenance	18	25	26	28	31	34	14%
Systems Integration	16	20	22	24	26	29	13%
Total Info. Systems and Services	**159**	**190**	**203**	**219**	**238**	**262**	**11%**

Source: OMB and INPUT

Exhibit V-15

Total Department of Interior Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	106	99	103	108	114	122	5%
Software Products	39	42	45	48	52	57	8%
Communications/Network Services	47	46	48	51	54	58	5%
Processing Services	10	9	8	8	9	10	0%
Professional Services	27	28	31	34	38	42	10%
SI - Professional Services	10	11	12	13	15	16	10%
Systems Operations/Outsourcing	15	16	17	18	20	22	8%
Computer Maintenance	17	17	18	20	22	24	8%
Systems Integration	76	76	81	86	92	100	6%
Total Info. Systems and Services	**274**	**274**	**289**	**308**	**332**	**361**	**6%**

Source: OMB and INPUT

Exhibit V-16

Total Department of Justice Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	261	244	253	266	289	302	3%
Software Products	74	81	86	92	99	108	8%
Communications/Network Services	125	130	137	145	155	167	6%
Processing Services	2	2	2	2	2	2	2%
Professional Services	130	136	148	163	182	202	9%
SI - Professional Services	51	54	59	65	72	80	9%
Systems Operations/Outsourcing	74	76	81	88	96	106	8%
Computer Maintenance	81	83	89	96	104	116	7%
Systems Integration	200	199	211	225	243	264	6%
Total Info. Systems and Services	**873**	**884**	**939**	**1,006**	**1,089**	**1,190**	**6%**

Source: OMB and INPUT

Exhibit V-17

Total Bureau of Prisons Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	23	15	16	16	17	19	-.4%
Software Products	3	2	2	2	2	2	-7%
Communications/Network Services	9	8	9	9	9	10	3%
Processing Services	.2	.2	.2	.2	.2	.2	1%
Professional Services	.5	.6	.7	.8	.9	.9	13%
SI - Professional Services	.2	.3	.3	.3	.3	.4	13%
Systems Operations/Outsourcing	.3	.4	.4	.4	.5	.5	12%
Computer Maintenance	.3	.4	.4	.5	.5	.5	11%
Systems Integration	12	7	8	8	9	9	-4%
Total Info. Systems and Services	**38**	**31**	**32**	**34**	**36**	**39**	**.4%**

Source: OMB and INPUT

Exhibit V-18

Total Drug Enforcement Agency Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	49	30	31	33	35	37	-6%
Software Products	2	5	5	6	6	7	23%
Communications/Network Services	9	9	9	10	11	12	5%
Processing Services	*	.1	.1	.1	.1	.1	11%
Professional Services	7	10	11	12	13	14	15%
SI - Professional Services	3	4	4	5	5	6	15%
Systems Operations/Outsourcing	4	5	6	6	7	8	13%
Computer Maintenance	5	6	6	7	7	8	13%
Systems Integration	25	19	21	22	23	25	.2%
Total Info. Systems and Services	**83**	**74**	**78**	**83**	**90**	**98**	**36%**

Source: OMB and INPUT

Exhibit V-19

Total Federal Bureau of Investigation Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	86	91	95	100	106	113	6%
Software Products	27	35	37	40	43	47	12%
Communications/Network Services	46	47	49	52	55	60	5%
Processing Services	.9	.9	.8	.9	.9	1	1%
Professional Services	33	34	37	40	45	50	9%
SI - Professional Services	13	13	15	16	18	20	9%
Systems Operations/Outsourcing	19	19	20	22	24	26	7%
Computer Maintenance	21	21	22	24	26	29	7%
Systems Integration	65	73	77	82	88	95	8%
Total Info. Systems and Services	**264**	**279**	**295**	**315**	**340**	**370**	**7%**

Source: OMB and INPUT

Exhibit V-20

Total INS Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	60	48	50	52	56	59	-.1%
Software Products	22	15	16	16	18	20	-2%
Communications/Network Services	27	24	25	27	29	32	3%
Processing Services	.3	.3	.3	.3	.3	.3	-3%
Professional Services	52	51	56	61	68	76	8%
SI - Professional Services	21	20	22	24	27	30	8%
Systems Operations/Outsourcing	30	28	30	33	36	40	6%
Computer Maintenance	33	31	33	36	39	43	6%
Systems Integration	59	48	52	55	60	66	3%
Total Info. Systems and Services	**271**	**243**	**260**	**280**	**305**	**336**	**4%**

