

# **The National Information Infrastructure**

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NII*

## **A Policy Perspective**

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**National Economic Council**

**1994**

# WHY WE CARE

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1. Powerful tool for economic and social challenges
2. Connects people to people and people to information
3. Economic benefits
  - Job creation
  - Increases in productivity
  - Demand driver for advanced products and services
  - U.S. more attractive as an investment location

# WHY WE CARE

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## 4. Applications

Life-long learning

Health care

Delivery of government services

Digital libraries

Manufacturing

# WHY WE CARE

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## 4. Applications (cont'd)

Electronic commerce

Environmental monitoring

Research enterprise (e.g. collaboratories)

Quality of life for Americans with disabilities

# WHY WE CARE

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## 4. Applications (cont'd)

Urban and rural development (e.g. empowerment zones)

Participatory democracy

Telecommuting

Demand-side management

# WHY WE CARE

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## 4. Applications (cont'd)

Arts, culture, entertainment

Law enforcement, public safety, crisis management

International affairs

- public diplomacy
- development assistance)

# **WHAT'S NEW SINCE "AGENDA FOR ACTION"**

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## **1. President's FY95 budget**

- \$1.1 billion for HPCC
- \$100 million for NTIA
- Funding for "reinventing government"

## **2. State of the Union**

- challenge to connect classrooms, libraries, hospitals, clinics

## **3. Advisory Council on NII selects three "mega-projects"**

## **4. Telecom legislation passes through House committees**

# WHAT'S NEW...

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5. S.4 (National Competitiveness Act) passes Senate
6. Gore announces commitment to GII
7. HPPCIT unveils agenda for fifth element of HPCC program (Information Infrastructure Technology and Applications)
8. NTIA receives over 4,000 inquiries for program

# WHAT'S NEW...

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9. Industry, academia, government work to set technical agenda through NII Forum
10. Significant increase in availability of government information on the Internet
11. TRP funding for "information infrastructure" projects in health care, manufacturing
12. NSFNET resolicitation

# WHAT'S NEW...

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13. Panel recommends changes in GOSIP

14. Presidential memo on electronic commerce

15. Establishment of National Science and  
Technology Council

16. Wildly popular announcements on  
encryption,digital telephony

# COMING ATTRACTIONS

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1. Administration policy on "fair information practices"
2. Release of applications papers for public comment
3. Decisions on "focus areas" for Advanced Technology Program and Technology Reinvestment Project
4. Further Congressional consideration of S. 4/ H.R. 1757 and telecom legislation

# CHALLENGES

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1. Getting telecommunications on the "technology curve"
2. Increasing the participation of non-technical agencies in the NII as users
3. Temporary rotations from academia, industry

# CHALLENGES...

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4. Rapid national (and global) learning from different experiments, test-beds, pilot projects
5. Taking advantage of the "group mind" to inform public policy
6. Human resource issues

# **HOW TO KEEP INFORMED**

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**1. IITF Web server**

<http://iitf.doc.gov>

**2. HPCC Web server**

<http://www.hpcc.gov>

**3. ARPA Web server**

<http://ftp.arpa.mil>

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## **Clinton Presidential Records Digital Records Marker**

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This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

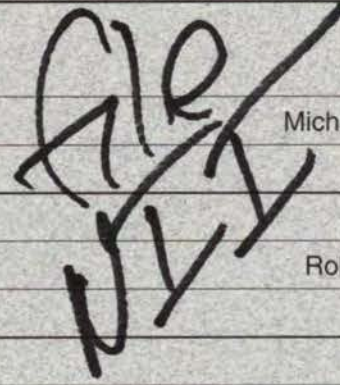
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Publications have not been scanned in their entirety for the purpose of digitization. To see the full publication please search online or visit the Clinton Presidential Library's Research Room.

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## Computer Systems Policy Project



Michael Spindler **Apple**

Robert E. Allen **AT&T**

## **Perspectives on the National Information Infrastructure: Ensuring Interoperability**

Eckhard Pfeiffer **Compaq**

James E. Ousley **Control Data**

John F. Carlson **Cray Research**

Ronald L. Skates **Data General**

Robert B. Palmer **Digital Equipment**

Lewis E. Platt **Hewlett-Packard**

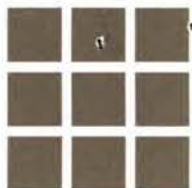
Louis V. Gerstner, Jr. **IBM**

Edward R. McCracken **Silicon Graphics**

Scott G. McNealy **Sun Microsystems**

James G. Treybig **Tandem**

James A. Unruh **Unisys**



# Computer Systems Policy Project

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December 13, 1993

Mr. John Podesta  
Deputy to the President  
and Staff Secretary  
The White House  
Ground Floor, West Wing  
Washington, D.C. 20500

Dear Mr. Podesta:

Through the electronic delivery of government information and services, the NII will revolutionize the way governments relate to their constituents. Government employees will be able to work together, collaborate, and communicate with citizens to share and generate information without regard to geographical, bureaucratic, or jurisdictional boundaries. This will provide citizens with greater access to their governments, in a timely fashion, at a lower cost.

On behalf of the Computer Systems Policy Project (CSPP), a coalition of the CEOs of thirteen computer systems companies, I am pleased to present you with our new report, *Information Technology's Contribution to Improving Access to Government Information and Services*, which describes the benefits the national information infrastructure (NII) will bring to individual Americans in improving the delivery of government information and services.

The National Performance Review report, *Creating a Government that Works Better and Costs Less*, and the Office of Technology Assessment's report, *Making Government Work*, demonstrates a growing recognition that government must be more responsive, more convenient and less costly to meet citizens' needs. Electronic delivery of government information and services will meet these needs and move the government into the 21st century. In our report, CSPP identifies new technologies that will enhance access to information and services and improve service to the citizens. CSPP believes that adoption of these technologies will be accelerated through demonstration projects that will highlight their benefits.

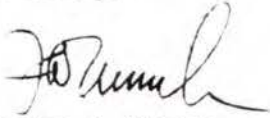
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I hope you will find the paper useful as you explore how to reinvent government.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Unruh', with a stylized, flowing script.

James A. Unruh  
Chairman, CSPP

Enclosure

# **Information Technology's Contribution to Improving Access to Government Information and Services**



Computer  
Systems  
Policy  
Project

November, 1993

## What is CSPP?

The Computer Systems Policy Project (CSPP) is an affiliation of chief executive officers of American computer companies that develop, build and market information processing systems and related software and services. CSPP's members include the chief executive officer's of Apple, AT&T, Compaq, Control Data Systems, Cray Research, Data General, Digital Equipment, Hewlett-Packard, IBM, Silicon Graphics, Sun Microsystems, Tandem, and Unisys

The CSPP CEOs joined together in 1989 to develop and advocate public policy positions on trade and technology issues affecting all high-technology industries and ultimately the United States. That commitment continues today.

To date, CSPP has issued the following reports:

- *Perspectives on Market Access and Antidumping Law Reform*, Spring 1990;
- *Success Factors in Critical Technologies*, July 1990;
- *Perspectives on U.S. Technology Policy, Part I: The Federal R&D Investment*, February 1991;
- *Perspectives on U.S. Technology Policy, Part II: Increasing the Industry Involvement*, July 1991;
- *Expanding the Vision for High Performance Computing and Communications: Linking America for the Future*, December 1991;
- *Perspectives on U.S. Technology and Trade Policy: The CSPP Agenda for the 103rd Congress*, October 1992;
- *Perspectives on the National Information Infrastructure: CSPP's Vision and Recommendation for Action*, January 1993;
- *Information Technology's Contribution to Healthcare Reform*, April 1993; and
- *Keeping Pace with Change*, June 1993.

For more information, contact Pam Fandel at (202) 662-8403.



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## Executive Summary

Interacting with government employees and locating available government information can sometimes be a frustrating, timely, and costly process. Today, governments disseminate services to citizens in almost the same way they did 50 years ago -- manually, from behind counters and desks, with paper forms, lines and waiting rooms, ringing telephones, and face-to-face interviews. In many cases services are available only Monday through Friday from nine to five and information may be accessible only at locations distant from the person who needs it. The Computer Systems Policy Project (CSPP) believes that the enhanced national information infrastructure (NII) will provide a tool to overcome these difficulties by linking together a range of institutions and resources -- from schools, hospitals, and businesses to libraries, laboratories, and government agencies -- allowing people to more easily interact with government employees and to locate the government information and services that they need. The NII will revolutionize the way governments relate to their constituents by enabling government employees to work together and collaborate to access, share, and generate information without regard to geographical, bureaucratic, or jurisdictional boundaries.

The NII will enable the application of existing and new information technologies, such as user friendly computers and information appliances, advanced telecommunications networks, distributed data management and retrieval techniques, and interactive technologies, to the delivery of government information and services. This will enable governments to accommodate the special needs of diverse populations, streamline their processes, locate information and services centrally, and link dispersed offices and functions. As Vice President Gore noted in the September, 1993 report of the National Performance Review, information technologies are key tools for reinventing government: *"With computers and telecommunications, we need not do things as we have in the past. We can design a customer-driven electronic government that operates in ways that, 10 years ago, the most visionary planner could not have imagined."* With an electronic delivery service system, individuals will be able to conduct their business with the government from convenient locations, at convenient times, often in one stop rather than many.

Innovative service delivery approaches are already being applied around the country, particularly in state and local governments. The new technologies that the NII will make widely available will provide opportunities to build on and expand these efforts. CSPP believes that the adoption of information technologies by federal, state, and local governments can be accelerated through their participation with the private sector and users in demonstration projects that will highlight the benefits of information technologies and overcome many of the barriers to their adoption. While there are innumerable ways that information technologies can be applied to improve the delivery of government services to citizens, CSPP recommends that the federal government and the private sector invest in projects to demonstrate an Integrated Human Services Delivery System, a Service to the Citizen Kiosk System, and an Electronic Locator for Federal Information.

# **The Value of Information Technology to Improving Access to Government Information and Delivery of Government Services**

While public demand for more effective government services and better access to government information is growing, fiscal constraints at all levels of government require that these needs be satisfied at minimal cost increases to taxpayers. As the recent report of the Vice President's National Performance Review notes, these conflicting forces require governments to find new ways of doing business and to radically improve the old methods. It is clear that the current model of government service and information delivery -- formed in the industrial era -- is ineffective in meeting the changing demands of today's informed public and the growing information management challenges of the public sector.

## ***The Challenge of Improving Service and Access at Reduced Cost***

Individuals and organizations look to their governments for a wide variety of services and information, including the following:

**Generic services** -- Services that the general public encounters in the course of daily life, such as driver's licenses, voting, job information, vital records, education, emergency services, building permits, recreational services, and paying taxes.

**Services to special populations** -- Services that address the needs of specific groups or that people rely upon in special situations, such as benefits and services for military veterans, services provided by health and human services organizations, agricultural extension services, and small business support.

**Access to government information/data bases** -- Governments are the repository of vast quantities of data and information about a variety of topics that are of interest to virtually every segment of society. Federal laboratories produce research reports of interest to scientists and engineers. The Commerce Department provides daily summaries of new trade opportunities for business. The Bureau of Economic Analysis maintains historical records of economic activity, as do the Bureau of Labor Statistics, the Bureau of the Census, and many other statistical organizations. People frequently travel to Washington to use historical documents found at the National Archives.

