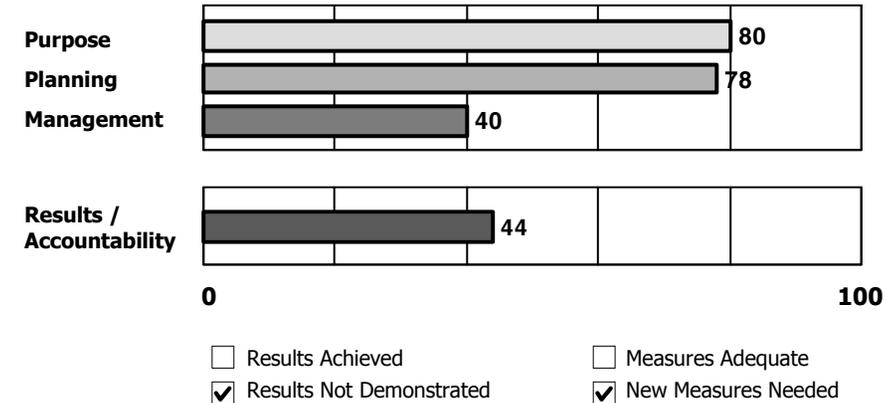


**Program:** *Communications Infrastructure*

**Agency:** *Department of Defense--Military*

**Bureau:** *Department of Defense--Military*



**Key Performance Measures**

**Year Target Actual**

Long-term Measure: DoD is preparing long-term performance metrics, to include system capacity, performance, and user satisfaction. (New measure, target under development)			
Annual Measure: Percent of time that the Non-Secure Internet Protocol Router Network (NIPRNET) access circuit is available. NIPRNET is the unclassified IT system.	2000	> 98.5%	99.63%
	2001	> 98.5%	99.50%
	2002	> 98.5%	
	2003	> 98.5%	
Annual Measure: Number of bases upgraded by the Army Installation Information Infrastructure Modernization Program (I3MP)	2001	5	5
	2002	8	8
	2003	5	

**Rating:** *Results Not Demonstrated*

**Program Type:** *Capital Assets*

**Program Summary:**

The communications infrastructure program includes all networks and systems for transmission of voice, data, and video information for the Department of Defense, with a total investment of about \$5.4 billion in 2003. This analysis includes base level communications activities of the military services, DoD's long distance communications, and the Defense Information System Network (DISN), managed by the Defense Information Systems Agency (DISA), which provides world wide communications capabilities to military personnel. The DISN includes the Global Infrastructure Grid (GIG) Bandwidth Expansion program, which will increase bandwidth connections to over 90 military bases, and the DoD Teleport program, which will improve satellite communications connections.

Overall, the PART reveals that DoD does not manage its communications infrastructure on an enterprise or department-wide basis. Best industry practice suggests a communications infrastructure should be managed with an enterprise approach rather than in a piecemeal fashion by component. The PART assessment also suggests that DoD should develop common performance measures to be used across the entire department for this program. Additional findings include:

1. The program's purpose is clear, owing to the unique military requirements of these systems.
2. The program performs well on planning because it has established clear short-term goals and has taken meaningful steps to address strategic planning deficiencies. It has not, however, established long-term performance measures.
3. While the program does collect performance information and is working to address management deficiencies, it lacks clearly defined long-term performance objectives and does not measure program efficiency or effectiveness.
4. The program results section also shows some weaknesses. Here again the PART highlighted the lack of long-term outcome goals.

In response to these findings, DoD will develop common metrics to assess program performance across the department.

