The Amateur Computerist

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Editorial: From Public Internet to WSIS

[T]he effort at developing the Internet Protocols was international from the beginning. Vint Cerf*

The development of the Internet was international from its very beginning in 1973. Major contributions to that development came from the international research community with leadership, financial support and encouragement from the United States government. Because of the public nature of the networks that were connecting to become the Internet, there were acceptable use policies (AUP) that restricted any non public or commercial use. The result was that by 1990, an electronic commons was unfolding and becoming attractive as a new public communications media.

Just as the Internet was developing into this public commons, the

two major political parties in the U.S. were consolidating a mutual support for 'market economy.' That convergence manifested itself in meetings at Harvard and elsewhere to privatize and commercialize as much of U.S. society as possible: education, health care and the Internet. The U.S. government began its process to privatize the Internet at such a meeting in 1991. No public discussion or debate was encouraged. Evidence for the effort to change from the public Internet can be seen in the more or less closed mailing list which appeared called the comp-priv mailing list. In the discussion, only postings discussing how to privatization and commercialize the Internet were treated as appropriate. Any attempt to question whether to privatize and commercialize was unwelcome. Another example, U.S. Vice President Al Gore offered in a speech at the International Telecommunications Union (ITU) Buenos Aires meeting March 21, 1994 five principles from the National Information Infrastructure for a Global Information Infrastructure: "private investment, market-driven competition, flexible regulatory systems, non-discriminatory access, and universal service."

The method to achieve its end was for the U.S. National Science Foundation (NSF) to loosen its acceptable use policy. By 1995, on May 1, the U.S. government was ready to remove such restrictions and to transfer its real property that was part of the backbone of the NSFNET to private entities. This transfer took place even though it was in violation of the 1946 Government Corporation Control Act which forbids such transfer without an authorizing law passed by the Congress.

In Fall 1996, a number of groups including the Internet Society tried to develop a mechanism that could replace the U.S. government dominated process for the distribution of Internet names and numbers including control over the authoritative root name server. They called themselves the International Ad Hoc Committee (IAHC) and included participation by the International Telecommunications Union (ITU). The framework they sought to implement was called the generic Top-Level Domain Memorandum of Understanding (gTLD-MoU). In part their plan would have shifted the root server to Geneva and would have brought intergovernmental groups or at least the ITU into what was up until then exclusive U.S. government oversight of the infrastructure of the Internet. This activity drew the attention of the European Union

which felt it was still a U.S. dominated activity minus the direct hand of the U.S. government. The EU wanted a mechanism with more European Internet industry involvement.

The U.S. government responded by seeking a means to privatize the infrastructure of the Internet in such a way as to assert U.S. corporate (IBM, MCI, AT&T) dominance. It issued a Green and a White paper outlining the principle that the public Internet should be converted into a privatized commercial Internet. In these papers the Internet was changed from a communications network and was replaced by a commercial network. The mechanism to maintain U.S. corporate dominance while having the appearance of a broader purpose was the creation of a corporate-like board-dominated organization. It was called Internet Corporation for Assigned Names and Numbers (ICANN) and started to try to administer the crucial aspects of the infrastructure of the Internet after November 1998, incorporated under the charity laws of California.

ICANN began with a secretly chosen Interim Board of directors that was immediately in conflict with many sectors of the Internet industry and with users of the Internet. The secret Interim Board renamed itself the ICANN Initial Board and continued its controversial dominance of Internet governance despite its frequent run ins with country code administrators and other sectors of the broader Internet community. The U.S. government promised to give up control to ICANN but never did.

The question of what has come to be called "Internet Governance" (IG) for which ICANN seems to have failed to be the answer was still being debated at the preparatory meeting for the upcoming World Summit on Information Society which concluded on Sept 30, 2005 in Geneva. (See pages 2-3, this issue). The summit will be held November 16-18, 2005. One goal of the preparatory process was to create a proposal that countries could accept on how to further the spread and development of the Internet. The Geneva meeting did not succeed in solving the thorny problem of Internet Governance. But significant progress has been made clarifying that there is a problem that needs solution. The problem as described in one proposal (see pages 10-13, this issue) to the advisor to the U.S. President in 1998 stated "the governance issue must take into account the needs and desires of others

outside the United States to participate." Also, it must recognize the need to maintain "integrity in the Internet architecture including the management of IP addresses and the need for oversight of critical functions." Further critical needs for the protection for the Internet's infrastructure is described in the Preface to "The Internet an International Public Treasure," elsewhere in this issue.

In order to provide some perspective for how to approach this problem, we have created this issue of the *Amateur Computerist*, which is a collection, of articles that have appeared in earlier issues of the newsletter. We also include some of the articles and discussion which followed and critiqued the creation and operations of ICANN.

The Internet is an important international communications system. The need is for a model of governance consistent with the nature of the Internet as a communications system and its continuing development. This need has hardly been taken up in the process that has unfolded from 1998 until the World Summit on Information Society. We hope this issue helps to clarify some of the principles needed to further this process.

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* "How the Internet Came to Be" in *The Online User's Encyclopedia*, Bernard Aboba, Addison-Wesley, November 1993

Who Will Control Internet Infrastructure?*
At a recent U.N. preparatory meeting for the World Summit on Information Society, the dispute widens
by Ronda Hauben

Returning Internet Governance to the People

As the third preparatory meeting (Prepcom III) for the U.N.'s upcoming summit about the Internet and its infrastructure came to an end, a dispute erupted over whether the management of the Internet's

names, numbers and protocols should be controlled by one nation or by a multinational structure.

Brazil, China, India and several other countries insist on a change from the Internet Corporation for Assigned Names and Numbers (ICANN), the entity created by the U.S. government. The U.S. government insists on continued control of ICANN, which operates under the charity laws of California.

Many governments believe that this is not an appropriate entity to protect those who depend on the Internet for their economic, political and social needs around the world. The stage is set for a difficult round of negotiations to determine if an agreement can be reached to resolve this dispute in time for the 2nd World Summit on Information Society (WSIS) to be held by the U.N. in Tunis, Nov. 16 to Nov. 18.

A representative to the U.N.'s planning meeting for the Tunis Summit, Motlhatlhedi Motlhatlhedi, who is Botswana's deputy permanent secretary in the Ministry of Communications, Science and Technology, described how several developing countries support a multinational body to be in charge of the administration of the Internet's infrastructure, rather than only the U.S. government.

"The general feeling was for a change, as no single country should have control over the Internet," he said.[1]

Clarifying the nature of the dispute, the Brazilian Ambassador Antonio Porto explained how the Internet has become a critical part of the political and social life of his country: "Nowadays our voting system in Brazil is based on ICTs (Information and Communication Technologies), our tax collection system is based on ICTs, our public health system is based on ICTs. For us, the Internet is much more than entertainment, it is vital for our constituencies, for our parliament in Brazil, for our society in Brazil."

Given the nature of this critical resource for Brazil and other countries, Porto asks, "How can one country control the Internet?" [2]

The U.S. representative to the talks, Ambassador David Gross, who is with the U.S. State Department, maintained that the current management organization – ICANN – should not be changed. He stated that "the U.N. ought not to be running the Internet."

Gross' position is that there can be some flexibility in what ICANN

is doing, particularly with regard to the country code domain names like "KR" for Korea, or "US" for the United States, but that the current situation is desirable.

Pakistan's ambassador and chairman of the U.N. committee, Masood Khan, trying to develop an agreement on these issues, welcomed the U.S. stand. "The U.S. has taken a very clear position and has enunciated it and reiterated it both inside and outside the conference," he explained. "And that has helped the process because now everybody understands what the U.S. position is."[3]

Into this fray stepped the European Union. On Sept. 28, the EU introduced a proposal for a change in who oversees and who is in charge of the Internet's infrastructure. The EU position called for the creation of an international body, but outside of the U.N., to oversee ICANN. The EU also proposed the creation of a multinational entity to oversee and discuss issues related to Internet policy.

Under the proposal a cooperative entity would be formed from representatives of governments, the private sector (i.e. corporations), and civil society organizations (i.e. NGOs). Their proposal calls for the initiation of two new processes, at the international level.

The 3rd WSIS preparatory meeting for the Tunis Summit made a breakthrough in clarifying the nature of the problem of having one government exercise unilateral control over the administration of the infrastructure of the international Internet. As the UK/EU representative, David Hendon explained, ICANN is under "a contract from one government, and the government advises it what to do. It's kind of strange for governments to be advising a public sector body and for that body to be doing things for the whole world under the instruction of one government." [4]

While some progress has been made in understanding the nature of the problem, there is as yet no solution.

The history of the development of the Internet contains valuable lessons toward understanding how to create an appropriate entity to manage the Internet's infrastructure. This history helps to understand the models that made possible the successful development of the Internet as an international, public and inclusive communications system.

Also, online discussion and debate about the problems of the

Internet's development by active Netizens has played a critical role in the continuing development and spread of the Internet.[5]

While the WSIS process has made a good start at identifying a critical problem needing solution, it has not yet recognized the importance of building on the models and practices that have been developed in the evolution of the Internet itself toward helping to shape its future.

Notes

1. "Internet governance talks stall," Daily News Online, Sept. 29, 2005

2. Kieren McCarthy, "EU deal threatens end to U.S. dominance of Internet," *The Register*, Sept. 30, 2005, http://www.theregister.co.uk/2005/09/30/eu_deal_wsis/

3. Kieren McCarthy, "WSIS: Who gets to run the Internet? United Nations conference ponders net future," *The Register*, Sept. 28, 2005, http://www.theregister.co.uk/2005/09/28/wsis_geneva/

4. Kieren McCarthy, "EU outlines future net governance," *The Register*, Sept. 30, 2005, http://www.theregister.co.uk/2005/09/30/eu_net_governance/

5. See, for example, my proposal made to the U.S. government in 1998 before ICANN was created, "The Internet An International Public Treasure: A Proposal" (PDF), http://www.wgig.org/docs/Comment-Hauben-April.pdf (also, pp. 10-13 this issue)

*http://english.ohmynews.com/ArticleView/article_view.asp?no=251118&rel_no=1

The International Origins of the Internet and the Impact of this Framework on its Future*

by Ronda Hauben
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[Editor's note: The following is a talk given at Columbia University on Nov. 4, 2004.]

The research I have been doing for the past 12 years is about the origin, development and social impact of the Internet. I want to propose

that knowing something of the nature of the Internet, of its international origins and early vision and development can provide a useful perspective for looking at a process that is currently ongoing at the initiative of the United Nations.

I want to share some of my research about the original vision and the international origins of the Internet and the implications of this heritage on the Internet's future. Just now, over the past two or more years, and continuing through November, 2005, there is a ongoing United Nations initiative in which the world's governments are participating, along with NGO's and corporate entities. Yet this high level activity, as *Wired* reports, "has been largely ignored by those not participating in it." (Wendy Grossman, "Nations Plan for Net's Future," October 11, 2004)

This process is known as the World Summit on the Information Society (WSIS). After preparatory activities for almost two years, the first of two planned summits was held in Geneva, Switzerland in December 2003. Since that summit, a continuing series of meetings are scheduled to set the foundation for the second Summit which is planned to take place in Tunisia in November of 2005.

Heads of state of many nations, particularly developing nations came to the Geneva summit and spoke about the importance of the Internet to the people in their countries and to their present and future economic and social development and well being. The participants recognized that the Internet is an international network of networks, and that it has been built by a great deal of public and scientific effort and funding. The disagreement arises over the nature of the present and future management structure and processes for the governance of the Internet.

In 1998 the U.S. government, which had previously overseen the Internet's infrastructure managed as a non commercial, scientific and educational medium, made a decision to begin to transition it to a private sector entity which is called the Internet Corporation for Assigned Names and Numbers (ICANN).

In the WSIS process there has been a lot of contention over the form and processes of ICANN. The concern is that ICANN was constructed as a business and technical creation and that this process marginalized governments.

Another way of describing this disagreement is that there is a contest about whether the development and management of the Internet and its infrastructure should be left to the market to determine or set by the policies of governments.

Concern is being raised about what are the issues pertaining to Internet governance. Stimulating the spread of the Internet and who has access is one such issue. Others include safeguarding the Internet's integrity, oversight of the distribution of Internet addresses and domain names, determining the nature of the public interest and how to protect that interest, etc.
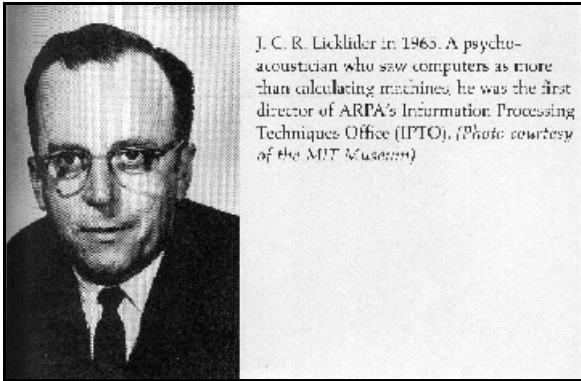
At the core of this dispute is the question of what kinds of policy decisions need to be made about the Internet and determining the process by which they will be made.

The WSIS meetings include those who it is claimed have an interest in questions of Internet governance. These are called the "Stakeholders" and thus far include representatives from:

> governments
> civil society (NGOs)
> private sector

Others are sometimes mentioned, such as the scientific community, or the academic community.

In looking back at the origins of the Internet, I feel it is helpful to start with the vision of J. C. R. Licklider, a psychologist, who was invited to begin a research office within the U.S. Department of Defense in Oct 1962. Licklider called the office the Information Processing Techniques Office (IPTO).

J. C. R. Licklider in 1963. A psycho-acoustician who saw computers as more than calculating machines, he was the first director of ARPA's Information Processing Techniques Office (IPTO). (Photo courtesy of the MIT Museum)

Licklider was an experimental psychologist who had studied the brain. For his PhD thesis he did pioneering work mapping where sound is perceived in the brain of the cat. Licklider was also excited about the development of the computer and of its potential to further scientific research.

He was particularly interested in the potential of the computer as a communication device. He saw it as a means of helping to create a community of researchers and of making it possible to strengthen the education available to the whole society through access to the ever expanding world of information. He envisioned that increased social contact would become available via the computer and computer networks.

Licklider created a community of researchers that he called the Intergalactic Network. He had in mind a network of networks. Though it was too early to create such a network when he began at IPTO in 1962, he set a foundation that inspired the researchers that followed him. He returned briefly to head the IPTO from 1974-75 just at the time that the research on the Internet was being developed.

In a paper Licklider wrote with another researcher, Robert Taylor in 1968, Licklider outlined a vision for a network of networks. Licklider's vision was of the creation and development of a human-computer information utility. For this to develop and be beneficial, everyone would have to have access. The network of networks would be global. It wouldn't be just a collection of computers and of information that people could passively utilize. Rather his vision was of the creation

of an on-line community of people, where users would be active participants and contributors to the evolving network and to its development. To Licklider, it was critical that the evolving network be built interactively.

Also Licklider believed that there would be a need for the public to be involved in the considerations and decisions regarding network development. He recognized that there would be problems with pressure being put on government from other sectors of society and that active citizen participation would be needed to counter these pressures. Licklider, writes:

"…many public spirited individuals must study, model, discuss, analyze, argue, write, criticize, and work out each issue and each problem until they reach consensus or determine that none can be reached – at which point there may be occasion for voting."

Licklider believed that those interested in the development of the global network he was proposing, would have to be active in considering and determining its future. He also advocated that the future of politics would require that people have access to computers to be involved in the process of government. Licklider writes:

"Computer power to the people is essential to the realization of a future in which most citizens are informed about, and interested and involved in the process of government."