Not only is demand for each of these types of services increasing, each also involves increasing amounts of information that must be collected, analyzed, stored, updated, manipulated, extrapolated, and retrieved on a daily basis. Most government agencies are beginning to apply information technologies, including computers and communications links, to help meet their exploding information management needs. A growing amount of public information is now available on-line. However, most of the efforts to date are designed

primarily to meet the needs of the government agencies and their employees, not the needs of the citizens -- or customers -- that are using the services. Strategic application of new information technologies, through the NII, will enable fundamental changes in the way governments do business that will not only improve efficiency and reduce costs, but will also help them better meet their customers' needs across all types of services.

Many agencies and departments, particularly at the state and local levels, have already begun reinventing their service delivery approaches with information technologies. These early innovations provide lessons that can be applied to similar approaches elsewhere and foundations for future deployment of improved systems. For example:

**State of California: Info/California** -- To meet the increasing needs of its large and very diverse population, the State of California is implementing Info/California, a "one stop shopping" approach to service delivery. A multilingual, intelligent touchscreen system, Info/California is a multimedia kiosk network which provides statewide transactional services 24-hours a day, seven days a week. The kiosks, which are placed in shopping malls, grocery stores, retail stores, and other public locations, offer a variety of services. Residents have access to the state's "Job Match," that allows the users to match their qualifications with available jobs free of charge. Users can also order copies of birth certificates and pay for the service using a credit card or debit card, and renew their automobile registrations with the same system. California will expand the system to include additional services in the near future.

**State of Hawaii** -- The State of Hawaii operates two information services networks -- "Hawaii FYI" and "Hawaii Access." Hawaii FYI allows residents anywhere in the state the opportunity to access a broad array of international, national, and state government databases and information services. The network and its electronic gateway allows residents to use a home computer and modem, or a terminal at any one of the state's public libraries, schools, or state information offices, to access a multitude of services, most of which are free. The services range from reports on the latest legislative action, to restaurant guides and chat lines.

Hawaii Access, an island-wide network for information and referral services, allows the public to access the state's health insurance program services from multilingual kiosks located on several islands in the state. Individuals can conduct their own interviews for the State Health Insurance Program, with the kiosks' expert systems helping to determine their eligibility and transmitting the electronic application to program administrators at the Department of Health. Hawaii Access was recently expanded to include "ALEXIS," an island-wide network for employment. Individuals can complete and submit job applications using the same system.

**Departments of Motor Vehicles** -- State Departments of Motor Vehicles (DMVs) are beginning to use digitized imaging for driver's licenses and improved information delivery systems to revolutionize the way DMV business is conducted. These emerging technologies enable the provision of high quality, tamper-resistant, digitized driver's licenses and

identification cards and allow the public to access DMV services on a seven day a week, 24-hour a day basis from remote locations, such as home, library computers, or shopping mall kiosks. Six states have already implemented digitized drivers licenses and are beginning to realize the benefits of using the digitally stored images. For instance, other government agencies, such as Law Enforcement, Social Services, and Secretaries of State, can use the image databases for identification purposes. In California, the new digitized image system dramatically improves the information flow between DMV and law enforcement agencies, reducing the time needed to make personal identification from days to minutes. Additionally, multiple agency services can be provided easily, such as voter registration at the same time as driver's licenses are issued. Individuals benefit from the implementation of the new technologies by having to spend less time in line obtaining licenses, and even being able to do it from more convenient locations.

### ***Technologies That Will Enable Enhanced Access to Information and Services***

The challenges presented by the diverse needs of communities and individual constituents can no longer be solved with traditional solutions. Budget constraints prevent agencies and departments from hiring more staff, bringing in language experts, or building new sites, as they often did in the past when demand for services changed or increased. However, as the above examples of early innovations illustrate, today's information technologies provide tools for governments to more effectively collect and communicate complex information and services to an increasingly diverse and dispersed public. Information technologies also allow members of the public to easily and conveniently locate the information and services they need. In the near future, new technologies that will be available through the NII will allow all levels of government to better accommodate the special needs of diverse populations through easily accessible, easy to use, public access information systems. The NII will make possible a network of advanced telecommunications networks that will link individual Americans directly to their governments, to one another, and to virtually any information and service resource they want. These new technologies, if made available in convenient locations, can supplement, rather than replace entirely, the direct interactions citizens have with agency personnel, freeing agency employees to focus on the most complex and difficult problems. Some of the present and near-term technological solutions that will enable improved government service delivery and access to government information include:

**Intelligent multilingual kiosks**, which are user-friendly computer stations that combine audio, video, text, and graphics to store information about all types of government services, including social security and welfare benefits, help for people with special needs, and information about available community services. Kiosks, which are already being used by governments around the country, can be operational 24 hours a day, seven days a week, can substitute for trips to government offices, and can also link users directly with government personnel through telephone and, eventually, video hookups. They can print forms and documents and will even accept payment by credit card, debit card, and check. To be effective, kiosks must be conveniently located, easy to use, and have high

quality content that is responsive to users' needs. As kiosk technologies improve, users will be able to conduct fully interactive, two-way government business from one location.

**Automated telephone voice processing systems** today provide a convenient, easy to use means of accessing government services through touch tone telephones. In the future, voice recognition technologies will enable individuals to obtain customized services and responses to inquiries through automated telephone contacts any time of the day.

**Public computer bulletin boards**, if kept up to date, are good sources of information about government programs and activities. There are currently over 150 publicly available federal bulletin boards which are accessible to users who have access to personal computers and telephone lines. With improved technologies for locating and presenting information, bulletin boards will become easier to use, will include more information, and will be linked to other sources of information to be more responsive to users' needs.

**Electronic funds transfer**, through the use of smart cards, is being used in an increasing number of jurisdictions to deliver monetary government benefits electronically, directly to recipients. Using cards reduces human errors, paperwork, and delays. Passwords and cryptology reduce opportunities for fraud and counterfeiting. Service recipients are spared the embarrassment of using food stamp coupons or public assistance checks. Smart cards have computer chips embedded in them that can encrypt, process, and store all information on the card. In the future, smart cards will be used in any store just like other electronic funds and bank cards. Amounts spent by recipients would be automatically deducted from monthly entitlements.

**Interactive cable television** will allow individuals to conduct many government transactions from their homes at their convenience. Today, many local governments provide information to communities about government programs via one-way cable programming. In the future, interactive television technologies will enable individuals to use their televisions to find specific information, to send and receive information, to obtain specific answers to questions, and to transact government business from home.

**On-line information** can be obtained through communications networks and personal computers. This provides users with direct access, at their convenience, to data and information stored in government databases or libraries. Today, a limited amount of government information is available on line, and much of it is difficult to locate and retrieve. New technologies, including better storage, searching, and indexing techniques, combined with government policies to expand the availability of on-line information, will make electronic access a convenient way to find government information.

**Expert Systems** are computer-based components that aggregate the knowledge of experts in a particular application discipline and simulate the decision-making process. They are being used to supplement routine agency decision-making processes by having a benefits

applicant enter specified information at a touchscreen that is linked to a host computer. The system analyzes the information that was provided, requests follow-up or clarifying information where necessary, and immediately determines whether the applicant is eligible. In the future, widespread implementation of expert systems in agencies where decisions are routinely made using a set of fixed criteria will free employees to spend more quality time with clients who need special help.

**Document imaging and retrieval systems** permit the electronic digitization, storage, and retrieval of documents. State of the art facilities provide options for storing documents on various media, including magnetic disk, tape, and optical disk, as well as retrieval options that include electronic display, printing, and remote facsimile distribution. These technologies reduce the space needed to store documents and make them easy to retrieve quickly by government employees or consumers in remote locations. As governments move increasingly to on-line and kiosk-based transactions, digitization of information and images for storage will become more important.

# Issues Facing Government and Industry in Implementing a Public Access Infrastructure

The public and private sectors have important roles in making public access applications of the NII a reality. The private sector has primary responsibility for deploying the communications networks and services, and developing and making available products, applications, and services for the infrastructure. The government's primary role is as a catalyst. It can do this by:

- leading the development of a public access vision and defining a national challenge in support of the vision;
- investing in research on precommercial technologies and demonstration projects and supporting technology transfer;
- making appropriate government information easily accessible to the public electronically;
- implementing a political and regulatory environment that encourages the development of new technologies and enables competitive markets;
- supporting and adopting industry-developed interoperability standards; and
- coordinating public and private action to address complex policy issues, such as access to the NII, privacy, security, carrier liability, intellectual property, and affordability.

In developing new ways to meet individual's needs through electronic service delivery, the government's leadership will be especially important in working with the private sector to address the following issues:

**Equitable Access** -- Strategies need to be developed to ensure that all individuals have access to and the ability to use information and service systems, regardless of social and economic status. The NII must provide a tool for reducing difficulties in accessing government information and services. This may require educating members of the public to use the new technologies effectively.

**Protection of Privacy/Adequate Security** -- Technologies and policies must be implemented to protect the personal privacy of individuals, organizations, and enterprises that provide information to government. Personal information must not be disclosed to unauthorized users or for inappropriate uses.

**Protection of Data Integrity** -- People and organizations will rely on the data and

information they receive from the government to make decisions. It will be imperative to ensure the security and accuracy of data and protect information and service systems from accidental or intentional misuse or alteration.

**Data Availability** -- To meet the needs of all users, which will vary widely, government information will have to be published and disseminated in multiple formats -- printed, magnetic, optical, or on-line.

**Ownership and Control of Information and Services** -- Government data and information in its various forms must be treated as public records which must be managed and made available as public assets. Those who manage the assets must be held accountable for their protection and preservation. Individual and enterprise-specific information must be treated the same way such information is treated when maintained in paper form.

**Fees for Accessing Government Information** -- To ensure that government information and services are available and accessible to all who need them, strategies must be developed to ensure they are affordable to all users.

**Training Government Employees to Use New Technologies** -- Failure to ensure that government employees are adequately trained to use the new technologies effectively is critical: adding technology without corresponding training could make service delivery worse rather than better.

**Organizational Cultures** -- In their delivery of information services, many government agencies view themselves as independent entities rather than integral parts of the larger organization of government. This may create some difficulties in developing "one-stop shopping" centers designed to address the full spectrum of citizen needs.

## **Recommended Pilot Projects**

Through the NII, emerging information technologies will be integral components of efforts to improve access to government information and to improve the delivery of government services. Steps are already being taken to accelerate the application of these technologies in government settings, but significant barriers exist. Demonstration projects in the following areas will help to accelerate the acceptance of information technologies as key tools in the improvement of government service delivery. They will also help overcome the operational, programmatic, organizational, technological, and other barriers to their adoption.

### ***Integrated Human Services Delivery System***

A number of recent federally-sponsored studies, including the work of the Welfare Simplification and Coordination Advisory Committee, identified the lack of a single point of service delivery as a critical common barrier limiting access and coordination among human services programs. Families must go from agency to agency to apply for the different services to which they are entitled. Convenient access to information about programs and eligibility would not only reduce the amount of time people had to spend obtaining them, it would eliminate many of the barriers that make the system especially difficult for those who need the services most -- children, the elderly, the disabled, and others with limited mobility.

One of the models studied by the Advisory Committee is Delaware's Service Center approach. The Center has eliminated barriers to access by offering a variety of services from all levels of government -- federal, state, and local -- at a single site. Although successful, this approach can be costly because it requires additional staff and additional space that agencies cannot afford. An alternative approach is to link existing programs at different sites through an integrated electronic delivery system. This would make all services immediately available from one site, creating a virtual one-stop service center to reach throughout the community. Information about a client would be entered into the system once, then transferred to each program site. The automated system could be programmed to identify family needs and determine eligibility for other appropriate services.

