SPRING 1991 MEETING OF THE TASK FORCE

SUMMARY REPORT

Note: This Meeting Summary may be used to provide information to other individuals in your organization or institution and may be used in local newsletters or reports. A more complete report of the Meeting is in preparation and will be distributed in the near future.

The Spring 1991 Meeting of the Coalition for Networked Information Task Force took place on March 18-20 in Washington, D.C. A total of **258 individuals attended the Meeting,** an approximately 25% increase over the level of attendance at the Fall 1990 Meeting of the Task Force and a greater than 100% increase over the level of attendance at the Organizational Meeting of the Task Force in May, 1990. A total of **134 institutions and organizations now belong to the Coalition.**

Lessons for the Governance and Structure of the NREN

John P. Witherspoon, The Center for Communications, San Diego State University, opened the conference with a vision presentation on the lessons for the proposed National Research and Education Network (NREN) from the founding of the Corporation for Public Broadcasting (CPB) and COMSAT. He noted that in both of the prior cases, the country turned to a Congressionally chartered corporation "when it was necessary to establish a structure to manage a new technology-based development that was perceived to have great importance although its implications were not well understood." These previous experiences are directly relevant to deliberations regarding the eventual structure and governance of the NREN.

Witherspoon also noted the similarities between the points made by the Partnership for the NREN in its January, 1991 statement of principles and those invoked at the establishment of COMSAT and CPB. The Partnership advanced as key for the establishment of the NREN: (1) creation of a federal, state and local networking partnership, with contributions from all levels; (2) education in its broadest sense complementing established research objectives as a reason for development of the NREN; (3) all involved constituencies of the NREN must have a voice in the development of network policy; and (4) all fifty states must be provided with high capacity and affordable access to the network.

Witherspoon was asked whether the creation of new, Congressionally authorized companies is a feasible notion in today's economic and political climate, and he answered that framing the establishment of the NREN as a type of public-private partnership would be a sensible as well as a politically expedient way to get this important but expensive initiative moving. He noted that:

"Today, as then, we need to pull together diverse interests in a common structure which all concerned can recognize as theirs; in which all concerned know that they have a stake and know that their voices will be heard. Today, as then, we need to build a structure that can leverage a crucial federal investment, so that the federal commitment and all the state, institutional, commercial, and other components of financing can be coordinated to build and develop the NREN that's needed and that will work for its users."

An Electronic Library System Scenario

In a second vision statement, **Marvin Sirbu,** Professor of Engineering and Public Policy and Chair of the Executive Committee of the Information Networking Institute, Carnegie Mellon University, described in both economic and information technology terms why he feels that the concept of a "distributed electronic library" can be realized. The goal of his research is to "develop a plan which demonstrates that an electronic library system (ELS) for scientific and technical journals is economically feasible, can be built with today's technology, and can provide high levels of service to users."

The cost model that Sirbu described assumed an ELS that completely replaces paper, that includes first-page costs, that utilizes a nation-wide system composed of three index and document brokers, and that accounts for declining costs of relevant technologies. It also took into account costs of hardware, storage, operations, networks, software packages,

maintenance contracts, software maintenance, and data production for an ELS containing 20 years of 5,000 journals accessed by four million users served by small, medium, and large libraries.

Among Sirbu's major conclusions were that the initial software development costs would require approximately $4.5 million, that ELS costs are dominated by first page costs and system operations, that storage is not a major concern and becomes less so with time, and that bitmaps are a reasonable way to store ELS pages. His key findings were that such a system would require only tens of dollars per user per month, would be usage insensitive, would be dominated by publisher costs, would be strongly affected by number of journals and size of library, and would compare well with current library budgets. He emphasized that success of this scenario is dependent on standards development and coordination relating to document storage formats, unique document identifiers, naming databases, billing systems, and protocol interfaces.

Information Services from the Users' Perspective
Charles R. McClure, Professor at the School of Information Studies, Syracuse University, discussed in the third and final vision statement the need for information professionals to develop academic information services from a user perspective. He remarked that "the technical problems and issues associated with the design and operation of the NREN may be easier to resolve than the organizational, social and behavioral ones." McClure emphasized that users want straightforward technology, "holistic assistance on accessing electronic information resources and obtaining the actual information in the desired format," and that they do not want someone to explain to them how or why it works, they just want the system to work. He emphasized, however, that developing educated users would be a key component of the success of networked information and encouraged the attendees to reconcile themselves and their constituencies to the need for training and retraining.