Licklider and other computer pioneers of the 1950s and 1960s were concerned with the public interest and how the computer and networking developments of the future would be maintained in the public interest. Licklider writes that it is important to not only seek to consider the public interest, but also to make it possible for the public to be involved in the decision making process:

"[Decisions] in the 'public interest' but also in the interest of giving the public itself the means to enter into the decision-making process that will shape their future."

Through the 1960s and into the early 1970s the IPTO pioneered new and important computer technology like the time-sharing of computers and then the creation of packet switching and the ARPAnet computer network. The research was written up in professional publications and widely distributed.

By the late 1960s and early 1970s it was recognized that there was widespread interest in developing computer networking in countries around the world. A conference was held in 1972 at the Hilton Hotel, in Washington DC from October 24-26. More than a thousand researchers from countries around the world attended and participated in the demonstration by U.S. researchers that packet switching technology was functional. The demonstration excited many of the researchers. Also, however, international participation was recognized as critical to the development of networking technology. "International participation is no mere adornment to the Conference," the organizers wrote. "It is a primary means towards achieving a diversity of interest and viewpoint."

At the conference, a group was formed of those working on networking developments in different countries. It was called the International Network Working Group (INWG).

The great interest worldwide in computer networking was stimulating, but also it presented a problem. To understand the nature of this problem, it is helpful to consider the fact that there were packet switching networks being developed in different countries. These included Cyclades in France, NPL in Great Britain, and ARPAnet in the U.S. These networks were different technically and were under the ownership and control of different political and administrative entities. Yet networking researchers realized the importance of making it possible for these networks to be able to interconnect, to be able to communicate with each other. This can be articulated as the Multiple Network Problem.

There was the recognition that no one of these different networks could become an international network. There would need to be some means found to make communication possible across the boundaries of different networks.

Collaboration among the researchers continued, with a number of meetings and exchanges about how it would be possible to design and create a means to support communication across the boundaries of these diverse networks.

At a meeting in Sept 1973 at the University of Sussex, in Brighton, England, two U.S. researchers, Bob Kahn and Vinton Cerf presented a draft of a paper proposing a philosophy and design to make it possible

to interconnect different networks. The basic principle was that the changes to make communication possible would not be required of the different networks, but of the packets of information that were traveling through the networks.

To have an idea of the concept they proposed it is helpful to look at a diagram to show what the design would make possible.

In the gateways, changes to the packets would be made to make it possible for them to go through the networks. Also the gateways would be used to route the packets.

The philosophy and design for an Internet was officially published in a paper over 30 years ago, in May 1974. The paper is titled "A Protocol for Packet Network Intercommunication" by Vinton Cerf and Robert Kahn with thanks to others including several from the international network research community for their contributions and discussion.
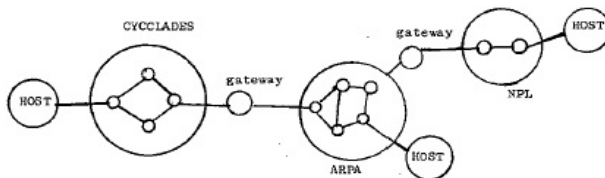
This diagram is from a memo by Vint Cerf, but it is not an actual plan for the Internet.

Describing the process of creating the TCP/IP protocol, Cerf explains that the effort at developing the Internet protocols was international from its very beginnings. Peter Kirstein, a British researcher at the University College London (UCL) presented a paper in Sept. 1975 at a workshop in Laxenburg, Austria, describing the international research process. This workshop was attended by an international group of researchers, including researchers from Eastern Europe. Kirstein reports on research to create the TCP/IP protocol being done by U.S. researchers, working with British researchers and Norwegian researchers. Above is the diagram that Kirstein presents showing the participation of U.S. researchers via the ARPAnet, along with British researchers working at the University College London (UCL) and Norwegian researchers working at NORSAR.

SATNET

Schematic of UCL configuration, July 1975.

Collaboration between the Norwegian, British and U.S. researchers continued, demonstrated by the research to create a satellite network, called SATNET. Later researchers from Italy and Germany became part of this work.

Describing this international collaboration, Bob Kahn writes:

"SATNET... was a broadcast satellite system. This is if you like an ETHERNET IN THE SKY with drops in Norway (actually routed via Sweden) and then the U.K., and later Germany and Italy."

Networking continued to develop in the 1980s. Among the networking efforts were those known as Usenet (uucp), CSnet, NSFnet, FIDONET, BITNET, Internet (TCP/IP), and others.

By the early 1990s TCP/IP became the protocol adopted by networks around the world.
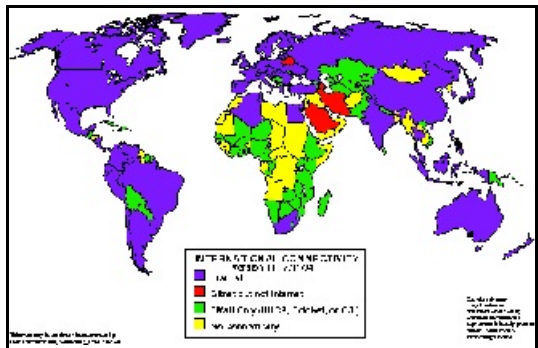
In this map you can see the areas of the world where TCP/IP networking was possible, the areas where there was access to BITNET but not the Internet and the areas there was only e-mail access via different networking possibilities like uucp, FIDONET or OSI (X.25), etc.
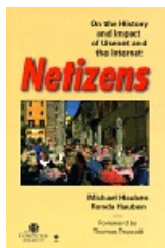
Netizens: On the History and Impact of Usenet and the Internet published by the IEEE Computer Society Press, 1997, ISBN 0-8186-7706-6

It is also in the early 1990s that my co-author of the book Netizens, Michael Hauben, did some pioneering on-line research as part of class projects in his studies at Columbia University. He explored where the networks could reach and what those who were on-line

felt was the potential and the problems of the developing Internet.

In the process he discovered that there were people on-line who were excited by the fact that they would participate in spreading the evolving network and contributing so that it would be a helpful communication medium for others around the world. Michael saw these users as citizens of the net or what at the time was referred to as net.citizens

Shortening the term to 'netizen,' he identified and documented the emergence of a new form of citizenship, a form of global citizenship that is called netizenship.

Describing these on-line citizens, the netizen Michael writes:

"They are people who understand that it takes effort and action on each and everyone's part to make the Net a regenerative and vibrant community and resource. Netizens are people who decide to devote time and effort into making the Net, this new part of our world, a better place." (Michael Hauben, 1995)

What are the implications of this background to the WSIS process? In October 1998, the U.S. government decided it needed to privatize the Internet's infrastructure. It created ICANN, the Internet Corporation for Assigned Names and Numbers. ICANN provided only minimal input for governments in an official way or for Internet users. There have been many problems with the structure and functioning of ICANN and lots of criticism.

The WSIS process led to holding a Summit in Geneva in December 2003. A number of heads of state attended. Issues raised included: Affordable access available to all, what would be the role for Governments in Internet governance? What would be the role for others in Internet governance?

In February 2004 a workshop was held to try to determine the components of Internet governance. At the workshop there was a proposal for netizens to be involved in Internet governance, recommending that netizen involvement would make it possible to counter the self interest of corporations who were part of the Internet governance process. The following diagram was submitted by Izumi Aizo of Japan. It still shows only a minimal role for governments but it introduces a role for netizens which is in line with Licklider's vision of the crucial nature of citizen participation in the network's development.

On-line, there is a forum involved with the WSIS process. But few people who are involved with WSIS seem to pay attention to it. However, a comment on the forum seemed quite relevant to the problems being raised. A contributor to the forum, Safaa Moussa was from Egypt. Moussa, too, echoed Licklider's concerns, writing that the crucial issues of Internet governance involve the issue of public access and the issue of how to widen the scope of public engagement in the decision making process.

In September 2004, a meeting was held in Geneva. Many contributions to that meeting seemed in line with the vision Licklider expressed to guide computer network development. But there was contention, also. Summarizing the conflict that has developed in the WSIS process, a representative of Egypt, H. E. Dr. Tarek Kamal, explains that there are two conflicting view points. One view is that Internet governance involves primarily technical and operative issues which can be best coordinated by technical groups and business organizations (this is the view of those in favor of ICANN). The other view pointed to by Dr. Kamal is that technical resource management and other policy matters concerning the Internet are social and public questions needing international and government participation.

At the September 2004 meeting, supporting this second viewpoint, a member of the Brazil delegation, Jose Marcos Nogueira Viana,

proposed the need to create an inter-governmental forum – a meeting place for governments to discuss Internet related issues. Also putting public interest into the debate, was Hans Falk Hoffman, a representative from the international scientific institution CERN. He described how the scientific community would continue to try to connect universities and therefore major cities to the global network with sufficient bandwidth at affordable prices. A representative from the Chinese delegation Madam Hu Quiheng, explained how:

"The Internet is a resplendent achievement of human civilization in the 20th century. And that government has to play the essential role in Internet governance...creating a favorable environment boosting Internet growth while protecting the public interests."

I want to propose that this activity as part of the WSIS process demonstrates the importance of understanding the fact that the Internet is international and that there is a demand for an international management process and structure.

Similarly, and perhaps even more important is the need to understand how to determine the public interest. In connection with this goal, I want to propose the need to seriously consider whether the goal of netizen empowerment is one of the important policy issues to be injected into the WSIS process. This would imply the need to provide means for the on-line community to be able to be active participants in the WSIS process. In the on-line forum on 09 September 2004, Safaa Moussa wrote:

"This on-line forum constitutes an important part of mobilizing efforts for the pursued effective outcome. But, in view of the wide-ranging aspects that Internet Governance covers, I believe it is duly important to make clearer the inclusion of on-line contributions into the decision-making process."

"On-line interaction and feedback need to be seen all along the decision-making and implementation processes."

"Another point I would like to underline is the creation of on-line working groups to help integrate and coordinate initiatives and efforts undertaken at national regional and international levels."

(Safaa Moussa's post can be seen at: http://www.wsis-online.net/igov-forum/forums/message-view?message_id=416031)

The Tunis Summit will take place in November 2005. Will it be able to meet the challenges of the continuing development and spread of the Internet? There are promising signs that the public and international essence of the Internet as envisioned by J. C. R. Licklider which were so important in the origin and development of the Internet are being taken up. But will there be a means of welcoming the on-line community, the community of netizens into the WSIS process? Will there be a convergence of netizen participation and defense of the public essence of the Internet strong enough for the results of the Tunis summit to be significant?

Tunis November 2005

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*[Reprinted from *Amateur Computerist* Vol. 12 no. 2,
http://umcc.ais.org/~jrh/acn/Back_Issues/Back_Issues[2003-2005]/ACn12-2.pdf]

IFWP 1998: No Consensus*

[Editor's note: For a few months in 1998 just preceding the invention of ICANN, a process took place of international meetings and mailing list discussions called the International Forum on the White Paper (IFWP). From its very beginning, the IFWP followed almost as little democratic procedure as did ICANN. The following is a report from the second international meeting of the IFWP process.]

The International Forum on the White Paper one and a half day meeting held after the INET conference ended was not a planned extension of INET98 but a last minute event. The U.S. government has had oversight and control of the domain name and root server systems that allow all users on the Internet to send messages and packets to each

other no matter where they are. This is achieved via a conversion of domain name addresses into numeric addresses. The U.S. government confirmed its intention in a White Paper issued June 5, 1998, to end this historic role on September 30 of this year. The White Paper presented by presidential advisor Ira Magaziner had as its purpose the formation of a new private entity to control and manage the root server and domain name systems which are the central control and nerve center of the Internet. The IFWP meeting in Geneva was organized to approve and help give international support and form to the new private organization. The method to achieve such support was to disallow any opposition to privatization. The sessions were chaired in such a way that all opposition and most discussion was discouraged and there were frequent calls for a consensus. Even when it appeared as many as half or more people were confused or openly opposed to proposed structures or powers of the new body the chairs often declared that consensus had been achieved and that the next issue was in order. Since the changes being proposed concern the future of the Internet, e.g., whether it would be the interconnection of different networks or of only networks adhering to commercial concerns about security, they require careful consideration and the hearing of points of view from across the Internet user spectrum. But the IFWP meeting was not set up to allow such democratic procedure. The meeting ended with the declaration by the organizers that a large degree of consensus had been achieved. Those who opposed or disagreed with the process or the purpose of privatization of the nerve center of the Internet left the meeting very frustrated. Another such meeting was planned by the IFWP for Singapore in mid August while other follow up meetings and activities were planned by other forces. The value of these IFWP meetings was that they have alerted a body of people to significant changes that are being planned for the Internet.

The Internet an International Public Treasure A Proposal

by Ronda Hauben
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Preface

In testimony before the Subcommittee on Basic Research of the Committee on Science of the U.S. Congress on March 31, 1998, Robert Kahn, co-inventor of TCP/IP, indicated the great responsibility that must be taken into account before the U.S. government changes the administrative oversight, ownership and control of essential aspects of the Internet that are part of what is known as the Domain Name System (DNS).

Kahn indicated that "the governance issue must take into account the needs and desires of others outside the United States to participate." His testimony also indicated a need to maintain "integrity in the Internet architecture including the management of IP addresses and the need for oversight of critical functions." He described how the Internet grew and flourished under U.S. government stewardship (before the privatization - I wish to add) because of two important components.

1) The U.S. government funded the necessary research.

2) It made sure the networking community had the responsibility for its operation, and insulated it to a very great extent from bureaucratic obstacles and commercial matters so it could evolve dynamically.

He also said that "The relevant U.S. government agencies should remain involved until a workable solution is found and, thereafter retain oversight of the process until and unless an appropriate international oversight mechanism can supplant it."

And Kahn recommended insulating the DNS functions which are

critical to the continued operation of the Internet so they could be operated "in such a way as to insulate them as much as possible from bureaucratic, commercial and political wrangling."

When I attended the meeting of the International Forum on the White Paper (IFWP) in Geneva in July, which was a meeting set up by the U.S. government to create the private organization to take over these essential DNS functions September 30, 1998, none of the concerns that Kahn raised at this Congressional hearing were indicated as concerns by those rushing to privatize these critical functions of the global Internet. I wrote a report which I circulated about the political and commercial pressures that were operating in the meeting to create the Names Council that I attended. (See *Amateur Computerist* Vol. 9 no. 1, "Report from the Front, Meeting in Geneva Rushes to Privatize the Internet DNS and Root Server Systems".)

But what is happening now with the privatization plan of the U.S. government involves privatization of the functions that coordinate the International aspects of the Internet and thus the U.S. government has a very special obligation to the technical and scientific community and to the U.S. public and the people of the world to be responsible in what it does.

I don't see that happening at present.

A few years ago I met one of the important pioneers of the development of time-sharing, which set the basis for the research creating the Internet. This pioneer, Fernando Corbató, suggested I real a book *Management and the Future of the Computer* which was edited by Martin Greenberger, another time-sharing pioneer. The book was the proceedings of a conference about the Future of the Computer held at MIT in 1961 to celebrate the centennial anniversary of MIT. The British author, Charles Percy Snow made the opening address at the meeting and he described the importance of how government decisions would be made about the future of the computer.

Snow cautioned that such decisions must involve people who understood the problems and the technology. And he also expressed the concern that if too small a number of people were involved in making important government decisions, the more likely it would be that serious errors of judgment would be made.

Too small a number of people are being involved in this important decision regarding the future of these strategic aspects of the Internet and too many of those who know what is happening and are participating either have conflicts of interest or other reasons why they are not able to consider the real problems and technological issues involved. (About the 1961 conference, see chapter 6 of Netizens at http://www.columbia.edu/~rh120)

What is happening with the process of the U.S. government privatization of the Domain Name System is exactly the kind of danger that C. P. Snow warned against.