Source: OMB and INPUT

Exhibit V-21

Total Department of Labor Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	24	38	39	41	44	47	14%
Software Products	7	12	13	14	15	16	17%
Communications/Network Services	14	18	19	20	21	23	11%
Processing Services	.3	.3	.3	.3	.3	.3	4%
Professional Services	15	22	23	26	29	32	16%
SI - Professional Services	6	9	9	10	11	13	16%
Systems Operations/Outsourcing	9	12	13	14	15	17	14%
Computer Maintenance	9	13	14	15	16	18	14%
Systems Integration	17	30	31	34	36	39	18%
Total Info. Systems and Services	**92**	**133**	**142**	**152**	**165**	**180**	**14%**

Source: OMB and INPUT

Exhibit V-22

Total Department of State Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	63	77	81	85	90	96	9%
Software Products	5	5	5	5	6	7	6%
Communications/Network Services	111	110	114	120	128	137	4%
Processing Services	3	3	3	3	3	3	-.3%
Professional Services	10	10	11	12	14	15	9%
SI - Professional Services	4	4	4	5	5	6	9%
Systems Operations/Outsourcing	6	6	6	7	7	8	8%
Computer Maintenance	6	6	7	7	8	9	7%
Systems Integration	34	40	42	45	48	51	9%
Total Info. Systems and Services	**212**	**226**	**236**	**250**	**267**	**287**	**6%**

Source: OMB and INPUT

Exhibit V-23

Total Department of Transportation Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	654	639	664	698	740	792	4%
Software Products	556	409	443	464	501	546	-.4%
Communications/Network Services	411	423	442	465	493	529	5%
Processing Services	10	10	9	9	10	11	1%
Professional Services	72	75	82	90	101	112	9%
SI - Professional Services	28	30	33	36	40	44	9%
Systems Operations/Outsourcing	41	42	45	49	53	59	8%
Computer Maintenance	45	46	50	53	58	64	7%
Systems Integration	648	549	579	615	660	714	2%
Total Info. Systems and Services	**1,852**	**1,709**	**1,795**	**1,904**	**2,039**	**2,205**	**4%**

Source: OMB and INPUT

Exhibit V-24

Total Department of Treasury Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	342	444	462	485	514	551	10%
Software Products	78	61	64	69	75	81	1%
Communications/Network Services	376	401	419	442	470	504	6%
Processing Services	10	10	9	9	10	10	1%
Professional Services	128	132	144	158	177	196	9%
SI - Professional Services	51	52	57	63	70	78	9%
Systems Operations/Outsourcing	73	74	79	85	93	103	7%
Computer Maintenance	80	81	86	93	101	112	7%
Systems Integration	229	263	276	294	315	341	8%
Total Info. Systems and Services	**1,199**	**1,317**	**1,388**	**1,477**	**1,588**	**1,723**	**8%**

Source: OMB and INPUT

Exhibit V-25

Total Custom Service Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	39	20	21	22	23	25	-9%
Software Products	28	8	8	9	10	11	-18%
Communications/Network Services	9	5	6	6	6	7	-5%
Processing Services	*	*	*	*	*	*	-25%
Professional Services	16	16	17	19	21	23	8%
SI - Professional Services	6	6	7	7	8	9	8%
Systems Operations/Outsourcing	9	9	9	10	11	12	7%
Computer Maintenance	10	10	11	11	12	13	6%
Systems Integration	39	18	19	20	22	24	10%
Total Info. Systems and Services	**124**	**80**	**86**	**92**	**101**	**110**	**-2%**

** Source: OMB and INPUT*

Exhibit V-26

Total Internal Revenue Service Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	267	381	396	416	441	472	12%
Software Products	33	36	38	41	44	48	7%
Communications/Network Services	336	360	375	396	420	450	6%
Processing Services	9	9	8	8	9	9	1%
Professional Services	83	84	91	100	112	124	9%
SI - Professional Services	33	33	36	40	45	49	9%
Systems Operations/Outsourcing	47	47	50	54	59	65	7%
Computer Maintenance	52	51	56	59	64	71	7%
Systems Integration	158	208	218	231	247	267	11%
Total Info. Systems and Services	**900**	**1,040**	**1,093**	**1,160**	**1,244**	**1,346**	**8%**

Source: OMB and INPUT

Exhibit V-27

Total Secret Service Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	8	10	11	11	12	13	11%
Software Products	.7	2	2	2	2	2	26%
Communications/Network Services	6	7	8	8	9	9	9%
Processing Services	.2	.2	.2	.2	.2	.2	4%
Professional Services	2	2	2	3	3	3	11%
SI - Professional Services	.8	.8	1	1	1	1	11%
Systems Operations/Outsourcing	1	1	1	1	2	2	10%
Computer Maintenance	1	1	1	2	2	2	9%
Systems Integration	4	6	6	6	7	7	14%
Total Info. Systems and Services	**20**	**26**	**27**	**29**	**31**	**34**	**11%**

