

**COALITION FOR NETWORKED INFORMATION  
FALL 1997 MEETING OF THE TASK FORCE  
SUMMARY REPORT**

The Coalition for Networked Information's Fall Task Force meeting was held on October 26-27, 1997 in Minneapolis, Minnesota in conjunction with Educom '97. This report highlights the plenary speakers and key themes of the meeting.

*Intellectual Property, Policy and Networked Information*

Pamela Samuelson, who holds joint appointments in the School of Law and the School of Information Management and Systems at the University of California, Berkeley and is a recently named a MacArthur Fellow, has published in both law reviews and *Wired* magazine on information policy issues and is active in the Digital Futures Coalition. Samuelson discussed three sets of federal and international policy initiatives affecting intellectual property in the networked environment: HR2652, related to protection of databases; bills addressing the implementation of the 1996 World Intellectual Property Organization (WIPO) treaties; and, the UCC 2(b) -- provisions for a new model Uniform Commercial Code to govern transactions in networked information. Among the myriad policy issues that involve information, Samuelson chose to focus on these three since she feels that there has been no significant group action addressing the provisions of those policies other than from the rightsholders community.

Addressing the database protection bill, Samuelson described the fears of the commercial sector that their investment in compiling databases will be subject to market-destructive appropriation on the network. They are also concerned that reciprocity provisions of the European Commission (EC) directives will leave American products open to misappropriation unless strict new guidelines are written into US law. These provisions state that Europe won't protect another country's database contents unless that country has database protections similar to those of the EC in place; this directive goes into effect in January, 1998. While Samuelson stated that all sectors want adequate incentives to be available to database developers, she feels that the current bill before the US Congress is too protective of the interests of database compilers and may have many undesirable consequences. She feels that it is important to maintain the balance of interests between producers of information and the user community that exists in current copyright law.

Some versions of the legislation that is being developed to implement the WIPO treaties domestically include provisions on liability for service

providers. These bills would make service providers responsible for the users of their systems, e.g. students in universities. Samuelson pointed out that many administrators are concerned that in order for institutions to be responsible for their users, they would have to violate their users' free speech and privacy rights through monitoring of Internet transactions; additionally the scale of monitoring required would be both impractical and chilling. Anti-circumvention of copyright protection technology penalties that are included in some bills would be problematic for institutions that need to make preservation copies of electronic information; they address action rather than the intent of the action. In contrast, provisions of the Ashcroft bill, one generally favored by the user community, punishes circumvention only when it infringes copyright.

The Uniform Commercial Code (UCC) activity would set the standards for states to develop legislation regulating transactions in information on the network. These provisions are being drafted by a committee and will be taken to two law groups for endorsement prior to transmission to the states as models for adoption. The provisions of section 2(b) of the proposal which are currently being drafted would, among other things, validate shrink wrap or online click licenses. Two key issues raised by the proposals are the extent to which users' rights granted under copyright can be abrogated through the new "mass market" licenses, and the extent to which shrink wrap licenses might even be extended from software to books, CDs, or other information products.

Samuelson concluded by saying that some fundamental policy decisions are being made in Washington right now. The issues are highly specialized and technical but have great significance for how information will be available for access in the networked environment. She wants rules that promote prosperity, balance, and open systems. Samuelson urged the attendees to get involved in getting their views included in the framing of information policy. In particular, she encouraged attendees to support the work of the Digital Futures Coalition, in which she has been active and which gives voice to the user community. She asked rhetorically, "Why should we care?" She replied that while we all have busy lives, we need to address these issues and promote rules of balance. She stated that we've gotten beyond the industrial policy of "What's good for General Motors is good for the country," and now we need to get beyond the credo that what's good for Hollywood is good for the US. In concluding, Samuelson also made a brief but intriguing mention of her work in thinking, from first principles, about appropriate frameworks for protecting information in the digital environment, as opposed to reacting to legislative proposals.

### *Trends in Information and Communications Technology*

Robert Spinrad, Vice President for Technology Strategy at Xerox Corporation, described a two-part strategic planning process at Xerox, in which top

executives spend a significant amount of time establishing their "view of the world" and then decide what the company should do in that environment. They examine economic and geopolitical trends, technologies, products and services, customers, delivery channels, and competitors. They analyze a series of assumptions as the framework for the discussions among top management.

