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COMMUNICATION NEEDS
AND RIGHTS;
COMMUNICATIONS IN FOUR
NEW ZEALAND CONTEXTS

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The views expressed in this paper are those of the authors and do not necessarily represent the views of the Commission For the Future.

COMMUNICATION AND INFORMATION

The words 'communication' and 'information' have been used in many different ways to describe a number of similar concepts. For example, communication has been defined as all procedures by which one mind may affect another. With the rapid convergence of computer and telecommunication services and the increasing awareness of the importance of this fact and hence the increasing number of studies being done in this area, new terms are being born continually, for example 'compunication', 'informediation', etc.

Communication is a process which should be interactive, participatory and multiway involving active source(s) and receiver(s) who seek convergence towards a mutual understanding.

Information transfer or the moving of information between its origin or repository and its user may or may not be part of communication in this sense. It may be an element of a communication act which extends over a long period of time. For example the transfer of information into a data bank.

Communication Systems

For analytical purposes it is useful to consider communication systems as socio-technical systems having two inter-related components:

1. Social rules which are the sets of role definitions, norms and rules, etc, that define which persons participate in communication on what subject and in which context. These define the institutional aspects of communication and from these we can identify communication needs, rights and hence obligations and responsibilities.
2. Tools or technologies which are the technical aspects and the operational rules and management. These define the infrastructure of communication and hence the communication resources.

The concept of "systems" is particularly appropriate in the attempt to understand the dynamic rather than the static nature of communications as a socio-technical process.

Communication Needs

It is useful here to clarify a number of similar and inter-related terms. Communication services arise in response to human needs, wants and demands. The term "demand" is familiar in its economic connotations e.g. the number of applications for telephone installation. Demands are, however, the effective expression of wants (i.e. individual desires). They may also be interpreted as a response to needs - need being a logical construct derived from observation. An analysis of effective demand requires an examination of relevant wants and needs, and also of economic, social and political influences (e.g. ability to pay, or the likelihood that the demand can be supplied). In other words, an assessment of demand for communication services must be based on a valid picture of needs and wants.

Long range planning of communication services must try to anticipate the relationship between future demand and future social needs based on expected change in the environment such as economic growth, political structure, changes in urban and regional settlement patterns, supply of energy and development in other service sectors: e.g. transport. For the purposes of this paper these changes are defined by the Commission For the Future's four contexts.

As humans our needs to communication vary widely. For a start, collective life of any kind requires communication just to function. Through communication we develop a synthesis - perspectives we share towards decisions, values, beliefs and norms. We actually construct what is real to us by exchanging and modifying information.

There appear to be five basic categories of needs and wants which generate a variety of demands for communication and information services:

- i Personal survival - this relates to Maslow's first level of needs. It requires flows of information between the individual and his or her environment.
 - ii Personal interaction.)
 - iii Organised communication.)
 - iv Collective behaviour.)
 - v Learning and socialisation.)
 - vi Creativity)
- Requirements for humans to function socially. These provide for fulfillment of Maslow's higher order needs.

These can be subdivided into a number of overlapping sub-categories, as follows:

- i Survival.
- ii Personal interaction.
- iii Learning and socialisation.
- iv Information storage and analysis.
- v Recreation and entertainment.
- vi Collective behaviour.
- vii Co-ordinated activity.

The recognised functions of communications - to inform, educate, persuade, co-ordinate, provide dialogue, entertain and create - enable us to satisfy these demands by a series of bio-social and man-machine media which can require one or all of the five human senses. The media are:

- speech)
- written language)
- coded signals (e.g. non-verbal, body language, Braille, etc))
- telegraph) individually
- telephone) or in
- film and photography) combinations
- sound recording)
- radio and television)
- computers)

The medium we prefer to use for communication is strongly dependent on the culture to which we belong and the purpose we have in communicating. For example, people from eastern countries prefer a physical proximity

which enables them to use coded signals such as the smell of their partners when speaking and to watch other non-verbal indications of feeling, such as pupil dilation in the eyes.

If we are within a primary group (close to friends and family) we rely on non-verbal communication much more than if we are within secondary groups (those people we associate with for business, recreation or social purposes, who are not close friends or family).

