

Lessons from the Network Model for Online Engagement of Citizens.

A project by Canadian Policy Research Networks with Public Works and Government Services Canada.

Paper presented to the LENTIC Colloquium: Quelle administration publique dans la société de l'information? Brussels May 18-19, 2000

Elisabeth Richard - Director, Corporate and Public Affairs - Canadian Policy Research Networks

As the internet continues its expansion in the everyday activities of public servants, many aspects of government organizations are affected. Just as new possibilities arise, challenges come along. A close examination of the impact shows deep organizational implications. The internet forces the public service to operate in a new model: the network model. This new model, increasingly recognized as a winning social and business structure, can have a profound impact on the quality and quantity of relationships that governments increasingly need in an era of growing disenchantment about the public policy process. The new structure of governance is made of flat, flexible connections, ideally pulsating with continuous action.

In government this brings a fear that the volume of connections will be difficult to sustain. Government officers worry they don't have the tools of mass-listening required for this form of enhanced participation. Fears related to the volume of relationships to create and maintain for example stop departments from building on them and turning them into a strategic advantage. There are many ambiguities about how the network model relates to the old processes. In the government traditional structure, ideas and action are implemented from the top down. The predominantly vertical public service structure is challenged in this environment where lateral and diagonal connections are heralded. The new model creates some identity crises within the public service.

This paper describes the results of a project initiated in 1996 by the Canadian federal department of Public Works and Government Services for the G7 Governments On-line and Democracy initiative, and pursued in partnership with Canadian Policy Research Networks. It builds on the contribution of a cross-section of federal public servants brought together in various workshops in '96, and '97 and a final roundtable in '99, to examine the impact of the emerging network environment, specifically, the internet, on relationships with citizens.

A first paper [Tools of Governance](#)¹, has described how traditional tools used by government to gather and disseminate information converge with the internet. The Internet is like a library, a news wire, a deliberation room and a voting booth, all meshed together in a dynamic process at the tip of the citizen's fingers. As a consequence, tools for public information, consultation, and participation converge, creating a confusion in

¹ This paper is a chapter of the book "Digital Democracy: Discourse and Decision-Making in the Information Age", Barry Hague and Brian D. Loader (Routledge, 1998). This paper creates a framework to help governments adjust their roles and processes in the Internet environment. It follows-up on issues outlined in the G7 Governments On Line and Democracy White Paper (see: <http://www.state.mn.us/gol/democracy/final/canada.htm>).

the public service ranks where the traditional organizational structure define the various functions and sets boundaries.

This paper looks at the model behind this convergence. As the information highway rolls out in society and organizations, structural changes start to be documented. In the public service, for example, not only do the tools converge, but also the functions. The functions of communications, policy development, consultation, information technology and information management are affected as a result of this new networking environment.

Organizational changes are needed in order to put in place the mechanisms of mass-listening and trust building necessary to engage citizens in a network of partnerships.

The paper will first review the network model and how it is increasingly used as a reference for public service renewal. It will then show how some tools for mass-listening are put in place to deal with the potential volume of relationships created by this environment, and the new roles emerging.

The Network Model

Many new tools and processes have been put in place by governments in order to rejuvenate the old command and control model of government. The departmental functional boundaries supporting the hierarchical structure are challenged by a growing number of collaborative partnerships facilitated by Information and Communication Technologies. Boundaries are blurred in horizontal information networks.

The network is increasingly described as a model in many fields. Both sociologists and management experts describe it as the winning structure, creating pressure for public managers to explore this new environment of links and nodes. Governments are increasingly expected to take an active role in a structure described not only as the model for economic growth but also for a healthy civil society.

A clear, simple model: “a structure of points or circles and connecting lines – nodes and links, vibrant with activity” has been described as the winning structure for many companies, such as Eastman Kodak and Arthur Andersen & Co Business Consulting¹.