Spinrad reviewed some of the assumptions that Xerox has made in the recent past in several areas. For example, some of their assumptions related to networks and communication included:

- the network becomes the computer
- the Web will support a document-based marketplace
- organizations will work in fundamentally different ways both with one another and internally

He then described how the executives at Xerox analyzed the impact of those changes:

- information services would evolve into an information "bazaar"
- physical security/privacy control would give way to networked authorization, authentication, accounting, and privacy tools
- static text and images would be replaced by active, multimedia hypertext (a particularly significant development for a "document" company)

While many of these assumptions were familiar to CNI attendees, Spinrad also highlighted some imminent developments in networking which have received considerably less attention. In particular, he discussed the emergence of low-earth-orbit (LEO) and hybrid LEO/geosynchronous satellite constellations under development by organizations like Motorola/Iridium, Loral, and Teledesic which promise to create a high level of truly global interconnectivity while bypassing much of the current telecommunications infrastructure in developing nations. This will, in his view, have significant economic and geopolitical consequences.

In the area of document services, some of the assumptions that Xerox is making are:

- large repositories of network-linked hypertext documents will be used in and among many enterprises
- network-based services for document summarization, translation, notarization, format conversion and the like will be developed
- hypertext documents will be supported by sophisticated visualization tools for searching complex information spaces

Spinrad stated that early in the next century, software agents -- knowbots, intelligent filters, and expert systems -- will handle many information and document management tasks. He characterized this as a "sleeper" - this is where all the big money and big development is going. The systems being developed all work interactively with the user. Much work at the Xerox PARC research facility is on intelligent agents, and one of the products now being marketed by a PARC spin-off company enables the user to look at a space of documents and reports and understand the contextual space of a whole body of information. It enables the user to see clusters of documents, and without reading a title, the user can get a sense of the information space.

Spinrad also touched on Xerox's projections of hardware in the future. He stated that by the turn of century, individuals will be able to carry around in a very small device everything they have ever read or written in their life. This storage will be the user's personal "life file" and the rest of computing services will be commodity on the Web. Color flat panel displays, ranging from palm-sized to wall-sized will support most collaborative information-centric activities. Early in the next century, electric paper "displays" (thin, flexible sheets with dynamically alterable images) will become commercially available. The ability to make displays compact and with high-resolution approaching that of print on paper is imminent in the next decade. Spinrad's presentation was fascinating both in its insights into a successful process for planning in an era of rapid technology change and for the specific assumptions guiding Xerox's course. He left the audience eager for more detail about Xerox's planning assumptions.

### *CNI's Program*

Clifford Lynch outlined his plans for the Coalition during a plenary session and invited feedback on the CNI program from the Task Force representatives. The three themes of the CNI program are:

- developing networked information content
- transforming organizations, professions and individuals
- building technology, standards and infrastructure

In addition to ongoing CNI programs, Lynch described some new initiatives, including projects to define technology approaches, standards, best practices, and policy and business issues for authentication and authorization of networked information users. CNI will work closely with the Internet2 applications group and Educom's National Learning Infrastructure Initiative (NLII) to ensure that the requirements of digital information resources are well-represented in those efforts. A copy of the full program is available on CNI's website ([www.cni.org](http://www.cni.org)).

Lynch emphasized that CNI will continue the roles for which it has been valued by the community. CNI will be an incubator of ideas, a venue for bringing parties together, a forum for discussion, and a disseminator of ideas and information about the latest networked information technologies.

### *Project Briefings*

Project briefings included several groups of sessions which are closely connected to CNI's programmatic themes, as well as many updates on important projects. Sessions included reports from the CNI projects on *Assessing the Academic Networked Environment* and *Institution-Wide Information Strategies* (IWIS) and a discussion of the newly forming initiative on authentication. Other projects supported by CNI were also represented with sessions on digital dissertations, digital archiving, and the Dublin Core and other metadata issues. CNI has identified arts, humanities and cultural heritage communities as key opportunities for networked information to transform current practice. Meeting attendees had an opportunity to attend sessions sponsored by the National Initiative for a Networked Cultural Heritage (NINCH), the Computer Interchange of Museum Information (CIMI) program, and several sessions that discussed developments for using site licenses to make large amounts of image content available on a sustainable, community-wide basis: the MESL program, AMICO, and the Museum Digital Licensing Consortium (MDLC). Other notable sessions included those on the deployment of the government information locator service (GILS) and a discussion of a new Association of Research Libraries initiative on electronic scholarly publishing, SPARC. Materials from many of the project briefing sessions are included on the CNI website at [www.cni.org](http://www.cni.org).

### *Spring 1998 Meeting*

The Spring Meeting of the Task Force will be held in conjunction with Net '98 on April 14-15, 1998 at the Crystal Gateway Marriott in Arlington, Virginia, outside of Washington, DC.