Man-made communication channels are extensions of the human senses and bridge time and space. They may be one-way or interactive. They can be delayed or instantaneous. They can be in a variety of languages or modes, as long as the users are "compatibly equipped". We read ancient writings. We see the surface of Mars. The web of complexity thickens. Today, computers and other devices intermediate and enhance basic communication channels, mimicking the abilities of the biological nervous system in many ways.

To be "compatibly equipped" requires the parties in a communication process to have both the necessary hardware and to share a common experience. Without any common experience there can be difficulty transferring meaning - think of speaking to someone in a language they do not understand. Even our understanding of word meanings varies and makes it difficult for us to reach common understanding while talking until we agree on the meanings we are employing. Opportunities for communication increase with common experience.

Many believe that what we experience is largely a function of the symbols we command. The more we have in our "vocabulary" of words, gestures, memories, previous experience, the more we are likely to experience. In other words, the information rich grow richer.

Previous experiences set up expectancies which determine what and how new impressions will be received. Selective attention and selective perception have vast implications for all acts of communication, ranging from inter-personal to international relations.

Most societies constantly change through increased learning and understanding which occur through communication and experience.

Communication needs can be simply analysed at the level of the individual and at the different levels of society.

Collective Needs

It is important to understand that the sum of individual needs does not necessarily result in a collective need. Moreover, a collective need does not necessarily imply the satisfaction of an individual one. For example, most people would probably agree that New Zealand's cultural identity should be protected but would also agree that they would like to have more imported television programmes available for their individual consumption. Thus the individual need demands great diversity and choice. The collective need favours the protection of cultural identity by reducing foreign content.

Collective needs crystallise around groups and within a country there are many competing groups. Ideally, they should merge into the notion of the "public interest", without which public policy would have no object. But what is the public interest? The recent CFF social survey "Attitudes to the Future" ** provides a guide to this key question.

This survey indicates that the public interest shows a preference for about equal emphasis on growth in both economic and social-environmental living standards embracing the following aspects in order of importance:

- * indefinitely sustainable use of natural resources
- * redeployment of unemployed economic production workers in social production activities
- * economic growth from more import substitution orientation, less export orientation
- * mixed scale of industries
- * a wide variety of work and creative use of increased leisure time, within the scope of a wide variety of life-styles

** Brian Murphy, "Attitudes to the Future", Government Printer, 1980

- * a more co-operative and less competitive society
- * a mixture of advanced and simple technology in use, with specialised production of computer technology goods and services
- * economic and social equality throughout society
- * less central government, more regional and community government
- * stronger links with Pacific nations than other countries

Many of these have significant implications for the development of communication and information services.

Individual Needs

Individual needs are often met by interaction within primary groups (family, close friends, including colleagues at work). They include the socialisation of children and the maintenance of language, values and belief in adults. The sense of belonging to a group is also involved. Communication at this level is often interpersonal either through face to face or point to point exchanges. These needs are likely to be the same at the individual level, no matter what development scenario or context we choose.

Needs of Society

Communication is a necessary but not a sufficient condition for human beings to act socially. Communication is necessary but not sufficient for a society to exist. A complex society demands a sophisticated understanding among all its citizens. Again, communication is a necessary but not sufficient condition for a society's members to achieve widespread and common understanding.

That which we call society may be thought of as the software, the filing system, the protocols of a System, capital S.

That may explain why this communications/computing/information explosion with which we are trying to cope is so difficult to comprehend and to describe. The medium may or may not be the message, but Society is the System in quite specific computer terms.

The Structure of Society

While communication is a necessary condition for human co-operation and survival, in the form of society, it is not sufficient. The way in which society is organised adds that condition.

There is general agreement that any industrialised society has to plan for its future in what is termed a turbulent environment - one where competing strategies set off reactions which have compounded effects and which may destroy, even inadvertently, competing social systems.

In this type of environment, a society which increases the adaptiveness of its members is most likely to survive disruptions which occur. In addition, it has been suggested that, for societies to tame turbulent environments, they must concentrate not on objectives which can be swamped by events, but on ideals which can be commonly held.