Many of the technologies required to develop an automated integrated human services system exist today. Multimedia touchscreens and interactive video provide user-friendly interfaces. Videophone technology enables the applicant to speak with a human services agency representative from a kiosk when required. On-line computer services match information provided by applicants with existing databases to verify whether the individual has already received services that would affect eligibility for other programs. Expert systems automatically schedule appointments for on-site follow-up visits when required and print the associated details for the client. These and other technologies need to be refined, integrated, and tested in applications settings to ensure that they work effectively and transparently from the user's perspective.

CSPP recommends that funds be allocated for a set of demonstration projects to integrate, on a large scale, the various aspects of human services delivery within several geographic areas. The projects should have as a goal the creation of a user-friendly one-stop shopping site for human services programs that would streamline service delivery from the perspectives of both the clients and the agencies involved.

### ***Service to the Citizen Kiosk System***

In an effort to demonstrate the ability of federal civilian agencies to partner and leverage their respective resources to rapidly meet common agency goals, the U.S. Postal Service, the Social Security Administration, and the Department of Veterans Affairs jointly produced a prototype "Service to the Citizen" system. This multi-agency, one stop shopping kiosk contains interactive information and video programs from each organization. If successful, the Service to the Citizen project will be used to help define a nationally deployable system of kiosks that all government agencies that deal with the public on a regular basis could use as a first (and in some cases, last) point of contact with citizens. For example, the Veterans Administration would make general benefit information available through the kiosks. By inputting individual identifier information, a veteran could obtain specific information about his eligibility for benefits, or the latest status of his application for a VA-guaranteed mortgage.

CSPP recommends that funds be allocated to demonstrate, on a large scale, a system of multimedia kiosks linking a variety of agencies and departments across a number of disciplines that would address the needs of the public for easy-to-use, convenient, timely, and responsive government services. The Service to the Citizen kiosk would be a consolidated single point of contact for the individual to access information about the availability of services, and to transact business with government agencies, to provide information to the government (such as changes of address), and to request forwarding of materials from the government.

### ***Electronic Locator for Federal Information***

A wealth of federal information is currently available in paper form from the federal government, including, for example, census data, environmental information about specific geographic locations, food and nutrition information, information about business opportunities overseas, availability and associated eligibility requirements of mortgage assistance programs, eligibility criteria for Social Security benefits, and updated regulations affecting small businesses. Today, accessing such information is neither convenient nor easy. The information that people want is often distributed across several agencies -- or many departments within agencies -- with little coordination among the holders of the information. There is often no good way to identify which agency, or who within an agency, is responsible for particular information. In many cases, organizations are open for business only during hours when it is difficult for people to get there physically. With a centralized locator service, however, an individual with a particular topic or problem in mind would only have to

enter some key words or phrases into a conveniently-located computer or kiosk in order to be directed electronically to the appropriate agencies. The locator will show all sources of the desired information, as well as relevant related information that the user may not have been aware of.

CSPP proposes that the federal government establish a centralized federal electronic locator service to streamline access to government information by the general public. Through the locator, people would have direct access to a wealth of information across all government disciplines, accessible from "one-stop shopping" public access systems, personal computers and modems in homes and libraries, bulletin boards, and other easy to use, widely accessible outlets. This effort should include developing and deploying locator services that make government information easy to find, deploying indexes of information, and expanding the type and amount of government information that is available electronically to eventually include library material in multimedia and hypermedia formats.

## Conclusion

Information technology is dramatically reshaping the world. The private sector is using it to drastically improve customer service by making services available from anywhere and at any time. If federal, state, and local governments are to be responsive to the needs of their citizens for improved services at lower cost, they must integrate information technology into their information and service delivery mechanisms. Governments at all levels have begun to take seriously the need to improve service delivery, as demonstrated by the progress of successful innovative projects using voice- and kiosk-based technologies. Early, small steps to improve service delivery with existing technologies are significant, but giant steps can be realized through the NII. A series of strategic, coordinated initiatives, including large-scale demonstration projects which use the skills, leadership, common visions and technology tools of the public and private sectors, will help ensure the successful implementation of new information technologies that will improve service delivery by governments as we move into the 21st century.

File  
NII

# NII and the Foundations

|                     |                            |                              |
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## POLICY POSITIONS FOR THE NATIONAL INFORMATION INFRASTRUCTURE

## Introduction:

The Administration's National Information Infrastructure (NII) Initiative emphasizes the role of the private sector in operating and developing the nation's communications networks and the applications that can use those networks. Because many of the major players in the U.S. communications industry, including local and long-distance telephone companies, cable television operators, broadcasters, and cellular telephone providers, are subject to varying degrees of regulation at the Federal, state, and local levels, governmental policies directly affect the course of infrastructure development by these firms. This memo presents background and recommendations on several major policy issues.

In The National Information Infrastructure: Agenda For Action, the Administration committed to work with Congress to pass legislation by the end of 1994 to increase competition and ensure universal access in communications markets. S. 1086, a comprehensive infrastructure bill sponsored by Senators Inouye and Danforth, addresses many of the telecommunications issues discussed below. Because a representative of the Administration will be asked to testify on S. 1086 at a Senate hearing in mid to late October, Administration positions on major telecommunications issues must be developed.

**Overall Recommendation:** Many aspects of S. 1086 are consistent with the goals of the NII. The Administration should assume for now that S. 1086 is the prime vehicle for legislative action, subject to refinements that must be agreed upon within the Administration before the hearing. This situation could change if major infrastructure legislation is introduced in the House.

## ISSUE 1: CABLE-TELEPHONE COMPANY CROSSOWNERSHIP

## Description:

In 1970, the FCC adopted cable-telephone company crossownership rules, which generally prohibit local telephone companies or "telcos" (such as the Bell Operating Companies or GTE) from offering video programming in their telephone service areas. The 1984 Cable Act essentially codified those restrictions.

In August 1993, a federal district court in Alexandria, Virginia, ruled that the crossownership restriction violated the First Amendment and enjoined the government from enforcing it. Although the court's ruling is subject to appeal and, in any event, may not be binding in other jurisdictions, it does raise substantial questions about the continuing viability of the existing crossownership restriction.

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The 1984 Cable Act permitted telcos to provide capacity and facilities in their service areas for cable programming owned by others, and to own cable systems outside their local telephone service areas. In August 1992, the FCC authorized telephone companies to offer, within their local service areas, distribution facilities and ancillary services to unaffiliated programmers on a regulated, common carrier basis. The FCC also allowed telcos to acquire up to a 5 percent ownership interest in video programmers. It concluded that this "video dialtone" policy was consistent with the Communications Act, but various facets of the FCC's 1992 decision are the subject of court appeals.

Among other things, S. 1086 would repeal the crossownership rule, subject to specific safeguards. H.R. 1504, by Reps. Boucher and Oxley, would also repeal the statutory cable-telco crossownership restriction, subject to certain conditions and safeguards.

## **Recommendation: Repeal the Crossownership Rule, Subject to Regulatory Safeguards.**

The Administration should support legislation to remove the statutory restriction while retaining several major regulatory safeguards. First, although telcos would be able to deliver, package, and own programming, but would be required to make capacity on their systems available to others on a nondiscriminatory, common carrier basis (thus, for example, the program listings or "gateway" to the video services could not emphasize the telco's offerings). Second, telcos would not be permitted to purchase cable systems within their operating areas. This safeguard would be designed to prevent telcos from simply becoming the monopoly provider of both telephone and cable services in their current operating areas. Third, the telcos' programming operations would be in subsidiaries separate from their transmission activities.

This is generally similar to the approach taken in S. 1086, but that bill does not mention the "common carriage" safeguard.

## **ISSUE 2: LOCAL NETWORK COMPETITION**

### **Description:**

While the situation is gradually changing, the vast majority of point-to-point, two-way telecommunications services today are still provided through the networks of the local telephone companies. Although specialized local- and wide-area networks are increasingly important for data communications, most businesses and ordinary consumers depend on telephone networks not only for purely local voice and data needs, but also for access to long-distance networks and information services. Even those firms that have

extensive private telecommunications systems presently rely substantially on facilities, such as private digital lines, provided by local telephone companies for essential parts of their networks. Moreover, most local telephone companies still operate under state franchises that restrict or prohibit competition in their service areas.

As a result of technological and regulatory developments, network competition is developing from a number of sources. In the late 1980s and early 1990s, competitors to local telephone companies (often called competitive access providers -- CAPs) began to build competing local networks in major metropolitan areas where state public utility commissions have been receptive to competition. A number of states have led the FCC in experimenting with local access competition. CAPs generally offer private line telephone services (*i.e.*, transport of calls from point to point without going through a local telephone company's network switches) to large business users seeking lower-cost, better-service alternatives for local routing of data and voice communications, and direct connections to long-distance providers. A recent study identifies 34 CAPs that offer or are planning to offer alternative local telecommunications services in 38 cities in 26 states.

Moreover, use of digital transmission techniques by cellular radio providers and future deployment of radio-based personal communications services will increase the ability of wireless companies to compete with local telephone companies. As discussed above, cable operators are increasingly venturing into local telephone markets, just as local telephone companies are seeking to be legally permitted to provide, on an unfettered basis, video offerings in competition with the cable operators.

In September 1992, the FCC ordered the nation's largest local telephone companies to allow CAPs and others to interconnect with local telephone networks for the provision of interstate "special access" (*i.e.*, private line) services. In particular, the FCC ordered the local telephone companies to provide CAPs with physical, fiber-based connections to their high-capacity special access services unless superseded by a negotiated agreement for "virtual" collocation (that is, of lesser physical proximity but similar functionality), lack of space in the central office, or state regulatory action.

In August 1993, the FCC voted to require large local telephone companies to provide expanded interconnection for interstate switched transport services under a set of rules similar to those it adopted for special access. Smaller telcos are exempted from the requirement, mainly out of concern for upsetting existing universal service subsidy arrangements. The "Tier 1" local companies (those with annual revenues generated by regulated operations in excess of \$100 million) must file relevant interstate tariffs by November 18, 1993, with an effective date of February 15, 1994.

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S. 1086 seeks to advance competition in communications services by setting national policy in four areas: preempting state prohibitions that are inconsistent with federal rules on entry into competitive markets, general requirements for nondiscriminatory interconnection of competitors in providing local services, number portability, and regulatory flexibility.

**Recommendation: Support S. 1086 In More Aggressively Advancing Interconnection and Competition Opportunities.**

The Administration would support the efforts of S. 1086 to liberalize interconnection policies at the Federal and state level by, for example, preempting state regulatory authority if necessary.

## ISSUE 3: UNIVERSAL SERVICE

### Description:

The tradition of "Universal Service" -- widespread availability of telephone service at affordable rates -- traces its beginnings to the early years of the Twentieth Century and was formalized with the passage of the Communications Act of 1934. The original goal has been achieved to a substantial degree in the United States (94.2% of U.S. homes had telephone service in March 1993, which is the highest level ever reported).

The Administration has committed to redefine Universal Service so that all Americans have the opportunity to receive advanced communications services at reasonable rates. This goal embraces a forward-looking policy that would accommodate local network competition and would bring residential users the option of using advanced data and voice communications services, while adopting more targeted subsidy programs for the poor and underserved areas.

Goals for Universal Service and infrastructure development have traditionally been intertwined. As Section 1 of the Communications Act states, an integral part of the public policy promoting Universal Service is the development of a "rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges."