Source: OMB and INPUT

Exhibit V-28

Total Department of Veterans Affairs Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	228	204	213	223	237	254	2%
Software Products	27	24	25	27	29	32	3%
Communications/Network Services	117	125	131	138	146	156	6%
Processing Services	3	3	3	3	3	3	3%
Professional Services	27	23	25	28	31	34	5%
SI - Professional Services	11	9	10	11	12	14	5%
Systems Operations/Outsourcing	15	13	14	15	16	18	3%
Computer Maintenance	17	14	15	16	18	20	3%
Systems Integration	118	104	108	115	122	132	2%
Total Info. Systems and Services	**458**	**426**	**447**	**473**	**505**	**545**	**1%**

Source: OMB and INPUT

Exhibit V-29

Total Commodity Futures Trading Commission Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	.09	.3	.3	.4	.4	.4	35%
Software Products	.6	.7	.7	.7	.8	.9	7%
Communications/Network Services	.7	.7	.8	.8	.9	.9	5%
Processing Services	*	*	*	*	*	*	3%
Professional Services	.9	.3	.3	.4	.4	.4	13%
SI - Professional Services	.3	.1	.1	.1	.2	.2	13%
Systems Operations/Outsourcing	.5	.2	.2	.2	.2	.2	-14%
Computer Maintenance	.5	.2	.2	.2	.2	.3	-14%
Systems Integration	760	682	724	776	840	915	4%
Total Info. Systems and Services	4	3	3	3	3	4	-3%

Source: OMB and INPUT

Exhibit V-30

Total Environmental Protection Agency Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	32	31	32	34	36	39	4%
Software Products	22	21	22	24	26	28	5%
Communications/Network Services	52	50	53	56	60	64	4%
Processing Services	1	1	1	1	1	1	-1%
Professional Services	61	58	64	70	78	86	7%
SI - Professional Services	24	23	25	28	31	35	8%
Systems Operations/Outsourcing	34	32	34	38	41	45	6%
Computer Maintenance	38	36	38	42	45	50	6%
Systems Integration	45	44	47	51	55	61	5%
Total Info. Systems and Services	293	280	300	323	351	387	6%

Source: OMB and INPUT

Exhibit V-31

Total Federal Emergency Management Agency Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	1	5	6	6	6	7	49%
Software Products	17	15	16	17	18	20	3%
Communications/Network Services	6	6	7	7	8	8	6%
Processing Services	.1	.1	.1	.1	.1	.2	.2%
Professional Services	.3	.3	.3	.3	.4	.5	8%
SI - Professional Services	.1	.1	.1	.2	.2	.2	9%
Systems Operations/Outsourcing	.2	.2	.2	.2	.2	.2	7%
Computer Maintenance	.2	.2	.2	.2	.2	.2	7%
Systems Integration	12	13	14	15	16	17	7%
Total Info. Systems and Services	**25**	**28**	**30**	**31**	**34**	**36**	**8%**

Source: OMB and INPUT

Exhibit V-32

Total General Services Administration Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	82	86	89	94	99	106	5%
Software Products	46	48	52	56	60	67	8%
*Communications/Network Services	112	101	108	118	129	142	5%
*Processing Services	.6	.3	.3	.3	.3	.3	-10%
*Professional Services	477	459	500	549	614	681	.8%
*SI - Professional Services	188	182	199	219	244	271	.7%
Systems Operations/Outsourcing	270	255	274	296	323	359	6%
Computer Maintenance	298	281	300	323	352	391	6%
Systems Integration	228	227	246	269	296	327	7%
Total Info. Systems and Services	**1,701**	**1,629**	**1,755**	**1,908**	**2,094**	**2,320**	**6%**

- Includes Services To Support FTS

Source: OMB and INPUT

Exhibit V-33

Total National Aeronautics Space Administration Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	245	232	241	253	269	288	3%
Software Products	87	89	95	102	110	120	7%
Communications/Network Services	138	147	155	165	177	192	8%
Processing Services	2	2	2	2	2	2	3%
Professional Services	275	270	294	324	362	401	8%
SI - Professional Services	109	107	117	129	144	159	8%
Systems Operations/Outsourcing	156	151	161	174	190	211	6%
Computer Maintenance	172	165	177	190	207	230	6%
Systems Integration	244	240	257	276	301	328	4%
Total Info. Systems and Services	**1,314**	**1,290**	**1,379**	**1,488**	**1,621**	**1,782**	**6%**