A choice in the basic design of society is, therefore, essential to survival. As one example, the choice is defined between a population seeking to improve its chances of survival by strengthening and elaborating its mechanisms of control or by increasing the adaptiveness of its individual members. The latter is regarded as a more successful strategy to deal with turbulent environments.

In the first design choice, communication tends to be one-way, with a stress on mass communications which instruct people, telling them what they should do and offering little chance to put their own opinions or to make choices. In the second, two-way communication is built in to the communications systems on the premise that people learn to learn only by constant feedback which is focused by the ideals that society holds for its existence, and by the operation of personal choices.

Consequently the technologies for communication are, in themselves, less important than cultural innovations which allow the maximum opportunities for people to learn. One study suggests, as examples, learning centres, video-access centres and electronic conferences. It predicts that, in a

society organised for maximum information and learning, demand will grow for such one-one, many-many, group-group communications. They say that demand is likely to decrease for one-many, many-one communications. These include the press, radio, films, television, surveys, so the implications of such possible changes are widespread.

Communication Rights and Responsibilities

Coupled with the concept of communication needs are concerns for rights and obligations. Freedom of information and the right to communicate are based on Article 19 of the Universal Declaration of Human Rights which states:

"Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."

The right to communicate is an evolving concept growing from the belief that communication is a basic human process which should ideally be two-way, interactive and participatory. The development of the right to communicate acknowledges that the world is being flooded with information useful to people but that the information needs to be organised, localised and made easily available.

However, all rights must carry with them equivalent obligations and responsibilities. Three special concerns have been associated with the right to communicate. They are:

- (a) The right to privacy
- (b) Cultural preservation
- (c) Information overload

With wide access to vast quantities of information there is a need to balance the flow of information to avoid extremes of both overload and scarcity.

The Canadian Telecommunication study "Instant World" in the early 1970's considered the right to communicate as a fundamental objective of Canadian society. It noted:

"The rights to hear and be heard, to inform and be informed, together may be regarded as the essential components of a 'right to communicate' ... But the realisation of a 'right to communicate' is a desirable objective for a democratic society, so that each individual may know he is entitled to be informed and to be heard, regardless of where he may live or work or travel in his own country. The people of Canada - as a body and as individuals - are, therefore, entitled to demand access to efficient telecommunications services on a non-discriminatory basis and at a reasonable price."

Implementation of the right to communicate in subsequent Canadian communication policy can be seen in the use of satellites to provide services for Indian and Eskimo villages in remote areas of northern Canada and in regulations to control the extent of Canadian content in the mass media in order to stimulate Canadian culture.

The concepts of communication rights and free flow of information are fundamental to the policy issues of privacy, cultural preservation, information overload, access to communication systems and equality of choice and distribution.

Individual and group communication rights are unlikely to differ within different social environments in the future. However, rights are an expression of political philosophy and hence the concept of a universal right to communicate is likely to be acceptable or unacceptable to a different extent within various political environments which future development options imply.

Such problems as an individual's freedom to withhold information which may conflict with other peoples' right of access to it, as the right of access to knowledge possessed by an individual but not written down, as the right to convert another's information into data for communication, are detailed problems which need consideration under the policy issue of privacy.

Four Possible Futures

In its publication "Contexts for Development: Clarifying Values", the Commission For the Future describes four possible, alternative New Zealand futures based on four different sets of values and aspirations.

The basic assumptions of the four philosophies are summarised as follows:

Context A: Humans are individualistic and competitive and can dominate nature.

Context B: Humans are individualistic and competitive but must live in harmony with nature.

Context C: Humans are social and co-operative and can dominate nature.

Context D: Humans are social and co-operative but must live in harmony with nature.

Societies based on different philosophies will adopt communication and other technologies in different ways.

COMMUNICATION ENVIRONMENT OF THE CONTEXTS

General Comment

The global "state of the art" will remain the same, no matter which New Zealand context we consider. The variability will be in the mix of social structure implicit in each context. Then the needs derive from the organisational units of the social structure.