**Program Funding Level (in millions of dollars)**

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
4,426	5,397	5,674

## OMB Program Assessment Rating Tool (PART)

### Capital Assets & Service Acquisition Programs

**Name of Program: Communications Infrastructure**

#### Section I: Program Purpose & Design (Yes, No)

	Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
1	<i>Is the program purpose clear?</i>	Yes	The purpose of the communications infrastructure program is to make information available on a network that people depend on and trust. The department is working to achieve a ubiquitous, secure and robust network, without bandwidth, frequency or computing capability limitations. The key to this network is a well developed, dependable communications infrastructure program.	Evidence includes directions from the Secretary of Defense, goals of the Assistant Secretary for Command, Control, Computers, and Intelligence, Joint Vision 2020, the DoD Information Management Strategic Plan.	20%	0.2
2	<i>Does the program address a specific interest, problem or need?</i>	Yes	The communications infrastructure program allows DoD personnel at all levels to share information, prepare and execute military plans, and provide administrative support to the department.	All military and business functions require a robust, secure, unconstrained communications infrastructure. Supporting documents include: Joint Vision 2020; DoD Directive 4640.13; Joint Requirements Oversight Council validation of capstone requirements; Quadrennial Defense Review.	20%	0.2
3	<i>Is the program designed to have a significant impact in addressing the interest, problem or need?</i>	Yes	DoD is the sole agency in the federal government responsible for providing a secure robust reliable communications infrastructure for military and intelligence needs. The federal contribution is \$5.4 billion. The increased funding of \$500 million in FY 2003 for Bandwidth Expansion will increase bandwidth connections to 90 locations and eliminate current network congestion while increasing reliability.	100% of the program's funding comes from Federal funds. The communications infrastructure program provides communications capabilities at more than 600 defense installations around the world.	20%	0.2

4	<i>Is the program designed to make a unique contribution in addressing the interest, problem or need (i.e., not needlessly redundant of any other Federal, state, local or private efforts)?</i>	Yes	This is the only federal, state or local program that provides communications infrastructure to the Department of Defense. The PART review covered DoD communications infrastructure programs which provide for transition of voice, data and video information between DoD facilities and within DoD facilities as well. The population served by this program is not served by any other program.	There are no other programs designed to provide communications capabilities to support U.S. national security needs. DoD budget exhibits and strategic plans confirm that this is the only DoD program to provide a communications infrastructure.	20%	0.2
5	<i>Is the program optimally designed to address the interest, problem or need?</i>	No	There may be a more efficient manner to implement the program to achieve the desired results.	No study has examined all elements of the communications infrastructure program to determine if the current program is, indeed the most cost-effective method to provide this capability. Private sector best practices suggest an department-wide approach for providing communications infrastructure is more effective and efficient than each individual component providing its own communications infrastructure. DoD does not yet manage this program on a department-wide basis, although it is moving in that direction.	20%	0.0

<b>Total Section Score</b>	<b>100%</b>	<b>80%</b>
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**Section II: Strategic Planning (Yes, No, N/A)**

Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
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1	<i>Does the program have a limited number of specific, ambitious long-term performance goals that focus on outcomes and meaningfully reflect the purpose of the program?</i>	No	DoD has not yet established clear, measurable outcome goals with timelines. The program, however, does have a clear vision: "to provide a ubiquitous, secure, and robust network without bandwidth, frequency or computing capability limitations." While the vision is clear, better metrics are required. DoD has prepared a rough draft of possible long-term goals, but these have not been finalized or approved.	There are no goals or performance metrics that measure capabilities of the entire infrastructure. Portions or projects of the communications infrastructure, such as the Defense Information Systems Network, the Bandwidth Expansion effort, and DoD Teleports, do, however, have clear measurable goals. For example the Defense Information Systems Network plans to reduce data transmission costs from \$60.36/kb in FY 2002 to \$22.04/kb in FY 2007.	11%	0.0
2	<i>Does the program have a limited number of annual performance goals that demonstrate progress toward achieving the long-term goals?</i>	Yes	DoD is implementing several programs with quantifiable short-term goals to support the long-term vision of providing a ubiquitous, secure, and robust network without bandwidth, frequency or computing capability limitations. These programs include the Bandwidth Expansion program, DoD Teleports, the Defense Information Systems Network, Army Installation Information Infrastructure Modernization Program, and Navy Marine Corps Internet (NMCI).	The Bandwidth Expansion program has a clear measurable outcome: to provide optical cable connections to 90 sites in the continental United States in FY 2003 and FY 2004 to increase bandwidth. DoD Teleports will increase bandwidth capabilities for satellite communications by adding additional frequency bands (X, C, Ku) in FY 2002-2004. Navy plans to convert almost its entire existing Information Technology network to the Navy Marine Corps Intranet, a system maintained by a private contractor. The Army plans to upgrade its base level communications infrastructure.	11%	0.1

