COALITION FOR NETWORKED INFORMATION

To Advance Scholarship
and Intellectual Productivity

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SPRING 1993 TASK FORCE MEETING
SUMMARY REPORT

INTRODUCTION

The Spring 1993 Meeting of the Coalition for Networked Information Task Force took place on March 22 and 23 at the Sheraton Palace Hotel in San Francisco, California, and was attended by 330 individuals representing two-thirds of the 180 Task Force member institutions. The theme of the meeting was "Big Ideas that Make a Difference."

MEETING THEME

Richard P. West, Associate Vice President, University of California, Office of the President, and chair of the Coalition Steering Committee, opened the Meeting and related its theme to the hope that the new Clinton / Gore Administration will pay very high-level and sustained attention to networks and networked information. He indicated that discussions along this line since the Fall 1992 Task Force Meeting came to focus on three specific big ideas that make a difference by which to frame the development of the Spring 1993 Meeting program:

- Networks and networked information allow information to be made available to anyone, anywhere, anytime, and in any format;

- Networks and networked information offer an opportunity to improve the operation of government through broad diffusion of public information; and,

- Networks and networked information force an examination of the critical relationship between information, democracy, and technology.

Mr. West emphasized that the networked research and education community needs to take immediate action to realize the potential for progress that exists in the situation represented by this new Administration, and called particular attention to the technology initiatives, including measures pertaining to "information superhighways," that were proposed by the Administration on February 22 in *Technology for America's Growth: A New Direction to Build Economic Strength.*

NREN / NII POLICY DEVELOPMENTS AND ISSUES

Four views on key developments, issues, position, and priorities in the National Research and Education Network / National Information Infrastructure (NREN / NII) public policy process were represented in the opening panel.

Jane Caviness, Deputy Director, Division for Networking and Communications Research and Infrastructure, National Science Foundation (NSF), began with an overview of the upcoming, transitional phase in NSF's

involvement in the evolution of high performance networks. NSF's program has funded initiatives in four categories: national and international services, including the provision of the NSF backbone network, information services, and international connections; assisting mid-level networks to develop a stable environment; the Connections Program to assist new users to connect to the network; and, research initiatives such as the "knowbot" project. As NSF nears the scheduled end of its existing cooperative agreement with Merit Network, Inc., thinking has turned to how to re-architect the network. Caviness related that while the new solicitation for the network is not yet out, she can report that NSF still perceives the same needs: supporting the "bleeding edge;" providing a national routing authority; providing a set of network access points; and, assisting with inter-regional traffic. In addition, support for the mid-levels will continue, but funding will be directed for their providing better services, with a push for all mid-levels to become self-supporting. NSF continues to be committed to the Connections Program, and they are seeking funding for pilot projects to new communities. She closed by stating that NSF will continue to work towards a network for research and education and asked for the support of the Coalition and its members in this transition phase.

Nancy Cline, Dean, University Libraries, Pennsylvania State University, was next on the panel and she represented the perspective of the Association of Research Libraries (ARL) on the future direction of NREN / NII initiatives. She began by remarking that the diversity of views on the panel represented the diversity of the Coalition, which is one of CNI's strengths. She commented that the Coalition provides a unique opportunity to find new solutions, through cross-profession dialogue and collaboration, to the problems that we encounter in the networked information environment. Cline's presentation underscored the set of rights that librarians have championed and that are integral to higher education and the U.S. form of government: freedom of access to information; equitable access; privacy regarding what information is sought, received, and managed; and, freedom to exchange ideas. She then elaborated on the directions that ARL sees as high priority for the development of networks and networked information: providing sophisticated user services; developing new technologies for searching for information on the networks; demonstrating the benefits of the networks; and, evaluating the capacity of the networks to disseminate various types of resources. ARL is specifically interested in federally supported demonstration centers, increased attention and support for federal agency dissemination of information via the network, and increased support for training and development of navigational skills for librarians and users.