Assuming that people want to achieve and to develop socially, emotionally, intellectually as much as they are able, this can be assisted by organising communication systems for self-learning. This is best achieved by cultural rather than technological innovations and by the one-one, many-many, us-us communication forms.

Context A: Individualist/Environmentally Dominating

Social Philosophy and Structure

- * Maximum communication choice is provided for free and independent individuals to pursue their own best interests.
- * Communication needs are largely uniform throughout society being tailored to efficiency in satisfying them and are almost exclusively supplied by the marketplace.
- * Services are not equitably accessible. Distribution is based on economic viability.
- * In general communication services are one-way, top down. Mass media are stressed and communication channels are used largely to instruct, inform and persuade.
- * Large organisations (many of them transnationals) satisfy their own needs. For example, they provide their own international networks,
- * Citizens require a high level of information to get by in a very competitive society. Information is recognised as having high value and much is traded commercially at high prices - little is shared freely. Information is regarded as having a high personal property value. The information sector is controlled by a few large companies.
- * Large gaps develop between the information rich and poor. This produces conflicts. For example, the unemployed are unable to afford to participate in much of the entertainment or education oriented communication services during their long periods of unoccupied time because of the high costs of such services.
- * Laissez-faire attitude exists to regulating industry. Policies support high growth economics.
- * Centralised control of government and hence state information prevails.
- * There is closed government with little opportunity for citizen participation but there is minimum interference in the affairs of individuals.
- * Communication rights are protected by a Constitution and Bill of Rights.
- * Censorship laws are few and liberal.

International

- * The requirement to keep up with overseas developments and to interface internationally is critically important.
- * Sophisticated international networks and information exchanges are heavily used to support export trade involving global and particularly trans-national commercial enterprises. This involves high use of satellite and undersea circuits providing data links for electronic funds transfer, global negotiations and transactions, transmission of market and service information, etc.
- * Overseas communication links are concentrated on the major export markets.
- * Overseas broadcast services are developed to cover major trading areas. There is no concern for provision of coverage to less important trading nations such as the Pacific Island nations.
- * Little concern for participation in co-operative communication systems with lesser developed countries such as Pacific Island nations.
- * Security of communications is important. In a highly competitive society dependent on global operations, theft and monitoring of data or funds is a continuing threat. Security techniques and public policy have to accommodate.
- * New Zealand is recognised internationally as a tax haven. This is encouraged by promoting high velocity funds transactions as a non-polluting industry.

National

- * Internal infrastructure requires similar capabilities to the international. It is concentrated on modes probably centred on the location of a small number of large scale industries and the main urban centre.
- * Most communications equipment, products and much expertise are imported to satisfy rapidly expanding demands.
- * Mass media are highly commercialised with high level of persuasive advertising and are funded entirely on a user-pays basis e.g. through direct subscription, advertising revenue, etc.
- * There is a demand for high technology leisure activities. The affluent

- globally-oriented strata require world-class radio, television, cinema and publishing media plus yet-to-be invented diversions. Many sources are imported and provide multiple choice for those who can afford them.
- * There is little concern for cultural and minority language protection.
 - * Private enterprise provides substantial financial support for cultural and arts programmes.
 - * Parts of the New Zealand physical environment remain a symbol of desirability mirrored in New Zealand-originated media.
 - * There is high demand for business and skill-oriented educational programmes. These generally involve formal examination and certification.
 - * Basic education is free but there is a need for frequent updating of skills because of rapid rate of technological change. Many advanced training programmes are expensive.
 - * Remote access to educational services is available to a limited number through home terminals on a user-pays basis.
 - * Extensive use is made of high technology computer/communication systems particularly in the service and clerical sectors to improve efficiency and productivity. There is little concern for the unemployment produced.

Context B: Individualist/Environmentally Harmonising

Social Philosophy and Structure

- * Moderate degree of communication choice is provided which allows individuals to become well-informed and thence to pursue their own best interests.
- * Communication needs throughout society are mainly uniform with a small degree of diversity. They are tailored more to local capacity to satisfy them. Many are supplied by the marketplace.
- * The government, either through direct responsibility for distribution or by means of subsidy, ensures a reasonably equitable access to services.
- * Communication services consist of a mixture of one-way, top down and multi-way horizontal.
- * Communication channels are used less for instructing and more for broad education, co-ordination and individual and group creativity.