I have been in contact with Ira Magaziner, senior advisor to the U.S. President on policy with these concerns and he asked me to write a proposal or find a way to put my concerns into some "operational form." The following draft proposal for comment is my beginning effort to respond to his request.

Proposal
Toward an International Public Administration of Essential Functions of the Internet – The Domain Name System

Ronda Hauben
ronda@panix.com

Recently, there has been a rush to find a way to change significant aspects of the Internet. The claim is that there is a controversy that must be resolved about what should be the future of the Domain Name System.

It is important to examine this claim and to try to figure out if there is any real problem with regard to the Domain Name System (DNS) that has to be solved.

The Internet is a scientific and technical achievement of great magnitude. Fundamental to its development was the discovery of a new way of looking at computer science.[1] The early developers of the ARPAnet, the progenitor of the Internet, viewed the computer as a

communication device rather than only as an arithmetic engine. This new view, which came from research conducted by those in academic computer science, made the building of the ARPAnet possible.[2] Any changes in the administration of key aspects of the Internet need to be guided by a scientific perspective and principles, not by political or commercial pressures. It is most important to keep in mind that scientific methods are open and cooperative.

Examining the development of the Internet, an essential problem that becomes evident is that the Internet has become international, but the systems that allow there to be an Internet are under the administration and control of one nation. These include control over the allocation of domain names, over the allocation of IP addresses, over the assignment of protocol numbers and services, as well as control over the root server system and the protocols and standards development process related to the Internet. These are currently under the control and administration of the U.S. government or contractors to it. Instead of the U.S. government offering a proposal to solve the problem of how to share the administration of the DNS, which includes central points of control of the Internet, it is supporting and encouraging the creation of a new private entity that will take over and control the Domain Name System. This private entity will magnify many thousands fold the commercial and political pressures and prevent solving the genuine problem of having an internationally shared protection and administration of the DNS, including the root server system, IP number allocations, Internet protocols, etc.

Giving these functions over to a private entity will make it possible for these functions to be changed and for the Internet to be broken up into competing root servers, etc. It is the DNS whose key characteristic is to make the internetwork of networks one Internet rather than competing networks with competing root server systems, etc.

What is needed is a way to protect the technology of the Internet from commercial and political pressures, so as to create a means of sharing administration of the key DNS functions and the root server system.

The private organization that the U.S. government is asking to be formed is the opposite of protecting the Internet. It is encouraging the

take over by a private, non-accountable corporate entity of the key Internet functions and of this international public resource.

In light of this situation, the following proposal is designed to establish a set of principles and recommendations on how to create an international cooperative collaboration to administer and protect these key functions of the Internet from commercial and political pressures. This proposal is to create a prototype for international cooperation and collaboration to control and support the administration of these key Internet functions.

I. The U.S. government is to create a research project or institute (which can be in conjunction with universities, appropriate research institutes, etc.). The goal of this project or institute is to sponsor and carry out the research to solve the problem of what should be the future of the DNS and its component parts including the root server system.

II. The U.S. is to invite the collaboration (including funding, setting up similar research projects, etc.) of any country or region interested in participating in this research. The researchers from the different nations or regions will work collaboratively.

III. The researchers will, as much as possible, utilize the Internet to carry out their work. Also they will develop and maintain a well publicized and reachable online means to support reporting and getting input into their work. They should explore Usenet newsgroups, mailing list and web site utilization, and where appropriate RFC's etc.

IV. With clearly set dates for completion, the collaborative international research group will under-take the following:

1) To identify and describe the functions of the DNS system that need to be maintained. (The RFC's or other documents, that will help in this, need to be gathered and references to them made available to those interested.)

2) To examine how the Internet and then how the DNS system and root server system are serving the diverse communities and users of the Internet, which include among others the scientific community, the education community, the librarians, the technical community, governments (National as well as local), the university community, the art and cultural communities, nonprofit organizations, the medical community, the business community, and most importantly the users whoever they

be, of the Internet.

3) To produce a proposal at the end of a specified finite period of time. The proposal should include:

a) an accurate history of how the Internet developed and how the Domain Name System developed and why.

b) a discussion of the vision for the future of the Internet that their proposal is part of. This should be based on input gathered from the users of the Internet, and from research of the history and development of the Internet.

c) a description of the role the Domain Name System plays in the administration and control of the Internet, how it is functioning, what problems have developed with it.

d) a proposal for its further administration, describing how the proposal will provide for the continuation of the functions and control hitherto provided by U.S. government agencies like NSF and DARPA. Also, problems for the further administrations should be clearly identified and proposals made for how to begin an open process for examining the problems and solving them.

e) a description of the problems and pressures that they see that can be a danger for the DNS administration. Also recommendations on how to protect the DNS administration from succumbing to those pressures. (For example from pressures that are political or commercial.) In the early days of Internet development in the U.S. there was an acceptable use policy (AUP) that protected the Internet and the scientific and technical community from the pressures from political and commercial entities. Also in the U.S., government funding of a sizeable number of people who were the computer science community also protected those people from commercial and political pressures.

f) a way for the proposal to be distributed widely online, and the public not online should also have a way to have access to it. It should be made available to people around the world who are part of or interested in the future development of the Internet. Perhaps help with such distribution can come from

international organizations like the ITU, from the Internet Society, the IETF, etc.

g) comment on what has been learned from the process of doing collaborative work to create the proposal. It should identify as much as possible the problems that developed in their collaborative efforts. Identifying the problems will help clarify what work has to be done to solve them.

h) It will be necessary to agree to some way to keep this group of researchers free from commercial and political pressures – government funding of the researchers is one possible way and maybe they can be working under an agreed upon Acceptable Use Policy for their work and funding.

This proposal is an effort to figure out what is a real way to solve the problem that is the essential problem in the future administration of the Internet. If the principles and prototype can be found to solve this problem, they will help to solve other problems of Internet administration and functioning as well.

Notes:

1. See Michael Hauben, "Behind the Net: The Untold Story of the ARPAnet and Computer Science," in *Netizens: On the History and Impact of Usenet and the Internet*, IEEE CS Press, 1997, p. 109. See also "Internet, nouvelle utopie humaniste?" by Bernard Lang, Pierre Weis and Veronique Viguie Donzeau-Gouge, *Le Monde*, September 26, 1997, as it describes how computer science is a new kind of science and not well understood by many. The authors write: "L'informatique est tout a la fois une science, une technologie et un ensemble d'outils…. Dans sa pratique actuelle, l'introduction de l'informatique a l'ecole, et malheureusement souvent a la'universite, est critiquable parce qu'elle entretient la confusion entre ces trois composantes."
2. Ibid.

The draft proposal "The Internet an International Public Treasure" is online in English and French at: http://www.columbia.edu/~ronda/other/

Submitted to the NTIA of the U.S. Department of Commerce.

Who Are the Stakeholders in the DNS Controversy Over
the Future of the Internet?*

On June 5, 1998 the U.S. government issued a White Paper elaborating its plans and position to fundamentally change the control and ownership over the Domain Name System (DNS) that is the nerve center of the Internet. The basic premise of the White Paper is that the DNS must be put into private hands.

Such changes are very important issues for the public of the U.S. and around the world to consider and discuss as the Internet, in the words of Judge Dalzell of the U.S. Federal District Court, is: "a far more speech enhancing medium than print, the village green or the mails."

In the court case of ACLU vs. Reno over the Communications Decency Act, the Federal Court Judges wrote that "The Internet is...a unique and wholly new medium of worldwide communication."

In his opinion in that case, Judge Dalzell goes on to direct the U.S. government saying, "We should also protect the autonomy that such a medium confers to ordinary people as well as media magnates."

Does the White Paper issued by the U.S. government undertake to protect the autonomy that the Internet confers to ordinary people? Will placing the DNS into private hands (most likely dominated by powerful corporate entities) be a way that the U.S. government can fulfill on its obligation to ordinary people?

...We include [on pages 14 to 23 in this issue] a discussion that occurred on the Netizens mailing list over what would be a position toward the plans of the U.S. government that would reflect the interests of Netizens, i.e. of those who contribute to the Net to help it grow and flourish as a means of global communication. This online discussion raises issues about the Framework that U.S. government advisors have

created to make the Internet into a Commercenet. Rather it should be creating a "Framework for the Net as a New Means of International Communication," that a government would be creating if it were to uphold its obligation to protect the autonomy of the ordinary people, as the U.S. Federal District Court mandated....

The rush to give the nerve center of the Internet, the DNS functions which include the root server over to some private interests, in a to-be-created organization which doesn't even have a public proposal for its founding 4 months before it is to get control of key Internet functions, is a very serious change of direction from the obligations that a government has to its citizens....

Given that the originating conception of the Internet was to be a Net of Networks and that no one network was to dominate others, it is imperative that these origins be discussed and understood and actions like that proposed by the U.S. government Green and White papers be widely discussed and challenged. Can any private sector organization even begin to protect the "autonomy of ordinary people" to have the ability to communicate globally? Isn't that is an obligation for governments which have a social obligation to their peoples?

We hope this special issue will serve to raise some of the important questions surrounding the plans by various groups and interests for the future of the Net. We don't want to be going backward to a single Net, to an ARPAnet, but this time one that is devoted to buying and selling and to commercial activities. Instead we want to go forward to the further development and flourishing of the Internet as "a unique and new means of worldwide communication." We hope this special issue will help to encourage the discussion and activities that will make this vision more and more a reality.

Netizen List DNS Discussion*

From: rh120@columbia.edu (Ronda Hauben)
Newsgroups: alt.society.netizens
Subject: [netz] Internet as Communications Medium – Need for Discussion
Date: 20 Mar 1998 11:07:07 -0500

I welcome comments and discussion on the following draft and on the issues it is raising.

Internet as a Communication Medium and How That is not Reflected in the Proposal to Restructure the DNS

There is currently a proposal by the U.S. govt. to change the way that Internet domain (site) names are given out, and thus to affect in an important way the future of the Internet.

The proposal is at:
http://www.ntia.doc.gov/ntiahome/domainname/domainname130.htm

March 23 is the end of the time that one can submit comments on it to the NTIA and comments up till then can be submitted electronically.

It is interesting to look at the Framework that Ira Magaziner, the advisor to the President, has created looking at the future of the Internet.

In the document called Framework, he fails to mention or consider that the Internet is an important new *communication* medium. Instead he substitutes the word *commerce* for *communication* and sets out a framework for making the Internet into an important new means of

commerce.

In two sentences at the beginning of his document he says that "the Internet empowers citizens and democratizes societies" and then he goes on and spends the next 24 pages describing changes that have to come about to make the Internet into an electronic marketplace for business.

Nowhere in the "Framework" does he discuss the fact that Netizens are those who come on line to contribute to the growth and the development of the Net. Instead Magaziner sees the Internet as "being driven... by the private sector."

If the "Framework" has *no* understanding of the ways that the Internet and Usenet contribute to and make possible new forms of *communication* between people, then there is no way that the proposal he has made for changing the DNS (domain name system), that assigns address and maintains the lookup tables, can help to facilitate the communication that is so important as the essence of the Internet. The Proposal "Improvement of Technical Management of Internet Names and Addresses: Proposed Rule" is listed in the February 20, 1988 Federal Register. (And one can make comments on it till March 23. It is also online at the NTIA web site.)

Instead of examining how this *communication* has been developed and why it is so important, Magaziner is rushing to replace the current system (which was also developed without any analysis of the importance of the communication aspects of the Internet) with a "privatized" new form.

In this "privatized" new form, he has proposed creating a "membership association" that will represent Internet users. So Internet users are not to represent themselves, but the U.S. government is proposing creating a rubber stamp organization to promote its attempt to change the Internet from a medium for human-to-human communication into something that only conceives of users as "customers" of unregulated advertisers and other forms of business.

This is hostile to the whole nature and development of the Internet. Magaziner claims that the "marketplace, not governments should determine technical standards." What he seems to have no knowledge of is how government support for a standards process that wouldn't be dominated by the most powerful corporations, is some of how helpful

standards have been developed. Instead Magaziner is trying to recast the standards development process to mirror the unhealthy situation that develops when the supposed "marketplace" is allowed to set standards.

Magaziner is proposing creating a supposed "not for profit" corporation to take over the domain name system functions currently being administered by IANA (the root system and the appropriate databases). This new corporation he proposes will have a board of directors which will be made up of 5 members who are commercial users. There are proposed two directors from "a membership association of regional number registries," two members designated by the Internet Architecture Board (IAB) and two members from an association he is proposing be created representing domain name registries and registrars, and 7 members from the membership organization he is creating. (Of which he says at least one of those board seats could be designated for an individual or entity engaged in non-commercial, not-for-profit use of the Internet, and one for individual end users. The remaining seats could be filled by commercial users, including trademark holders.) Thus he is basing his proposal on to-be-created associations that will not be based on the Internet, but created to provide for commercial control of the domain naming system.

The proposal is an effort to change the nature and character of the Internet from a means of communication to a means of "commerce." It is almost like claiming that the advertisers in a newspaper should have an organization that will assure their control of the newspaper, and ignoring the fact that the newspaper exists to present the news, editorials, etc.

The Internet has been developed and continues to be for most of its users, a place where one can communicate with others, whether by email, posting to Usenet newsgroups, putting up a WWW site, etc. As such it is the nature of this communication that has to be understood and protected in any proposals to change key aspects of how the Internet is administered.

Also the Internet makes possible communication with people around the world. Thus creating a board where commercial businesses are the main controlling interests is hostile to facilitating this communication. While Magaziner's proposal is being distributed electronically,

it gives no indication of where it came from, and why it fails to be based on the most essential aspects of the Internet. Why doesn't the advisor making up such a proposal ask for discussion on line and participate in the discussion so as to be able to create a proposal that will reflect the needs and interests of those who are online rather than a narrow group of commercial interests. The Judges in the Federal District Court in Philadelphia hearing the CDA case (the Communications Decency Act) and the Supreme Court Judges affirming their decision recognized that the Internet is an important new means of mass communication. The Judges in the Federal District Court case wrote: "The Internet is... a unique and wholly new medium of worldwide communication."

Judge Dalzell, in his opinion, wrote explaining how "The Internet is a far more speech-enhancing medium than print, the village green, or the mails.... We should also protect the autonomy that such a medium confers to ordinary people as well as media magnates.... There is also a compelling need for public education about the benefits and dangers of this new medium and Government can fill that role as well."

However, there is no indication in either of Magaziner's proposals, the longer "Framework" proposal, or the specific proposal to restructure the DNS, that he is interested in or has considered the benefits of the Internet for the public of the U.S. or elsewhere around the world. Instead he is only putting forward the wishes of certain commercial entities who want to grab hold of the Internet for their own narrow purposes. By restructuring the domain naming system in a way that can put it up for control by a few commercial interests, Magaziner's proposal is failing to protect the autonomy that the medium confers to ordinary people, as the court decision in the CDA case directed U.S. government officials.

The ARPAnet and Internet (up till 1995) developed because of an Acceptable Use Policy encouraging and supporting communication and limiting and restricting what commercial interests were allowed to do. As such it developed as an important means of people being able to utilize the regenerative power of communication to create something very new and important for our times.

Pioneers with a vision of the future of the Internet called for it to be made available to all as a powerful education medium, not for it to be turned into something that would mimic the worst features of a so called

"democratic nation" which reduces the rights and abilities of its citizens to those of so called "customers" of unregulated and unaccountable commercial entities.

The Internet and the Netizens who populate the Internet have created something much more important than the so called commercial online "marketplace" that the Framework is trying to create. Netizens have created an online international marketplace of ideas and discussion which is needed to solve the complex problems of our times. The process of "privatizing" what is a public trust will only result in more problems and fights among the commercial entities that are vying for their own self interest, rather than having any regard for the important communications that the Internet makes possible.

