

THE PROCESS OF ETHICS

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Abstract

A prominent, public debate regarding the possibilities available to regulate the Internet has surrounded the expansion of this increasingly ubiquitous medium. It was the intention of IFIP's special interest group on a Framework for Ethics to facilitate contribution to this important discussion. The group did so by organising a series of rolling workshops and a round table on the subject of Internet governance throughout the duration of the HCC5 conference. The details of the presentations, and the ensuing discussions, are described here. Not only did these events provide an ethical focus for the entire conference, they also enabled a particularly dynamic and interactive experience in the process of developing ethics.

1. INTRODUCTION

Parallel to the rapid growth of the Internet, there has been an increasingly urgent debate surrounding the issue of regulation. Concerns regarding security, privacy, illegal and harmful content (among others) have all contributed to discussions between governments, professional bodies, and consumer organisations as to what steps could or should, be taken to protect users. At the extremes of the debate, there are two constituencies: those who argue that any regulation goes against the spirit of the Internet and, moreover, that its success can be attributed to the absence of regulation; and those who see the lack of regulation as a threat not only to its potential success as a communications medium but also to certain moral or societal values.

The outcomes of this debate cannot be understated. The influence of the Internet on the commercial world alone will impact on every member of society in the developed world and, as the number of users continues to grow exponentially, the Internet will form part of the fabric of people's daily lives. Whether regulation is appropriate, how it could be managed and by

whom, are key questions with fundamental ethical consequences. These questions deserve informed, open, public discussion and reflection.

In light of the importance, and urgency, of this debate, and in line with its commitment to create "spaces for discussion" (Berleur and Brunnstein; 1996, p263), the IFIP Special Interest Group, SIG9.2.2 (Framework for Ethics) organised a series of workshops and round table discussion around the theme "Internet Governance". These workshops and discussions are just one of the formats that the group believes to be an integral part of its mandate to develop various spaces, processes - or fora - for discussion - about the ethics of the Internet. The particular structure of the workshops and round table enabled the participants of HCC5 to contribute actively to the debate, and it is hoped that the resulting publication (*Ethics and the Governance of the Internet*, IFIP Press, 1999) will continue to inform and stimulate discussion world-wide¹.

This paper gives some background to, and describes the events of, the series of rolling workshops and round table held during this conference (HCC5) on the topic of Internet Governance. The paper "Ethics and the Governance of the Internet" (Jacques Berleur) which also appears in these Proceedings gives an introduction to the governance debate, together with the recommendations of SIG9.2.2.

2. BACKGROUND

The format of the workshops and round table was in the nature of an experiment. Rather than simply host the round table and present conference delegates with topics for discussion, the emphasis was placed on active audience participation. The rolling workshops were specifically designed to introduce topics relating to regulation of the Internet to the participants. Although the topics covered were considered to contain an ethical perspective, the papers presented were deliberately devoid of opinion. The intention was to offer the audience 'straight facts' so that they could assess the ethical dimensions of the questions for themselves. The idea behind this experiment was to provide conference delegates with concrete information so that they could give these matters some thought in advance of the round table session. They would then be able to participate more fully, and fruitfully, in the round table. It was planned that the structure of the round table session would evolve from comments collected from the delegates

following the presentations, and that some members of the audience would become the presenters at that session.

To create a sense of continuum and participation, a member of the special interest group (one of the authors of this paper, Penny Duquenoy) was elected as rapporteur or 'collector of ideas' from the audience. The remit was to provide a summary of the previous workshops at the beginning of each workshop session and to collate opinions on ethical matters expressed by members of the audience during the week.

3. THE WORKSHOPS

There were four workshops of approximately one hour each, arranged at intervals during days 1 and 2 of the Conference. The round table was held on the final day of the Conference.

The overall theme of the series of workshops was the governance of the Internet. The workshops explored three main forms of governance: technical controls; self-regulation (that is, norms regulated by professional or trade associations); and legal controls.

3.1 Rolling Workshop 1:

Introduction

Chair: Prof. Jacques Berleur (Chair SIG 9.2.2)

The first of the workshops was an introductory one. It was chaired by Prof. Jacques Berleur, who explained the nature and theme of the workshops to the audience. The audience was made aware of the participatory nature of the events, and Prof. Berleur introduced Penny Duquenoy as the contact person for their views on ethics. The audience was requested to refrain from discussions about ethics until the round table, but any questions to clarify the content of any presentation were answered at the time of the workshop.