To illustrate these points McClure first presented a job description for a Coordinator for Electronic Information Resources Management as an example of the types of new professional roles that are needed in the electronic information environment. He then went on to describe the Beyond the Walls professional deveopment program, which brought together professional staff from Syracuse University library, academic computing, faculty, and regional networking communities. The day-long session included a keynote speaker, demonstrations of how to access networked information, and discussion group sessions. A package that will include a videotape of the program and suggestions for implementation on local campuses is currently being developed by McClure and his colleagues with assistance from the Coalition.

McClure concluded by challenging the attendees to develop a vision, define new professional roles and responsibilities, affect policymaking at all levels, and implement a strategic plan to become active participants in the electronic networked information environment.

Meeting Activities
Meeting participants also attended sessions of the **Coalition Working Groups** , participated in a **Town Meeting**, and convened or participated in **Synergy Sessions**. A Synergy Session convened by Karen Hunter, Peter Lyman, and Clifford Lynch captured the largest audience and generated the liveliest discussion. They reported on an invitational meeting convened by their Coalition Working Groups (Commercial Publishing, Non-Commercial Publishing, and Architectures and Standards) which brought together librarians, information technologists, economists, researchers, publishers, and other commercial representatives to discuss **an agenda for pricing information in the electronic networked environment**. Four models of electronic scholarly publishing were drafted at that meeting and attention has now turned to testing the viability of those models.

Grant to the Coalition of Internet Server Equipment
An announcement was made concerning the **grant of Internet server equipment by the Digital Equipment Corporation** to the Coalition. The server will be used to facilitate electronic communication among members and to mount reports, directories, and other products of Coalition activities. It was also announced that the Coalition is working with Carnegie Mellon University to apply the technology of Project Mercury to the Coalition's advanced electronic information handling requirements. Finally, it was announced that a LISTSERV has been established at the University of New Mexico to facilitate communication among individuals interested in directories and resource information services. Subscriptions to this **LISTSERV** can be entered by sending the message "SUB CNIDIR-L <first name last name>" to LISTSERV@UNMVM.

Resource Materials and Next Steps
A Resource Binder, detailing the first year of Coalition activities and including full-text of vision statements and summaries of the two prior meetings, was distributed to attendees and will be made available to all representatives of Task Force member institutions and organizations. A more detailed report on the Meeting and its outcomes is in preparation and will be distributed in the near future.

Work is now underway to prepare a coordinated plan of action and budget for FY92 which begins July 1, 1991. This plan of action and budget will be ready for distribution before the end of May.

April 10, 1991

EVALUATION TABULATION

SPRING 1991 MEETING OF THE TASK FORCE

Each shaded cell in the DISSATISFIED column is the sum of the cells falling between it and the corresponding cell in the NEUTRAL column

Each shaded cell in the SATISFIED column is the sum of the cells falling between it and the corresponding cell in the NEUTRAL column

EVENT EVALUATED	DISSATISFIED		EVENT EVALUATION NEUTRAL			SATISFIED		TOTAL RESPONSES
WITHERSPOON VISION PRESENTATION	0	0	2	11	10	11	21	55
	0.0%	0.0%	3.6%	20.0%	18.2%	20.0%	38.2%	
	3.6%	3.6%	3.6%	20.0%	18.2%	38.2%	76.4%	
SIRBU VISION PRESENTATION	0	1	6	8	8	8	22	53
	0.0%	1.9%	11.3%	15.1%	15.1%	15.1%	41.5%	
	13.2%	13.2%	11.3%	15.1%	15.1%	30.2%	71.7%	
WORKING GROUP SMALL GROUP DISCUSSIONS	3	2	3	7	11	14	14	54
	5.6%	3.7%	5.6%	13.0%	20.4%	25.9%	25.9%	
	14.8%	9.3%	5.6%	13.0%	20.4%	46.3%	72.2%	
MCCLURE VISION PRESENTATION	3	0	5	7	10	10	21	56
	5.4%	0.0%	8.9%	12.5%	17.9%	17.9%	37.5%	
	14.3%	8.9%	8.9%	12.5%	17.9%	35.7%	73.2%	
TOWN MEETING	0	2	7	20	13	6	5	53
	0.0%	3.8%	13.2%	37.7%	24.5%	11.3%	9.4%	
	17.0%	17.0%	13.2%	37.7%	24.5%	35.8%	45.3%	
SYNERGY SESSIONS (2 WAVES)	8	4	2	15	23	23	24	99
	8.1%	4.0%	2.0%	15.2%	23.2%	23.2%	24.2%	
	14.1%	6.1%	2.0%	15.2%	23.2%	46.5%	70.7%	
WORKING GROUP PLENARY SESSION	1	0	4	8	16	12	10	51
	2.0%	0.0%	7.8%	15.7%	31.4%	23.5%	19.6%	
	9.8%	7.8%	7.8%	15.7%	31.4%	54.9%	74.5%	
MIX OF TYPES OF SESSIONS	1	0	2	8	9	17	19	56
	1.8%	0.0%	3.6%	14.3%	16.1%	30.4%	33.9%	
	5.4%	3.6%	3.6%	14.3%	16.1%	46.4%	80.4%	
INFORMAL INTERACTIONS	0	0	0	4	7	15	32	58
	0.0%	0.0%	0.0%	6.9%	12.1%	25.9%	55.2%	
	0.0%	0.0%	0.0%	6.9%	12.1%	37.9%	93.1%	
LOGISTICS	0	0	1	1	7	17	28	54
	0.0%	0.0%	1.9%	1.9%	13.0%	31.5%	51.9%	
	1.9%	1.9%	1.9%	1.9%	13.0%	44.4%	96.3%	
GENERAL	0	0	1	2	9	26	18	56
	0.0%	0.0%	1.8%	3.6%	16.1%	46.4%	32.1%	
	1.8%	1.8%	1.8%	3.6%	16.1%	62.5%	94.6%	