Both the government processes and purposes in proposing the DNS restructuring do not ground themselves on the important and unique nature of the Internet. Proposals and practices to serve the future of the Internet and the Netizens who contribute to that future, can only be crafted through a much more democratic process than that which led to the current proposal. There is a need to examine the processes that have actually given birth to and helped the Net to grow and flourish, and to build on those processes in creating the ways to solve the problems of the further development of the Net. Sadly Magaziner's proposal has ignored that process, and thus we are left with a proposal that doesn't reflect the democratic and communicative nature of the Internet and so can only do harm to its further development and cause ever more problems.

Ronda Hauben
ronda@panix.com

Comments and Discussion needed!
Netizens: On the History and Impact of Usenet and the Internet
  http://www.columbia.edu/~hauben/netbook/
  and in print edition ISBN # 0-8186-7706-6

From: markus.kruggel@uni-duisburg.de (Markus Kruggel)
Newsgroups: alt.society.netizens
Subject: Re: [netz] Internet as Communications Medium – Need for Discussion
Date: 20 Mar 1998 16:28:50 -0500

Hello Ronda,
On 20-Mar-98 17:05:11, Ronda Hauben wrote:
>There is currently a proposal by the U.S. govt to change the way that
> Internet domain (site) names are given out, and thus, to affect in an
> important way the future of the Internet.

Thanks for pointing it out to me. After reading this document and your draft, I think this document is a good starting point to discuss two crucial matters of the future of the Internet: who will control and set standards and in which way will the Netizens be represented.

> This is hostile to the whole nature and development of the Internet.
> Magaziner claims that the "marketplace, not governments should
> determine technical standards." What he seems to have no knowledge
> of is how the government support for a standards process that
> wouldn't be dominated by the most powerful corporations, is some of
> how helpful standards have been developed. Instead Magaziner is
> trying to recast the standards development process to mirror the
> unhealthy situation that develops when the supposed "marketplace" is
> allowed to set standards.

As setting the standards of something is a powerful means to determine its future development, setting the Internet standards can't be done by markets as long there's still an agreement that the net has more than the commercial function, and especially when the social implications of the net are stressed. Social interests can't be managed through a market mechanism as social interests always need a reconciliation of the strong and the weak that the market simply cannot accomplish: the means of communication on a market is money and so the strong ("rich") can gladly ignore any opposition of the weak ("poor") as those

don't have the means of getting through to the arena of the market. In our case that means that any standards set by "markets" will not promote any social interests that are opposing the commercial interests.

That brings me to the second point: the social interests as well as the commercial interests regarding the net have to be identified as well as their possible connections to Internet standards. To explain what I mean: in the early 80s a communication system called BTX was introduced in Germany (quite similar to Minitel in France and other systems) that used the phone line and the TV to give electronic information to the user. This system had a channel bias, that means the channel from the network to the user was much bigger than the channel from the user to the network (I think it was 1200 bps vs. 75 bps). Possible net standards nowadays could go into a similar direction, converting it into a one way street that serves the needs of commercial interests while those pedestrians can still find their way on the sidewalk.

To actually fight against such a threat, it is IMO vital that both interests are identified and translated into "standard matters," to prevent that we discover afterwards that a change of a standard led to a advantage of the commercial interests on cost of the social interests.

>Magaziner is proposing creating a supposed "not for profit" corpora-
> tion to take over the domain name system functions currently being
> administered by IANA (the root system and the appropriate data-
> bases). This new corporation he proposes will have a board of
> directors which (...) 7 members from the membership organization he
> is creating. (Of which he says at least one of those board seats could
> be designated for an individual or entity engaged in non-commercial,
> not-for-profit use of the Internet, and one for individual end users. The
> remaining seats could be filled by commercial users, including
> trademark holders.)

Here's the other point why I think the proposal could have very negative effects on the net's future: representation is mainly built on who is paying. In such a board the "non-commercial, not-for-profit" voice would only be heard – if at all – but would not be able to influence any of the decision made. Such a model of representation would be

another means of ensuring a domination of commercial interest in crucial matters of net administration.

And if it is applied in the case of the DNS administration, why shouldn't this be the model for other areas: a few technicians, many commercial users and one "non-commercial, not-for-profit" voice.

> The proposal is an effort to change the nature and character of the
> Internet from a means of communication to a means of "commerce."

I agree wholeheartedly to this comment.

>While Magaziner's proposal is being distributed electronically, it gives
> no indication of where it came from, and why it fails to be based on
> the most essential aspects of the Internet. Why doesn't the advisor
> making up such a proposal ask for discussion on line and participate
> in the discussion so as to be able to create a proposal that will reflect
> the needs and interests of those who are online rather than a narrow
> group of commercial interests.

Indeed. A more open and democratic way of discussing these matters is needed. Somehow our interests have to find their way into the discussion but I'm quite unsure how this could be solved. Hopefully, as Ronda pointed this document out to us, we are able to discuss the implications of this proposal and make them more public on the net (that is, if this isn't the case already).
Bye,
Markus Kruggel, 40217 Duesseldorf, Germany
markus.kruggel@unidui.uni-duisburg.de
http://online-club.de/members1/rp10930/

From: astingsh@ksu.edu (kerry)
Newsgroups: alt.society.netizens
Subject: Re: [netz] Internet as Communications Medium - Need for Discussion Date: 21 Mar 1998 18:48:58 -0500

The Proposal seems to contradict itself several times. In itemizing the reasons for change, it's clear that the concept of "government" as exactly the stabilizing force required in society has lost out to "Government" as merely an entrenched bureaucracy. The initial premise that the Net *should* be completely commercialized is maintained, despite the fact that it is "increasing commercial value" of domain names which leads to trademark conflicts, while the "widespread dissatisfaction" exists only among those who see a *commercial* opportunity in DN registration.

Again, "Certain technical management functions require coordination. In these cases, responsible, private-sector action is preferable to government control." – but, "we divide the name and number functions into two groups, those that can be moved to a competitive system and those that should be coordinated." How private-sector coordination is to differ from private-sector competition is not explained., or, if "objective criteria" are found, what the means are of bringing them into wide acceptability if the first guess proves faulty.

One is reminded of the proposed Multilateral Agreement on Investment, which would give corporations the power of nations, with all the benefits of government with none of the disadvantages, like equal representation or free speech. Perhaps that's all one should expect of a concoction of the OECD and the cohorts of international business, but it's a bit alarming to see the USG, the bastion of democracy, ignoring – indeed actively dismantling – its own fundamental principles.

Kerry
========
www.ntia.doc.gov/ntiahome/domainname/domain name130.htm

From: ronda@panix.com
Newsgroups: alt.society.netizens
Subject: Re: [netz] Internet as Communications Medium

Hello Markus and others on the Netizens Mailing list.
    I wrote an answer to this on March 23, but somehow it got lost, and

then things got very hectic and I haven't had a chance till now to respond. But I did want to respond so please excuse how late the response is.

> From: markus.kruggel@uni-duisburg.de (Markus Kruggel)
> Newsgroups: alt.society.netizens
> Subject: Re: [netz] Internet as Communications
> Medium - Need for Discussion
> Date: 20 Mar 1998 16:28:50 -0500

> Hello Ronda,
> On 20-Mar-98 17:05:11, Ronda Hauben wrote:
>>There is currently a proposal by the U.S. govt to change the way that
>> Internet domain (site) names are given out, and thus to affect in an
>> important way the future of the Internet.
> Thanks for pointing it out to me. After reading this document and your
> draft, I think this document is a good starting point to discuss two
> crucial matters of the future of the Internet: who will control and set
> standards and in which way will the Netizens be represented.

I agree that there is a need to discuss the two topics you mention:
1) who will control and set standards
2) in which way will the Netizens be represented.

There is one other topic I think very important, which is
3) what is the nature of the Net as a new medium of international communication and how to nourish and continue to develop it.

>As setting the standards of something is a powerful means to determine
> its future development, setting the Internet standards can't be done by
> markets as long there's still an agreement that the net has more than
> the commercial function, and especially when the social implications
> of the net are stressed. Social interests can't be managed through a
> market mechanism as social interests always need a reconciliation of
> the strong and the weak that the market simply cannot accomplish: the

> means of communication on a market is money and so the strong
> ("rich") can gladly ignore any opposition of the weak ("poor") as
> those don't have the means...

Yes the social implications and importance of the Net need to be considered. This is more important than any commercial function. There is only market dysfunction in reality. What the market means in the U.S. is the development of unregulated, govt. support for monopolies like Microsoft.

Interesting. But why do you say "the means of communication on a market is money"?

I agree that money (or some other form of power) is what functions to determine who wins and who loses, but I am interested in why you say this is communication.

> of getting through to the arena of the market. In our case that means
> that any standards set by "markets" will not promote any social
> interests that are opposing the commercial interests.

Yes this is helpful. "Standards" cannot be set by a "market" mechanism as it only makes what the most powerful wants the "standard/"

>That brings me to the second point: the social interests as well as the
> commercial interests regarding the net have to be identified as well as
>their possible connections to Internet standards. To explain what I
> mean:

This is helpful – I agree that the social interests have to be identified.

How do we work to have that happen?

In the U.S. at least, the government is *only* interested in what the commercial interests want, and not at all interested in what the people or Netizens want.

Somehow we need to find a way to not just react to the government support for the commercial sector, but we need to find a way to define

what are the social interests and how to work to have them developed.

I was thinking perhaps to try to develop a "Framework for the Net as a New Means of International Communication" as opposed to the Magaziner Framework of the Net for Commerce.

But I don't know if that is the way forward.

However, I do think it is important to try to identify the communication aspects of the Net and then how to continue to support and spread the advantage this makes possible more broadly.

> in the early 80s a communication system called BTX was introduced
> in Germany (quite similar to Minitel in France and other systems) that
> used the phone line and the TV to give electronic information to the
> user. This system had a channel bias, that means the channel from the
> network to the user was much bigger than the channel from the user
> to the network (I think it was 1200 bps vs. 75 bps). Possible net
> standards nowadays could go into a similar direction, converting it
> into a one way street that serves the needs of commercial interests
> while those pedestrians can still find their way on the sidewalk.

This is a very helpful example.

I am interested in what you think is the way we should try to go forward to have the broader social interests with regard to the Net discussed and brought onto the public agenda.

> To actually fight against such a threat, it is IMO vital that both
> interests are identified and translated into "standard matters," to
> prevent that we discover afterwards that a change of a standard led to
> a advantage of the commercial interests on cost of the social interests.

I am trying to understand how we do this.

>> Magaziner is proposing creating a supposed "not for profit"
>> corporation to take over the domain name system functions currently
>> being administered by IANA (the root system and the appropriate
>> databases). This new corporation he proposes will have a board of
>> directors which (...) 7 members from the membership organization

>> he is creating. (Of which he says at least one of those board seats
>> could be designated for an individual or entity engaged in
>> non-commercial, not-for-profit use of the Internet, and one for
>> individual end users. The remaining seats could be filled by
>> commercial users, including trademark holders.)

> Here's the other point why I think the proposal could have very
> negative effects on the net's future: representation is mainly built on
> who is paying. In such a board thee "non-commercial, not-for-profit"
> voice would only be heard - if at all - but would not be able to
> influence any of the decision made. Such a model of representation
> would be another mean of ensuring a domination of commercial
> interest in crucial matters of net administration.

Yes – Magaziner's proposal was only to take a crucial aspect of the
Internet – the DNS (Domain Name System) and give it over to the
commercial sector. This will create a real problem as the commercial
interests have a very different agenda with regard to Internet develop-
ment than the Netizen or user agenda.

It seems important to find some way to work to challenge such a
power grab and also the whole backhanded way this is all being done.
Magaziner didn't come online and ask for comments and discussion on
what should be done regarding the DNS – and there are U.S. govt
newsgroups where he could have done so.

Instead he seems to have responded to the proposals by the
commercial interests to give them this important aspect of the Internet.
There does seem to be a lot of opposition to what Magaziner is doing –
it is a problem for many so it would be good to see if there could be a
common battle, or some alliance of all those who will be harmed by this
proposal.

> And if it is applied in the case of the DNS administration, why
> shouldn't this be the model for other areas: a few technicians, many
> commercial users and one "non-commercial, not-for-profit" voice.

Yes - and in fact the Net then to made into mainly a vehicle for

commerce. I noticed recently that some of the search engines mainly list commercial listings when you search for something, rather than the broad view of what they used to list.

>> The proposal is an effort to change the nature and character of the
>> Internet from a means of communication to a means of "commerce."
> I agree wholeheartedly to this comment.

    I wonder if it would be worth trying to write a framework for the Internet as a means of communication.

>> While Magaziner's proposal is being distributed electronically, it
>> gives no indication of where it came from, and why it fails to be
>> based on the most essential aspects of the Internet. Why doesn't the
>> advisor making up such a proposal ask for discussion on line and
>> participate in the discussion so as to be able to create a proposal
>> that will reflect the needs and interests of those who are online rather
>> than a narrow group of commercial interests.
> Indeed. A more open and democratic way of discussing these matters
> is needed. Somehow our interests have to find their way into the
> discussion but I'm quite unsure how this could be solved.
> Hopefully, as Ronda....

    I wonder if there are mailing lists where govt officials are discussing these issues with the commercial interests - in the past the com-priv (commercialization - privatization) functioned to provide for such discussion (but it doesn't seem to do so much lately) But if one tried to bring up social interests, one was attacked.
    But there seems to be a need for a Netizen framework for the future of the Net – and then to apply this in responding to the commercial framework.

> pointed this document out to us, we are able to discuss the implica-
> tions of this proposal and make them more public on the net (that is,
> if this isn't the case already).

I didn't see much discussion of the DNS on UseNet – actually I don't know what newsgroups would be discussing it.

I wonder if anyone on the Netizens list knows of where such discussion has taken place online.

But in any case, it hasn't been open and obvious.

>*Markus Kruggel, 40217 Duesseldorf, Germany*
> markus.kruggel@unidui.uni-duisburg.de

Ronda
ronda@panix.com

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Date: Sun, 31 May 1998 18:06:46 -0400 (EDT)
From: markus.kruggel@uni-duisburg.de
Subject: [netz] Internet as a Means of Communication - Need for Discussion

Hi all,
Sorry for this late reply, but my workload here was tremendous, and I wanted to write a decent answer as I find the topic quite important.

On 08-Apr-98 03:35:08, Ronda Hauben wrote:

>>> There is currently a proposal by the U.S. govt. to change the way
>>> that Internet domain (site) names are given out, and thus to affect
>>> in an important way the future of the Internet.
>> Thanks for pointing it out to me. After reading this document and
>> your draft, I think this document is a good starting point to discuss
>> two crucial matters of the future of the Internet: who will control and
>> set standards and in which way will the Netizens be represented.
> I agree that there is a need to discuss the two topics you mention:
>
>1) who will control and set standards
>2) in which way will the Netizens be represented.
>

>There is one other topic I think very important, which is:
>
> 3) what is the nature of the Net as a new medium of international
> communication and how to nourish and continue to develop it.

    I agree. But IMO 3. comes before 1. and 2. as the answer(s) to this question will determine possible answers to 1. and 2.

>> As setting the standards of something is a powerful means to
>> determine its future development, setting the Internet standards can't
>> be done by markets as long there's still an agreement that the net has
>> more than the commercial function, and especially when the social
>> implications of the net are stressed. Social interests can't be managed
>> through a market mechanism as social interests always need a
>> reconciliation of the strong and the weak that the market simply
>> cannot accomplish: the means of communication on a market is
>> money and so the strong ("rich") can gladly ignore any opposition of
>> the weak ("poor") as those don't have the means

> Interesting. But why do you say "the means of communication on a
> market is money" ? I agree that money (or some other form of power)
> is what functions to determine who wins and who loses, but I am
> interested in why you say this is communication.