As an aide-memoire to the ethical focus of the series of presentations, the members of the audience were asked to bear the following questions in mind:

What are the main ethical issues?

- i) Should the Internet be regulated?
- ii) By whom?
- iii) How (including cost effectiveness)?

3.2 Rolling Workshop 2:

Technical Means to regulate the Internet

Chair: Eur. Ing. Richard Sizer (Member SIG 9.2.2)

The second workshop was the first in a series of presentation sessions. Two papers were presented, one on technical controls of the Internet and the other on filtering software.

*"Internet Convergence and Technical Control", Prof. Joseph Kizza
(University of Tennessee, Chattanooga, USA)*

This paper presented the Internet as a combination of three media: communications, computer services, and broadcast. Each medium has its own problems in terms of governance and control. Within the communications area, there are ethical issues which may be a function of the level of security of the information held on databases at servers or the security of the data during transmission. With electronic commerce "predicted to be one of the fastest and largest components of the Internet within the coming couple of years", the security controls (involving both hardware and software controls) are related to server security, server access, and transmission. Technical security controls currently in use include firewalls (protection of the server) and cryptography (protection during transmission).

In the Computer Services medium, the loopholes in security are evident. Complex operating systems are exposed to risk in a variety of ways, such as hacking, fraud, and safety critical software. Again, security is the main issue.

From the point of view of the Internet as a broadcast medium, several issues (already well known in this medium) arise. These are issues of free speech, access, intellectual property, child pornography, harassment, and security. One of the technical methods of control is the Platform for Internet Content Selection (PICS), which provides standard of labelling web pages according to their content. This technology can be adopted by groups or individuals to set their own criteria for rating and accepting or rejecting web pages, leading to the development of filtering or blocking software.

"What can be regulated on the Internet by control/filtering software?", Dr. Marie d'Udekem-Gevers (Cellule Interfacultaire de Technology Assessment, Facultés Universitaires Notre-Dame de la Paix, Namur, Belgium).

This paper outlined a description and criticism of control/filtering software. It set out the social and ethical implications of the processes involved in control/filtering (for example, setting labelling vocabulary and assigning labels). The approaches taken to control content vary from suggesting appropriate sites, searching, informing, monitoring, and warning to blocking. Control can relate to topics (taking place at the entry point to an address and based either on ratings or "not/black list", or at the level of the content itself) or to time. PICS introduces a separation between labelling and filtering : consumers can choose their filtering software and label sources independently. However, questions arise such as:

- i) Who has set labelling vocabulary and criteria for assigning labels?
- ii) Who is in charge of assigning labels?
- iii) What are the possibilities for customising the filtering software?

In a sample of ten ratings analysed by the author, nine are in English (one was written in Italian) and six use criteria defined in the US, the remaining four comprise Canada (2), the United Kingdom (1) and Italy (1). The most frequent categories in the sample are 'sex' and 'violence'.

Following these two presentations, the questions and concerns from the audience were:

"Is it possible to see which sites are on any filtering "not/black list"? Concern was expressed that certain sites could be arbitrarily black-listed (for example the suppliers of a filtering system could pre-set the system to exclude a competitor's web page). If black-lists are used, and the list is withheld from public view, any third party rating service has the power to dictate accessibility (i.e. inclusion or exclusion).

"To what extent is it possible to have a system of technical controls?" The point was made that as technical controls are introduced, technical 'antidotes' are also found. (For example, the introduction of filtering software has also brought bypass-filtering techniques.)

3.3 Rolling Workshop 3:

Self regulation of the Internet

Chair: Penny Duquenoy (Member SIG 9.2.2)

This third workshop presented delegates with an overview of various means of self-regulation (through codes of conduct or charters). One paper was presented which is summarised below.

"Governance and Self regulation", Prof. Jacques Berleur, (Cellule Interfacultaire de Technology Assessment, Facultés Universitaires Notre-Dame de la Paix, Namur, Belgium).