The FCC and the states have already established some targeted programs that provide assistance to low-income users for their monthly telephone charges ("lifeline" plans) or installation charges ("Link-up America"). States participate in these programs by selecting means tests and determining the benefits for their respective programs. Federal support is provided on a matching basis (up to certain limits) and is funded

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through modest surcharges assessed long-distance carriers on their use of local networks for interstate calling.

Without defining the term "universal service," S.1086 contains general provisions that would require all communications carriers to contribute to its preservation. It also would require the states to set a goal of directly assisting individuals who cannot afford service (again, without defining that service.) S. 1086 also has general provisions seeking to preserve high quality service in rural areas.

## **Recommendation: Follow Through on Commitment to Expand the Existing Universal Service Goal.**

Support the general universal service provisions of S.1086 as a good start, but work on developing details of universal service policy that would accommodate local network competition and would seek to bring residential users the option of using advanced data and voice communications services. Field hearings on these issues by the Telecommunications Policy Committee of the Information Infrastructure Task Force are scheduled to begin in December 1993. This effort would include use of greater local competition to rationalize prices for communications services, while adopting more targeted subsidy programs for the poor and underserved areas. (S. 1086 does not attempt to do this explicitly.)

## **ISSUE 4: THE AT&T CONSENT DECREE – INFORMATION SERVICES RESTRICTION**

### **Description:**

The 1984 AT&T Consent Decree divested AT&T of the Bell Operating Companies (BOCs), which provide most of the nation's local telephone service, and also imposed certain line-of-business restrictions on them. The order is referred to as the "AT&T Consent Decree" or "Modified Final Judgment (MFJ)". The MFJ originally prohibited the BOCs from providing most information services over their networks. In July 1991, the District Court, or Decree Court, terminated the restriction, which was upheld on appeal.

After the Decree Court lifted the information services restriction, legislative efforts to reinstate that restriction commenced. The newspaper industry and many information service providers, which rely on connection to BOC networks to offer services, contended that the BOCs would engage not only in cross-subsidy to the detriment of their telephone customers, but also other forms of anticompetitive conduct, which would harm the information services industry. These parties argued that the FCC could not develop sufficient safeguards to protect against such potential harms.

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The BOCs claimed that their entry into information services served to foster competition, lower prices to consumers, and widen availability of user-friendly services. They claimed that FCC safeguards, which were non-structural and did not require the BOCs to use separate subsidiaries, were sufficient. This issue was highly contentious, as it involved concerns about BOC control over the "local bottleneck" in the absence of local competition.

A jurisdictional battle developed in the House last session between Chairman Brooks of the Judiciary Committee and Dingell of the Energy and Commerce Committee. Chairman Brooks had introduced a bill that would, among other things, have reinstated a variation of the information services restriction. This bill was approved by the Judiciary Committee but not enacted. Chairman Dingell worked to prevent a House floor vote on the bill.

S. 1086 would impose extensive safeguards on the provision of information services by the BOCs. Most significantly, it would require separate subsidiaries for any "electronic publishing" services offered by the BOCs, which would encompass most content-based services. Many competitors argue that such separate subsidiary requirements are essential to protect competition, while the BOCs argue that this extreme safeguard will cause lost efficiencies and impose extra costs on consumers.

**Recommendation:** Oppose the Information Services Provisions of S. 1086. There does not seem to be any need to impose new regulatory restrictions in this area. There have been few, if any, major problems under the present regime, in which the BOCs may provide information services subject to the FCC's nonstructural safeguards.

## ISSUE 5: THE AT&T CONSENT DECREE -- MANUFACTURING RESTRICTION

### Description:

The AT&T Consent Decree prohibits the BOCs from manufacturing telecommunications equipment: they may do research on, and design and development of their local networks (which we call R&D) and provide generic functional specifications for equipment, but they may not design, develop, or fabricate equipment. In a judicial review of this restriction, the BOCs and DOJ argued for its termination, and AT&T argued for its continuation. Using the fairly strict standard applicable to a contested modification of the decree, the District Court held in favor of AT&T and was upheld by the Court of Appeals.

Bills introduced in previous sessions of Congress addressed the manufacturing provision. One bill by Senator Hollings passed the Senate in 1992 and would have

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permitted the BOCs into the full range of manufacturing activities, subject to regulatory safeguards, as well as domestic content and domestic manufacturing restrictions. (The Vice President, then Senator, Gore co-sponsored the Hollings bill.) A bill introduced in the House by Congressman Brooks (Chairman of the Judiciary Committee) sought to codify the restriction. None of these bills was enacted, and no bills in the current session of Congress deal with manufacturing.

Those favoring elimination of the restriction argue that the BOCs can boost U.S. productivity through their manufacturing efforts, potentially increasing U.S. jobs and helping the United States to remain competitive globally. Some argue that BOC expertise in telecommunications makes it particularly appropriate for them to extend their activities into manufacturing. There is also concern that the way the restriction has been applied to R&D arbitrarily and inefficiently hampers the BOCs' ability to do research on telecommunication technology.

Those favoring retention of the restriction are concerned about potential BOC discrimination against competitors, due to the BOCs' special knowledge of and control over their local networks. There are concerns that the BOCs would have advanced knowledge of network changes, to the detriment of competitors. Some also argue that the BOCs would simply enter joint ventures with foreign manufacturers, with negative effects on U.S. workers and U.S. trade balances.

S. 1086 does not mention the manufacturing restriction.

**Recommendation: Do Not Raise The Issue at This Time.** If asked at the hearing, express interest in exploring with Congress to permit more research, design, and development. This aspect of the restriction seems the most technologically and economically inefficient. Change in this area could be desirable particularly to allow closer collaboration with entities designing equipment for use in the BOC's local networks. Providing greater certainty as to the precise scope of permissible activities could also facilitate manufacturing advances and ultimately infrastructure development.

## ISSUE 6: THE AT&T CONSENT DECREE – LONG-DISTANCE RESTRICTION

### Description:

The AT&T Consent Decree prohibits the BOCs from providing most long-distance services (generally interstate, but also some intrastate). The theory of the Decree was to prevent the BOCs from leveraging their "local bottlenecks" to harm long distance competition. Technically, the BOCs are prohibited from providing almost all "interLATA" services. The Decree Court created 194 "Local Access and Transport

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Areas" (LATAs) in the United States, and the Consent Decree prohibits BOC transmission across LATA boundaries. Long-distance providers like AT&T, MCI, Sprint, and many others (most on a resale basis) provide interLATA services.

For many years, there has been little movement to eliminate this restriction, in part because long-distance services are deemed by many to be at the "core of the decree." (Anticompetitive conduct by the pre-divestiture AT&T in the long distance market was probably the principal reason the antitrust case was brought.) No bill introduced in previous sessions of Congress sought to terminate this restriction; and one bill sought to codify it.

However, the BOCs have recently increased their efforts to obtain relief from the interLATA restriction, which, they argue, should accompany opening up the intraLATA market to full competition. In March 1993, one of the BOCs, Ameritech, petitioned the FCC for a declaratory ruling that Ameritech's provision of interLATA services would be in the public interest if Ameritech were to implement its Customer First Plan which, purportedly, would increase dramatically opportunities for competing local service providers to interconnect with Ameritech's local exchange networks. In July 1993, five BOCs (Ameritech and US West did not participate) asked the FCC to initiate a rulemaking to specify safeguards governing BOC provision of interLATA services. Once those safeguards were in place, the BOCs would then seek elimination of the interLATA restriction. There has been guarded interest in, but not support for, such a proposal by AT&T and other traditional opponents of changing this prohibition.

S. 1086, introduced in the current session of Congress, would allow some very narrow exceptions to the restriction. For example, it would allow the BOCs to use certain interLATA distribution facilities to provide cable services across boundaries, and also to facilitate intersystem handoff and routing for cellular and other wireless services. These exceptions do not address the provision of information services across LATA boundaries, even though this possibility was earlier addressed in some staff drafts of legislation on the House side last session. Absent such an exception, the BOCs may need to duplicate equipment in different geographic areas to provide information services, potentially adding unnecessary costs to consumer prices or rendering the services uneconomic.

**Recommendation: Support the Relevant Provisions of S. 1086 as an Interim Measure, But Support Terminating the Restriction When the Local Services Market Is Deemed Competitive. Support Adding Legislative Provisions That Would Establish a Test for When the Local Services Market Would be Deemed Competitive.**

When the test is satisfied, the BOCs would be permitted to enter the long-distance market. The test, which NTIA would work on with DOJ before the next hearing on

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S.1086, could be based on a variety of factors, such as market share, availability of service from CAPs, or penetration by CAPs.

Although Congress heretofore has shown little interest in such an approach, AT&T has supported a test for local competition — availability of a CAP's services to 50% of the subscribers in a BOC's service area, with 25% subscription — that the BOCs believe to be too restrictive.

## ISSUE 7: REGULATION OF LONG-DISTANCE TELEPHONE SERVICE

### Description:

In 1980, the FCC authorized the competitive provision of interstate switched telephone service. The breakup of the Bell System in 1984 expanded opportunities for many firms, particularly MCI and US Sprint, to compete with AT&T in the long-distance services market.

By the mid-1980s, the FCC had adopted a regulatory "forbearance" policy under which it declined to regulate long-distance service providers other than AT&T, which continued to be regulated as a "dominant" carrier. In 1989, the FCC replaced rate-of-return regulation of AT&T with "price cap" regulation, thereby giving the firm some pricing flexibility for its long-distance services, including residential services. In 1991, the FCC reduced its regulation of AT&T's services for large business users.

AT&T challenged the FCC's forbearance policy on the ground that it was not authorized by the Communications Act of 1934. In November 1992, a Federal appeals court ruled that regardless of the policy merits of regulatory forbearance, the FCC could not exempt competing long-distance companies from filing public tariffs for their interstate services.

In February 1993, the FCC instituted a rulemaking to consider what tariff filing requirements should apply to nondominant common carriers that formerly were subject to forbearance. AT&T used that proceeding as a vehicle to call for complete deregulation of its long-distance operations, arguing that competition in domestic long-distance services is fully established.

In August 1993, the FCC modified its rules to establish significantly streamlined tariffing requirements for nondominant common carriers. Under the new rules, nondominant carriers are permitted to file tariffs on not less than one day notice and may state in their tariffs either a fixed rate or a reasonable range of rates. The FCC specifically declined to alter the existing dominant/nondominant regulatory dichotomy,

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deeming it to be beyond the scope of the proceeding, and thus did not alter its classification of AT&T as a dominant carrier. AT&T has petitioned the FCC to be classified as nondominant.

S. 1086 would provide the FCC with authority to exempt carriers from filing tariffs "to the extent the carrier does not have market power."

**Recommendation: Give the FCC Statutory Authority to Forbear From Regulating the Rates of Carriers Without Market Power.**

The Administration should support this aspect of S. 1086.

Information Infrastructure Task Force (IITF)  
Information Policy Committee  
July 19, 1993

file  
NII

**Purpose:** Help the IITF articulate and implement the Administration's vision for the NII, by addressing information policy issues.

Identify persons outside of the Executive branch to advise the IITF and the Committee on information policy matters.

**Structure:** Initially, three working groups, chaired as follows --

Intellectual Property Rights  
Privacy  
Federal Information

Bruce Lehman, PTO  
TBD - (OMB *pro tem*) *Pat Foley*  
Bruce McConnell, OMB

**Output:** Proposals for actions, policies, and legislation to secure rights in intellectual property, protect the privacy of individuals, and promote the dissemination of government information in an electronic world.