Jane Ryland, President, CAUSE, was the third speaker and she represented the interests of her association as achieving a "full seat at the table for administrative use of the networks." CAUSE members are administrators, who benefit from the use of networking in communication, keeping current, accessing professional resources, and sharing equipment. In the development of network policy, Ryland noted that CAUSE takes special interest in: networks for all levels of higher education (not just universities); use of the networks for management, not just research and education; and, access to networks by all types of organizations and institutions, including commercial organizations. Ryland also described statistics that her organization has compiled which show that only 60% of CAUSE members have network access, and she voiced strong support for the NSF Connections Program.

In a ringing conclusion to the presentations of the opening panel, Douglas van Houweling, Vice Provost for Information Technology, University of Michigan and chair of the Policy Committee of EDUCOM's National Telecommunications Task Force (NTTF), began by stating that the explosive use of networks is a matter of record, and the "bottom line" is that the networking community has extraordinary prospects. He feels that the NSF re-examination of its role is a sign that we are in a period of major transition. He reminded the audience that while only six years ago, development of high performance networks was considered a high risk effort with little chance of success, today we have an unanticipated success that has resulted in creating new markets and new businesses.

Dr. van Houweling continued by noting that the new Administration has put forward a five-point program for networking, which includes full implementation of the High-Performance Computing Act of 1991, creation of a task force and a program on the national information infrastructure, funding projects for schools and libraries, and promoting the dissemination of federal information. He commented that the Administration's proposal positions many of these initiatives in the economic, not scientific, side of government, and that the funds being discussed dwarf previous NSF funding for networking. He remarked that at the same time, NSF is moving to end central federal funding of networking. These developments clearly add up to a major sea change in how the community views the network. Van Houweling voiced concern that the areas of the federal government that are concerned with economic policy and progress, such as the Department of Commerce, have no record of understanding higher education needs, and that support for network projects via the reorganized DARPA will likely require higher education to seek funding for projects by forging partnerships with companies that serve national defense needs. As yet, he stated that no clear national coordination for the development of the network is visible, and he noted that the Computer Systems Policy Project (CSPP) has pointed out similar concerns.

In closing, van Houweling pondered whether federal involvement in networking in the future would "follow the vision or follow the bottom line" and asked who will guard the public interest in an increasingly business-oriented network environment? He urged the audience to preserve higher education's role in the development of networks and to collaborate with partners in society who have similar interests. He stated that the Coalition's unique value is to focus on advancing uses of the network and to demonstrate the power of access via examples of how information makes a difference in how work is done.

ONE ARCHITECT'S EXPERIENCE WITH INFORMATION TECHNOLOGY

In a stimulating and entertaining after-dinner presentation, Phillip Bernstein, Associate, Cesar Pelli & Associates, explored the differences that information technologies and networks are making for architects and the projects they undertake. In Mr. Bernstein's practice, which includes the new terminal for National Airport in Washington, DC and a wide range of projects in countries around the world, he has come to depend increasingly on electronic transmission of data to coordinate the activities of the various teams and firms that work on executing a design that has been devised by members of his firm. Mr. Bernstein emphasized that, more and more, architecture requires this sort of integration of information from numerous sources with various perspectives, talents, and responsibilities who are located almost anywhere on the planet. He said that maintaining the integrity and accuracy of the plans and materials that constitute the architectural enterprise is the most significant area that is crying out for attention, and expressed his belief that the development of standards, and the will to use them, for the representation of architectural designs in electronic formats, so that those working on different aspects of the same project can exchange information that will be meaningful to each other, is clearly what needs to be done. Mr. Bernstein also wove anecdotes and comments about the various phases through which information technology, computer-aided design (CAD) technology in particular, has been adopted and used by his firm into his presentation to paint a refreshing and, for most if not all in the audience, rather familiar picture.

ACCESS TO AND DELIVERY OF PUBLIC INFORMATION

In the panel that opened the second day of the Meeting, moderator Charles McClure, Professor, School of Information Studies, Syracuse University, who is currently on sabbatical at the Coalition, described current key

issues pertaining to access to and delivery of federal information. He began by reviewing key passages of the Clinton / Gore document "Technology for Economic Growth," which demonstrates the new administration's keen interest in using networks for the dissemination of federal information. He noted that this represents a significant shift in policy, and that the Coalition and its members should take advantage of this propitious time. He also highlighted the National Competitiveness Act, the revision of Circular A-130, the reauthorization of the Paperwork Reduction Act, and the GPO Access bill as important contemporary federal initiatives.