As far as governance of the Internet is concerned there is now a call for self regulation. This presentation identified what is meant by self regulation (voluntary acceptance of rules of behaviour by a group), and showed the methods employed by Internet users to establish some system of self-regulation (e.g. codes of conduct).

The methods classified under self regulation are diverse. They range from a variant of the "Ten Commandments", through to Netiquette, virtual communities' rules, charters, codes of ethics, and codes of Internet Service Providers (ISPs). Of course, with such a diversity of groups (and diversity of motivation) the priorities, and nature, of issues and principles differed. For example, the first item on the list of topics of the French Internet Charter Proposition aims to protect what they see as a "new space" (i.e. Cyberspace) of free expression and liberty, whereas the first item on the list of service providers refers to the legality of material. However, some generally agreed principles emerge (although the wording of the particular charters or codes differs). Some common principles advocate fairness, respect, honesty, sincerity, privacy, intellectual property rights, free speech, and seek to discourage computer crime and illegal, dubious, or harmful material.

Although self regulation is effective in several areas, in matters that specifically concern ethics, a number of issues still need to be addressed including: questions of participation; 'places' (physical or virtual) where self regulation is applicable; and enforcement. To be effective, regulations of codes or charters must be seen to be applied. Even where some sort of complaints or feedback procedure is in place, it is unlikely that any organisation will advertise its shortcomings, or inform the general public of weaknesses in its security. This poses some difficulties in evaluating the success/effectiveness of self regulatory procedures. It also seems that, in

some instances, codes of conduct or charters are little more than "propaganda statements" or self-defence provisions.

Following this presentation, some comments from the audience included : Items mentioned in some codes of ethics/charters (e.g. fraud) are criminal offences. To focus a fruitful debate on 'ethically grey' areas, it might be helpful to distinguish between 'illegal' and 'unethical' activities.

3.4 Rolling Workshop 4:

The Internet - The Role of the Law

Chair: Prof. Joseph Kizza (Member TC 9)

This session offered delegates information on the legal issues currently under discussion with respect to the Internet. One presentation was made, as below.

"The Role of the Law", Laetitia Rolin (Centre de Recherches Informatique et Droit, Namur, Belgium).

This presentation focused on two issues of current concern to users of the Internet:

- i) privacy,
- ii) protection of copyright.

The debate concerning privacy began with the question, "Is privacy a matter of ethics or economy?". First the position held by the United States was outlined, followed by the position held by the European Union.

In the United States, the trend (although there are strong opponents) is for the private sector to lead the way. The government recognises the unique qualities of the Internet and is keen to avoid placing undue restrictions on its use. Electronic commerce is to be facilitated.

Statistics in the United States show that Internet users are concerned about their privacy, and the use of their private data. They also show that more people would use the Internet if their privacy were protected in some way. The implications are, therefore, that the use of the Internet for commercial purposes is not realising its potential, and the future expansion of the Internet is at risk.

The United States government believes that trust and confidence in the Internet must be restored in order to maximise its commercial benefits. An example of one mechanism to build trust comes from a private-sector initiative called TRUSTe, a standards-setting organisation that provides web pages with a recognised seal of approval. However, confidence is not being restored as fast as the Federal Trade Commission would like, and the Commission has demanded that effective self regulatory measures should be implemented before early 1999. If this does not happen, additional government measures will be deemed necessary.

Non-governmental measures, such as market sanctions can be helpful for the effectiveness of self regulation. In the case of privacy, shares in the Internet Service Provider, Geocities fell heavily following public exposure of its practice of selling information from its database.

Where government measures do exist, for example the Electronic Communications Privacy Act, these measures are not necessarily effective. In the McVeigh case in the United States, information regarding McVeigh was gained illegally (by his employer the United States navy) and given illegally (by his service provider). The Electronic Communications Privacy Act states that information regarding a subscriber may not be given to a governmental entity without a warrant or court order. In this case, personal information regarding McVeigh was obtained by the navy and used in court as evidence of behaviour which would lead to his discharge from the service.²

The position taken by the European Union is expressed in its telecommunications directive which argues the confidentiality of personal data. The link between privacy, confidence and trust, and the influence of these issues on electronic commerce is also recognised. However, as far as legal sanctions are concerned, there are problems because of conflicts in definitions. For example, is personal information held by Internet Service Providers traffic and billing data or the collection of personal data? Different rules apply to these categories. There is a lack of clarity in definitions of roles and scope of the actors involved.³

On the question of copyright, there is a tension between the law and technique. Technical solutions for resolving privacy on the Internet focus on the mechanics (techniques) of production rather than on the content of the work. If this concept is followed, and content takes a secondary position (or is ultimately ignored), the nature of copyright will be altered, and we could

see the "death of copyright". This would have serious ethical consequences as far as traditional notions of the ownership of ideas are concerned.

