To establish a National Information Strategy in order to provide a coordinated program to fully meet the Nation's information needs by requiring the President of the United States of America to devise and present to Congress annually a National Information Strategy which seeks to facilitate the integration and exploitation of public information available through centers of learning, private concerns, and state and federal government organizations; establishes Chief Information Officers at both the Federal and State levels, and a National Information Foundation charged with encouraging, through grants and incentive programs, a nation-wide network of substantive multi-media and multi-lingual data available to the public, characterized by an order of magnitude increase in the amount of useful information in the public domain, widely distributed centers of excellence in particular information areas, and increased access to helpful information by individual citizens; and which, in its implementation, improves living standards and contributes to the national competitiveness and national security of the United States of America.

IN THE SENATE

July 4, 1994

A BILL

To establish a National Information Strategy in order to provide a coordinated program to fully meet the Nation's information needs by requiring the President of the United States of America to devise and present to Congress
COORDINATION. Using a body similar to those now orchestrating NII technical issues, focus on resource management across government and private sector boundaries in both technical and non-technical (content) arenas. There is no good reason why hundreds of major organizations should be wasting approximately $2 billion a year creating hundreds of variations of a basic multi-media analysis workstations. There is no good reason why hundreds of corporations and other organizations should be wasting enormous sums collecting and processing the same encyclopedic information about foreign countries, companies, and capabilities. Presidential leadership will make a difference and save the Nation billions of dollars annually, not only within government, but across the private sector.

COMMUNICATIONS & COMPUTER SECURITY. We have a house built over a sinkhole! The vulnerabilities of our national telecommunications infrastructure to interruption of services as well as destruction, degradation, and theft of data are such that I feel comfortable in predicting that--unless we are able to establish a major Presidential program in this arena--we will see a series of enormously costly electronic attacks on our major financial and industrial organizations, generally undertaken by individuals who stand to benefit financially from degraded or interrupted performance. The current generation of systems engineers was not raised in an environment where security was a necessary element of design. At every level, through every node, we are wide open--and in a networked environment, one open house contaminates the next.

Such an integrated program could be established using existing resources. The cost savings from the elimination of redundant and counterproductive investments in information collection and information technology across government departments and into the private sector can also make a substantive difference against the deficit.

Presidential and Vice Presidential leadership could serve as the essential catalyst for a bi-partisan Congressional effort to produce the National Information Strategy Act of 1994. I stand ready to support such a program in any capacity.

Sincerely yours,

Robert D. Steele
President

NOTE: Inter-nauts can find pertinent papers at <oss.net>, reachable via wais, gopher, and ftp. Hard copies are available for the cost of production from OSS, Inc.
annually a National Information Strategy which seeks to facilitate the
integration and exploitation of public information available through centers of
learning, private concerns, and state and federal government organizations;
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magnitude increase in the amount of useful information in the public domain,
widely distributed centers of excellence in particular information areas, and
increased access to helpful information by individual citizens; and which, in its
implementation, improves living standards and contributes to the national
competitiveness and national security of the United States of America.

Be it enacted by the Senate and House of Representatives of the United
States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS

(a) SHORT TITLE.--This Act may be cited as the "National Information
Strategy Act of 1994"

(b) TABLE OF CONTENTS.--The table of contents for this Act is as follows:
Sec. 1. Short title; table of contents
Sec. 2. Findings

TITLE I--ESTABLISHMENT OF A NATIONAL Information STRATEGY

Sec. 101. Establishment of a National Information Strategy
Sec. 102. Purpose of the National Information Strategy
Sec. 103. Presidential Responsibility for the National Information Strategy
Sec. 104. Elements of the National Information Strategy

TITLE II--CHIEF INFORMATION OFFICER OF THE UNITED STATES OF AMERICA

Sec. 101. Designation of the Chief Information Officer
Sec. 102. Duties of the Chief Information Officer

TITLE III--CHIEF INFORMATION OFFICERS

Sec. 101. Designation of Chief Information Officers
Sec. 102. Duties of Chief Information Officers

TITLE IV--NATIONAL INFORMATION FOUNDATION

Sec. 101. Establishment of the National Information Foundation
Sec. 102. Objectives of the National Information Foundation
Sec. 103. Organization of the National Information Foundation

TITLE V--THOMAS JEFFERSON PROGRAM

Sec. 101. Establishment of the Thomas Jefferson Program
The Congress finds that--

(1) The Nation is entering the information age lacking a national information strategy or any focal point for fully integrating and nurturing the abundance of information and knowledge produced by the citizens, corporations, and governance organizations of the Nation--this impairs both national competitiveness and national security.