3	<p><i>Do all partners (grantees, sub-grantees, contractors, etc.) support program planning efforts by committing to the annual and/or long-term goals of the program?</i></p>	Yes	<p>The military services and the Defense Information Systems Agency are partners in providing the communications infrastructure. The military services agree on the need for a robust, reliable, assured network and include these goals in their strategic plans. The Defense Information Systems Agency has a performance plan agreement with the Office of the Secretary of Defense and the Defense Resources Board. Systems that are not part of the DoD Information Technology plan, or in compliance with DoD Information Technology policies are required to seek a waiver. The waiver process forces all programs to eventually become part of the department's communication infrastructure network</p>	<p>Evidence includes the Defense Information Systems Agency Performance Plan and Transformation Roadmap, as well as strategic plans from the services, and the DoD Information Technology waiver process. Under the waiver process, DoD directed 22 legacy networks to move to the standard communications infrastructure system between 1999 - 2006. There are plans to move the remaining 10 networks to the standard DoD systems, including 9 Navy networks that will be moved during conversion of the Navy's communications infrastructure to a private contractor.</p>	11%	0.1
4	<p><i>Does the program collaborate and coordinate effectively with related programs that share similar goals and objectives?</i></p>	Yes	<p>The department provides communications capabilities used by other agencies, such as the Federal Aviation Administration, and uses other federal communications capabilities, such as Federal Telecommunication Service 2001, managed by the General Services Administration. The National Communication System leads inter-agency committees to provide emergency communications. The department also participates in the interdepartmental radio advisory committee and works with the Federal Communications Commission on communications issues to prevent spectrum interference.</p>	<p>The National Communications System, a part of DoD, manages the Government Emergency Telecommunications Service to provide telecommunications capabilities to federal leaders in the event of an emergency. DoD has agreements with the Federal Aviation Administration and uses the federal telecommunications contract managed by the General Services Administration. DoD worked with other agencies in the federal government and the Executive Office of President on proposed spectrum legislation in FY 2002.</p>	11%	0.1

5	<i>Are independent and quality evaluations of sufficient scope conducted on a regular basis or as needed to fill gaps in performance information to support program improvements and evaluate effectiveness?</i>	yes	DoD Program Analyses and Evaluation, the General Accounting Office, and internal DoD evaluators have examined the Defense Information Systems Agency and the Defense Information Systems Network. The Navy Marine Corps Internet has been reviewed multiple times by independent assessors and the Navy CIO.	Evidence includes General Accounting Office reports, Program Analysis and Evaluation reports, DoD Inspector General reports, Defense Information Systems Agency reports, and independent reports on the Navy Marine Corps Internet.	11%	0.1
6	<i>Is the program budget aligned with the program goals in such a way that the impact of funding, policy, and legislative changes on performance is readily known?</i>	Yes	Communications infrastructure budget submissions clearly identify the capabilities provided by a given funding level, and what additional requirements are satisfied by increased funding. The budget submission is tied to the department's goals for information technology and communications infrastructure.	The program's goal is to provide a ubiquitous, secure and robust network, without bandwidth, frequency or computing capability limitations. The budget is aligned with this goal, within the overall funding constraints of the department. For example, the Bandwidth Expansion program will improve the communications infrastructure to about 90 locations, thereby reducing or eliminating bandwidth constraints. This effort costs about \$500 million in FY 2003, but the results will be clear and directly support the program goal.	11%	0.1
7	<i>Has the program taken meaningful steps to address its strategic planning deficiencies?</i>	Yes	As a result of criticism that too many systems were not integrated with the primary DoD communications infrastructure, DoD implemented a waiver process to force independent systems to become part of the larger communications infrastructure system. DoD has developed draft long term goals, although these have not been reviewed or finalized. The Army is considering implementing Service Level Agreements to measure service quality.	Evidence includes establishment of the waiver board, results of waiver process, and the waiver handbook, as well as draft long-term goals, and the Army Information Management Implementation Plan, Phase 1.	11%	0.1
8 (Cap 1.)	<i>Are acquisition program plans adjusted in response to performance data and changing conditions?</i>	Yes	DoD is seeking increased network capacity in response to network capacity constraints, congestion, and delays.	DoD has launched two primary programs, Teleports and Bandwidth Expansion, to increase bandwidth and improve reliability.	11%	0.1