The first panelist, Michael Eisenberg, Director, ERIC Clearinghouse on Information Resources, described the AskERIC pilot project, which includes a question answering service over the Internet, a library, and a gopher server. As a user-driven initiative, AskERIC's services have been developed as the project coordinators have discovered what users need. Out of 200-300 questions received by AskERIC each week, 80% are from K-12 classroom teachers; the gopher server, which includes access to topical database searches and "info guides," receives 3000 questions/week. Eisenberg feels strongly that librarians and individualized services for network users are essential, and pointed out that we need to rethink how we will finance and restructure services in the global, distributed digital library environment.

Ken Rogers, Director, Information Product Development, Office of Business Analysis, U.S. Department of Commerce, described the process by which his agency is preparing the data resources of the Economic Bulletin Board for access via the Internet. He noted that Commerce serves all types and levels of users, and he feels that agencies will migrate from media-driven services to information-driven ones. He projects that they will develop a repository where information is stored and where some support services will be provided, and that data will be delivered in a variety of media depending on user needs. He commented that government customers need better marketing, service, documentation, and demonstrated stability from network service providers.

Eliot Christian, Information Systems Division, U.S. Geological Survey, described the diverse needs of policy-makers, scientists, and others who work in the area of global change. He strongly supported the Z39.50 standard and WAIS, which facilitate the process of search and retrieval among many resources while remaining relatively neutral on how user interfaces are crafted and how information resource management is accomplished. As the number and type of resources on the Internet grow, there is an increasing need for navigational tools. He called for: more elaboration of WAIS in dealing with sources of various levels and types; selective dissemination of information, given the explosion of sources and traffic on the Internet; development of automated mechanisms for refining user profiles; and, enabling contributors of materials to provide documentation of their resources in some standard format or template.

Following the presentation of the views and efforts of these three panelists, Julia Wallace, Head of the Government Publications Library, University of Minnesota, discussed electronic information on the Internet from the vantage point of the federal depository libraries. She noted that government information is and will be one of the important components of the Internet / NREN and that depository libraries can play an important role in the transition to a networked environment. Wallace described a variety of characteristics of federal information, including its value as a public asset and its lack of copyright restrictions. She stated that the government has a responsibility for timely and equitable dissemination of information to its citizens and noted that network access may provide efficiencies in information dissemination for both federal agencies and libraries. She called for more coordination and development of an infrastructure for federal information in the electronic environment, development of user interfaces, including locators, training skilled information professionals, and developing policies and mechanisms for archiving federal information. She suggested that depository libraries could be used as pilot sites for projects and called on ARL libraries to assume special responsibility for networked federal information in this transition period.

THE CRITICAL RELATIONSHIP BETWEEN
INFORMATION, TECHNOLOGY, AND DEMOCRACY

In the closing plenary session, Evgeny Kuzmin, Director, Library Department, Ministry of Culture, Russia, discussed the important role that Russian libraries are playing in the development of democratic institutions. His presentation took place while a new crisis was unfolding in Russia, which made his remarks all the more timely. He described how libraries in Russia have reappraised their social function as an aftermath of recent political events. He reported that while the leaders of the Russian government have not yet recognized the key roles that libraries play as guarantors of democratic government and social stability and in keeping citizens informed, local leaders have made libraries, particularly automation of libraries, one of their primary tasks.

Scott Armstrong, Executive Director, Taxpayers Against Fraud, reported from the "front lines" on his role and that of other groups he has led, particularly the National Security Archive, in attempting to save the electronic records from the Reagan and Bush eras from destruction or restriction. He reminded the audience that a hallmark of democratic government is accountability to the people, which requires that citizens have complete and recurrent access to government information. He pointed out that information allows us the accountability in our system, and sometimes the accountability is the information itself. In closing, Armstrong applauded the stands taken by such groups as the Association of Research Libraries, the American Library Association, and the Coalition. Speaking of the Coalition, he said, "This is the group where the gigabyte meets the user, where democracy meets the information."