**Accountability:** Committee will agree on the work programs of the Working Groups, including problem statement, priority issues, and milestones.

Working Group chairs are responsible for meeting milestones and delivering products to the Committee chair.

Working Group chairs select membership of working groups in consultation with Committee chair.

The Committee chair is responsible for coordinating the Committee's work with the other committees and working groups, and for communicating with the IITF chair.

**Meetings:** Committee -- August 10th - 2:00 pm  
-- thereafter, monthly

Working Group Chairs -- as needed

Working Groups -- as needed to meet milestones

## IPR Issues Outline

### 1) Problem/Opportunity

The National Information Infrastructure will make electronic information storage, retrieval, and delivery systems available throughout the country and the world in ways that will change the way information products are created, marketed, and delivered in our economy. The Infrastructure will create unprecedented opportunities and new challenges for our world-preeminent copyright industries. The integrity of intellectual property rights and copyrights in information and entertainment products must be ensured if these products, whether in the form of text, images, computer programs, video recordings, sound recordings or multi-media formats, are to move in commerce in an electronic high-speed telecommunications system.

Electronic media and computer information systems have shown us that the traditional distinctions among authors, copyright owners, producers, users, and distributors are becoming increasingly blurred. We have the opportunity to create a system that will ensure the integrity of intellectual property rights, make the wealth of our information and entertainment products more widely available than ever before, and provide the economic incentives to deliver all types of information products essential for job creation and economic growth through the National Information Infrastructure.

### 2) Approach/Ideas

- Develop standards for identification of copyright ownership of information products in an electronic system (i.e., electronic headers, labels or signature techniques). The Group will have to consider the Government's role in ensuring the inclusion of appropriate standards in the design of the Infrastructure to permit identification of ownership and the permitted uses of a work. The Group should consider how to provide assurances for those who insert information and entertainment products into the Infrastructure that their property rights will be respected in the manner that they determine.
- Develop an efficient licensing/royalty system for copyrighted information products delivered over the Infrastructure. What provisions can or should this system include to identify a user's ability to access, modify, reuse, repackage, or resell information products in the system? These are issues

that the Group must address. The Group must also consider how traditional concepts of fair use will apply in a digital environment. How can this be done in ways that allow some use of the works without any liability for payment, or a requirement for prior permission, without unreasonably prejudicing the legitimate economic interest of the author?

- Strengthen the copyright laws to prevent the proliferation of piracy and protect the integrity of intellectual property, while ensuring broad access to information in the context of the National Information Infrastructure.
- Develop, in cooperation with the Department of Education, a National educational curriculum on the role of intellectual property rights in electronic information systems for schools at all levels that will identify the contribution of intellectual property rights to America's technological and economic strength.

### 3) Results

- Creation of a system that provides appropriate economic incentives for the inclusion of the full range of needed information products in the National Information Infrastructure through:
  - Standards for marking copyright protected information in electronic formats;
  - Efficient licensing procedures for copyrighted works in electronic information systems; and
  - Enhanced copyright legislation appropriate for the electronic information media.
- Increased public awareness of the importance of maintaining the integrity of intellectual property rights for economic growth and job creation.

### 4) Milestones (dates and expanded schedules to be developed)

- Nominate members to the IITF Advisory Committee.
- Assemble Working Group members for inter-agency IP Group.
- Organize Public Hearing(s)

- Draft formal legislation.
- Draft business standard proposals on noticing.
- Develop educational criteria.
- Write licensing procedures.

## PRIVACY

Problem/Opportunity:

While personal privacy was not guaranteed in the Constitution, courts have found that various privacy principles can be found in the Bill of Rights, especially the freedom from unlawful searches and seizures of the Fourth Amendment and unenumerated rights of the Ninth Amendment. Most individuals would probably consider the ability to conduct their lives free from intrusions into their personal habits or dissemination of intimate information about themselves to be basic human rights.

Before the widespread use of electronic systems, information about the various facets of a person's life was relatively difficult to gather in one place. Records kept on paper required much effort to collect into a "dossier" about any particular individual. The widespread use of distributed electronic information systems has made the gathering of a wide variety of information about almost anyone simple, quick, and inexpensive. Many records which are considered "public information" such as real estate ownership, court records, tax liens, bankruptcy filings, voter registration, auto and driver records, marriage records and the like--when grouped together may give a fairly accurate portrait of a person. When coupled with information from the private sector which is almost completely free of regulation-- financial, medical, employment, credit, and phone data--a complex biography can be developed. Much of this information can be gathered with no more elaborate equipment than a personal computer, a modem, and a phone, and therefore can be gathered remotely, without much of a trace. Whether originating in the public or private sector, most information can be re-used, sold, or re-sold by the original gatherer, private investigators or information brokers without the record subjects' consent or knowledge. The information may be used to make important decisions about people, such as whether they qualify for insurance or a mortgage, or whether they are suitable for employment. If data is out of date, incomplete, or just plain wrong, the use of electronic systems facilitates the propagation of erroneous information which becomes very difficult to eradicate.

Reports that there is a growing public concern about the sharing of personal information have become frequent in the trade and popular presses. Therefore, as the Clinton Administration implements its February 22, 1993, technology plan, *Technology for America's Economic Growth, A New Direction to Build*

*Economic Strength*, and, in particular, as the Administration moves toward a National Information Infrastructure, there is both a need and an opportunity to concurrently implement appropriate privacy policies to protect personal data. A major part of this Infrastructure will be the National Research and Education Network, a communications tool that would allow many individuals to share text, numeric graphic, video, sound, and other forms of data much more quickly than they now can. This has great benefits, but also serious risks of abuse.

#### Approach:

1. Review existing privacy law at the Federal, State, and local level to identify existing gaps in coverage, especially of privately held information about individuals.
2. Develop options for various possible approaches, with an eye to the current fragmented jurisdiction and potential regulatory impacts. Some approaches might be:
  - creating a model privacy statute
  - continued sectoral approach to regulation
  - establishment of a Federal data protection commission
  - facilitating voluntary industry standards setting
  - strengthening enforcement mechanisms
3. Promulgate standards of fair information practice

#### Results:

Improved respect for privacy in the public and private sectors.

Establishment of fair information principles, such as that information obtained for one purpose should not be used or sold for another purpose without the record subject's informed consent.

Public trust in information systems that provide government or commercial services to citizens.

Ability of government and industry to conduct business using the information resources they require.

Milestones:

Survey of US laws

Analysis of Federal provisions

Analysis of State and local provisions

Survey and analysis of Canadian, Japanese, European approaches

Begin defining possible US approach with options

Amend Federal Privacy Act to embrace electronic records

## Federal Information

Problem/Opportunity: Government information is a valuable national resource. Information technology expenditures will rise from \$9.1 billion in FY 1982 to \$25 billion in FY 1994. This investment in the automation of Federal information has created valuable data bases, of benefit not only to the agency but to the public. The recent revisions to OMB Circular No. A-130 (58 Fed. Reg. 36068, July 2, 1993), recognize that these benefits will materialize only if these information resources can be adequately managed, preserved, and made available to the public in a timely and equitable manner. Impediments to more effective management and dissemination of electronic information include:

- o A recent study by the National Academy of Public Administration has shown that agencies often do not know the extent of their own data holdings, and generally do not have inventories of their databases. As a result, the public cannot easily find or access these databases.
- o The computer revolution has made the task of archiving Government information for future use more complex. Preserving computer records for future use requires careful advance planning. See, "Taking a Byte out of History," House Committee on Government Operations (November 6, 1990).
- o While case law suggests that the Freedom of Information Act applies to electronic records, the administrative burden an agency is required to expend to produce records that are responsive to a request is an issue. In 1991, agencies processed 600,000 requests at a direct cost of \$92 million, collecting only \$6 million in fees. Better dissemination of government information could eliminate the need for many of these requests.

Approach: Develop a strategy to improve government management of electronic information and its dissemination to the public. Possible actions include:

1. Require agencies to systematically inventory their existing data holdings.
2. Establish a standard-setting process to define the minimum set of data elements necessary for effective identification, dissemination and archiving of electronic information.
3. Take advantage of the Internet and NREN to create a distributed Government Information/Inventory Locator System (GIILS) so that agencies and the public can identify what information is available and how it can be accessed.
4. Develop a draft bill to amend the FOIA to bring it up to date with case law and make it consistent with Federal dissemination policy.

Results:

Improved management of government data bases.

Increased dissemination of government information over the Internet and NREN.

Ensuring future generations can retrieve government information.

Milestones:

List of outside advisers

Agency inventory of data holdings

Propose standard on data elements for management of databases

Prototype locator system

Draft FOIA amendment

THE WHITE HOUSE  
WASHINGTON

To: John Podesta

Fr: Tom Kalil <sup>93</sup> MAR 22 P1:07

File  
NATIONAL INFORMATION  
INFRASTRUCTURE  
NII

## **NATIONAL INFORMATION INFRASTRUCTURE**

### **ACTIVE N.I.I. EFFORTS**

- DEFENSE CONVERSION PROGRAM**
- ARPA N.I.E.**
- COUNCIL ON COMPETITIVENESS**
- CROSS-INDUSTRY WORKING TEAM**

### **OTHER ACTIVITIES BY:**

**CSPP, SMART VALLEY PROJECT  
DIEBOLD, IEEE, HARVARD, MCC  
NATIONAL ENGINEERING CONSORTIUM**

**A MODEL FOR**

**CROSS-INDUSTRY COLLABORATION**

**ON THE DEVELOPMENT OF A**

**NATIONAL INFORMATION INFRASTRUCTURE**

**Applications**

**Middleware**

**Networks &  
Computers**

## INITIAL CHARTER

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**Promote and accelerate the deployment of a world-class National Information Infrastructure by fostering the development and application of technologies which cross traditional industry boundaries.**

***Specifically: (see next sheet)***

## INITIAL CHARTER (continued)

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### *Specifically:*

**Foster ongoing experimentation and development of technology and skills;**

**Build and sustain a cooperative environment for the exchange of technical ideas, interests and information;**

**Promote cross-fertilization and stimulate advanced infrastructure developments;**

**Develop common technological and architectural approaches that match the evolution of information technology, and provide for openness, heterogeneity, interoperability, scalability and ease of use;**

**Plan information infrastructure pilot projects that leverage industry capabilities and state-of-the-art research;**

**Create and maintain an open forum for dialogue among representatives of key U.S. stakeholder communities in the private and public sectors.**

## **ASSUMPTIONS**

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- **3-4 Meetings per year in Plenary**
- **Task Forces meet more frequently; come and go as appropriate**
- **High Level Corporate Commitment**
- **Collaboration with Federal Gov't on Technology and Pilot Project Planning**
- **Neutral with Respect to Specific Vendor choices**
- **Emphasis on Architectures, Standards, Generalized Interfaces, Interoperability, Scalability**
- **U.S. Industry led; no Foreign Participation**
- **Distributed Task Groups (e.g. Collaboration)**
- **Use of Multi-media Teleconferencing as Infrastructure to Support Future Meetings**

## **Organization and Structure**

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- **Plenary Committee - Primary Members**
- **Executive Committee - Elected from Plenary Advisory and Science; 10 members**
- **Advisory Council - Associate Members; two members serve on Executive Comm.**
- **Science Council - World-class scientists & reseachers; two serve on Exec. Comm.**
- **Working Teams - Primary Industry Members & Invitees**
- **Forums - open to interest parties; fee based**
- **Secretariat - reports to Executive Committee; approved by Plenary, day-to-day staffing**