3.5 Round Table on the Rolling Workshop

Chair: Prof. Jacques Berleur

The week of workshops culminated in a round table. The aim of this round table was to have discussion on the ethical issues and ideas arising from the previous three workshops. The round table's main points of discussion, and its ensuing resolutions are described in detail here.

Attendees approached Penny Duquenoy (as rapporteur) throughout the first two days of the conference to express their ideas and willingness to take the floor, and to give short, individual presentations to the audience at the round table. The presentations were as follows:

Prof. Colin Beardon (Plymouth University, UK)

Prof. Beardon was concerned that the impression in the first session on filtering/blocking software presented a rather 'negative' aspect of ethics: i.e. the workshop appeared to advocate blocking or suppressing free speech and freedom of choice; thereby, encouraging a culture where values were attributed by third parties rather than by individuals. He wanted to see an alternative approach to censorship taken, and he cited the analogy of ethical investment by proposing the idea of "ethical gateways". In the same way that an investor can choose to invest in companies that pursue an ethical policy (from information given by an investment adviser), an individual could choose to support ethical practices on the Internet (via an ethical gateway). This type of approach re-establishes ethical responsibility with the user, engaging the user in ethical choices. To take an active ethical position sometimes requires 'hard choices'. For example, Greenpeace is promoted as an ethical organisation and is very action-oriented. As far as professional ethics (and associated codes of conduct) are concerned, there is a choice between the 'third party' approach and a more individually 'engaged' position.

Mr. Gunnar Wenngren (Linköping University, Sweden)

Mr. Wenngren's question also arose from the first workshop on filtering/blocking software. He pointed out that there were ethical issues in the evaluation of the criteria used. The advisory groups for the various

organisations and providers of software pronounce themselves representative of the Internet community. This announcement in itself is questionable. As far as the evaluation of the Internet is concerned (and the groups involved in the evaluations), several questions are raised: "who are the groups?", "what is their culture?", "are they a minority?", "what are their values?", and "do they even exist?". The answers to these questions are relevant in an assessment of their authority and credibility. Further research would be useful. Values are very different between cultures. For example, in Switzerland prostitution is legal and regarded as a service whereas a prostitute in Afghanistan would be executed.

Although the groups undertaking the rating describe themselves as "advisory", there must be someone who makes the final decisions. Who are these people? Also, if a small subsection of a site is filtered, is the whole site filtered? In addition, it seems that some vendors choose to filter simply because they do not like a certain page or organisation. It is therefore right to ask the question "what sites are on the banned list?". This information should be publicly available.

Finally, filtering software can be automatically included in off-the-shelf products. These decisions are in the hands of a very few people.

Prof. Leif Bloch Rasmussen (Copenhagen Business School, Denmark)

Codes of ethics often enter the scene when a professional association is in crisis - that is, after the particular event causing the problem has occurred. For example, in the United States currently, the medical profession is assessing its behaviour at the very moment that it has become publicly known that syphilis research on black Americans was undertaken earlier in this century without the knowledge of the persons involved. Within communities, ethics and morality have been variously described by philosophers. The Danish philosopher K. E. Løgstrup talks about spontaneity, sovereignty, and a life of caring and helping when people are in need, and Pierre Bobillier suggests that morality is with mother and child. To bring these themes together, Prof. Rasmussen proposed that the International Federation for Information Processing (IFIP) should concentrate on an initiative that examines the role of children and their families in relation to information and communication technologies. They should be viewed as learning entities which need access to the Internet. Let IFIP become the first ethical community!