    I was a bit unclear here, I suppose. What I meant was that communication on a market is realized by setting (seller) and offering (buyer) prices. What's communicated on market are plans: plans to sell or to buy at a certain price. So, it's probably better to say that all market communication *refers* to money instead of saying the money is the *means* of communication on a market. However, both lead to same result: whatever can't be formulated in terms of quantities and prices can't be communicated on market.

>> That brings me to the second point: the social interests as well as the
>> commercial interests regarding the net have to be identified as well
>> as their possible connections to Internet standards. To explain what

>> I mean: This is helpful- I agree that the social interests have to be
>> identified.
>
> How do we work to have that happen?

I think those who have the interests have to formulate them. I see that this bears another problem, because the broad majority of people around the world who have *no* access to the Internet would be excluded from this process. If this happens, chances are that interests that those people have would be excluded, too.

> In the U.S. at least, the government is *only* interested in what the
> commercial interests want, and not at all interested in what the people
> or Netizens want which is what is in the best interest of the society.

Same here in Germany, I'm afraid.

> Somehow we need to find a way to not just react to the government
> support for the commercial sector, but we need to find a way to define
> what are the social interests and how to work to have them developed.

I think this mainly goes via influencing the public agenda. My idea concerning this are described a little bit further down.

> I was thinking perhaps to try to develop a "Framework for the Net as
> a New Means of International Communication" as opposed to the
> Magaziner Framework of the Net for Commerce.
>
> We need to try to figure out what is a way forward.

I don't think that such an extensive framework should *oppose* the framework for commerce. IMO commerce has to get it's place on the Internet, too, but it shouldn't rule. So it seems to me that the best approach is to incorporate social and commercial interests in some way and to find a compromise between both. But I probably misunderstood you and what you had in mind was a not a comprehensive framework

but one that concentrates on social interests. It's probably best for us to develop the latter as I'm sure that Magaziner is not alone and others are happily developing concept with a commercial bias right now.

>> in the early 80s a communication system called BTX was introduced
>> in Germany (quite similar to Minitel in France and other systems)
>> that used the phone line and the TV to give electronic information to
>> the user. This system had a channel bias, that means the channel
>> from the network to the user was much bigger than the channel from
>> the user to the network (I think it was 1200 bps vs. 75 bps). Possible
>> net standards nowadays could go into a similar direction, converting
>> it into a one way street that serves the needs of commercial interests
>> while those pedestrians can still find their way on the sidewalk.
> This is a very helpful example.
>
> I am interested in what you think is the way we should try to go
> forward to have the broader social interests with regard to the Net
> discussed and brought onto the public agenda.

One way to do this seems to make use of the conventional mass media. The problem that I see here is, that Netizens are a minority within the society and as long as this state remains, it will be quite hard to interest a broader public for this topic, simply because it won't make a story on conventional mass media.

Another way I could think of would be to sensibilize more or less prominent and public figures to realize what power over standards can mean for the future of communication. Sayings of those public figures would be perceived more probably than any statement that is made by us – on this list, for example.

A third way, and probably the most promising one, is to point out the importance of the topic to non-governmental organizations (NGOs) of different kinds and not only the EFF and the like. I think the NGOs could be helpful because they are benefitting a lot from the Internet (in fact, already the fax machine was a powerful tool for them) and hence they would be harmed from processes that exclude social interests. NGOs could probably advocate Netizens' interests best and they could

start immediately and they could do it on world scale as they already work together. IMO the last is a really huge advantage.

>> Here's the other point why I think the proposal could have very
>> negative effects on the net's future: representation is mainly built on
>> who is paying. In such a board thee "non-commercial, not-for-profit"
>> voice would only be heard – if at all – but would not be able to
>> influence any of the decision made. Such a model of representation
>> would be another mean of ensuring a domination of commercial
>> interest in crucial matters of net administration. Yes – Magaziner's
>> proposal was only to take a crucial aspect of the Internet – the DNS
>> (Domain Name System) and give it over to the commercial sector.
>> This will create a real problem as the commercial interests have a
>> very different agenda with regard to Internet development than the
>> Netizen or user agenda.
>
> It seems important to find some way to work to challenge such a
> power grab and also the whole backhanded way this is all being done.

The only way I see is to make such developments public. If the regarding persons and institutions don't do this themselves it has to be done by those who take note of it. One tool we have to accomplish this is the net itself. Obviously, a simple web site wouldn't do the trick, instead the discussion has to be spread to inform as many people as possible – carried into newsgroups and mailing lists for example.

> There does seem to be a lot of opposition to what Magaziner is doing
> – it is a problem for many so it would be good to see if there could be
> a common battle, or some alliance of all those who will be harmed by
> this proposal.

Where is this opposition forming up at the moment? Is there any news?

>> And if it is applied in the case of the DNS administration, why
>> shouldn't this be the model for other areas: a few technicians, many

>> commercial users and one "non-commercial, not-for-profit" voice.

> Yes - and in fact the Net then to made into mainly a vehicle for
> commerce. I noticed recently that some of the search engines mainly
> list commercial listings when you search for something, rather than the
> broad view of what they used to list.

That's an interesting observation. Do you have any further info on this?

(...)
> Perhaps what is needed is a Netizen framework for the future of the
> Net - and then to apply this in responding to the commercial frame-
> work.

Yes, I really think that developing this framework should be the next step. The first things that I'm aware of now and which should be included in this framework are:

– the Net's nature from the Netizens' point of view
– a plan for the future development of the Net
– other possible plans (commercial ones, for example)
– which development ideas exclude each other
– the levers to influence the Net's development (standards, ...)
– how these levers can be used to realize the above future plan
– in which ways the levers can be used to the Netizens' disadvantage
Of course this list is far from being complete or detailed. But IMO it should be completed before the framework is worked out.

Bye,
- --
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(To Be Continued)

[Editor's Note: The following analysis of ICANN is reprinted with permission from *TELEPOLIS* (http://www.heise.de/tp/)]

Cone of Silence ICANN or Internet Democracy is Failing

by John Horvath

We take for granted a lot of the inventions of the late 20th century. We are naturally under the assumption that things we use every day which are so handy and so useful will always be the way they are, and that the technological improvements underway will only make them better. Even the Internet, which has become so much a part of modern life for many people, has fallen prey to such assumptions.

Unfortunately, the assumption is dead wrong. There's a battle being waged behind the scenes that many of us don't know about – even those whose lives have now become dependent on computer mediated communication systems like the Internet. The process to hand over government control of the Internet to a private body – a process which was formulated last summer and initiated toward the end of that same year – has been rife with problems that various sides are continually struggling to deal with.

While many people who use the Internet will have heard about this process and the organisation involved – ICANN, to which the whole process has become synonymous – the truth of the matter is that for the vast majority it is something relatively unknown. Indeed, there's been a "cone of silence" over the issue, and for those involved that's just the way they like it.

In order to try and break this cone of silence and to better understand what is really at stake, what will be looked at is the origin and

evolution of the process and the organization it has created, ICANN. Its first moves and the corresponding negative reaction that gave the whole process a stillborn start will be examined, along with ways in which attempts have been made to rescue the process. This will be followed by a more in-depth look at those for and against ICANN and the process, along with some observations as to how and why the silent complicity that surrounds the issue exists.

In the end, it will be shown how the issue is not just one involving the transformation of the Internet from a government body to a private one, but strikes at the very heart of democracy in the digital age. It also affects the emergence of a new form of civic discourse, one that transcends the limits of physical space. In fact, it's something which will profoundly change our lives, and unless more attention is paid to what is actually going on behind the scenes, a future will be built for us that will run counter to many of our hopes and expectations.

The origin and evolution of ICANN

For many, ICANN (the Internet Corporation for Assigned Names and Numbers) was established in the most mysterious of ways. What is more, they see a grand disaster being set up by an organisation with tenuous legitimacy and experience in Internet-related matters. In order to understand what exactly is at stake, we have to go to the very beginning – not merely the birth of ICANN, but the structural framework upon which it was conceived.

ICANN is an organisation, established in the form of a private non-profit corporation and supposedly managed by an international board, that was expressly formed to take over the responsibility for duties now performed under U.S. government contract by the Internet Assigned Numbers Authority (IANA) and other entities. The transition is expected to last about a year, during which time the Initial Board of ICANN will create a permanent governance structure with members and member-elected directors. In addition to overseeing technical standards, the group is supposed to devise and administer a new plan for managing the top-level domains: .com, .org., and .net. At issue is the Domain Name System (DNS) which governs the routing of World Wide Web pages, electronic mail and other communications over the Internet. (The

DNS is a hierarchical architecture to keep the number of root level lookups for the Internet at a minimum.) The ownership/control and allocation of the IP numbers of the Internet, the port numbers, the protocol process, and the scaling of these systems are all issues that are to be dealt with by the new organization.

The supposed need for a transition was formulated by the U.S. government last year through what has come to be known as the International Forum on the White Paper (IFWP). The Commerce Department's Green Paper/White Paper process was initiated with primary purpose of turning to e-commerce as the policy for the Internet. However, so as to make it appear more broad-based, it was also announced that the "need" for a transition was because "broad segments" of Internet users were deeply unsatisfied with the process conducted by the IANA, which was subsequently criticised as being closed and unfair. Also, conflicts between Network Solutions (NSI), the company which had been in charge of administering the DNS, and the on-line community had given rise to what many have termed the "DNS wars."

It was on the basis of this that a new, more responsible organisation was to be established. Some observers see ICANN as the brainchild of just one man: Jon Postel, the director of the IANA. The irony of the situation, it has been argued, is that some of the most critical network functions done by Postel actually had no authority in law. Moreover, the IANA functions had no institutional basis. Thus, as the argument goes, what Postel did was on the basis of nothing more than informally agreed upon custom. Despite this supposed lack of legitimacy, Postel worked on articles of incorporation for the new organisation. Although reactions to some of his drafts were largely negative,[1] Postel still continued to enjoy support of a wide spectrum of the Internet community, especially the technical insiders. Shortly before his untimely death, he hammered out the final framework for what was to be called ICANN.

There is some debate, however, about this interpretation of events. Although Postel did much of the work to bring about ICANN, some counter that Postel was not the sole author and may not have had that much to do with the authoring of the ICANN proposal. According to one source, a lawyer named Joe Sims claims to have written some of the

Postal drafts. When a reporter tried in Geneva to ask Postel about some of the details of the draft and its consequences he was not willing to answer them. "It is unlikely that so important a document would have been left to Postel especially when his experience was not in the by-laws or corporate field and when so much was at stake," remarked Jay Hauben, an editor of the *Amateur Computerist*. He goes on to mention that the only clue given by Esther Dyson, who eventually became chairperson of the new organization, about the origins of ICANN is that she was contacted by a person from IBM before she spoke with Postel about it.

"What is ironic is that a story about ICANN being a one person creation occurred only after that person had died," adds Hauben. "Moreover everything Postel did, he did under contracts with the U.S. government subject to U.S. government oversight and direction. Postel was mainly under contract to ARPA." Jake Feinler, who worked at the NIC, relates: "Jon and I were both government contractors, so of course followed the directions of our contracting officers. He was mainly under contract to ARPA, whereas the NIC was mainly under contract to DCA. BBN was another key contractor. For the most part we all worked as a team...."[2]

Therefore, contrary to those who see the birth of ICANN as a one man affair, Postel actually had authority from the U.S. government to do what he was doing with regard to carrying out the functions of IANA. However, a question can be raised as to whether Postel was under the impression the U.S. government had the right to and was directing him to create ICANN.[3]

Whether or not Postel was the sole creator of ICANN and had the authority to do whatever he did, one thing is for certain: ICANN is being portrayed as the first legally-constituted, international governing body for the Internet. Indeed, at the outset, some considered that ICANN would be nothing more than a process designed to provide a formalised mechanism for the execution of the IANA functions. In retrospect, this was mere wishful thinking. Many have since speculated how history might have been different if Postel had not died so unexpectedly.[4]

First Moves

All during the Fall of 1998 controversy raged over the future of the IANA. Proposals were made by Ronda Hauben, by the Boston Working Group, the Open Source Root Consortium and by the IANA itself. The IANA's proposal to create ICANN was particularly controversial because the two U.S. government contractors – the IANA and NSI – had split over it. It began to appear as if the U.S. Congress was going to investigate Postel himself because of this split and the method of choosing the ICANN interim board. Then Postel suddenly died.

No sooner had Postel been buried and eulogies about him circulated throughout the Internet, controversy over ICANN re-erupted. The problem right away had to do with the different views of what ICANN represented: for some it was to privatize key aspects of the Internet, the DNS and control of the root server of the Internet; for others, it was to establish a new regime whereby social-technical issues such as scalability were to be resolved; and still others continued to fight against any private entity being created.

For members of the interim board of ICANN, they see their work as a clear mandate for privatizing the Internet. The optimism with which the chairperson of ICANN, Esther Dyson, approaches the privatisation of the Internet is akin to the supposed benefits of telecom liberalisation, most of which are unfounded. According to Dyson, "in every market I know where telecom has been privatized and rendered competitive, prices have gone down. And generally, service has even improved!" As far as she is concerned, this goes not only for the U.S. but for the U.K., Germany, the Czech Republic, Hungary, and Russia.[5]

The assumption that "competition" and so-called "market forces" bring better service is a grand myth of telecom liberalization, second to that of cheaper prices. As Ronda Hauben, co-author of *Netizens: On the History and Impact of Usenet and the Internet* points out, it is basic research which is responsible for advanced communications technology. In the US, for instance, basic research was funded by government setting the rates to provide for the research that went on at Bell Labs. Conversely, private companies have repeatedly demonstrated a lack of vision and even aversion to new technology unless it has somehow already proven itself to be a worthwhile and profitable investment. As

a result, most companies won't support basic research unless profits are high and immediate. Meanwhile, old technology is kept in place for as long as possible at high prices.

This process can be clearly seen in the evolution of the Internet itself. In its early days, big business was approached with the idea of funding its development but they refused, for it was not considered to be a worthwhile (i.e., profitable) project. Likewise, in 1977, DEC was convinced that PCs would never become a mainstream consumer item. Apart from stifling technological innovations, what many people fear is the real meaning behind the privatization of the Internet: an offer to private sector corporations competition in selling root level gTLDs. To this extent, they see ICANN embroiled in a conflict of interest. One of the primary purposes of ICANN is to make policy and recommendations for how to increase the number of gTLDs. Those presently proposing this structure have a commercial self-interest in the issues, and thus a conflict of interest in being involved in proposing or setting public policy regarding the future of the Internet.

"The history of the Domain Name System (DNS) reform controversy is repeating itself," notes one commentator. "The Commerce Department must make sure that this second occurrence is not a tragedy." What he and many others feel is that the problem with NSI is now being repeated under ICANN. What is especially worrying is that profits are being made on a government contract for what should have been a simple administrative function – giving out domain names, like giving out license plates for cars. In the case of ICANN, not only is the profit motive lingering in the background, but so too is the potential to grab the central points of control of the Internet from a legitimate and responsible entity (i.e., a public governmental entity with responsibility and obligations and means of punishing abuses) and putting them into the hands of an entity with no means of accountability, no means of knowing who is doing what, and no means of punishing criminal activity.

In debating the legitimacy of ICANN, supporters often point to the fact that the Internet community has been attempting for years to terminate NSI's commercial monopoly on .com, .net and, .org registrations. Consequently, through ICANN the community has been

attempting to establish new sorts of DNS oversight.