Source: OMB and INPUT

Exhibit V-34

Total Nuclear Regulatory Commission Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	7	5	5	6	6	6	-3%
Software Products	3	2	2	3	3	3	1%
Communications/Network Services	4	3	4	4	4	5	2%
Processing Services	*	*	*	*	*	*	-3%
Professional Services	7	7	7	8	9	10	6%
SI - Professional Services	3	3	3	3	3	4	6%
Systems Operations/Outsourcing	4	4	4	4	5	5	5%
Computer Maintenance	5	4	4	5	5	6	4%
Systems Integration	6	5	5	6	6	7	2%
Total Info. Systems and Services	**37**	**31**	**33**	**36**	**39**	**43**	**3%**

Source: OMB and INPUT

Exhibit V-35

Total Office of Personnel Management Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	2	.9	.9	1	1	1	.9%
Software Products	2	2	2	3	3	3	6%
Communications/Network Services	3	3	3	3	3	4	4%
Processing Services	*	*	*	*	*	*	.5%
Professional Services	5	4	4	5	5	6	4%
SI - Professional Services	2	2	2	2	2	2	4%
Systems Operations/Outsourcing	2	2	2	2	3	3	3%
Computer Maintenance	3	3	3	3	3	3	2%
Systems Integration	4	3	4	4	4	5	19%
Total Info. Systems and Services	**22**	**18**	**19**	**21**	**23**	**25**	**3%**

Source: OMB and INPUT

Exhibit V-36

Total Social Security Administration Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	187	179	186	195	207	222	4%
Software Products	11	10	10	11	12	13	3%
Communications/Network Services	50	59	61	65	69	74	5%
Processing Services	1	1	1	1	1	1	1%
Professional Services	41	44	48	52	59	65	10%
SI - Professional Services	16	17	19	21	23	26	10%
Systems Operations/Outsourcing	23	24	26	28	31	34	8%
Computer Maintenance	26	27	29	31	34	37	8%
Systems Integration	99	89	94	100	107	115	23%
Total Info. Systems and Services	**385**	**381**	**402**	**428**	**461**	**501**	**6%**

Source: OMB and INPUT

Exhibit V-37

Total Tennessee Valley Authority Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	18	19	19	20	22	23	5%
Software Products	9	9	9	10	11	12	7%
Communications/Network Services	9	9	9	10	11	12	6%
Processing Services	.2	.2	.2	.2	.2	.2	1%
Professional Services	8	8	9	9	11	12	9%
SI - Professional Services	3	3	3	4	4	5	9%
Systems Operations/Outsourcing	4	5	5	5	6	6	8%
Computer Maintenance	5	5	5	6	6	7	7%
Systems Integration	14	15	15	17	18	19	6%
Total Info. Systems and Services	**60**	**61**	**65**	**70**	**75**	**82**	**7%**

Source: OMB and INPUT

Exhibit V-38

Total Agency for International Development Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	4	4	4	5	5	5	6%
Software Products	2	2	2	2	2	2	6%
Communications/Network Services	3	4	5	5	5	6	12%
Processing Services	*	1	1	1	1	1	14%
Professional Services	8	8	9	9	11	12	7%
SI - Professional Services	3	3	3	4	4	5	7%
Systems Operations/Outsourcing	5	4	5	6	6	6	5%
Computer Maintenance	5	5	6	6	6	7	5%
Systems Integration	5	5	6	6	7	7	6%
Total Info. Systems and Services	**35**	**34**	**36**	**39**	**43**	**47**	**6%**

Source: OMB and INPUT

Exhibit V-39

Total U.S. Information Agency Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
* Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	10	10	11	12	12	13	5%
Software Products	3	3	3	3	4	4	7%
Communications/Network Services	21	22	23	24	26	28	5%
Processing Services	1	1	1	1	1	1	1%
Professional Services	3	4	4	4	5	5	9%
SI - Professional Services	1	1	2	2	2	2	9%
Systems Operations/Outsourcing	2	2	2	2	3	3	8%
Computer Maintenance	2	2	2	3	3	3	7%
Systems Integtration	6	6	7	7	8	8	6%
Total Info. Systems and Services	**46**	**47**	**49**	**52**	**56**	**61**	**6%**