Dr. Marc van Lieshout (Dept. of Informatics, University of Nijmegen, The Netherlands)

In the last presentation of the round table session, Drs. van Lieshout expressed his doubts regarding self regulation. His view is that the development of technology provides a choice between Faust and Frankenstein (a means to entertainment and amusement, but with a debt to pay). Although not a particular advocate of regulation/legislation, he foresees the alternative of self regulation leading to a development of norms and values imposed on users by, for example, software companies, leaving the user with no free choice. Society is developing a view of people that is based on fun and entertainment - should this view set the foundation of ethical behaviour? For these reasons, it may be impossible to resist the power or the pressure to regulate in a more formal way. To return to philosophy, Drs. van Lieshout reminded the audience that, according to Emmanuel Levinas, our conscience lies in the face of the 'other', and that we perhaps need that tension in order to ground our ethics.

Discussion during this session was then open to the floor. Two general issues were raised that have previously been of concern to the special interest group on ethics (Berleur & Brunnstein, 1996; 241-56):

- were all the items for discussion within the series of workshops and within the special interest group more generally (such as intellectual property rights, security, and reliability) actually ethical issues?
- are ethics relative or fundamental? How possible is it to arrive at a universal set of ethics that is appropriate to all individuals? Alternatively, are there different sets of ethics relative to various broad cultural areas of the globe, such as the Far East, Europe, and North America?

It should be noted that the IFIP General Assembly has already pronounced on these questions. It favours the discussion of ethics in all countries rather than promoting the idea of one code. (Berleur & Brunnstein, 1996; 257).

An important suggestion was to think in terms of what we could strive for. Could there be a common starting point - for example, cross cultural values such as non-aggression, and peace? This proposal was supported. It was suggested that we question the underlying assumption of the Internet as an

infinite resource, which it is not (e.g. unequal access), and that we look at the issues arising from a finite resource.

Finally, there were some comments from the floor regarding the document "One Planet, One Net: Principles for the Internet Era" drafted by Computer Professionals for Social Responsibility (CPSR).⁴ The remainder of the discussion was dedicated to a review of this document.

Six very specific observations were made:

- i) The CPSR document mentions rights but does not stress responsibilities enough. Rights should be linked with responsibilities.
- ii) There is a need for debate with the United States (US) regarding censorship. Americans' use of the First Amendment closes many avenues of discussion (i.e. freedom of speech takes priority over censorship).
- iii) The document is written from an individual point of view, an individual who has free choice. The document presupposes we know what it is to be socially responsible.
- iv) The word "freely" or "without restriction" should be added to item 3 of the document (Net users have the right to communicate). It is vital that freedom of speech should be upheld, notwithstanding the dangers that this brings with it.
- v) As far as governance is concerned we have several models. However, because the US model is the first to emerge on the Internet we are in danger of adopting only North American rules rather than formulating rules from other cultures. This view is demographically unrepresentative. Asians constitute the majority of the world's population. We have a new opportunity to define a form of global government. Quite how this is to be achieved, we do not know.
- vi) It was pointed out that, as an international federation, IFIP is well placed to obtain international views.

Another comment was that, since the Internet is international, then we should look to international law. However, it was pointed out that the basic principle of international government is sovereignty of countries. The Internet is one overriding entity - are we able to regulate it?

4. SUMMARY OF RESOLUTIONS

A number of proposals for action by IFIP emerged from the discussions in the final session. These included suggestions for activities at various different levels of the federation (whether within its special interest group on ethics or through its series of conferences on Human Choice and Computers).

No definitive decision was made at the conference on which of the following proposals would be adopted. That decision-making forms the next stage of the special interest group on ethics' activities.

Broadly, the philosophy underlying any such efforts - shall we call it a proactive philosophy? - was encapsulated in the following ideas. Let IFIP:

- _ act to mitigate unequal access to the Internet.
- _ use the Internet to develop a cross-cultural approach to a search for peace on earth .
- _ focus on children and families and their need to access the Internet to further their learning experiences. Promote netmaking, rather than networking, with kids.

Three specific areas of research to be undertaken by the special interest group on ethics were proposed from the floor:

- what are the principles underlying the internationalisation of any laws on the use of the Internet?
- can what has been learned from the United Nations' experience of developing a Universal Declaration of Human Rights (and its application over fifty years) be applied to IFIP?
- a study of filtering software to illustrate ethical behaviour.