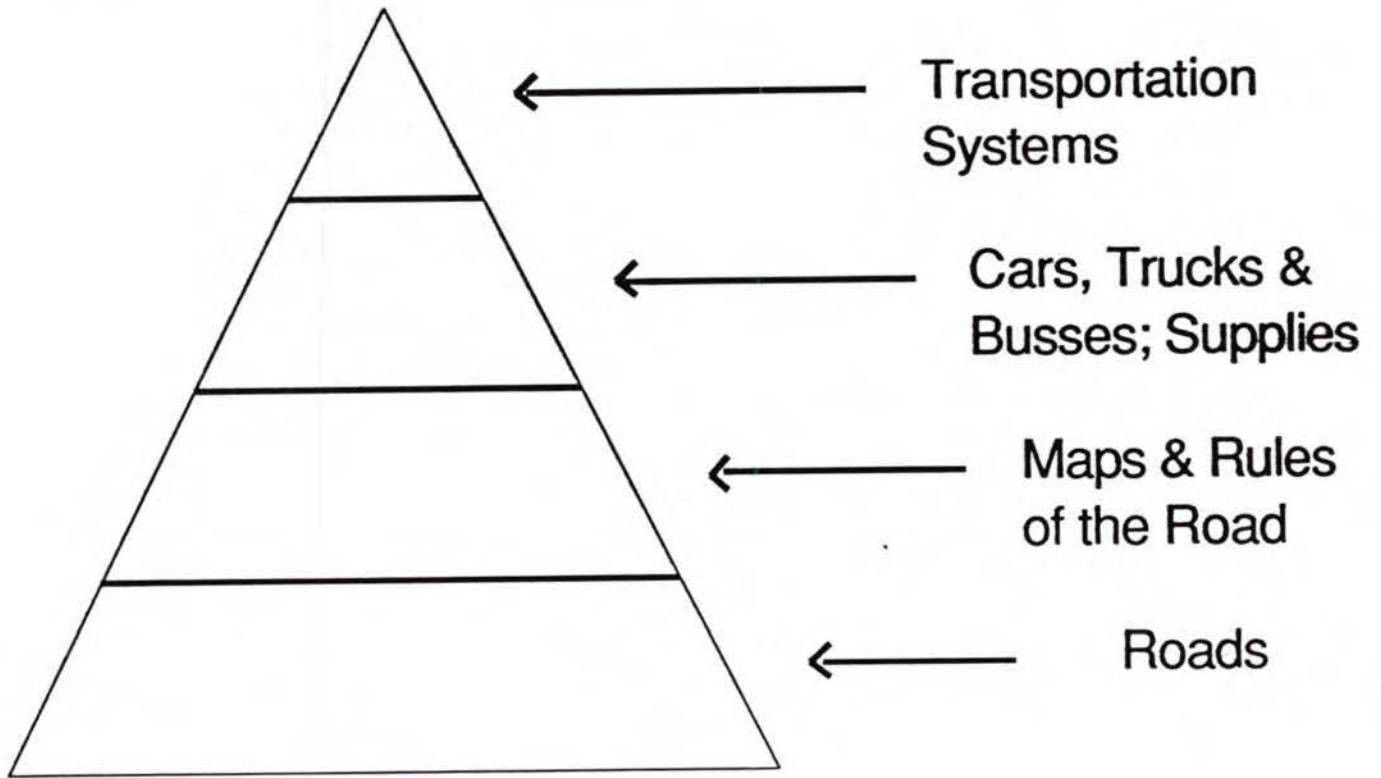
## **N.I.I. ISSUES**

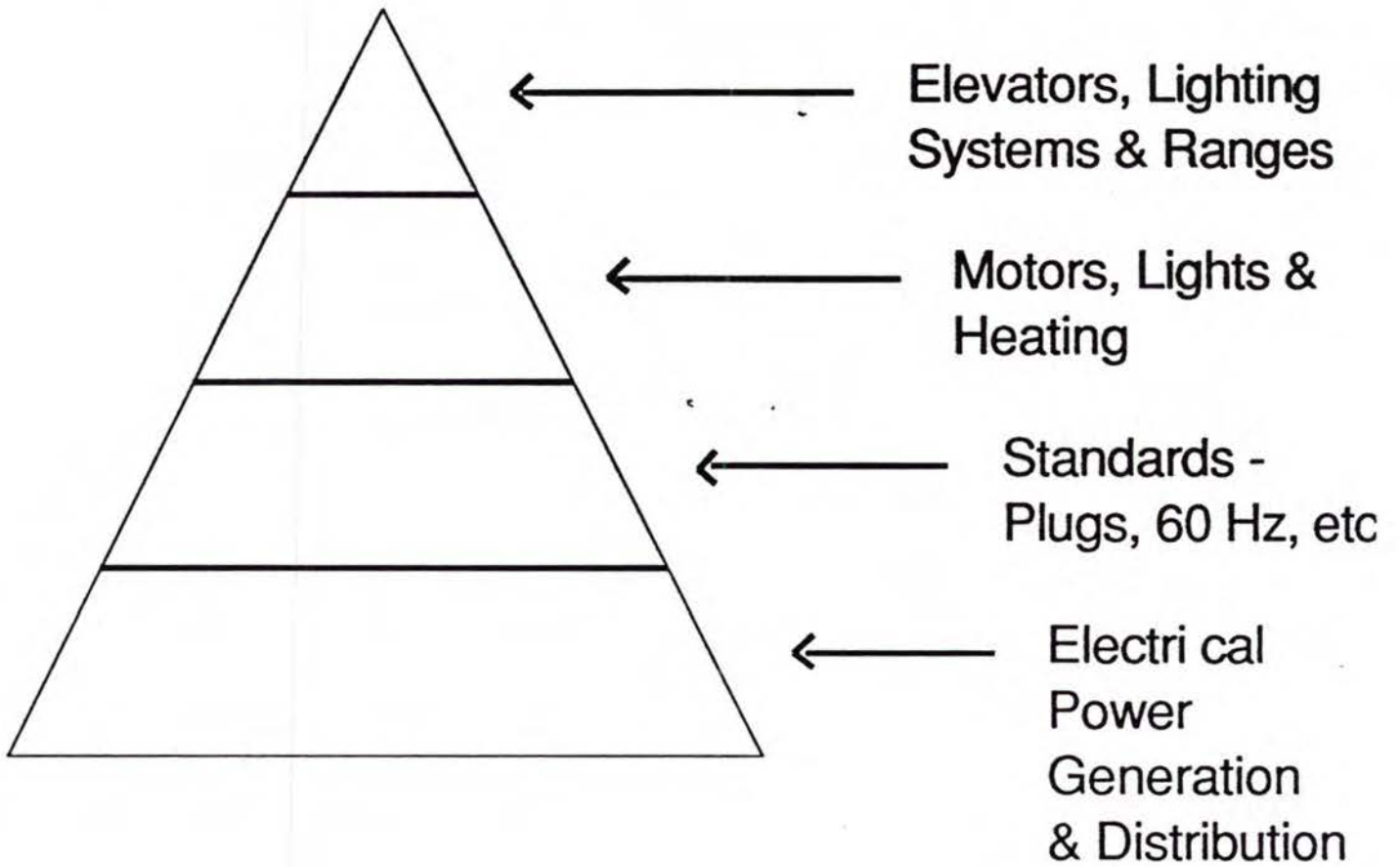
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- **What is Information Infrastructure?**
- **Roles of Government & Private Sector**
- **Range of Concerns - Policy, Legal, Economic  
Regulatory, International, Technological**
- **Breadth vs Height, Long-term vs Short-term**
- **Interoperable, Scalable, Heterogeneous, etc.**
- **Fairness in deployment**
- **Critical Mass**
- **Role of Experimental Testbeds**
- **Intellectual Property Protection, Privacy, etc.**
- **Role of States**
- **Leveraging Private Sector Resources**