PROJECT BRIEFINGS AND SYNERGY SESSIONS

Attendees had the opportunity to talk in small group sessions with the four NREN / NII panelists, the four government information panelists, and, in addition, to attend project briefings and synergy sessions on a wide variety of topics: Carl Malamud, Founder, Internet Talk Radio, described his Internet "radio station;" Anne Kenney, Cornell University, provided an overview of the CLASS Project; Greg Anderson and Marilyn McMillan, MIT, conducted a discussion where they asked attendees to assist them in designing a cost/benefit assessment of MIT's Distributed Library Initiative; Willem Sholten, Columbia University School of Law described the JANUS Project; Kathryn Ellis, Library of Congress, reviewed the Library's special projects that are available via the Internet; Susan Calcari, General Atomics / CERFnet, and Richard Huber, AT&T Bell Laboratories, provided an overview of the InterNIC; Douglas Engelbart, Bootstrap Institute, provided his vision of "collective IQ" in organizations; Robert Ubell, of Robert Ubell Associates, provided a status report on the Rights for Electronic Access to and Delivery of Information (READI) Project; Ed Fox and John Eaton, Virginia Polytechnic, and Steve Worona, Cornell, and Dave Billick, UMI, provided an update on their respective efforts to use the Internet to improve access to and delivery of theses and dissertations; Curtis Hardyck, Director, Pacific Neighborhood Consortium, reported on the formation of that group; Don Waters, Yale University, gave an overview of Project Open Book; Stuart Lynn, Cornell, and Don Olson, Eastman Kodak, discussed their involvement in preservation and access using Photo CD; Chuck Henry, Vassar, and Paul Evan Peters, Coalition, led a discussion on NREN analogies and metaphors; David Lankes, Syracuse University, described the AskERIC Service and a federal information gopher server; and, Bruce Gritton, Monterey Bay Aquarium Research Institute, Jaia Barrett, ARL, and Carol Watts, NOAA discussed the proposed National Library for the Environment.

WORKING GROUP MEETINGS

Meetings of the Working Groups focused on issues and activities identified in the _Program Overview_, distributed to Meeting attendees and available from the Coalition office. Issues and projects discussed in each group are identified below.

- **Modernization of Scholarly Publishing.** Andrea Emold, The SoftAd Group demonstrated some computer-based, interactive advertising and the topic of advertising on the Internet was discussed.

- **Transformation of Scholarly Communication.** Avra Michelson, National Archives and Records Administration, gave a status report on archival programs on the Internet, and John Eaton, Virginia Polytechnic and State University, gave a status report on Coalition efforts to coordinate the start-up of various projects that seek to improve access to and delivery of theses and dissertations.

- **Architectures and Standards.** Ongoing and proposed projects were discussed, including the Z39.50 Interoperability Testbed, a standard for transmission of bitmapped image files, and protocols for handling networked requests for delivery of source materials.

- **Directories and Resource Information Services.** A progress report on the TopNode, a discussion on the InterNIC award, and a discussion of data formats for the representation of networked information resources were among the topics considered at this session.

- **Legislation, Codes, Policies, and Practices.** The group discussed plans to develop a policy statement on responsible network use. Judith Krug, American Library Association, Office of Intellectual Freedom, was the guest speaker. She reviewed existing policies related to information and suggested that we need to hook into such policies and apply them to the cyberspace environment. In addition, the group discussed plans to develop a kit (tentatively entitled _When the Net Hits the Fan_) for use in responding to press inquiries when problematic situations involving networks and network use arise in institutions and organizations.

- **Access to Public Information.** The group reviewed the Access to Public Information Program (APIP) proposal (described more fully in a section below) and broke into sub-groups to develop implementation strategies for the initiatives in the program.

- **Teaching and Learning.** An update and discussion of ongoing and proposed projects was held, including: a proposed conference to be held in 1994 on "creating learning communities;" the information packet for new network users; the scholarship program (described more fully in a section below) for a panel on exemplary uses of the network in teaching and learning at the EDUCOM 1993 Annual Conference; a project in collaboration with EDUCOM's Project Jericho that would develop a clearinghouse of resources available to help faculty use the Internet for teaching; a project in collaboration with EDUCOM's Project Jericho that would result in prototype workshop(s) that introduce faculty to networks and networked information resources and services; and, support for a workshop about how to make the best use of the Internet that is conducted on the Internet itself. In addition, the group discussed its charge, which has expanded to include user education.