Finally, the following proposal was made:

As part of its mandate, IFIP must act to promote public discussion about the ethics of computing. These discussions could take place on relevant topics. In such a forum, IFIP might:

- organise an active debate with North America on some more controversial questions relating to the ethics of the Internet.

- develop a channel or open forum for the expression of an Asian/Confucian ethics of computing.
- formulate its own guidelines for a charter on rights and responsibilities in the age of the Internet.

Overview

The series of workshops provided an ethical focus or theme for the conference as a whole. The discussion served as a reminder that computer scientists' involvement with information technology, and specifically with the Internet, brings certain professional responsibilities.

The format of the workshops was considered to work well. Giving factual information, with time allotted for discussion and deliberation among participants and between sessions, allowed a more informed and conscious debate in the final round table.

The success of the workshop series means that this is likely to be a format that the special interest group will use again in the future.

The proposals that were made enable the special interest group to move ahead in its work. Several stimulating, concrete, and positive suggestions were made which fit well with IFIP's basic premise of creating fora for discussion on the ethics of computing rather than laying down a mandate for the behaviour of each of its societal members.

The ethical challenges posed to all members of society by the increasingly global use of information technology (and particularly by the Internet) are considerable, and will require much further careful thought as we begin a new century, and a new millennium.

The events reported in this paper describe the process of ethics, that is, of sharing thoughts and reformulating ideas. According to Jurgen Habermas (1983), discussion is at the heart of ethics, enabling learning and promoting understanding. In providing a forum for discussion SIG9.2.2. has endeavoured to activate and fuel the process of ethics.

Acknowledgements

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NOTES

- 1 This publication has been distributed to IFIP national societies, and other interested relevant bodies. It is available on-line from the SIG9.2.2 website under "Ethics and Internet Governance":
<http://www.info.fundp.ac.be/~jbl/IFIP/cadresIFIP.html>
- 2 For further information regarding 'Timothy R. McVeigh vs. The US Navy' see:
<http://dont.stanford.edu/cases/mcveigh/mcveigh.htm>
<http://www.wiredstrategies.com/mcveigh.html>
<http://www.lambda.org/McVeigh.htm>
<http://www.hrc.org/mcveigh/>
- 3 Regarding the current status of the discussion between the United States and European Union about art. 25 of the Directive, on "adequate protection", when there is a transfer to a third country of personal data, see:
'EU considers draft US "safe harbor" principles'
<http://europa.eu.int/comm/dg15/en/media/dataprot/news/harbor.htm>
'Joint Report on Data Protection Dialogue to the EU/US Summit, 21 June 1999'
<http://europa.eu.int/comm/dg15/en/media/dataprot/news/summit.htm>
'Opinion 7/99 on the Level of Data Protection provided by the "Safe Harbor" Principles as published together with the Frequently Asked questions (FAQs) and other related documents on 15 and 16 November 1999 by the US Department of Commerce (Adopted on 3 December 1999)', European Commission, Directorate General 'Media, Information Society & Data Protection', (DG XV 5146/99 - WP 27).
<http://europa.eu.int/comm/dg15/en/media/dataprot/wpdocs/index.htm>
- 4 See Appendix. Also available at: <http://www.cpsr.org/program/nii/onenet.html> (1997; the webpage has been last updated on December 8, 1999)

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Ethics and the Governance of the Internet, Jacques Berleur, Penny Duquenoey and Diane Whitehouse, Eds. IFIP Press 1999, Laxenburg, 56 p. (ISBN 3-901882-03-0)

(This brochure may also be found on the SIG9.2.2 website by clicking on SIG9.2.2 "Ethics and Internet Governance".):

<http://www.info.fundp.ac.be/~jbl/IFIP/cadresIFIP.html>

Habermas, Jurgen (1983), *Moral Consciousness and Communicative Action*, translated by Christian Lenhardt and Shierry Weber Nichol森, MIT 1990.

APPENDIX

CPSR DOCUMENT - "One Planet, One Net: Principles for the Internet Era" (reprinted below)

<http://www.cpsr.org/program/nii/onenet.html> : August 1998

One Planet, One Net: Principles for the Internet Era

The emergence of the Internet presents enormous opportunities and challenges to humanity. If we work to preserve its openness and diversity, we can ensure that the Net will be used to change the human condition for the better, and can prevent or mitigate its less desirable consequences.