(2) The term "information" pertains to and includes all unclassified information in the public domain, information maintained in various media, including electronic media, by the elements of our national information community..

(3) Our national information community includes our schools (Kindergarten through 12th grade) and universities; our public and private libraries; our large and small businesses; private investigators and information brokers who specialize in meeting specific information needs; our news media and our publishing houses; the departments of the Federal government as well as State
and local governments; and the national and defense intelligence communities.

(4) In the information age national competitiveness and the prosperity of the citizens of the United States of America requires strong and comprehensive leadership from the government.

(5) The High Performance Computing Act of 1991, as amended, is a vital element of national competitiveness, focusing as it does on high performance computing and networking; on connectivity.

(6) What is lacking in initiatives to date is a focus on the aggregate production, distribution, and dissemination of substantive information. Also lacking is a formal designation of a single individual, such as the Vice-President of the United States of America, to serve as the Nation’s Chief Information Officer; and a practical program to ensure that both the Departments of the Federal government, and State governments, are dong everything possible to support the information needs of their citizens.

(7) Federal initiatives as approved by Congress in the arenas of high performance-computing and high-speed networks are thus considered insufficient to meet the complete needs of the Nation, and therefore require significantly more investment to needs that are not associated with connectivity and other technical capabilities.

(8) A National Information Strategy, implemented through a National
Information Foundation under the direct oversight of the Vice-President of the United States of America— is an essential element of both national security and national competitiveness. Such a strategy cannot, under any circumstances, seek to control or to judge the value of specific information activities— instead, it must limit itself, and focus upon, nurturing the aggregate, distributed, public capability to access information necessary for national competitiveness and national security.

(9) Such a strategy and foundation, suitably empowered through annual appropriations, could significantly accelerate the development of distributed centers of excellence throughout the Nation, facilitating diverse and complementary multi-media and multi-lingual collection, processing, analysis, and dissemination activities in support of the American Workplace.

(10) Information may be the single most important service which a government can provide for its citizens— ultimately, improved information sources, systems, and services should permit a radical improvement in the performance of both Federal and State government.
TITLE I--ESTABLISHMENT OF A NATIONAL INFORMATION STRATEGY

Sec. 101. Establishment of a National Information Strategy. By law the United States of America, including all state and local authorities, are hereby encompassed within the National Information Strategy. All government entities are charged with recognizing that information a national good, and with devising their own departmental, corporate, and individual information strategies so as to take maximum advantage of the National Information Strategy.

Sec. 102. Purpose of the National Information Strategy. The National Information Strategy shall ensure that the Federal Government of the United States of America, and State governments, recognize that information is a national good, that information collected and processed by the government is a taxpayer asset, and that the well-being of the Nation in the information age requires a coordinated and well-developed National Information Strategy in order to empower and increase the productivity and prosperity as well as the security of citizens of the United States of America.

Sec. 103. Presidential Responsibility for the National Information Strategy. The President of the United States is required to assume personal responsibility for the National Information Strategy of the United States of America, and to
report annually to the Congress on this strategy, its directions, its funding, and any obstacles to its implementation.

Sec. 104. Elements of the National Information Strategy. The National Information Strategy shall consist of a minimum of four major program elements, and shall integrate all existing related programs such as the National Information Infrastructure (NII). The four elements of the National Information Strategy will be:

a) CONNECTIVITY. The NII and all related initiatives for establishing a national and international communications infrastructure which affords all citizens within the United States of America universal access to the "information superhighway" shall be the technical foundation for the National Information Strategy.

b) CONTENT. This Act, and the National Information Foundation (NIF) which this Act establishes, shall ensure that all individuals and institutional elements of our Nation have access to substantive multi-media, multi-lingual information such as is required to engage in business, pursue academic research, and administer the affairs of all within our borders.