- * Information is a high demand commodity and priced so that it is available to a wide section of the public. Many businesses of different scale make up the information/communication sector.
- * Small gap between the information rich and poor.
- * Industry is regulated particularly in areas of import licensing and incentives exist to promote import substitution.
- * Government has a limited role and there is limited citizen participation.
- * Most government and state activities are centralised but the widespread information networks allow good public access to information.
- * Communication rights are protected by various government regulations.
- * Censorship laws are numerous and formed by "representative public committee(s)".

International

- * International communication links are not predominantly export market oriented. They share equal importance with internal systems.
- * Concentration of international links tends towards Pacific rim countries.
- * Overseas broadcast services are developed to give wide coverage of Pacific rim areas and hence also give reasonable coverage of many Pacific Island countries.
- * Participation in co-operative communication systems with lesser developed countries is encouraged where long term advantage to New Zealand can be expected.

National

- * Internal communication facilities are provided to most reasonably populated areas. Some remote rural areas have limited choice and inferior standards.
- * Some of the communication equipment, software, products and expertise are provided locally. There are incentives to develop local regional industries to efficient global standards. Some of the locally provided equipment is designed overseas but assembled under licence in New Zealand.

- * Mass media are commercialised. Mass appeal services are funded on a user-pays basis. Minority services are supplied by the government.
- * Local programme production is encouraged by some restrictions on the amount of imported content.
- * Local data banks and services are encouraged by user taxes on overseas services.
- * Mass media usage is complemented by widespread availability of a good range of specialised information service from data banks, participatory entertainment and community participation and exchange programmes.
- * Basic education and some retraining throughout life is available free as of right.
- * Remote access to educational services is widely available through home terminals. Some are free, others are supplied on a user-pays basis.
- * High technology computer/communication systems spread in the service and clerical sector to improve efficiency and productivity. Rate of introduction is determined to some extent by regulations related to unemployment.
- * A small barter economy begins as a result of a generally co-operative society and as tax collection becomes more efficient. The latter is partly due to the use of EDP tax inspection systems and the widespread use of computer business systems which disclose more easily transactions to the tax inspectors.

Context C: Co-operative/Nature Dominating

Social Philosophy and Structure

- * Limited choice of communication services is provided and the majority are aimed at facilitating individual social responsibility.
- * Communication services are mostly provided by the state and are equitably accessible to most citizens. Broad availability of communication resources is emphasised more than quality.
- * There is a mixture of one-way top down systems which enhance strong social control mechanisms and a lesser number of multi-way, horizontal services.
- * Provision of separate facilities by large organisations (such as transnationals) is strongly resisted.

- * Information is mostly controlled and supplied by the state free of charge.
- * Generally information equality exists.
- * The dual levels of government (central and local) strongly regulate industry and operate many social services.
- * Participation in political activities is a need and duty of all. Multi-way communication systems help provide the means for citizens to participate in the decision-making process.
- * Communication rights within the limited facilities available and access to information are guaranteed by law.
- * Strict censorship laws exist and are determined directly by government.

International

- * There is limited need for international links and hence compatibility with international systems.
- * The overseas links that are necessary cover a diverse number of countries and are not limited predominantly to trading partners.
- * Overseas broadcast coverage is provided only to South Pacific Island areas from whence major numbers of island immigrants come.
- * New Zealand is active in promoting co-operative communication services with other nations, particularly in the South Pacific Island countries.
- * Practical support especially the offer of communication expertise is given to international agencies sponsoring self-help schemes.

National

- * The limited internal communication facilities extend to nearly all areas of the country.
- * Much of the communication equipment, software, products and expertise is provided locally. Import licensing and other restrictions discriminate very heavily against imported goods and services. Some manufacturing is controlled by state corporations or protected private enterprise companies. Some equipment and products are exported.
- * Mass media are not highly commercialised. Many services are funded and operated by the state.