Source: OMB and INPUT

Exhibit V-40

Total Department of the Air Force Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*ndicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	275	331	338	346	359	373	6%
Software Products	28	29	30	31	32	33	4%
Communications/Network Services	165	182	187	192	199	206	5%
Processing Services	4	4	3	3	4	4	0%
Professional Services	128	122	127	134	143	151	3%
SI - Professional Services	51	48	51	54	57	60	5%
Systems Operations/Outsourcing	73	68	70	72	76	80	2%
Computer Maintenance	80	74	77	79	82	87	2%
Systems Integration	153	178	183	190	198	207	6%
Total Info. Systems and Services	**864**	**915**	**941**	**974**	**1,014**	**1,061**	**4%**

Source: OMB and INPUT

Exhibit V-41

Total Department of the Army Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	288	285	291	299	308	319	2%
Software Products	112	98	101	104	109	114	.5%
Communications/Network Services	269	256	262	270	278	289	2%
Processing Services	7	6	5	5	5	6	4%
Professional Services	129	157	165	174	185	78	9%
SI - Professional Services	51	62	65	69	74	196	9%
Systems Operations/Outsourcing	73	88	90	94	98	103	7%
Computer Maintenance	80	96	99	102	106	112	7%
Systems Integration	208	212	219	227	237	248	4%
Total Info. Systems and Services	1,070	1,122	1,156	1,197	1,245	1,302	4%

Source: OMB and INPUT

Exhibit V-42

Total Department of the Navy Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	378	364	372	381	393	407	2%
Software Products	78	85	87	90	94	98	5%
Communications/Network Services	260	244	250	257	265	275	1%
Processing Services	6	6	5	5	5	5	-3%
Professional Services	125	117	123	129	138	146	3%
SI - Professional Services	49	46	49	52	55	58	3%
Systems Operations/Outsourcing	71	65	67	70	73	77	2%
Computer Maintenance	78	72	74	76	79	84	1%
Systems Integration	196	188	194	201	209	217	2%
Total Info. Systems and Services	1,103	1,053	1,083	1,119	1,163	1,214	2%

Source: OMB and INPUT

Exhibit V-43

Total Office of the Secretary of Defense Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	779	684	699	718	741	769	-.3%
Software Products	301	292	300	311	323	338	2%
Communications/Network Services	1,845	1,756	1,797	1,846	1,903	1,971	1%
Processing Services	52	47	43	43	44	45	-3%
Professional Services	437	405	425	448	478	200	3%
SI - Professional Services	173	161	169	179	190	504	3%
Systems Operations/Outsourcing	247	226	233	241	252	266	2%
Computer Maintenance	273	248	255	264	274	289	1%
Systems Integration	577	511	528	548	571	597	1%
Total Info. Systems and Services	**4,315**	**4,008**	**4,119**	**4,254**	**4,415**	**4,605**	**1%**

Source: OMB and INPUT

Exhibit V-44

Total Marine Corps Information Systems and Services Market

Category	Projected Spending by FY in $ Millions						CAGR
*Indicates Amount Is Less Than 100k	1996	1997	1998	1999	2000	2001	1996-2001
Computer Systems	34	59	60	62	64	66	14%
Software Products	13	14	14	15	15	16	4%
Communications/Network Services	9	12	13	13	13	14	8%
Processing Services	.2	.2	.1	.1	.1	.1	-2%
Professional Services	9	8	9	9	10	10	3%
SI - Professional Services	3	3	3	4	4	4	4%
Systems Operations/Outsourcing	5	5	5	5	5	5	2%
Computer Maintenance	5	5	5	5	6	6	2%
Systems Integration	21	33	33	34	36	37	12%
Total Info. Systems and Services	**83**	**110**	**113**	**116**	**120**	**125**	**9%**

Source: OMB and INPUT

Exhibit V-45

Total Defense Information Systems Agency Information Systems and Services Market

Category *Indicates Amount Is Less Than 100k	Projected Spending by FY in $ Millions						CAGR 1996-2001
	1996	1997	1998	1999	2000	2001	
Computer Systems	236	219	224	231	239	248	10%
Software Products	94	86	88	92	95	100	4%
Communications/Network Services	1,575	1,503	1,538	1,579	1,627	1,684	64%
Processing Services	47	42	39	38	39	41	2%
Professional Services	138	148	156	165	175	185	7%
SI - Professional Services	55	59	62	66	70	74	3%
Systems Operations/Outsourcing	78	83	86	89	92	97	4%
Computer Maintenance	86	91	94	97	101	106	4%
Systems Integration	178	157	163	169	177	185	7%
Total Info. Systems and Services	2,376	**2,302**	**2,360**	**2,431**	**2,516**	**2,617**	**90%**

Source: OMB and INPUT