c) COORDINATION of Information Research & Development. In order to immediately and dramatically reduce the enormous waste characteristic of information research & development efforts, especially in government but
also in the private sector, this Act requires the establishment of a National Information Research Council which can coordinate the efforts of our various Federal departments with those of their state and local counterparts and those of the private sector. To the maximum extent possible the Council will encourage the common pursuit of generic information handling capabilities, the establishment of internationally-acceptable standards for handling multi-media information, and the identification of redundant and uncoordinated projects which do not contribute to the common good.

e) C4 (Command & Control, Communications, and Computer) Security. The substantive elements of this program—connectivity, content, and coordination, are all heavily dependent on a relatively fragile national C4 infrastructure. It is the intent of this Act to ensure that all civil communications and computing pathways, including our financial, health care, governance, public information, and defense pathways, are developed in such a way as to maximize their survivability and reliability in the face of attacks by individuals, groups, and hostile nations familiar with the critical vulnerabilities of our civil and military C4 infrastructure.
Title II--Chief Information Officer of the United States of America

Sec. 101. Designation of a Chief Information Officer. The Vice-President of the United States of America is hereby designated, on behalf of the President, the Chief Information Officer of the United States of America.

Sec. 102. Duties of the Chief Information Officer. The Chief Information Officer shall be responsible for:

(a) Devising for Presidential and Congressional approval a National Information Strategy, to be submitted simultaneously with the Budget of the United States.

(b) Serving as Chairman of the National Information Council, which shall be comprised of the Deputies of each of the Departments of the Federal government, the Lieutenant Governors of each State, and an Advisory Board chaired by the Librarian of Congress and consisting of nine individuals from the private sector, of whom at least three must be from the academic community.

(c) Establishing guidelines, in conjunction with the Office of Management and Budget (Information Policy), for all information-related expenditures of the various Departments of the Federal government, to include intelligence, diplomatic, military, commercial and other information collection,
processing, and dissemination expenditures.

(d) Serving as the senior government official responsible for developing recommendations to the President for both unclassified and classified information collection, processing, and dissemination initiatives; and as the reporting senior of the Director of the National Information Foundation (the principal executive agency for funding the distributed collecting, processing, and disseminating unclassified information); and of the Director of Central Intelligence (the principal for collecting, processing, and disseminating classified information).

(e) Serving as the senior government official responsible for oversight of information handling restrictions including classification, compartmentation, and export control constraints on technology transfer. Heads of Departments and Agencies who have in the past been authorized to establish compartmented information programs and limit the export of information-handling technologies must, under this Act, receive approval and validation of their proposed constraints on information from the Vice President acting on behalf of the President.
TITLE III--CHIEF INFORMATION OFFICERS

Sec. 101. Designation of Chief Information Officers. Each Department and Agency of the Federal government, and each State, is directed to establish their second most senior officer as the Chief Information Officer. This is not a technical or research position which can be delegated; it must be occupied by the Deputy of the Federal organization, or, in the case of States, the Lieutenant Governor. The appointment of Deputy Chief Information Officers is authorized.

Sec. 102. Duties of Chief Information Officers. The Chief Information Officer shall be responsible for:

(a) Developing contributions to the National Information Strategy

(b) Representing their constituency or citizens within the National Information Council.

(c) Serving, in the case of Governors only, as the primary channel for the apportionment of all funds earmarked by the National Information Foundation established by Title IV of this Act, for centers of excellence in their respective State.

(d) Monitoring, coordinating, and approving all information-related expenditures of their Department, Agency, or State, to include intelligence, information processing, library, and information collection expenditures.
(e) Managing information and intelligence requirements to optimize utilization of unclassified information, and the dissemination of unclassified information collected or produced by their subordinates into the public domain, while also ensuring that requirements for classified intelligence are satisfied.

(f) Serving as the principal advocate and representatives of our citizens’ requirements for access to information collected or produced by the respective Department, Agency, or State.

TITLE IV--NATIONAL INFORMATION FOUNDATION

Sec. 101. Establishment of the National Information Foundation. A National Information Foundation is hereby established as a separate element of the Office of the Vice-President (Chief Information Officer).

Sec. 102. Objectives of the National Information Foundation.