Metaphors are also borrowed from nature: “...spider webs spun from small, globally dispersed, ad hoc teams or independent organizational entities performing knowledge or service activities...In these organizations network nodes are added to the web when they can add value and are disengaged as are they no longer required”.² The literature keeps piling up evidence that these new organizational forms are growing and can be more effective than hierarchies in responding to changing market conditions. The Web metaphor is cited in Robert Reich’s *Work of Nations* and scholars have made correlations with the World Wide Web and its hypertext protocol: ‘In hypertext, nodes do not require any single, fixed definition. They can figure dynamically in a variety of associative networks, depending on the nature of the task and the needs of the moment. Their definition is contextualized. They can evolve over time. They can themselves individually represent a network. Their function varies with the context evoked. Each of those associative networks is hierarchical, examined in isolation, so that this new metaphor of organization does not assume the absence of hierarchy. All it assumes is that hierarchy is not single-stream but fluid and multi-functional, reflecting the many coincident purposes and the disjointed agenda of a complex organization’³

The network model, as defined by Manuel Castells who is often credited for its conceptualization, is a set of interconnected nodes, “the appropriate instrument for a capitalist economy based on innovation, globalization and decentralized concentration”. This metaphor can be applied to all sectors of society according to Castells: “A network-based social structure is a highly dynamic, open system, susceptible to innovating without threatening its balance”. 4

The metaphor is reaching government circles. The Internet, and its structure where each new connection strengthens the network, is now identified as carrying considerable promises for governance. “The Internet is both clearly a factor in the rise of socio-cybernetic models of governance, as well as an example of how new policy communities and networks might operate” 5. As pointed out by Pal, who looks at policy networks, a good deal of policy theory purports to “think seriously about networked government’ and therefore it is necessary to look at the Internet as a benchmark for distributed network forms.

Networked : Emilia-Romagna

It could be a coincidence – certainly not a surprise - that the Italian region of Emilia-Romagna, identified by Robert Putnam 6 and quoted around the globe as the model for healthy civil society bursting with horizontal connections among a wide variety of institutions, is also one of the first European regions to have an active free-net, Iperbole. This online network is itself a model in fostering citizen participation online through thorough access and education programs, as well as information management practices. 7

The vision of leaders and their governments actively working in collaboration with citizens and interest groups toward measurable goals is prominent in the Internet-related discourse. In examining democratic processes in light of Information and Communication Technologies, Agre raises the concept of participatory design, used by the software industry. In this model, stakeholders are involved in the actual processes of technical design. 8 Institutions might find it an inspiration.

Much is said about the virtues of electronic democracy. However, a technical utopia cannot be reached without the establishment of proper response mechanisms within government. Before the information highway can be used to harness the general public’s opinion in a dynamic policy development process, integrating citizens as partners in the governance process, process need to be adapted. If the concept of participatory design is to be applied to government, if a structure of flat, flexible connections pulsating with continuous action is to be established, many questions must be addressed and public servants need to rethink their roles, the processes and structures designed in the post-war era.

Building Blocks

The ground is set for key elements of the network model. Public sector managers are now familiar with multi-stakeholder negotiations, and partnerships for service delivery. Governments at many levels actively engage one another, private and third sector organizations, citizens and communities in new kinds of consultative and power-sharing arrangements. They emphasize horizontal approaches to planning and managing programs, and have fostered many partnerships to deliver them.

At the most senior levels, Canadian federal government officials explore how to operate more effectively in this world of rapid change, calling for a more distributed system of governance. It is suggested that more learning-based approaches be developed. At the working level, public servants experiment with learning processes to engage citizens as partners in governance. The order is tall, considering the wide definition of citizen engagement: ‘Citizen engagement is a two-way learning process that allows for seasoned reflection, encourages a willingness to listen to the values and perspectives of others, and supports the reframing of interests and perspectives in the context of a search for common ground and solutions acceptable to all citizens’. 10

But other elements are still not well in place. In his presentation to a group of senior officials looking at renewing governance and the impact of “governing by learning in a world of rapid change”, Harlan Cleveland notes the importance of knowledge-management to create a shared framework of interpretation. He emphasizes the key role of government in facilitating that process.