Opponents of ICANN see the situation in another light. They see ICANN as merely a replacement for the NSI – with the exception that it has a much broader base of technical and economic power. Thus, rather than the Internet community attempting to initiate some sort of change, they see the whole process as being hijacked by a small group of people who, at the instigation of the U.S. government, have been trying to get themselves a piece of the NSI pie. In other words, ICANN is not particularly interested in identifying or solving any of the problems that exist, such as the scalability of the Internet.

"The real problem that the DNS wars show is that is that the U.S. government doesn't seem to be supporting the needed scientific research about how to provide for the scaling of the Internet," explains Hauben. "The U.S. government has initiated and is directing this process with no regard for the concerns and interests of the people on-line or not yet on-line."

Action, Reaction

People are still debating on what exactly ICANN is, whether it is an interest group or a regulatory body. One thing is clear: Many feel that ICANN should be nothing more than a body that sets policy for the development and use of domain name space, the assignment of IP numbers, and the assignment of port numbers to new protocols. These are considerable powers in itself, especially when we recall that the first allocations of IPv6 numbers are expected this year.

With the growing criticism surrounding ICANN, along with numerous lawsuits related to domain name disputes already launched against the new organization, not to mention complaints that reform plans were drafted behind closed doors without public input, the White House quickly halted its operations and ordered the group to realign its membership structure, hold open meetings, publish minutes, and set up a process for appealing decisions. Accordingly, ICANN came out with a number of "by-laws" designed to satisfy specific structural concerns noted by the government. These changes included financial accountability; a fully transparent decision-making process, with minutes of each ICANN Board, Supporting Organization or committee meeting to be

publicly posted within 21 days following every meeting; the creation of a Conflicts of Interest policy of all ICANN institutions, including the Supporting Organizations; a globally representative governance structure; and respect for a nation's sovereign control over its individual Top Level Domain.

While some see this as an effort on the part of the U.S. government to keep the process as fair and transparent as possible, others see this move as mere whitewash. They argue that the U.S. government still went ahead with its de facto recognition of ICANN anyway, only asking it to clean up its act a bit. Furthermore, the memorandum of understanding between the U.S. government and ICANN calls for a period of "design and testing" with a 50-50 split of responsibility, but in subsequent events the U.S. government did not play any obvious or helpful role.

Thus, although ICANN has been officially receiving parental supervision from the National Telecommunications and Information Administration (NTIA), pending a show of its ability to muster strong enough consensus support from the Internet Community, dissatisfaction with the organization is still strong. According to Jim Dixon, telecommunications director of EuroISPA, a European ISP trade group based in Brussels, "there is widespread mistrust of ICANN's board."

This mistrust is based on a number of factors. Many feel that ICANN is rushing through the process without any ethical considerations or social obligations, squelching discussion and dissent along the way. As far as the Computer Professionals for Social Responsibility (CPSR) is concerned, the problem is much more rudimentary: simply, the approach of ICANN is unilateral, unaccountable, and non-consensus. The foremost complaint against ICANN is its lack of transparency. Furthermore, the fact that many decisions are made in secret has many worried. Indeed, since its inception late last year, ICANN has been widely criticised for being secretive and unaccountable.

In a way, this kind of behavior is nothing new, and is something that preceded ICANN. Postel's creation of the organization was, for the most part, unilateral. Similarly, ICANN-nominated interim Board members were never discussed nor confirmed by any public process whatsoever. What is more, ICANN was incorporated in California at the unilateral

direction of the IANA.

ICANN itself, meanwhile, has defended their policy of closed meetings by saying they are more like a corporate than a government board, and that corporations typically hold board meetings in private. Moreover, ICANN's interim president and chief executive, Mike Roberts, said his group is responsive to criticism and that important policy proposals are submitted for public scrutiny and comment. "We are incredibly open for a private, non-profit organization," claims Roberts.

Dyson went further, stressing that ICANN will be a public entity – and not just the U.S. public. To this extent, the board had announced a series of "open" meetings throughout the world where members of the Internet community and others can speak directly to ICANN's interim board and management. "We have an international board, we will have an international membership, and we are an international organization," says Dyson.

Hauben disagrees. "ICANN is not in any way an International [sic!] but something created by the U.S. government to empower those obligations that the U.S. government currently holds." What is more, she argues that the activities of a small set of people who can afford to globe trot around the world to participate in trying to grab what belongs to the public and claim they have the right to make decisions for the Internet community is no way representative of a global and public entity. On this point, even the European Commission is in agreement.[6] Indeed, concern has also been raised by an observer from Namibia about the U.S. government giving away the authority to administer country code domains to a private entity.

Closely related to the lack of transparency is what many have come to regard as the abandonment of open structures. For most, the establishment and early operation of ICANN has been done in a way that is totally antithetical to the time honored open and democratic processes of IETF working groups. Not surprisingly, this was one of the first criticisms of ICANN that Dyson had to face.

Consequently, in the letter transmitting the bylaws as formally adopted by ICANN to the Commerce Department, Dyson acknowledged that the bylaws "will have to be changed to reflect the work of the Initial

Board and to create the permanent governance structure of ICANN. We will carefully consider any and all suggestions for improvement as we move forward in this process. Nobody should operate under the illusion that any issue has been resolved 'once and for all.' Similarly, nobody should feel that issues that are important to them and have not been addressed to their satisfaction cannot be revisited. The process is just beginning."

Despite this pronouncement, critics like Hauben have complained that issues important to her have not been addressed to her satisfaction. She points out that while the Harvard Berkman Institute conducts serious discussions about how to "vote" for "membership" in the new ICANN organization, other issues, such as increasing the say of those online in what is happening with regard to what the U.S. government is mandating, are not being discussed. "Instead, there is a cherade [sic!] of how the Internet should be 'governed' by this U.S. created and run private corporation staffed by people 'voted for' by some form of 'membership' that has come from the Internet." "This is the very opposite of not only the grassroots process that has given birth to and helped to build the Internet," adds Hauben, "but also to the kind of grassroots democracy that is needed to continue to make it possible for the Internet to grow and flourish."

Along with the abandonment of open structures, ICANN is often seen as over-extending their authority in a number of areas. This was clearly apparent at the very beginning when Dyson had indicated that aside from the issues ICANN was mandated for there were many others, including e-commerce and privacy, with which she would find it attractive to become involved.

The ways in which ICANN goes about over-extending their authority, however, is not always so obvious. For example, while ICANN claims to be a membership organization of a non-profit corporate entity, the membership list is based at an isi.edu domain. This is a site at the University of Southern California, despite the fact that ICANN is not an "edu" (i.e., educational) entity. What this clearly demonstrates is that ICANN is moving to take over and make private all that has been publicly held as part of the IANA – which includes the isi.edu domain as well as other aspects. Again, this all has a lot to do

with not only the attitudes of individual board members but the structure and theoretical framework upon which ICANN was conceived. In essence, the form being created for ICANN was fundamentally inappropriate for the task that it was being created for.

In addition to this, it must be remembered that the U.S. government is keen on maintaining a certain amount of control. This not only has to do with technology, but has been an integral part of U.S. foreign policy since the end of the Cold War. This is a view not only shared by observers like Hauben, who is convinced that "the U.S. government, despite its disclaimers will maintain both control and ultimately liability for whatever mess it is planning," but also by certain governments as well. For the European Union especially, this is an important factor, for "there are certain issues [...] still not fully dealt with [by ICANN], such as the improvement of safeguards against extra-territorial application of U.S. law and public policies."[7]

As with the other complaints it has received, ICANN has been made aware of this public displeasure over the way it over-extends its authority. And like the way in which it responded to other complaints, when the board had not simply turned a deaf-ear to criticism, it exhibited behavior which proves old habits not only die hard, they are innately ingrained.

A case in point was the recent ICANN board meeting in Singapore, which was to lay foundations for its own operation as well as domain name policy. At this meeting general issues included membership criteria, a call for open board meetings, and ensuring a fair international balance. In the area of domain names, the board moved forward toward creating a subordinate group called the Domain Name Supporting Organization (DNSO). Strangely, it also made policy rulings that one would expect would have been left open until the DNSO could meet and handle the matters itself. In the end, what this shows is how very little has changed in the way ICANN does things. One reason why ICANN feels comfortable in over-extending its authority in such a way is because it feels it's not accountable to anyone. This lack of accountability is still prevalent among board members even after ICANN came under NTIA supervision in November.

Meanwhile, what draws criticism from many quarters is that a

business-based "self governance" model or "private self regulation model" as a modus operandi for ICANN is essentially setting up a system for abuse. "The fundamental problem is that they are not engaged in two-way communication," observes Gordon Cook, author and publisher of *The Cook Report on Internet.* As a result, a line of responsibility that hitherto existed between the IANA and the online community is being severed.

The need to ensure such a line of responsibility continues to exist was brought up during the Berkman Institute meeting at the end of January. A person from China noted that if ICANN was to balance the distribution of scarce resources, then checks and balances would be needed, much like the present political system in the U.S. where there is a President (the executive branch), Congress (the legislative branch), and a Supreme Court (the judicial branch). Indeed, although the American regulatory framework which has tried to keep corporate behaviour in line has been effectively shattered by the onslaught of a neo-liberalist political agenda, checks and balances still do exist. For example, the FBI checks on government officials who are responsible for administering regulatory bodies and if they abuse their obligations they can be subject to criminal prosecution. How this translates into practice, of course, is another story. Nevertheless, with the Internet a trail of responsibility of sorts did exist. The IANA was under DARPA; thus, DARPA was responsible for what went on in the IANA.[8] Hence, there was a line of responsibility backed up by penalties for abuse. "This is all the opposite of what is happening with the privatizing of the DNS," notes Hauben, "and throwing it to the corporate interests who are the so called 'market forces'."

While all these arguments and observations pertaining to the secretive, undemocratic, and even unconstitutional behaviour of ICANN and its members have been made repeatedly, what irks most people is the smug attitude of ICANN board members and their blatant disregard for public opinion. For instance, on the issue of transparency and secrecy, board members still meet in private despite protests. A classic example of the contempt board members hold toward the public is the following from ICANN president Mike Roberts: "some of those people think the management should check with the public every time they

make a decision, which is crazy. That's flat-out crazy."[9]

But what about what Dyson said previously, that ICANN "will carefully consider any and all suggestions for improvement" and that "nobody should feel that issues that are important to them and have not been addressed to their satisfaction cannot be revisited."? Obviously, such contradictions doesn't deter Roberts: "I'm not very warm and fuzzy about the opinions of a bunch of self-appointed critics out there," he adds. "They create a context of their own, they create their own standards and then criticize us against those standards.... I am responsive to criticisms that we don't live up to the standards set out in the White Paper [that mandated ICANN]."

Some agree with this. "Regardless of my own desire for more openness in ICANN's processes, I think he and others at the Berkman Center have behaved in an honest and forthright manner, trying to include as many people in the discussions as possible," admitted one observer on the Netizen mailing list. "I've listened to the Real Audio feed from at least three fora where Ronda Hauben has participated (two hosted by BCIS), and in each instance she was given ample time to state her case. She has been treated fairly, but she is not fair enough to admit it."

In this particular case, however, those defending Hauben see the whole debate differently. They maintain that the silencing of critics has nothing to do with the time allotted nor the styles of the speeches made at the various meetings. Rather, it has to do with blurring the focus of some of the more critical attacks. Hence, at the Berkman Center meeting at the end of January, where the content of what Hauben was presenting was the case for a public and scientific oversight of the Internet, the ultimate purpose was not to deprive her of the right to speak, but to somehow penalize her so others would be cowed and wouldn't make the same criticism.

In face of such accusations and growing criticism, ICANN has had to rely on the services of a professional spin doctor, mostly to address charges of secrecy and inaccessibility. This in itself was a cause for severe criticism. "I think it's a bad idea and silly waste of money," said Dixon. "They should open up their [board] meetings and hold them in public rather than hire a PR firm to spin their decisions." Cook was more

scathing: "this is the normal PR approach to putting a friendly face on a dictator or a carcinogen."

Roberts defended the move, stating that ICANN is a world-wide organisation that gets world-wide press coverage and thus needs professional help. Yet critics say the move is merely cosmetic and that the corporation should institute democratic decision-making processes. "The PR firm now stands between them and the Internet community," notes Dixon. "It polishes their pronouncements and puts them out. It's just a familiar means of continuing the same kind of failed, bankrupt effort at communication that's not a meaningful two-way dialog, but merely a series of pronouncements."

While a professional spin doctor has been busy taking care of ICANN's defensive strategy, lately there seems to have appeared what can be referred to as an offensive strategy in support of ICANN. This strategy comes as ICANN teeters on the brink of legitimacy.

This offensive strategy has taken the form of scare tactics based on an increased fear of "cyber-terrorism." In the beginning of March a top Pentagon official cautioned the U.S. Congress about the "very real threat" of cyber-terrorists who are more likely to hit commercial targets than military ones. This followed an unconfirmed report by Reuters about hackers seizing control of a U.K. military satellite.

By ushering in a fear of cyber terrorists, ICANN's role is already being semi-legitamized. Also, a sense of urgency has been added, in where public opinion is coerced into believing that some form of control over the Internet is needed – and needed quickly. Secrecy is likewise justified; consequently, the open structures of the Internet is no longer being regarded as an advantage, and should thus be discarded.

The blatant contempt of ICANN board members, coupled with their lack of transparency and the over-extension of their authority, has many wondering what the ulterior motives for the organization really is. For many, the problem with Dyson as Chairperson of the Interim Board of Directors of ICANN is that she personifies the U.S. government's effort to create a private corporate entity that they control which, in turn, controls the Internet. Subsequently, the communication that the Internet makes possible among people is under attack by the likes of Dyson and ICANN who want to convert the new media into a place for buying and

selling, and for safe "transactions." In conjunction with this, is concern over the problem of scaling the Internet. According to the Office of Inspector General's Report for February 7, 1997, the Internet needs to have its scaling overseen by those with the kind of scientific knowledge that built the Internet.

Yet, instead of solving the problem of scaling the Internet, ICANN has been more concerned with determining who gains control of its various functions. What is more, they are involving themselves with such issues as the transfer of valuable and controlling assets of the Internet to a private entity, despite the fact that the Memorandum of Understanding with the NTIA in November 1998 didn't provide any authority to transfer any such assets (it only provided authority of the U.S. Department of Commerce to make contracts).

Many believe the hidden agenda behind ICANN to be not just as a means for the administration of critical technical functions, but as a vantage point from which interested parties can determine how the Internet should be governed by using it to make the rules under which the Internet would operate. This includes the DNS and other Internet functions.

Within this context, it seems ICANN is more concerned with first grabbing the functions needed to scale the Internet rather than solve the problems at hand. For Cook, the question is not what ICANN is up to; for him, that much is already clear and quite obvious. Rather, it comes down to simply this: "The Golden Egg – Will ICANN Kill the Goose or Just Steal It?"

Saving the process

With widespread discontent over the formation of ICANN, the policies it has thus far pursued, and the attitudes of its members, attempts have been made to keep the transition under some sort of control. At the recent meeting in Singapore, ways to save the process were explored. What has come to be known the CENTR proposal (or document) was one of the outcomes of this attempt to save and even realign the process.

Shortly before the March meeting in Singapore, critics of ICANN had coalesced around a proposal called the Paris Draft, with the Open

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Root Source Consortium (ORSC) being one of the main drafters of this proposal. Meanwhile, large commercial interests rallied around a proposal called the BMW (not to be confused with a famous trademark). In the end, members of both sides met and reached a sort of compromise, creating "consensus principles" which was later called the CENTR document. Supporters of the CENTR document argue that it's a common document, agreed by all participants in the previous day's DNSO meeting. In fact, they go so far as to regard the document as the "Singapore Draft." Whatever name is applied to it, the ultimate aim of the document was to confront some of the grievances shared by many over the way ICANN has been conducting its business.