(a) The National Information Foundation shall serve as the staff arm of the Vice-President (Chief Information Officer), of the National Information Council, and such other councils and commissions established by the Chief Information Officer of the United States of America.

(b) The National Information Foundation shall have four principal objectives:

(1) To serve as the focal point for devising and implementing the National Information Strategy.
(2) To increase the availability of substantive information throughout the Nation, by providing grants and other incentives to the Departments, Agencies, and States of government, to private sector individuals and organizations, and to foreign and international entities, in order to maximize the amount of multi-media, multi-lingual information available to the citizens of the United States of America. This responsibility shall include service as the principal organization responsible for ensuring that unclassified "open source" materials are collected, processed, and disseminated throughout the government and into the information commons; and

(3) To serve as the policy coordinator and administrative vehicle for supporting the Vice President's duties under this Act.

(4) To coordinate among the various Departments and Agencies of the Federal Government, and the States, long-term programs which improve information connectivity across political and organizational boundaries, the availability of information in the public domain, coordination of information-related research & development, and C4 security throughout the Nation.

(d) The National Information Foundation shall not have any regulatory authority.

Sec. 103. Organization of the National Information Foundation. The National
Information Foundation shall be organized as follows:

(a) The Director of the National Information Foundation shall also be designated Deputy Chief Information Officer of the United States of America, with rank and pay grade equal to that of the Director of Central Intelligence. This individual shall report directly to the Vice President, and serve at the pleasure of the President and Vice President.

(b) The National Information Foundation shall establish a headquarters in the National Capitol Area, convenient to the major Departments of the Federal government as well as the offices of major information associations and major universities. The F Street facility, former headquarters for the Community Management Staff, is designated as the preferred site for the Foundation's Headquarters.

(c) The National Information Foundation shall consist of no more than 100 individual full-time government employees. The staff of the Foundation may be augmented by private sector personnel, on detail from their parent organizations at no cost to the government.

(d) The National Information Foundation will utilize the same personnel and contractual facilities available to the Office of the Vice-President of the United States. However, in order to ensure the quickest possible establishment of this vital capability, and in order to attract the very best
qualified personnel, the National Information Foundation shall be exempt, for a period of three years, from all hiring and pay restrictions imposed by the Office of Personnel.

TITLE V--THOMAS JEFFERSON PROGRAM

Sec. 101. Establishment of the Thomas Jefferson Program. The Thomas Jefferson Program is hereby established as the first program under the auspices of the National Information Foundation.

Sec. 102. Objectives of the Thomas Jefferson Program. The Thomas Jefferson Program will test and refine the concepts and practices of the National Information Foundation by improving coordination of the activities of selected major information and intelligence activities in the District of Columbia and the States of Virginia, West Virginia, and Pennsylvania, thereby creating an "information beltway" around the Capital of the Nation. It is the intent of this program to augment both government and private sector funding already in existence, in order to develop new areas of cooperation in the collection, processing, and dissemination of unclassified information of common interest. Private sector activities, including universities, will be provided with the funding necessary to create a distributed information architecture that reduces duplicative storage of encyclopedic information necessary for governance, while maximizing the amount of unclassified
information available to the public and especially to the American Workplace.
The Thomas Jefferson Program is specifically charged with dramatically
increasing the amount of unclassified information, collected by the intelligence
community and other Departments of the Federal government at taxpayer
expense, which is available to the general public; and with decreasing over
time all unclassified information activities in the Federal government which can
be conducted with greater efficiency in the private sector. As soon as possible,
the program should be expanded to include centers of excellence in every
State.

Sec. 103. Organization of the Thomas Jefferson Program. The program will
be managed by a Project Office of no more than ten individuals, who shall, in
addition to obligation authority over a portion of the National Information
Foundation funds, shall have limited oversight authority, in conjunction with
the Office of Management and Budget, over information budgets of selected
Federal facilities dedicated to intelligence and information activities.

TITLE VI--AUTHORIZATION & APPROPRIATION

Sec. 101. Authorization of Appropriations. There are authorized to be
appropriated for the purposes of this Act $500,000,000 for FY 1995;
$1,000,000,000 for FY 1996; $1,500,000 for FY 1997; and $2,000,000,000
for FY 1998 and each year thereafter, indexed for inflation.