9 (Cap 2.)	<i>Has the agency/program conducted a recent, meaningful, credible analysis of alternatives that includes trade-offs between cost, schedule and performance goals?</i>	No	Several parts of the communications infrastructure program have conducted recent analysis of alternatives, but these are not comprehensive.	Evidence includes analysis of alternatives for the Navy Marine Corps Internet and Teleports, although none of these offers a comprehensive analysis of alternatives for the entire program.	11%	0.0
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<b>Total Section Score</b>	<b>100%</b>	<b>78%</b>
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**Section III: Program Management (Yes,No, N/A)**

	<b>Questions</b>	<b>Ans.</b>	<b>Explanation</b>	<b>Evidence/Data</b>	<b>Weighting</b>	<b>Weighted Score</b>
1	<i>Does the agency regularly collect timely and credible performance information, including information from key program partners, and use it to manage the program and improve performance?</i>	Yes	The Defense Information Systems Agency collects program performance measurements. DoD also monitors networks and systems for compliance with the department's Information Technology architecture and use of the Defense Information Systems Network.	Evidence includes quarterly performance contract report, performance plan, the waiver process, and Navy Marine Corps Internet Service Level Agreements.	10%	0.1
2	<i>Are Federal managers and program partners (grantees, sub grantees, contractors, etc.) held accountable for cost, schedule and performance results?</i>	No	There is little evidence program managers are held accountable for program performance. Contracts with private partners are not performance based. The Army and Air Force do not have performance contracts. There has been little consequence for performance shortfalls in the Navy Marine Corps Internet. Only the Defense Information Systems Agency has a performance contract stating performance goals.	Evidence includes lack of performance contracts and no accountability for Navy Marine Corps Internet problems. The Defense Information Systems Agency, does, however, have a performance contract.	10%	0.0
3	<i>Are all funds (Federal and partners') obligated in a timely manner and spent for the intended purpose?</i>	Yes	Funds are obligated in a timely manner and spent on the intended purpose	Evidence includes DoD financial reports, audits, reviews by DoD Inspectors General, and reviews by the Defense Information Systems Agency.	10%	0.1

4	<i>Does the program have incentives and procedures (e.g., competitive sourcing/cost comparisons, IT improvements) to measure and achieve efficiencies and cost effectiveness in program execution?</i>	No	While parts of the program, such as the Defense Information Systems Network, are measured on cost per unit basis, there is no evidence other parts of the program have such procedures and incentives.	There is limited evidence that the services measure or promote efficiency and cost effectiveness. The only example is Defense Information Systems Network, which plans to reduce data transmission costs from \$60.36/kb in FY 2002 to \$22.04/kb in FY 2007.	10%	0.0
5	<i>Does the agency estimate and budget for the full annual costs of operating the program (including all administrative costs and allocated overhead) so that program performance changes are identified with changes in funding levels?</i>	Yes	The budget for the communications infrastructure program is developed to meet the program goals within the budget constraints of the department. There is no other source for funding this program, including administrative and overhead costs, other than the DoD budget. DoD conducts an extensive budget review to ensure that all administrative and overhead costs are included in the budget.	The annual DoD budget justification books include the full cost of this program, including overhead and other indirect program costs.	10%	0.1
6	<i>Does the program use strong financial management practices?</i>	No	DoD financial systems prevent a clean audit. DoD can not certify that payments are made properly for the intended purpose and erroneous payments are minimized.	Evidence includes DoD Inspector General reports, and reports from the General Accounting Office, such as the high risk list.	10%	0.0
7	<i>Has the program taken meaningful steps to address its management deficiencies?</i>	Yes	DoD implemented the waiver process to review systems that do not comply with DoD policies. DoD has prepared draft long term goals, although these have not yet been approved.	Several General Accounting Office reports (GAO-02-50; GAO/AIMD-97-9; GAO/AIMD-98-202) noted problems with networks that did not conform with DoD policies. In response to this criticism, DoD instituted the waiver process to force compliance with DoD policies.	10%	0.1