The Internet is more than wires, computers, software, modems, routers, standards, and the applications that use them. It even encompasses more than text and pictures, and the audio and video that are rapidly joining those media. The Net is also the collective knowledge and experience of countless communities, each with its own modes of interaction, languages of discourse, and forms of cultural expression.

Certain principles must be understood and respected as we consider the more detailed daily questions that arise in the administration or governance of the Net. We believe that among these principles are the following:

1. The Net links us all together.
2. The Net must be open and available to all.
3. Net users have the right to communicate.
4. Net users have the right to privacy.
5. People are the Net's stewards, not its owners.
6. Administration of the Net should be open and inclusive.
7. The Net should reflect human diversity, not homogenize it.

The continuing evolution of the Internet presents both opportunities and challenges. We must work to counter the political, economic, social, and technical forces that work against these principles and threaten the promise of open communication on the Internet. Failure to do so may lead to a future in which the Internet is homogenized, commercialized, and regulated to the extent that it fails to meet its fundamental mission - to serve as a medium for maximizing human potential through communication.

1. The Net links us all together.

The nature of people and their use of networking technology provides a strong natural drive towards universal interconnection. Because the flow of information on the Net transcends national boundaries, any restrictions within a single country may act to limit the freedom of those in other countries as well.

The true value of the Internet is found in people, not in technology. Since each new user increases the value of the Net for all, the potential of the Net will only be reached when all who desire can openly and freely use the Net.

2. The Net must be open and available to all.

The Net should be available to all who wish to use it, regardless of economic, social, political, linguistic, or cultural differences or abilities. We must work to ensure that all people have the access to the technology, education, and support necessary for constructive, active participation. People in all walks of life should have as much right to send and receive information as do the affluent and powerful.

3. Net users have the right to communicate.

Every use of the Net is inherently an exercise of freedom of speech, to be restricted only at great peril to human liberty. The right to communicate includes the right to participate in communication through interacting, organizing, petitioning, mobilizing, assembling, collaborating, buying and selling, sharing, and publishing.

The Net offers great promise as a means of increasing global commerce and collaboration among businesses, but restrictions on information exchange would eviscerate that promise.

4. Net users have the right to privacy.

Without assurances of appropriate privacy, users of the Net will not communicate and participate in a meaningful manner.

The right to privacy includes at least three forms:

- * Individual Network users should control the collection, use, and dissemination of personal data about themselves, including financial and demographic information.
- * Network users should be free to use any available technical measures to help ensure the privacy of all aspects of their communications.
- * Individuals have the right to control who they communicate with, and how they conduct that communication. The privacy implied by the decision to not communicate must be respected.

5. People are the Net's stewards, not its owners.

Those who want to reap the benefits of the shared global Net are obliged to respect the rights of others who may wish to use the Net in different ways. We must work to preserve the free and open nature of the current Internet as a fragile resource that must be enriched and passed on to our children.

Individual pieces of the Net, such as wires, routers, and servers, have owners whose economic rights and interests must be respected. However, just as the ecosystem in which we live cannot be owned, the Net itself is not owned by anyone.

6. Administration of the Net should be open and inclusive.

The Net should be administered in an open, inclusive, and democratic manner for the betterment of humanity. The needs of all who are affected by the Internet - including current users, future users, and those who are unable to or choose not to be users - must be considered when making technical, social, political, and economic decisions regarding the operations of the Internet.

Although administration of the Net should aim to enhance its efficiency, availability, and security, it should not do so at the cost of discouraging use of the Net. Administration should facilitate and encourage greater use of the Net for communication, rather than inhibit it in any way.

7. The Net should reflect human diversity, not homogenize it.

The Net has the potential to be as varied and multi-cultural as life itself. It can facilitate dialogue between communities and individuals that might previously not have encountered each other in a dozen lifetimes. However, the Net could also become a homogenizing force, working to suppress diversity in favor of a bland globalism.

Individuals and communities should not be forced to forego local cultures and traditions in order to participate in the Net. In order to preserve the vitality that comes with a diversity of viewpoints, we should work toward helping the whole world participate as equals.