- **Management and Professional Development.** An update and discussion of ongoing and proposed projects was held, including: development of a packet of information for use in formulating and addressing institutional

and organizational issues arising from the emergence of a national networked information infrastructure and environment; assisting and influencing regional accrediting associations in their efforts to review the ways in which they assess libraries and computing; assessment measures for comparing institutional excellence in networked information access, management, and delivery across the enterprise; workshops and other facilitating events and materials pertaining to the surfacing, managing, and leveraging of cultural differences between information technologists and librarians; and, use of the Internet as a vehicle for distance / distributed training for professionals concerned with information resource management.

ACCESS TO PUBLIC INFORMATION PROGRAM (APIP)

The Coalition announced a new program with the overall purpose of improving public access to networked government information via the Internet / NREN. The purpose of the program is to act as a catalyst to encourage experimentation, innovation, and pilot projects to increase access to and delivery of federal networked information. The program seeks to encourage partnerships among federal agencies, the education and library communities, the private sector, and other groups. The specific initiatives proposed are:

- envisioning the future of access to and delivery of networked federal information;

- improving GPO depository library connectivity to and programming of networked federal information;

- establishing a visiting program officer to work with federal agencies for networked public information;

- identifying and locating networked federal information resources;

- arranging for a modem service for remote access to Washington, DC area-based federal dial-up services;

- establishing a group to coordinate the making of existing electronic federal information available over the Internet; and,

- promoting education and providing information about access to and delivery of networked federal information.

A document that describes the rationale for and the elements of this program is available on the Coalition's ftp file server and from the Coalition's office; see last section.

EDUCOM '93 SCHOLARSHIP PROGRAM TO PROMOTE
NETWORKED TEACHING AND LEARNING

The Second Annual Call for Project Descriptions about how networked information resources and services are being used to improve teaching and learning was issued at the Task Force Meeting. The Call seeks to identify projects that use networking and networked information resources and services in the broadest possible ways to support and enhance teaching and learning. Descriptions of projects will be used: to develop a database that can be used to share information and experience; to promote awareness of existing efforts; to attract attention and mobilize resources; and, to plan for a program at the EDUCOM 1993 annual meeting in Cincinnati. Scholarships will be offered to those individuals chosen to make a presentation on their work. Project

descriptions should be sent to Susan Perry, co-leader of the Working Group on Teaching and Learning, by June 15, 1993 via gd.slp@forsythe.stanford.edu or through the Coalition office.

CONSOLIDATING THE FOUNDATION OF THE COALITION AND ITS PROGRAM

At the Town Meeting session attendees were provided with an opportunity to comment on the document *Consolidating the Foundation of the Coalition and its Program* which describes the mission, constituency, program strategy, governance, and communications strategy of the Coalition and its Task Force in the form each has come to assume as a result of the first three years in the life of the Coalition and its program. This document is providing the basis for a wide range of discussions about the shape that the Coalition and its program should assume from this point forward, discussions that will culminate in new motions regarding the Coalition's mandate that will be formulated, discussed, and passed by the boards of the Association of Research Libraries (ARL), CAUSE, and EDUCOM, the three associations that sponsor the Coalition, over the course of the summer. This document is available on the Coalition's ftp file server and from the Coalition's office; see last section.

CONCLUSION

The political landscape in which the Coalition strives to fulfill its vision is now much more favorable than it has been at any time in the life of the Coalition, perhaps as favorable as it will ever be during the entire life of the Coalition. Still, just because "friends" of the Coalition and what it seeks to accomplish can be found throughout the Clinton / Gore Administration does not mean that there is any less work that needs to be done; quite the contrary! Members of the Coalition and its Task Force need to make a special effort to populate this landscape with big ideas that make a difference and with projects that demonstrate the values and workings of those big ideas. The Spring 1993 Coalition Task Force Meeting was one part of that special effort.

ADDITIONAL INFORMATION

Additional information about the Spring 1993 Meeting and the various talks presented and documents distributed can be obtained on the Coalition ftp file server at ftp.cni.org in the directory /CNI/tf.meetings/1993a.spring or from:

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