- * Local programme production is encouraged by severe restrictions on the amount of imported content.
- * Protection of local cultural identity has high priority and minority languages are promoted.
- * A rise in creative writers and artists of world class is experienced.
- * Community participation and exchange programmes and local communications centres develop. These allow access to a range of communication facilities not available in the home, e.g. video record/replay equipment, extensive video library, teleconferencing facilities, interactive learning and entertainment services.
- * Limited telecommunication facilities are available to allow individuals to remotely participate in local or government decision-making and polling (for example from the home or communication centres).
- * The state provides free education which is compulsory at a variety of stages in the life cycle. Access to remote learning programmes is available through local communication centres.
- * New technologies and services are subjected to lengthy evaluation and assessment. Those that are accepted are not available for some time after their introduction overseas.
- * New technologies and services are rejected if they replace human skills only for the sake of greater productivity.

Context D: Co-operative/Environmentally Harmonising

Social Philosophy and Structure

- * Society consists of a large number of autonomous, interdependent, co-operating communities. There is widespread understanding of the essential nature of communication to the successful existence of such a highly interdependent society.
- * Society is complex but life-style is simple. Communication needs are likewise complex and very diverse. They are generally based on local communities. Flexibility is essential. Most facilities are supplied and operated by community co-operatives.
- * Local communities endeavour to provide equitable access to all facilities.
- * Multi-way, participatory, horizontal systems are stressed. Maximum use is made of face to face communication.

- * Communication channels are used heavily to stimulate dialogue, and to provide information, education, co-ordination and creativity.
- * Information is a community/national resource and is shared freely. Little information is traded.
- * In general there are no information rich and poor.
- * Industry is organised on a co-operative community basis and a fundamental acceptance of self-sufficiency precludes use of imported goods and services unless impractical to produce locally.
- * Role of central government is very limited and there is maximum citizen participation in local community decision-making where appropriate mechanisms of control over the means of production, distribution and exchange are determined.
- * Communication rights are protected by the local community.
- * Censorship mostly determined collectively at community level and varies from place to place.
- * Many goods and services are provided on a barter basis.
- * There is a tendency towards the rise of extreme groups such as neo-Luddites and communities often develop their own "Ayatollahs".

International

- * International communication links have little importance - mainly used by individuals.
- * New Zealand's neutral foreign policy means that links are not concentrated on any specific area(s).
- * Overseas broadcasting provides limited service to South Pacific Islands.
- * New Zealand as a nation takes no leads in developing co-operative systems with less developed countries. Some communities, however, organise their own co-operative links with countries from which high numbers of immigrants have come.

National

- * Basic national communication networks are provided by the government. Local networks and facilities are provided and operated by the local communities.

- * Problems of standards and interfacing are numerous and are controlled by the central government.
- * Large variations exist in quality of services.
- * Most communication equipment, software, products and expertise are provided locally. Equipment is generally simple and locally designed.
- * Mass media are community-owned and operated. Government operates a few national services.
- * Nearly all programmes are locally produced. A number of national programme production co-operatives exist. Local community programming involves a high level of citizen participation and is not highly professional by world standards.
- * Communication centres are a major hub in all communities and are the coordinating point for local production. High level of programme exchange between communities takes place.
- * Commercial advertising is light being replaced by public co-operative, barter and exchange type notices.
- * Operating costs are met from community taxes or rates.
- * Mass media promote local cultures and the arts. Emphasis is placed on free expression of emotions by participants. Different languages are used extensively.
- * Community level and national level data banks are very important. They provide information on production, agriculture and horticulture, soils, meteorological forecasts, etc., necessary for highly productive industries.
- * Electronic barter transfer systems control trade between individuals, groups and communities.
- * Education is organised on two levels. Basic education and common work skill training is provided at community schools and colleges. A wide variation in standards and content exists. Higher level technical education is provided by the government.
- * Education is oriented toward vocational and ethical training and face to face techniques are preferred.
- * New technologies and services from overseas are subject to lengthy assessment at national and then at local levels. This process includes detailed evaluation of how such new concepts can be manufactured and applied in New Zealand.
- * Acceptance or rejection of many new technologies varies widely throughout the country. This tends to produce conflict but people eventually move to communities of common interest.

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