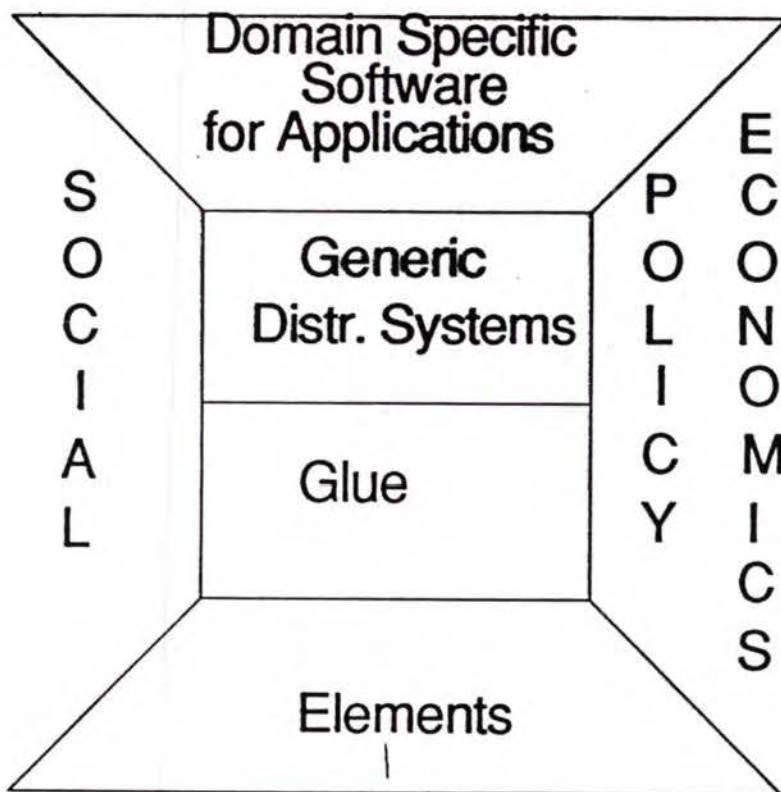
## PROPERTIES OF INFRASTRUCTURE

- \* Shareable
- \* Ubiquitous
- \* Easy to use
- \* Cost Effective

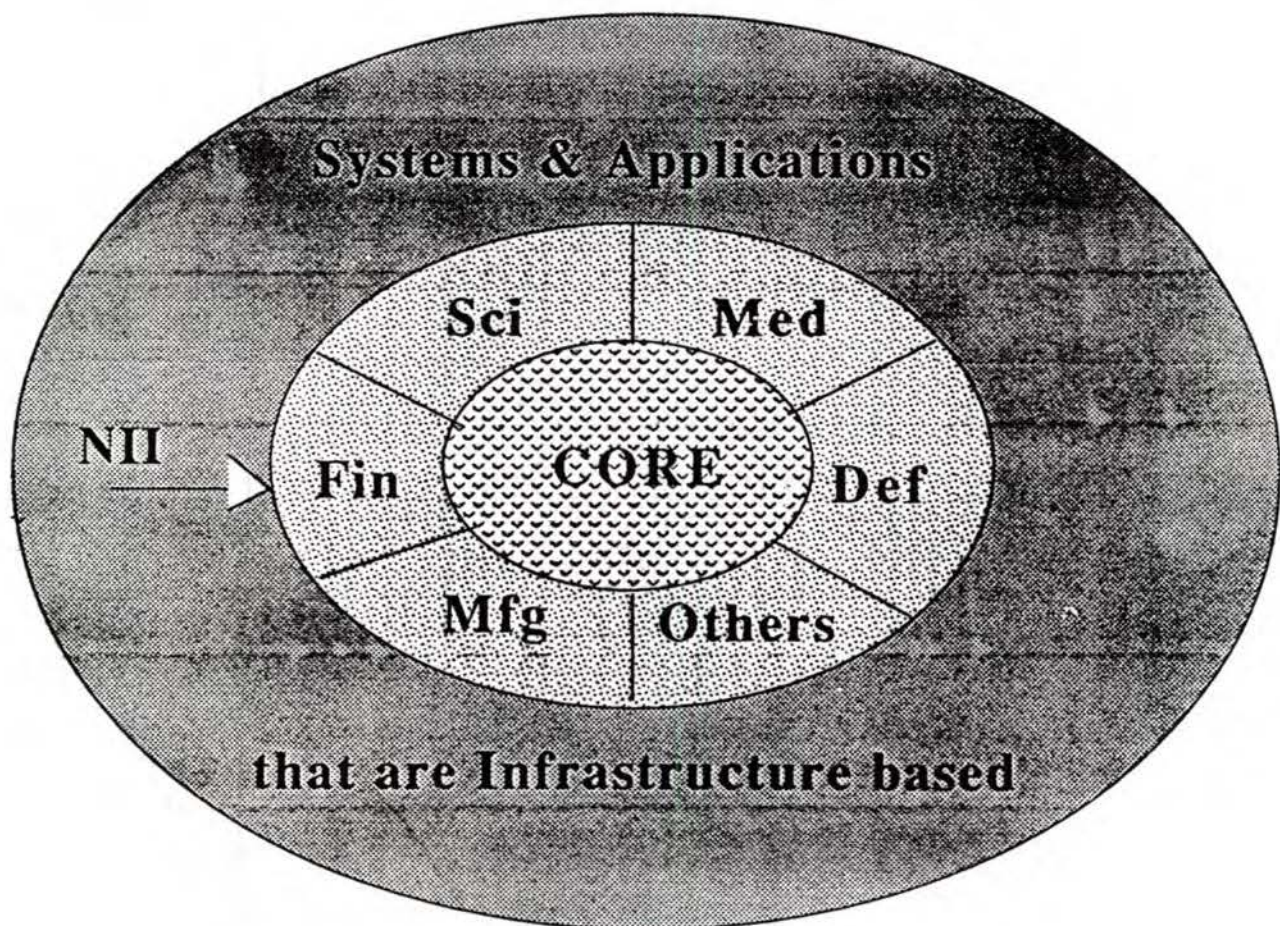




# NETWORKING INFRASTRUCTURE



# **A National Infrastructure for Information Technology and its Application**

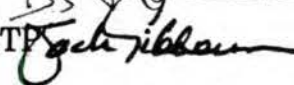


THE WHITE HOUSE  
WASHINGTON

April 5, 1993

file  
NII

MEMORANDUM FOR DISTRIBUTION

FROM: ROBERT RUBIN, NEC   
JOHN H. GIBBONS, OSTP   
SUBJECT: IMPLEMENTATION OF ADMINISTRATION'S TECHNOLOGY  
POLICY

We would like to hold a joint meeting of the NEC Deputies Committee and the OSTP S&T Group on Wednesday, April 14 from 2:00 to 4:00 p.m. to discuss implementation of the Administration's technology policy, as outlined in the February 22 Clinton-Gore statement, "Technology for America's Economic Growth." The meeting will be held in Room 474 of the Old Executive Office Building. Please call Sandy Mancini at 456-2800 to R.S.V.P.

The Administration's technology policy covers such a wide range of topics that no one standing committee will be the appropriate forum for addressing them. The NEC's role in this area will be to address those issues where technology policy and economic policy overlap. The NEC and the OSTP will work closely on all technology policy issues.

We would propose to conduct this work under the overall guidance of the Science and Technology Group appointed by Department and Agency Heads in response to the Vice-President's request on March 19. This group would meet as needed to monitor implementation of the technology policy, preferably no more than once per quarter. Co-chaired by the OSTP and the NEC, this group will:

- \* Assign agencies to draft options papers, legislation, executive orders, etc. needed to implement the technology initiative;
- \* Approve, disapprove, or modify staff level recommendations; and
- \* Prepare decision memoranda for decisions by the Cabinet or the President.

Below are some of the specific issues where action is needed:

1. **National Information Infrastructure:** Issues to be addressed include regulatory policy, government information policy, standards issues, intellectual property rights, private sector input on the NII, and transition of the National Research and Education Network. Many of the issues related to the NII will be dealt with by the High Performance Computing, Communications, and Information Technology (HPCCIT) subcommittee of the FCCSET. [Joint NEC/OSTP Chair]
2. **Defense Reinvestment and Conversion:** As military budgets decline, the Administration must have a coordinated strategy for reinvesting defense assets (people, facilities, and technology) into the commercial economy to create jobs and stimulate economic growth. Two dimensions of that strategy are key: (1) transitional assistance targeted to workers, communities and firms that are hurt by defense cuts and military base closings; and (2) investments in job training, facility reutilization, and dual-use technology that will create new economic opportunities. This strategy must also reflect the urgent need for the Defense Department to change the way it does business: as defense technology becomes both more expensive and less sophisticated than its civilian counterpart, DoD must rely increasingly on the commercial technology base. To develop such a strategy, this working group will address a range of issues concerning (a) communities (environmental cleanup of military bases, integrated delivery of assistance programs), (b) workers (turning troops-to-teachers/police, reutilizing defense training facilities) and (c) technology (dual-use opportunities for defense firms, procurement reform that permits greater use of commercial products and services, the future of the federal laboratories). Problems of defense workers will be addressed largely through a separate task force on displaced workers. [Joint NEC/OSTP/DoD Chair]
3. **Legislative strategy:** The House and Senate have introduced numerous bills related to technology policy. We will work to develop an Administration position on these bills, and to determine what other legislation is required to implement the Administration's technology policy. In addition, the success of the Administration's technology policy will be significantly influenced by the actions of the House and Senate Appropriations Committees. We need a strategy to (1) ensure adequate 602(b) allocations for the relevant subcommittees; and (2) an "anti-pork" strategy. [NEC Chair]

4. **Review National Research and Development Priorities:** The federal government spends about \$76 billion annually on research and development. While research investment has never been more important to the nation's security or to the health of its civilian businesses, priorities in federal research spending must change to reflect new defense requirements resulting from the end of the cold war, new competitive pressures placed on domestic businesses, and new technological opportunities. This task will define contemporary priorities in federal support for research and development, and propose a strategy for matching existing research capabilities to these new needs. The project will provide a comprehensive national strategy for investment in basic and applied research including recommendations about overall investment levels, spending priorities, and a management strategy for the federal research program. [OSTP Chair]
5. **Patient capital and technology financing:** The Administration made a commitment to review recent proposals to improve the patience, availability and affordability of companies. Proposals include (1) creating a Civilian Technology Corporation; (2) establishing a Civilian Technology Development Program [Title III(D) of the National Competitiveness Act]; and (3) more sweeping changes in corporate governance and the behavior of institutional investors suggested by the Council on Competitiveness. [NEC Chair]
6. **Mechanisms for private-sector input:** The Administration promised to review laws and regulations which currently inhibit private sector input. These include the Federal Advisory Committee Act, the Freedom of Information Act, and conflict-of-interest regulations. [NEC Chair]
7. **Federal Support for Manufacturing Research:** Federal funding for research and development designed to assist US manufacturers will expand during the coming years and a strategy is needed for (1) establishing research priorities, (2) determining which federal agency is best positioned to support the research, (3) determining the funding mechanisms best suited to ensuring that federal support is converted to practical products, and (4) ensuring adequate input from businesses and other interested parties. Several existing interagency FCCSET committees will be expanded to address these issues: Advanced Manufacturing Technology, High Performance Computing and Communication, and Advanced Materials and Processing. Task forces within these committees will focus on specific, high-priority topics such as the "clean car" program. [OSTP Chair]

8. **Technology for Education and Training:** Technology has reshaped the nature of work throughout the economy and has changed opportunities for delivering education and training services. First-rate scientists and engineers are needed to ensure that America maintains its technical leadership, but a growing number of all jobs require competence in basic engineering and mathematical skills. The nation needs programs for people that will get higher education in technical subjects and to ensure a graceful transition to work for the majority of Americans who will not. It also requires an efficient ways to ensure all Americans access to the training they will need throughout their careers. The existing FCCSET Committee on Education and Human Resources will be expanded to include school-to-work training and retraining programs for those already in the workforce. New programs will be introduced to ensure adequate support for education and training technologies. This will require close cooperation with the HPCC committee. It will focus special attention to the challenge of using DoD training resources -- including teaching technologies -- in ways that can benefit both defense and civilian training activities. [OSTP Chair]
9. **Government Infrastructure:** Government can be made more efficient and more accessible to the public by exploiting technologies already in widespread use by well managed private organizations. Computer and communication systems can improve government management, make it easier for individuals and businesses to comply with requests from the government for information, make it easier to obtain information about government programs, and make government information readily accessible. Using experts familiar with advanced information systems used in business, this project will develop a national strategy for installing information equipment throughout the government. It will also ensure that other technologies, such as energy efficiency technologies in buildings, are implemented where they are cost-effective. New interagency committees will be developed for specific tasks. [OSTP Chair]
10. **Space and Aeronautics:** American leadership in space and aeronautical sciences remains critical both for the nation's security and for the competitiveness of critical US businesses. This project will design strategies for maintaining leadership in these areas in a period of declining defense expenditures will require careful management of the nation's research and development assets. It will also devise a program for research and investment in space and aeronautics consistent with broad national goals in manufacturing, communications, environmental research, and other areas where these fields are critical. [OSTP Chair]
11. **Promoting partnerships between the National Labs and industry:** How should DOE, NASA, and DoD implement the President's commitment to have labs that can make a contribution to U.S. competitiveness devote 10 to 20 percent of their budget to cost-shared partnerships with industry? Should lab directors have more authority to enter into cooperative research and development agreements with industry? What position should the Administration take on legislation introduced by the Congress on

the National Labs? [NEC Chair]

12. **Basic Sciences:** It is essential that US leadership in basic science be maintained. While priorities may need to change reflecting new security and business challenges and new technical opportunities, we need to protect our essential research institutions and ensure continuity in critical areas. Federal support for research in global climate change research, advanced materials, and biotechnology will be coordinated using existing FCCSET processes. Other topics may be included. Policies must be developed for reducing earmarked research funding, and management strategies for basic research (including the role of the national laboratories) [OSTP Chair]
13. **Technology and work:** Organizations such as the AFL-CIO Industrial Union Department believe that new production technology "should be worker-centered and skill-based rather than engineer-and machine-centered and skill eliminating. The new technology should build on worker's pre-existing knowledge, deepening worker's control, discretion and responsibility over production rather than shifting these critical functions off the shop floor." Are there specific kinds of technologies that are more likely to build on worker skills and enable high-performance work organization? [NEC/OSTP Joint Chair]
14. **Evaluation and assessment:** Various efforts have been made to evaluate the effectiveness of U.S. technology programs. For example, OMB is tracking the number of Cooperative Research and Development Agreements and their productivity (e.g. number of invention disclosures, patent applications, and new businesses created.) NIST's intramural programs are evaluated by the National Research Council, which assembles teams of 15-20 experts in industry and academia to evaluate each of NIST's eight laboratories. What are the current agency "best practices" on evaluation? How can evaluation be built into the design of a given technology initiative? To what extent does evaluation effect budget decisions and agency management of a given program? [OSTP/NEC Joint Chair]
15. **Communications strategy:** How can we increase the level of awareness and support for the Administration's technology policy -- both in the mainstream press, specialized press, and relevant constituencies (e.g. high-tech industries, general public)? [NEC Chair]

#### **Preparation for the meeting:**

To make the meeting as productive as possible, we would like you to be prepared to discuss our proposed agenda and structure; and indicate which issues your agency would like to participate in, and who will represent your agency on those issues.