8 (Cap 1.)	<i>Does the program define the required quality, capability, and performance objectives of deliverables?</i>	No	There are no clear performance parameters and operational requirements for the entire communications infrastructure, although parts, such as the Defense Information Systems Network do have some of these measurements. Only the Navy Marine Corps Internet uses a performance based contract with outside contractors.	Use of service contracts is limited, except for the Navy Marine Corps Internet. There is a "capstone requirements" document for the Defense Information Systems Network, but there are no defined capability or performance objectives for the Army and the Air Force, or for the overall communications infrastructure.	10%	0.0
9 (Cap 2.)	<i>Has the program established appropriate, credible, cost and schedule goals?</i>	No	While parts of the program, such as Bandwidth Expansion program and Teleports have established cost and schedule goals, other elements of the program, such as the Navy Marine Corps Internet, do not have credible goals.	The Navy Marine Corps Internet has not met goals to move legacy applications to the new network, convert existing users to the new network, or establish an automated network management system. There is no evidence of Air Force goals. The Army has goals for acquisition for its base infrastructure upgrade plan, but not for operations of the communications infrastructure.	10%	0.0
10 (Cap 3.)	<i>Has the program conducted a recent, credible, cost-benefit analysis that shows a net benefit?</i>	NA	There is no credible way to conduct a cost-benefit analysis where the benefit is warfighting capabilities.	Not applicable.	0%	
11 (Cap 4.)	<i>Does the program have a comprehensive strategy for risk management that appropriately shares risk between the government and contractor?</i>	No	The Defense Information Systems Agency strives to minimize risk by carefully analyzing network systems to eliminate potential points of failure, but the government still bears the risk of contractor failure without potential	Evidence includes the Defense Information Systems Agency contracts and program data from the services. The services do not use Earned Value Management Systems to manage risk.	10%	0.0

<b>Total Section Score</b>					<b>100%</b>	<b>40%</b>
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**Section IV: Program Results (Yes, Large Extent, Small Extent, No)**

Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
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1	<i>Has the program demonstrated adequate progress in achieving its long-term outcome goal(s)?</i>	No	While the Defense Information Systems Agency, and to a lesser extent the services, have established long term goals, there are no clear measurable outcome goals for the program in its entirety.	DoD has prepared draft performance metrics for communications infrastructure department wide, but these have not been finalized. The Defense Information Systems Agency does have measurable long term goals which it is using to manage. The Navy Marine Corps Internet is another example of a program with established measurable long term goals.	17%	0.00
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<p>Long-Term Goal I: <i>To provide a ubiquitous, secure, and robust network without bandwidth, frequency or computing capability limitations</i></p> <p>Target: <i>DoD has not yet established clear measurable outcome goals to evaluate progress towards the goal</i></p> <p>Actual Progress achieved toward goal: <i>DoD has prepared draft performance metrics, but these have not been reviewed or approved.</i></p> <p><i>Bandwidth Expansion and Teleports are currently on schedule to start delivery in FY 2003. These programs are designed to improve bandwidth capacity, but there is no metric associated with the goal to indicate the degree of success.</i></p>	
<p>Long-Term Goal II:</p> <p>Target:</p> <p>Actual Progress achieved toward goal:</p>	
<p>Long-Term Goal III:</p> <p>Target:</p> <p>Actual Progress achieved toward goal:</p>	