Foremost among them was a call for open meetings. As Dixon aptly observed, ICANN is "making some very important decisions and have a great public trust.... The only thing they can do to make the people trust them is to conduct their meetings in public." Although ICANN responded to this by considering an open membership model, some opponents grumble that this is still not enough, for all the important decisions will be locked up before the membership would even have a chance to meet.

In addition to this, opponents see other problems. For some, what started out as a presentation of the CENTR compromise proposal at the Singapore meeting quickly devolved into an attempt to accept the BMW draft as the basis for the DNSO. For others, the CENTR compromise is structurally flawed, for it's just as elitist as ICANN. They argue that most Internet users have not been able to (or could not afford to) participate in the meetings taking place, so the CENTR document is, in effect, a document of a very small and privileged set of people.

Along these lines, criticism has been leveled at the DNSO itself. Many feel the structure of DNSO ensures heavy representation for narrow, corporate interests. As a result, by their representation in the leadership of the DNSO, these interests would outweigh the interests of ordinary domain-name holders and non-profits. As if adding fuel to the fire, proposals put forward by the World Intellectual Property Organisation (WIPO) to restructure the way Internet domain names in .com, .net, and .org are assigned and adjudicated have been brought to the fore. As one observer put it, "it is like having an auto dealer be the regulatory

agent for the automobile manufactures. He can only make decisions in his own self interest."

It quickly became obvious that small businesses, non-profit organizations, and individuals would derive no benefit from the WIPO proposal because they simply can't go through the expense of registering their name as a trademark. But more importantly, however, are some deeply embedded flaws within the proposal which A. Michael Froomkin, law professor at the University of Miami, points out in a detailed report . These flaws include bias in favour of trademark holders, a failure to protect fundamental free-speech interests including parody and criticism of corporations, and zero privacy.

According to Froomkin, the only way in which the whole process can be saved is through a simpler reform plan. This would include compulsory advance payment before registration of a domain name in order to reduce speculative registration; penalties for false contact details, including de-registering domains with fake contact information; special rules to penalise large-scale domain speculation; trust courts to continue to clarify relevant law; an understanding that rapid changes in technology may make domain names less important; and, finally, create differentiated commercial and non-commercial top-level domains.

The campaign for and against ICANN

With battles lines drawn, it's time to take a more in-depth look at those who support ICANN and those who not only oppose it, but the privatization of the Internet in general.

The campaign in support for ICANN is, by and large, more low-key than those protesting against the organization. Their main point of focus is that there is actually nothing wrong with ICANN or the transition process. Accordingly, several people from the ISOC see nothing basically at stake in what ICANN is doing. As far as they are concerned, the issues the organization are dealing with are just boring technical functions. Hence, there's no reason for anyone to be concerned with what is being done with ICANN.

ICANN has received heavy backing from important representatives of the founding Internet technical community, as well as from some large corporations such as IBM and MCI WorldCom. Upon taking a

closer look at some of this latter support going to ICANN, the picture of a corporate power play becomes evident. For instance, according to ICANN's own web site, the following have "contributed" financial resources to the organization:

Compaq Computer Corporation, $25,000
IBM, $25,000
MCI WorldCom, $25,000
Netscape Communications Corporation, $15,000
Paul D. Stauffer, $1,000
Symantec, $15,000
UUNET, $25,000

While this may seem harmless enough, closer inspection reveals some startling facts. For instance, UUNET is owned by, and part of, MCI WorldCom. Thus, the figure for MCI WorldCom is actually $50,000 and not $25,000. Moreover, IBM people have been on MCI WorldCom's Board of directors. What is more, in the privatization of the NSF Backbone, IBM and MCI worked together on the project, with MCI ending up with a great benefit as a result. Taking this into account, the MCIWorldCom/IBM investment in ICANN comes out to be $75,000.

It would be wrong at this point to conclude that those who oppose ICANN are simply the opposite, that is, anti-corporatist activists and people with a deep social conscious who see the organization as nothing more than the latest example of intransigent neo-liberalism. Indeed, ICANN has faced opposition from all sectors, including a large numbers of experts who had been debating the domain-name question for over a year. This includes many Internet Service Providers and companies in the business of registering domain names.

At the same time, however, it's easy to blame the likes of Dyson et al. for the way ICANN has been acting and the pro-business agenda it has been pushing. It must be remembered that often people in such positions are not actually the ones pulling the strings, but are tangled-up puppets themselves. One just has to look at the conceptual foundations for creating ICANN in the first place, the White Paper issued by the U.S. government (IFWP). It begins: "On July 1, 1997, as part of the Clinton

Administration's 'Framework for Global Electronic Commerce' the President directed the Secretary of Commerce to privatize the Domain Name System (DNS) in a manner that increases competition...."[author's emphasis].

Thus, the political objectives of ICANN are quite clear. The political rationale for ICANN and the privatization of the Internet has nothing to do with technology or communications. Rather, it has to do with fulfilling neo-liberalism's political agenda of providing economic growth and low unemployment at all costs. The objectives that have been put forth by Magaziner and others are consistent with what Clinton and Gore's objectives are for stimulating the U.S. (and world) economy by "opening up" markets and "creating competition." From this point of view, with the euphoric promises associated with e-commerce coupled with the phenomenal expansion of the Internet's user base, turning over the Internet to corporate control seems like a logical step. Naturally, whether or not those who voted for Clinton wanted the Internet to be the vehicle for this is debatable. Unfortunately, neo-liberalism's dewy-eyed optimism, much like that of the digerati, often isolates from the real world those that espouse its virtues.

But as the row over ICANN has shown, not everyone is so dewy-eyed and optimistic. At the Berkman Institute meeting at the end of January, it was commonly felt that ICANN was getting the "crown jewels" of the Internet. Even John Zittrain,[10] director of Harvard University's Berkman Center for Internet and Society, admitted as much.

For many, ICANN has become the latest, and perhaps, biggest government give-away in terms of corporate welfare. Basically, central points of control of the Internet is being handed over to a private entity – one that it's creating. In turn, this private entity is being given control over IP numbers (at present, around 4.3 billion, of which 2 billion are allocated).[11] Meanwhile, control over the root server system and other aspects of the network gives it additional power.

In order to try and expand the level of discourse over these and other issues involving ICANN, attempts have been made to broadcast the debate to those not already involved. A formal and broad-based protest has been called against ICANN, the purpose of which is to "bring

ICANN out of the shadows" and to end its policy of conducting board meetings behind closed doors. Known as "the grey ribbon protest," supporters have been encouraged to display a grey ribbon on their web sites in order to draw public attention to the issue. This protest wasn't limited to just electronic media: grey ribbons were worn by some participants during the recent ICANN meeting in Singapore.

Of all the individuals involved in the campaign against ICANN, none has been more vociferous than Ronda Hauben. Having done in-depth research on the history and impact of the Internet, she is well aware of the stakes involved. As she sees it, the Internet was developed and has grown and flourished through opposing procedures. It is a democratic process where all are welcomed to speak, where those who disagree are invited to participate, and to voice their concerns along with those who agree, where those who can make a single contribution are as welcome as those with the time to continually contribute.[12] Moreover, the processes for discussion on key issues regarding the development of the Internet have been historically carried out online. Hence, the Internet as a medium of online communication – as opposed to a new marketing medium – is at the very heart of what was being built. Consequently, she is vehemently opposed to what she regards as the shameless commercial exploitation of the Internet. What is more, she holds the U.S. government directly responsible for the faulty process.

Hauben's main bone of contention is with the corporate status of the new organization. As far as she is concerned, its board of directors will have power of an unimaginable kind over all of the Internet. In addition to this, the present structure is open to abuse. To illustrate this point, she uses the recent scandal involving the Salt Lake City bid to host the Olympic games. The Olympics Committee scandal clearly reveals the dangers of non-transparent organizations that act as if they are unaccountable to the general public, and the kind of criminal activity that can come as a result. The difference between the Olympic Committee and ICANN is that with the latter the essential functions of the Internet are at stake.

"The whole concept of ICANN is contrary to any public interest concerns and even to most commercial interest concerns," warns Hauben. The entire process involving ICANN, therefore, is one in which

self interest is totally dominant, which runs counter the spirit and energy that gave birth to the Internet.

Some might argue that this may be going a little too far, that the process is not as corrupt as Hauben and others make it out to be. For instance wasn't the U.S. government, through the NTIA late last year, looking out for the public interest by putting ICANN under its supervision?

It's undeniable that the NTIA responded swiftly to growing discontent over ICANN. On the other hand, it wasn't so much a matter of genuine concern as of political expediency. Neo-liberalism differs from other political philosophies in that it attempts to co-opt opposition – whether by hook or by crook – so as to give the impression of true democracy based on civic discourse. However, as the CDA and NTM (the New Transatlantic Marketplace) issues demonstrated, when faced with growing opposition political leaders will adhere to the rule of law or public pressure, only to push through their agenda in a reconstituted form (e.g., CDA II and TEP respectively) – one that is more palatable for public consumption.

It's this fraudulent use of public opinion that substantiates Hauben's claim that what ICANN, and hence the U.S. government, is doing through the process is actually illegitimate and in some cases outright illegal. In effect, this explains why ICANN has been so secretive: "Obviously this is an important battle," Hauben observes, "and that the forces behind the creation and development of ICANN hide so carefully shows the illegitimacy of what they are doing."

Not only has Hauben been active in trying to make people aware of what she sees are the illegal actions of ICANN, but she has taken an active part in the process itself, raising issues and pointing out inconstancies to the board. In addition to this, she has even formulated a counter-proposal to ICANN which was submitted to Magaziner and the NTIA. In her words, "it was for a different kind of form, than the corporate form." She adds that "a corporate membership form is not appropriate[...] with regard to giving control over vital controlling functions of the Internet [...] It's a set up for illegitimate activity, to put the problem mildly."

Aside from Hauben, another prominent critic of ICANN and its

policies is Gordon Cook of *The Cook Report*. Unlike Hauben, who opposes the privatization of the Internet[13] in principle, arguing that there is a continuing need for scientific direction and research to make the Internet scale and grow, and that that this requires government support of science and continuing government role in Internet matters, Cook doesn't actually oppose the privatization of the Internet per se. Rather, he is more concerned about how it is being done and for what reason.

While making the same observations as Hauben over how and what the "morally bankrupt ICANN" has been doing, Cook has gone a bit further and delved into the tricky question of why. What he ends up concluding is that ICANN is not so much the creation of something new as much as the preservation of something old. It's a reaction to what he terms the "IP insurgency."

The IP insurgency is, basically, the advance of Internet technology to the point of upsetting the balance of power in the world of telecommunications. This is a profound threat not only to business interests that seek monopoly market power, but also those whose livelihood depends on social and political control of the masses.

As computing power increases and bandwidth restraints are overcome, coupled with the innovations made in the field of mobile and insular technology, fixed line digital infrastructure has been relegated to the background. So much so, observes Cooks, that "suddenly in 1998, with the impact of the TCP/IP insurgency about to change the face of a multi-trillion dollar world wide telecommunications industry, the stakes were very real."

Consequently, what seems to lie at the crux of the privatisation of the Internet is not the use of the technology as a new communications medium. Instead, the U.S. government appears more interested in using Internet technology as a means to promote the spread of deregulated U.S. phone companies. In essence, the Internet is seen as a cheap way of making money off voice telephony, despite the fact that it will destroy the Internet as a new communications medium. "Thus, the old is trying to resurrect itself and take over the new," writes Cook.

The ultimate purpose of ICANN, therefore, is a means by which large, American based (or owned) telecoms can forestall their demise in the face of the IP insurgency. In the process of institutionalizing the

IANA functions they are trying to form ICANN into an international regulatory governing body for the Internet – one that they can indeed use to protect their own interests. As Cook surmises, "if they can't win on technical merit, ICANN may be the vehicle for their self-preservation."

Yet even if major telecom interests are unable to gain absolute control of ICANN, the way in which they would be able to attain a certain amount of influence to forestall or even short-circuit progress is being done by way of a stratagem that is purely American in character: not through the use of pen or sword, but the gavel. As Cook eloquently puts it: "letting the lawyers in the door would be giving them carte blanche to destroy IETF culture." As a result, as the process moves along its present course, "nothing would suit the agenda of the huge legacy telecom empires better than a world in which their lawyers are able to tell the engineers of the Internet what they can and cannot do."

This goes a long way to explain not only the battles being waged with ICANN, but why Central and Eastern European telecom giants (such as MATÁV in Hungary, which is part owned by Ameritech and Deutsche Telekom) pursue policies which implicitly restrict access and stunt the development of on-line communities. What we are witnessing, in effect, is a reactionary, "counter insurgency" movement by established telecom interests.

What Cook and many others realise, however, is that this IP counter-insurgency is bound to fail in the long run. The reason for this – even if ICANN would triumph in pushing through its hidden agenda – is because unlike traditional telecommunications technology, there is no central point of location for the Internet.[14]

Still, this doesn't mean there's nothing to worry about. Although a telecom-led counter-insurgency is doomed to failure, what is at stake is the ability of making the Internet a means by which to "level the playing field" so to speak. It's quite apparent that at present the Internet is not a level playing field: the high cost of access (especially in regions like Central and Eastern Europe), coupled with the educational background and financial resources needed to be able to use the technology effectively, has rendered the use of computer mediated communications an elitist, First World activity. Nonetheless, many of these problems can be overcome in due course; however, if ICANN pushes through its

agenda, the present barriers that exist between the haves and have-nots will become solidified.

Silent Complicity

While controversy rages over ICANN's very existence, it's difficult to decipher who exactly is to blame. Some argue that the five IANA advisory council folks (Roberts, Farber, Cerf, Bradner, and Landweber), people who epitomize the Internet community, have actually failed in their ethical obligation they have as computer scientists. Indeed, they have helped to form ICANN and forged alliances with the large corporate forces. Dyson, meanwhile, who has been put at the head of it all (that is, to privatize the Internet essential functions), has been singled out as the one pushing forth a globalist, corporate agenda, since she is also out to help certain venture capitalists privatize public assets in Central and Eastern Europe.

Yet the whole transition process is a complex issue, not one simply between "good" and "evil." An implacable rancor remains between ICANN supporters and Network Solutions, the company that holds the (soon to end) monopoly on the .com domain and that was hitherto the nemesis of the small-business forces. Thus, the controversy over ICANN can't be leveled to simply a split between corporatists and anarchists. Because the whole situation is rather complex, with no clear demarcation of "good" and "bad" guys (don't forget, Postel was highly respected right up to the time of his death even though some felt he was the one personally responsible for the creation of ICANN), it's hard for people not involved to focus on the issue at hand when so many contradictions abound. Some have even argued that it's exactly this lack of clear-cut divisions which is being exploited by those favouring ICANN. In this way, silent complicity among the majority of users and non-users alike is being cultivated. Thus, while the debate rages over the heads of ordinary people, a form of self-censorship protects many from the burden of having to sift through truths, half-truths, and lies.

For this reason, it can be seen why the issues at stake are purposely being muddled by the powers that be. At the Berkman Institute in January, the meeting was fraught with contradictions and inconsistencies, namely that of doing government functions outside of any

accountability by government. This issue had been repeatedly brought up by those from the audience and even a speaker on the final panel. Hauben summed up the meeting in this way: "In general of what these respondents said was that there was nothing at issue in the transfer to ICANN of Internet essential functions, assets, policy making etc. That these were just boring tasks. In this way they threw up confusing examples to spread sand in the eyes of anyone trying to figure out what the issues were."