April 25, 1991

WHAT WILL CONSTITUTE SUCCESS FOR THE COALITION IN THE EYES OF ITS FMEMBERS

1. What should the Coalition strive to accomplish?
   How should the Coalition accomplish it?

(12)Foster models, experiments, projects, big picture designs - (2) encourage prototypes in electronic publishing; (2) make visible exemplary "E" projects.

Matchmaking among developers and sources of funding, i.e. endorsement and support.
Active working groups - periodic full sessions with vision statements.
Get partners together and fund a wide pilot project to demonstrate the benefits of a very useful networked information resource.
Solicit funding and provide matching funds for projects which promote ease of use of the networks.
Narrow focus on a handful of specific problems/projects.
Build on the foundation it has established with this and other meetings. Solicit views for the concept and implementation of programs designed to meet some of the problems above.
Seve as meeting convenor/locus for discussion/publicity/locus for standards discussions.
Establish real experiments.
Get a project underway NOW.
Directories, newsletters, workshops.

(6) Promote broad-based use of networked information.

Include representatives of other constituencies, e.g. K-12, unions, journalists; don't isolate networked info issues from economic, political, cultural issues.
Provide grants to developers of catalogs, front ends, standardization, etc.
Give members information usable at home; support tests/trials of varying applications of networked information in teaching and research.
Continue on present course with ability to make adjustments in timely fashion.
Concentrate on ways to make network easy to use.
Publicize opportunities and obstacles involved with networked information to our campuses and their outreach groups. Get libraries, computing services, and faculty cooperating.
Sophisiticated lobbying, dealing with wide variety of "players," use of legislative networks already in place.

(6) The establishment of a system of governance and standards for the national network. (CNI as the voice of stakeholders); (Establishment of NREN); (Making sure to keep the "E" in it).

CNI needs to identify what amount of support staff is needed to accomplish the above and decide what will be done by 1) CNI staff; 2) parent organization staff; 3) members. Especially in areas of disseminating information and supplying support, CNI staffing may need to be increased.
Continue to build on present strategy.
Try to achieve consensus among librarians, computer people, publishers, and academic administrators - all should lobby.
Plan, develop statements.
Lobbying.
Continue current projects - keep institutions of higher ed involved and active - maintain contacts with other education agencies - fend off agency control.
Establish a theme for next meeting and examine topic from all angles.

(4)A clear agenda for the legislative and development activities of CNI.

Tell the members what's being done.
Send out specific instructions to members urging them to contact their Congressmen; provide critiques of the proposed legislation to members and Congress.
CNI members should "adopt" and educate their respective Congress person.
Pressure Working Groups to action. Continue frequent meetings.

(4) Help us identify the vision, the big picture.

Continue to develop vision statements; support development of templates and cookbooks we can use/adapt at home.
Keep a mix of views or visions; top notch keynote speakers that can engage and motivate the audience.
Encourage shared vision among members. Encourage active participation of members. A return to the carefully orchestrated face to face process of the first Task Force meeting in June would be welcome.

(3) Communication of what's underway in all areas of concern.
Provide current lists of projects, standards, legislation, etc. on the Internet.
More small, focused meetings - like Monterey - BUT with reports back to whole working groups or all of CNI.
Written and verbal communication with university administrators at national conferences and by campus visits.

(3) Develop educational programs which bring librarians and computing people to work more closely together; support cooperation between libraries and computer centers.

Speakers bureau, information packet, things like McClure's Beyond the Walls.
Support concrete projects that involve key members of both groups. Give examples of various ways in which institutions personnel structures work together, who do they report to, why they have succeeded. Stress cooperation at the institutional level.
These forums are a good start. Joint projects at local or regional levels need to move this forward.