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## PRESIDENT'S BUDGET ON NATIONAL INFORMATION INFRASTRUCTURE

| <u>Previous Program</u> |                 | <u>New Components from President's Budget &amp; Technology Reports</u> |                       |     | <u>Other Components</u> |                   |
|-------------------------|-----------------|------------------------------------------------------------------------|-----------------------|-----|-------------------------|-------------------|
| 1.                      | 2.              | 3.                                                                     | 4.                    | 5.  | 6.                      | 7.                |
| HPCCI                   | Gore II<br>OSTP | NTIA<br>Dept. of<br>Commerce                                           | N.E.C.<br>Interagency | FCC | Fed<br>Labs             | Private<br>Sector |

### Overall Issues:

1. Management--Who's in Charge?
2. N.I.I. Research
3. Private and Public Input
4. Policy Agenda

PRESTON  
GATES ELLIS  
& ROUVELAS  
MEEDS

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93 APR 13 02:01

DATE: April 5, 1993  
FROM: Ken Kay  
TO: John Podesta

The attached are the materials the  
Council on Competitiveness gave to  
Gibbons.

Attachment

## RECOMMENDATION

- **CREATE A PRIVATE SECTOR TECHNOLOGY ADVISORY COMMITTEE TO PROVIDE ON-GOING INFORMATION AND ADVICE TO THE PRESIDENT ON THE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF TECHNOLOGY POLICIES NECESSARY TO STRENGTHEN U.S. COMPETITIVENESS. THE ADVISORY COMMITTEE WILL BE CHAIRED BY THE VICE PRESIDENT AND HAVE THE AUTHORITY TO ORGANIZE PANELS TO ADDRESS SPECIFIC ISSUES.**

**PROBLEMS WITH THE  
CURRENT PROCESS FOR PRIVATE SECTOR-GOVERNMENT  
INTERACTION ON TECHNOLOGY ISSUES**

- **LACK OF A FOCAL POINT FOR PRIVATE SECTOR INPUT** - THERE IS NO PRIMARY FORUM FOR PRIVATE SECTOR INPUT INTO GOVERNMENT TECHNOLOGY POLICY AFFECTING U.S. COMPETITIVENESS. THERE ARE 308 DISPARATE SCIENCE AND TECHNOLOGY ADVISORY COMMITTEES (GSA 19TH ANNUAL REPORT ON FEDERAL ADVISORY COMMITTEES). AS A RESULT, THERE IS A TENDENCY TO FOCUS ON TACTICAL RATHER THAN STRATEGIC ISSUES. THIS CREATES VARYING DEGREES OF AUTHORITY AND AN AD HOC APPROACH.
- **CONFLICT OF INTEREST RULES** - THE INTENT OF THESE RULES IS TO PREVENT PRIVATE GAIN FROM GOVERNMENT DECISIONS. IN ORDER TO OBTAIN THE NECESSARY PRIVATE SECTOR EXPERTISE ON INDUSTRIAL TECHNOLOGY ISSUES, HOWEVER, IT IS ESSENTIAL TO HAVE REPRESENTATIVES OF ACADEMIA, INDUSTRY, AND LABOR WHO ARE NOT CLASSIFIED AS SPECIAL GOVERNMENT EMPLOYEES AND ARE EXEMPT FROM CONFLICT OF INTEREST RULES. THE USTR HAS ALREADY ESTABLISHED A PRECEDENT BY PROVIDING EXEMPTIONS FOR MEMBERS OF THE ADVISORY COMMITTEE ON TRADE POLICY AND NEGOTIATIONS (ACTPN).
- **FEDERAL ADVISORY COMMITTEE ACT (FACA) RULES** - THE INTENT OF THESE RULES IS TO ENSURE OPEN DEBATE. BUT CLOSED MEETINGS ON SELECTED CRITICAL COMPETITIVENESS ISSUES MAY BE REQUIRED BECAUSE OF THE SENSITIVITY OF THE INFORMATION. THEREFORE, LEGISLATION MAY BE DESIRABLE TO PROVIDE STATUTORY EXEMPTION FROM SECTIONS 10a, 10b AND 11 OF FACA, AS THE 1988 TRADE ACT PROVIDED EXEMPTIONS FOR ACTPN.

- PCAST EXCLUDED FULL PARTICIPATION OF PRIVATE SECTOR EXPERTS ON HPCCI PANEL BECAUSE OF CONFLICT OF INTEREST RULES. THE PRIVATE SECTOR EXPERTS WERE NOT GIVEN THE OPTION FREQUENTLY USED BY OTHER AGENCIES TO BE CONSIDERED INDUSTRY REPRESENTATIVES.
- THE OPERATING COMMITTEE OF THE CRITICAL TECHNOLOGIES INSTITUTE DOES NOT INCLUDE PRIVATE SECTOR REPRESENTATIVES.
- THE MANUFACTURING FORUM CEASED OPERATIONS BECAUSE OF THE LACK OF PARTICIPATION OF GOVERNMENT OFFICIALS.
- NACS RECOMMENDATIONS HAD MINIMUM RESPONSE FROM THE GOVERNMENT.

## **CHARACTERISTICS OF THE PROPOSED TECHNOLOGY ADVISORY COMMITTEE**

- **THE PROPOSED COMMITTEE WILL SERVE AS A FOCAL POINT FOR PRIVATE SECTOR ADVICE AND COUNSEL TO THE PRESIDENT FOR THE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF U.S. TECHNOLOGY POLICY RELATED TO ECONOMIC COMPETITIVENESS. POTENTIAL TOPICS FOR DISCUSSION INCLUDE THE FOLLOWING:**
  - Federal R&D budget objectives and funding levels
  - Structure of new government technology programs to strengthen industrial competitiveness
  - Implementation of cross-cuts
  - Technology transfer and funding of the federal labs
  - Linkages between federal, state, and industry technology programs
  - Review of Critical Technologies Institute reports
  - U.S. role in international technology programs
- **THE COMMITTEE WILL BE CLOSELY LINKED TO THE NATIONAL ECONOMIC COUNCIL (NEC) AND THE FEDERAL COORDINATING COMMITTEE ON SCIENCE, ENGINEERING AND TECHNOLOGY (FCCSET).**
- **THE COMMITTEE WILL HAVE AN APPROPRIATE BALANCE OF REPRESENTATIVES OF INDUSTRY, LABOR AND ACADEMIA. THE GOAL IS TO OBTAIN A BALANCE AMONG SECTORS, PRODUCT LINES, SMALL, MEDIUM AND LARGE ENTITIES, GEOGRAPHIC AREAS AND DEMOGRAPHIC GROUPS (TO AVOID WINNERS/LOSERS SYNDROME AND SPECIAL-INTEREST GROUPS).**

- MEMBERSHIP WILL CONSIST OF 30-40 CEO-LEVEL REPRESENTATIVES OF ACADEMIA, LABOR AND INDUSTRY WITH RECOGNIZED EXPERTISE AND EXPERIENCE IN THEIR FIELDS.
- MEMBERS OF THE COMMITTEE SHALL BE APPOINTED BY THE PRESIDENT UPON THE RECOMMENDATION OF THE VICE PRESIDENT, WHO SHALL CONSULT WITH INTERESTED ORGANIZATIONS AND OBTAIN NOMINATIONS OF INDIVIDUALS TO REPRESENT THE VIEWS OF INDUSTRY, LABOR AND THE ACADEMIC COMMUNITY.
- THE VICE PRESIDENT WILL SERVE AS THE CO-CHAIRMAN FOR THE ADVISORY COMMITTEE. THE OTHER CO-CHAIRMAN WILL BE ELECTED FROM AMONG THE PRIVATE SECTOR MEMBERS.
- ALL MEMBERS WILL BE REPRESENTATIVES OF ACADEMIA, INDUSTRY OR LABOR. THUS THEY ARE NOT SPECIAL GOVERNMENT EMPLOYEES AND WILL NOT BE SUBJECT TO CONFLICT OF INTEREST RULES (AS USTR DESIGNATES MEMBERS OF ACTPN).
- THE VICE PRESIDENT WILL HAVE THE AUTHORITY TO CLOSE MEETINGS THAT DEAL WITH SENSITIVE ISSUES ON INTERNATIONAL COMPETITIVENESS, INTERNATIONAL NEGOTIATING OBJECTIVES, AND BARGAINING POSITIONS. THESE MEETINGS WILL BE EXEMPT FROM THE OPEN MEETINGS SECTION OF FACA AND THE GOVERNMENT IN THE SUNSHINE ACT AND ALSO FROM THE DOCUMENT PRODUCTION PROVISIONS OF FACA AND FOIA BECAUSE OF THE SENSITIVE NATURE OF DISCUSSIONS ABOUT CRITICAL TECHNOLOGY COMPETITIVENESS ISSUES.

- THE ADVISORY COMMITTEE WILL HAVE THE AUTHORITY TO ORGANIZE PANELS TO FACILITATE WORKING-LEVEL ACTIVITIES TO SUPPLEMENT THE CEO-LEVEL POLICY DISCUSSIONS. THE PANELS SHALL HAVE CLOSE LINKAGE TO NEC AND FCCSET WORKING GROUPS AND THE SAME FLEXIBILITY TO CLOSE MEETINGS (FACA EXEMPTION) AS THE FULL COMMITTEE, AS DETERMINED BY THE VICE PRESIDENT. THE PANEL MEMBERS SHALL BE REPRESENTATIVES OF ACADEMIA, INDUSTRY AND LABOR. THUS THEY ARE NOT SPECIAL GOVERNMENT EMPLOYEES AND ARE EXEMPT FROM CONFLICT OF INTEREST RULES.
- AN ANNUAL REPORT WILL BE PREPARED BY THE COMMITTEE FOR THE PRESIDENT AND SHALL REQUIRE A RESPONSE FROM THE EXECUTIVE OFFICE OF THE PRESIDENT.
- THE EXECUTIVE OFFICE SHALL PROVIDE STAFF SUPPORT AND RELATED FUNDING.
- MEMBERS WILL NOT BE COMPENSATED FOR THEIR SERVICES OR REIMBURSED FOR THEIR TRAVEL EXPENSES.
- ALL NOMINEES MUST BE U.S. CITIZENS AND REPRESENT U.S. ENTITIES (AN ENTITY IS CONSIDERED TO BE NON-U.S. IF 50 PERCENT PLUS ONE SHARE OF THE STOCK IS CONTROLLED BY NON-U.S. CITIZENS OR NON-U.S. ORGANIZATIONS OR INTERESTS).
- ANY INTERESTED U.S. CITIZEN OR U.S. ENTITY MAY NOMINATE AN INDIVIDUAL FOR MEMBERSHIP ON THE COMMITTEE.
- APPOINTMENTS SHALL BE MADE WITHOUT REGARD TO POLITICAL AFFILIATION.

- MEMBERS ARE APPOINTED FOR TWO-YEAR TERMS AND MAY BE RE-APPOINTED FOR A MAXIMUM OF TWO ADDITIONAL TERMS.
- MEETINGS CAN BE CALLED BY EITHER OF THE CO-CHAIRMEN OR BY 2/3 VOTE OF THE MEMBERSHIP.