As a result, there is almost no public discourse. The lack of public debate compares starkly to when the U.S. government attempted to push through the CDA in its original form. Then, everyone, including big business was against it; however, now that big business is a part of the problem, discourse has suddenly dwindled. "There is a battle being waged today," observes Hauben, "one that is of great importance to the future of society, but most people have no idea it is taking place."

This suits governments and other interests just fine. In Europe, the European Commission's (E.C.) request for action on the new IANA calls for "the need for the attention of the private sector to be drawn to this matter."[15]

There is distinctly no mention of the public sector. Likewise, "the European Commission has called a number of consultative meetings. As a result of one of these meetings, the E.C. Panel of Participants (E.C.-PoP) was established, consisting of a European group of stakeholder representatives." In this case, the term "stakeholder" is deliberately vague. Hence, it seems in Europe governments are just as secretive as ICANN, leaving little room for public input. This is a totally different approach to how the Commission searched out public input on its Green Paper on Convergence in the telecom sector last year. In conjunction with this, there is the feeling that the process must be rushed through as soon as possible. According to the E.C., their panel of "experts" have concluded that "delays in incorporating the new IANA could create lasting imbalances with respect to the required international and competitive equilibrium."

Others, see this rush in a different light. As far as Cook is concerned, the IP Insurgency is now so close to total triumph in undermining the old telecom order that immediate action must be taken in order

to forestall the demise of the large telecoms. This goes a long way to explaining why governments and telecom interests alike are so concerned with rushing through the process as fast as possible. Either way, the apparent rush is at odds with the intended aim of establishing ICANN through a public consultancy process, which takes time to elicit a wide range of responses.

Not only is discourse limited in the public sphere, but within the realms of the Internet as well. Surprisingly, little mention has been made about ICANN's activities, despite the fact that it involves the future of the Internet. Even on some of the mailing lists where Dyson throws in her two cents worth along with promoting *digerati* corporate philosophy, there has been little mention of ICANN. On the On-line Europe list, for example, the only significant amount of information provided was when she forwarded an article entitled "ICANN asks Commerce Department to begin DNS transition" to which she simply added "what I've been up to lately...."[16]

Ironically, it seems the closer ICANN comes toward legitimacy and as the debates become more heated, mailing lists are swamped by other information deflecting the topic away from ICANN. Naturally, the war in Yugoslavia has exasperated this condition. In the case of On-line Europe, there has been a substantial increase in traffic on myriad issues, yet there was no mention at all about NSI's recent courtroom triumph, this despite the fact that previously disgruntled users wrote frequently about the DNS wars.

Not only is it odd that there has been little on-line debate about the issue, but even conspiracy theorists seem to have faded to the background in spite of the fact that there is ample material available, such as the sudden death of John Postel right after the creation of ICANN. The only one that has thus far come close is the following from Bob Allisat:

"The Big Boys unleash their once upon a time free wheeling cyber anarchist cowboys now erstwhile lap dog shareholders and Vice Presidents of same corporations (emphasis on vice) who also become alarmed at the potential loss of revenue and power they all face should the rambunctious, raucous and revolutionary New Guard become successful. Said a-hole net heavy shills of THE BOARD OF DIRECTORS begin pinching previously unsullied dear oldbie bearded friends

cyber-ass ever more painfully into silence and abeyance, subsequently forcing teams of hitmen attorneys, high priced lobby call boys and girls upon their ancient buddy and, once the guy croaks from all the massive pressure thereafter wheel free forcing enyone [sic!] they were ever even remotely affiliated with to adopt their rather unsettling plans for world re-domination despite their own better anarcho-intellectual instincts."[17]

In the end, what both the on-line and off-line worlds are suffering from is information overload and overkill. With the issues not clearly understood and the lines dividing various interests blurred, it's hard for people to become passionate about what is going on. Furthermore, it seems to be something over which they have no control over anyway. With so many other problems before them, such as the war in Yugoslavia and economic hardships lurking around the corner, the best that most people can do is lend a passing interest to what is going on.

Conclusion

The entire transition process involving ICANN is in many ways a reflection of Internet democracy. Sadly, the circumstances in which ICANN was created, coupled with the attitudes and reactions of its board members, shows that democratic processes exist in name only. Lack of openness and transparency are the major hurdles the new organisation will need to overcome if it is somehow to emerge from the process with a shred of dignity and – above all – true legitimacy.

The fact that some form of opposition does exist is an indication that all is not lost – at least not yet. Some form of discourse has appeared that questions the true motives of ICANN's board members and the process in general. The discontent people have expressed was enough for the U.S. government to step in to make sure the transition is as smooth and fair as possible.

Unfortunately, this has not gone far enough. What is more, there are many more people – both online and off-line – who are either unaware of what is going on or, because of the sheer complexity of the issues before them, are unable or even unwilling to take part.

As a result, it is here that Internet democracy ultimately fails. What should have been the glorious birth of online democracy and civic discourse on a truly global scale has been wasted. The need to rush

through the process quickly, along with the fact that only an elite minority of both on-line and off-line communities are making decisions about the future of the Internet, is antithesis to the actual spirit of democracy. Simply voting online and obtaining statistical information has not much to do with democracy; rather, thorough consultation and wide participation is the key.

Because of the silent complicity of the majority which, in some ways, has been cultivated by those wanting to push the process forward quickly, democracy will have suffered a severe setback no matter what the eventual outcome of the transition process will be. To be sure, if ICANN is able to maintain the present course that its board members hope to establish, it could very well mean the end to the Internet as we know it.

References

1. <http://www.thestandard.com/articles/article_print/0, 1454,1718,00.html>
<http://www.techweb.com/wire/story/domnam/ TWB19981001S0014?ls=twb_text>
<http://www.egroups.com/list/noframes/rre/ 936.html>

2. <http://www.ietf.org/rfc2555.txt> Hauben also points to the NSF Office of Inspector General's Report of 1997 which states that the U.S. government via its development of the Internet and of the public funding of the Internet development had – and still has – the authority to administer the essential functions of the Internet. cf. <http://www.columbia.edu/~jrh29/geneva/NSF.inspector.general.txt>

3. As one observer noted: "Postel did whatever he wanted. It worked. And because it worked, nobody messed with him. There was no need for an institutional basis and there is none. It's not broken, so why fix it? The answer of course is obvious, there is money to be made, obscene amounts in fact, for doing virtually nothing." At the same time, many critics see the whole idea of questioning Postel's authority in forming ICANN as an attempt to bury the real issue - the privatization of the Internet – under a miasma of polemics. They argue that the U.S. government did and does have the authority to administer IANA in a way that supports cooperative processes and public benefit. However, this same government is now trying to give IANA to the so called "private sector," which really means giving it to a small group for the benefit of the small group and those associated with it. The NSF Office of Inspector General Report <http://www.columbia.edu/~jrh29/geneva/NSF. inspector.general.txt> makes the point that the Internet has been developed with a great deal of public funding and by

government, and that the government doesn't have the authority to give the Internet Names and Numbers away to anyone. Indeed, they have the obligation to protect it so that people receive the benefit of the Internet.

4. As Jay Hauben mentions, before Postel died the Commerce Committee Chairman at the House of Representatives had sent a letter to the Secretary of Commerce asking for a series of documents so as to investigate what was happening in setting up ICANN and choosing the Interim Board of Directors. A copy of this letter can be found in the most recent issue of the *Amateur Computerist*.
 <http://www.ais.org/~jrh/acn/acn9-1.articles/>

5. For those involved with telecom issues both in Europe and North America, this is clearly false. Despite the promises of cheaper phone services due to competition, individual consumers (as opposed to corporate entities) have seen prices go up for basic, local phone services in the U.S., Canada, and throughout Europe. Indeed, in Central and Eastern Europe telecom charges have gone up 25% annually in countries like Hungary and in some cases doubled, as in Russia. In addition to higher prices, there are a host of other problems. There have been reports about the corrupt processes of telecoms in the U.S. transferring people to their services without the people's permission. Also there has been a marked increase in the number of junk phone calls. cf. <http://www.consunion.org/other/0406atdc499.htm> see also <http://www.consunion.org /other/ tele2sw299.htm>

6. According to a statement released by the European Commission in mid-October, "the E.C.-PoP [the European Commission's representatives for the transition process] also underlined the need to ensure a more balanced international representation." From: Significant progress made on the new Internet Assigned Numbers Authority. European Commission, 15 October 1998. <http://www.cordis.lu> RCN: 11372

7. A sample of its header: >From membership-owner@ISI.EDU Tue Feb 16 11:59:55 1999 Hauben, Ronda - "[Membership] Why not ISOC?" posting to the Netizen list, 16 February 1999.

8. The history of DARPA is as intriguing as that of ICANN. In response to Sputnik, President Eisenhower agreed with recommendations that there be a civilian agency that would be able to support scientific and technological research, and that would be part of the Department of Defense. Originally created to support research in space, its responsibilities changed for various reasons, so that NASA was created as a result instead. DARPA remained, however, and was soon put under the Director of Defense Research and Engineering (DDR&E;) who it would seem reported to the Secretary of Defense, who is directly under the President of the U.S. But that Congress provides the funding, the agency also has the obligation to report to Congress and is in that way overseen by Congress as well. Hence, the line of responsibility from DARPA is,

admittedly, not so clear and concise but nevertheless exists. According to a 1975 study of DARPA/IPTO (the Information Processing Techniques Office which existed from the early 1960's until 1986), the line of responsibility went from the head of DARPA to the DDR&E;, then most probably the Secretary of Defense and then Congress, with support from the President of the U.S. being an important component of overall support for DARPA.

The study adds, however, that at times there has been more and at times less support from the President of the U.S. for DARPA. What is of interest is that from the interviews of those who worked as part of DARPA which were cited in the study, one describes how there were various government agencies that would come to oversee the financial transactions and to make sure they were appropriate and provided for by law. The irony of it all is that DARPA was originally set up in opposition to "vested interests" whereas ICANN seems to be being set up to be in the control of "vested interests."

9. Wired News: 2/4/99

10. In a recent Forbes digital article, the opposition of Zittrain to the apparent direction in which ICANN is heading was made clear: "ICANN's possible ascendance to the Internet throne has some parties up in arms because of the crucial role domain names play in the economic success of any web venture. "There is an intrinsic value of these names far beyond what it costs to register them," says Jonathan Zittrain, director of Harvard University's Berkman Center for Internet and Society. He cites the example of a sex site that grabbed the domain whitehouse.com before the U.S. government could and enjoys a lot of accidental traffic as a result. "ICANN is careful to say they're just assigning names and numbers," says Zittrain, "but that's like saying you have the narrow scope of running the printing presses that happen to print money. It's a lot of power."

11. The possible economic implications of this is obvious. If ICANN would decide to charge a nominal amount for IP numbers, say $50 a year charge for only those allocated, this would lead to an income of $100 billion alone (NSI had a gross income of $900 million just from selling domain names).

12. cf. "Lessons from the early MsgGroup Mailing List as a Foundation for Identifying the Principles for Future Internet Governance" by Ronda Hauben, INET '98.

13. Noam Chomsky, in an interview he did on April 5, 1999 for the *Boston Phoenix* ("Who Runs America?," interview with Noam Chomsky by Adrian Zupp for *Weekly Wire*), similarly opposes the privatization of the Internet, and not just who benefits from it. In essence, he opposes the public harm that the privatization of the Internet represents to the average citizen.

14. This is another area where Cook and Hauben disagree. While Cook sees that there is no central point of location for the Internet, Hauben regards IP numbers as a central point of control, as one must have an IP number to communicate on the Internet. Similarly, she argues that the other functions that ICANN is taking over are crucial for communication on the Internet and so it will give them power and assets that belong to the public and to cooperative processes. "They do represent something fundamentally different and are trying to take ownership and control over actual means of controlling the Internet," notes Hauben.

15. see "Commission coordinates action on the new Internet Assigned Numbers Authority." European Commission, 30 July 1998.<http://www.cordis.lu> RCN: 10823

16. Dyson, Ester - "ICANN asks Commerce Department to begin DNS transition" posting to the Online Europe list, November 7, 1998.

17. Allisat, Bob – "Sister Corruption & Brother Big," accessed from Netizens, 18 February 1999. see also: Free Community Network
<http://fcn.net_http://fcn.net/allisat> and <http:// robin.fcn.net>

Additional Links

1. *The Amateur Computerist* web site is at:
  <http://www.ais.org/~jrh/acn/> In particular, the July 1998 Supplement entitled "Controversy Over the Internet" available at: <http://www.ais.org/~jrh/acn/dns-supplement.txt>

2. *The Amateur Computerist* Vol 9 No 1 Winter 1998-99 entitled "Battle over the Future of the Internet" is available at: <http://www.ais.org/~jrh/acn/ACN9-1.txt>

3. *The Cook Report on Internet:* <http://www.cookreport.com/>

4. The Computer Professionals for Social Responsibility (CPSR):
<http://www.cpsr.org/cpsr/nii/cyber-rights/web/dns-ntia-newcorp.html>

5. David J. Farber's homepage: <http://www.cis.upenn.edu/~farber>

6. The Domain Name Handbook: <http://www.domainhandbook.com/>

7. The EuroISPA homepage: <http://www.euroispa.org/>

8. Froomkin, A. Michael – "Major Flaws in the WIPO Domain Name Proposal – A Quick Guide": <http://www.law.miami.edu/~amf /quickguide.htm>

9. A draft of Hauben's book *Netizens: On the History and Impact of Usenet and the Internet:* <http://www.columbia.edu/~rh120/>

10. Ronda Hauben's paper distributed at the January 23, 1999 Berkman Center meeting "The Internet: A New Communications Paradigm," documents the discussion recently on Usenet about this problem in the U.S. of the American government destroying basic research and attacking important entities like Bell Labs.:
 <http://www.ais.org/~ronda/new.papers/internet.txt> see also a discussion about Bell Labs at: <http://www.ais.org/~ronda/new.papers /discussion.txt>

11. Hauben's account about the Names Council meeting in Geneva at the IFWP:
<http://www.columbia.edu/~rh120/other/ ifwp_july25.txt>

12. Hoedeman, Olivier – TEP of the Iceberg. Toward Freedom, Winter 1998/99, Vol. 47, Nos. 7 & 8.: <www.towardfreedom.com>

13. ICANN's Homepage: <http://www.icann.org/>

14. The request from the Chairman of the Commerce Committee of the U.S. House of Representatives for information on the process of formation of ICANN is at:
<http://www.ais.org/-jrh/acn/acn9-1.articles /acn9-1.1.txt>

15. Statement of Gene Kimmelman In Response to AT&T;'s Announced $3.00 per month Charge for Basic Schedule Long Distance Customers:
 <http://www.consunion.org/other/0406atdc499.htm>

16. McKay, Niall - "ICANN Gets a the Green Light," *Wired News*, 24.11.98.
<http://redirect.wired.com/redir/10025/>
<http://www.wired.com/news/news/politics/story/ 16469.html>

17. McWilliams, Brian - "ICANN Critics Call for Protest" InternetNews.com Correspondent Business News Archives, February 23, 1999:
<http://www.internetnews.com/bus-news/article/ 0,1087,3_72161,00.html>

18. NTIA: the National Telecommunications and Information Administration:
 <http://www.ntia.doc.gov> see also
<http://www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm>

19. Ogilvy PR Public affairs:
<http://www.ogilvypr.com/public_affairs/pubaffrs.html> see also:
<http://www.alexanderogilvy.com/>

20. Survey: Deregulation of local phone service results in higher prices, virtually no

competition in Texas: <http://www.consunion.org /other/tele2sw299.htm>

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