(2) Facilitate/expedite standards development where lack of standards is really slowing progress.

Fund meetings of working groups for developing standards proposals which can move into the formal standards process. Meet more frequently.
Make available information on protocols proposed and in use; new developments.

(2) Continue being a physical meeting for all sorts of groups interested in networked info. Extend it to the electronic area when feasible.

Extend membership to database providers, group representing low-end users. Become an information provider to members and prospective members. Fund a directory project; provide guides for network services.
Involve as many as possible in reaching stated goals.

Continue to focus the library, computer, government, publishing, and other relevant sectors of society on the new environment of networked information and the issues that raises for society.

Communicate with all parties, identify issues, selectively address issues and offer models of solutions.

Stay focused on networking, access to it, technology, policy and procedural issues.

Avoid being dominated by library applications and issues. Schedule a Working Group plenary session before the break-out working sessions.

Set standards, be a clearinghouse, a motivating force in networked information.

Working groups are good; perhaps sub-groups to implement specifics. More small meetings like Monterey.

Representing users of the NREN to the providers.

More emphasis on working groups; share more studies like McClure's to many constituencies.

Set 5 realistic and concrete goals for short term and 5 for long erm action. After a year we need to start moving from process to results.

Make 1 of the 2 meetings a true working session.

Measurable results.

Probably the result of working group initiatives.

Include the discipline-specific societies among membership.

Is the fee structure a problem for them?

Begin to "publish" informative and educational papers.

Effectuating change to the students; involve deans and especially library school deans and directors.

Attend their meetings; tell them they need to provide manpower and talent to carry out this vision.

Name recognition.

Accomplishments - deliver some projects.

COMPUTER NOTES

- **ETS adopts plan to identify impostors who take test of English**
- **Coalition for Networked Information faces problems of success**
- **3 university teams cited in computer-programming contest**

This summer the Educational Testing Service will start using a new computer system to help reduce the number of impostors who take the Test of English as a Foreign Language at sites in other countries.

Many American colleges and universities require foreign students who apply for admission to take the language examination, called the TOEFL, which evaluates the proficiency of those whose native language is not English. For the last few years, the number of applicants who have sent stand-ins to take the test has been growing, according to Judy Boyle, who administers the TOEFL program.

Although the proportion of ringers is small, she says, "we are getting evidence that the practice is getting more and more prevalent."

Ms. Boyle says using stand-ins is easier with the TOEFL than with the Scholastic Aptitude Test and the Graduate Record Examination, other tests used for college admissions, because "people need only to know English. They don't have to have any academic background. Language is all that is tested."

At present, students submit a photograph when they take the test. If a college finds, after it has admitted a high-scoring student, that "he is not doing well because his English is so poor," says Ms. Boyle, the institution can request the photograph to verify the student's identity.

Under the new system, called image processing, students' pictures will be scanned into a computer, along with their signatures and passport numbers, and become a physical part of the report on their test scores that goes to the colleges.

By making verification easier, E.T.S. hopes to cut down on the number of impostors. The system is expected to process about 80,000 student reports from 170 foreign test sites each month.

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The Coalition for Networked Information is facing an unusual problem: At the end of its first year, it has too much money and too many members.

The group was established in March 1990 by three academic organizations with an interest in computing—the Association of Research Libraries, CAUSE, and EDUCOM. It was charged with finding ways to organize information and make it available to scholars on national computer networks.

The need for the coalition was greater than realized, said Richard P. West, chairman of the steering committee, at the coalition's first annual meeting last month.

"At the beginning, we hoped that 30 or 40 institutions would join us. We have 150 now," said Mr. West, who is associate vice-president for information systems and administrative services for the University of California System.

Because of the coalition's size—about 260 representatives from higher-education institutions and associations, libraries, and computer companies attended the annual meeting—"getting an expression of views" from all members is difficult, he said.

The coalition, which set the annual institutional membership fee at $5,000 last year, also has more money than it needs, said Mr. West. Rather than expand activities, he said, the steering committee plans to reduce the fee.

■

Teams of computer whizzes from three universities—two in the United States and one in Europe—took top place in the finals of this year's computer-programming contest at the annual meeting of the Association of Computing Machinery.

The 25 competing teams were asked to create computer programs to solve such real-life problems as routing fire trucks around closed streets, scheduling patients in and out of operating rooms, and creating new political districts.

The winners in the five-hour contest—teams from Stanford University, Virginia Polytechnic Institute and State University, and Vrije Universiteit in the Netherlands—solved the most problems with the fewest attempts in the least amount of time.

A.T.&T. Computer Systems sponsors the annual contest.

—BEVERLY T. WATKINS