2	<i>Does the program (including program partners) achieve its annual performance goals?</i>	Large extent	The Defense Information Systems Network goals include measurements of availability and speed. Army installation upgrades are on schedule. The teleports are on schedule. The Navy Marine Corps Internet is behind schedule on conversion of legacy applications. (Bandwidth Expansion will not start until FY 2003)	Evidence includes Defense Information Systems Agency Performance Plan, Army and Navy reports.	17%	0.11
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<p>Key Goal I: <i>Non-Secure Internet Protocol Router Network access circuit is available at least 98.5 percent of the time. This is the unclassified IT system.</i></p> <p>Performance Target: <i>available 98.5 %</i></p> <p>Actual Performance: <i>99.63% in FY 2000; 99.5% in FY 2001; no data yet for FY 2002 or FY 2003</i></p>	
<p>Key Goal II: <i>Secure Internet Protocol Router Network latency within the continental United States not to exceed 100 milliseconds (ms). Latency measures the speed of the network. This is the classified IT system.</i></p> <p>Performance Target: <i>Latency under 100 ms</i></p> <p>Actual Performance: <i>120 ms in FY 2000; 112 ms in FY 2001; no data yet for FY 2002 or FY 2003</i></p>	
<p>Key Goal III: <i>Army Installation Information Infrastructure Modernization Program (I3MP)</i></p>	

Performance Target: 5 locations upgraded in FY 2001, 8 locations upgraded in FY 2002; 5 locations upgraded in FY 2003

Actual Performance: 5 locations upgraded in FY 2001, 8 locations upgraded in FY 2002, FY 2003 in progress

Footnote: Performance targets should reference the performance baseline and years, e.g. achieve a 5% increase over base of X in 2000.

3	<i>Does the program demonstrate improved efficiencies and cost effectiveness in achieving program goals each year?</i>	Small extent	The Defense Information Systems Agency reduced its per unit costs in FY 2000 and FY 2001 and plans to further reduce the per unit costs in the FY 2003 through FY 2007 time. There is no evidence the services (except for the Navy Marine Corps Internet) are analyzing costs to improve effectiveness and efficiency.	Defense Information Systems Network global data costs fell from \$75.60/kb in FY 2000 to \$53.12/kb in FY 2001; DEFENSE INFORMATION SYSTEMS NETWORK global video costs fell from \$2.73/min in FY 2000 to \$2.30/min in FY 2001; there was no change in voice costs (\$0.12/min).	17%	0.06
4	<i>Does the performance of this program compare favorably to other programs with similar purpose and goals?</i>	Yes	This program compares favorably with other federal telecommunications programs such as the General Services Administration sponsored Federal Telecommunications Service. DoD is also starting to manage its systems on an department-level basis. Department level or enterprise level management of IT networks is a private industry best practice.	Evidence includes Defense Information Systems Agency study of DoD communications systems, the telecommunications capabilities offered by the General Services Administration, and comparisons with private industry. The analysis of the Navy Marine Corps Internet highlighted need for department level management of the communications infrastructure.	17%	0.17
5	<i>Do independent and quality evaluations of this program indicate that the program is effective and achieving results?</i>	Small extent	Independent evaluations of the Defense Information Systems Agency and the Defense Information Systems Network indicate the program is effective and achieving results. The Navy Marine Corps Internet recently completed the first full operational assessment.	Evidence includes Defense Information Systems Agency and DoD evaluations of the Defense Information Systems Network, Navy Operational Test and Evaluation Force reports on the Navy Marine Corps Internet.	17%	0.05
6 (Cap 1.)	<i>Were program goals achieved within budgeted costs and established schedules?</i>	Small extent	Defense Working Capital fund operations were negative in FY 1999 to FY 2001, which means that costs were greater than collections. Bandwidth Expansion and Teleports are too new to evaluate at this point.	Army programs met cost and schedule goals.	17%	0.05

<b>Total Section Score</b>	<b>100%</b>	<b>44%</b>
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