The promises and perils of the public service as a borderless institution and a learning organization – less centralized, less hierarchical and more integrated – are often discussed. The traditional structure of government and its decision-making processes don’t easily lend themselves to sharing the agenda with those who are not in the full-time business of making public policy or are not formally accountable for doing so. Many public servants describe themselves as “horizontally challenged, vertically accountable” 11 and wonder how the new model can mesh with principles of ministerial accountability. “For de-bureaucratization to work, it has to be accompanied by a degree of de-politicization...ministerial accountability in the traditional sense requires central direction and control.” 12 Also, traditionally, officials do not see their role as paramount when it comes to relationships with citizens. They see their role as a support to elected representatives.

Notwithstanding these uncertainties, this new role is at the center of the citizens’ preoccupations. When asked to describe how they view government, citizens cite many elements of the network model: partnership, coordination, engagement, broker.13

At the Working Level

The Canadian federal public service, at the operational level, has responded in many ways in the recent years by engaging citizens in many policy development processes and by fostering the creation of virtual communities. 14. They have used the internet to strengthen and engage many groups of stakeholders. It is used as a tool for narrowcasting, sending and receiving information to and from various groups of stakeholders in many sectors of industry for example, like the mining sector. It is also used to facilitate the relationships between stakeholders themselves, for many-to-many communications. 15 In some cases, for example, an internet dialogue got ‘people communicating with people’, sharing their experiences. This is particularly true in communities where stakeholders were far apart geographically, like the rural communities. In this environment for multi-stakeholder relationships, for horizontal connections, government’s role as a broker becomes evident.

Some Canadian federal sites tested this brokering role as early as 1994 on the WWW. For some time, the guest book set up on Health Canada's web site, one of the first Canadian federal departments to encourage participation of the public, served as an informal self-help resource. Health practitioners used it as a professional bulletin board, to post conferences and ask for information. This concept has evolved into the Canadian Health Network, an Internet based organization aimed at strengthening health information networks. 16

Reluctance

Evidence from Californian municipal Web pages show that there can be a reluctance from governments to foster networks. A review of sites show that “only 3 per cent of sites provided information and links to grass-roots organizations, and only 8 percent did so about neighbourhood, fraternal and social organizations” 17 Unclear boundaries and responsibility is sometimes cited as a factor and the fear that hyperlinks create some kind of responsibility for the content of the pages linked to. 18 Governments sometimes prefer to delegate to an independent organization the brokering role, as it is the case for the Canadian Health Network.

The advantages of working through an independent not-for-profit group are recognized by Cabinet ministers in The Netherlands who delegate the responsibility of organizing regular online dialogues with citizens to an independent institute. 19 British Prime Minister Tony Blair also worked with the think-tank Nexus to organize his first steps in online dialogues. 20 As for Canadians, their feelings vary in whether voluntary organizations speak for them in government consultations. Thus government needs to be sensitive that some citizens wish to speak directly on issues (i.e. through the Internet), while others depend on voluntary organizations to represent them. 21 Another consideration is that Canada is a federal state with many jurisdictional delineations, each coming with its own network and legitimacy in engaging citizens.

The Roundtable on Online Engagement, sponsored by the Canadian federal department of Public Works and Government Services and organized by Canadian Policy Research Networks in the fall of 1999 gathered 30 public servants to examine the implications of fostering the integration of citizens as partners in the governance process. Many obstacles were identified: the quantity of stakeholders which can be encouraged to self-declare as a result was an issue and many fears related to the number of stakeholders that could be integrated into a decision-making process were expressed. It was unclear to participants whether the concept of partnership was a valid model with a wide range of self-declared stakeholders.

Mass-Participation Includes Narrow-Casting

Litvack and Stamps offer some guidance when they outline the first of the five principles of networks: purpose. “Purpose is the glue and the driver... [It] must extend from the abstract to the concrete... These abstractions must translate into time-bound operational missions, measurable goals, clearly identified results, and, finally specific tasks”. 22

Public servants echo this when they remark that different topics call for different fora. Some topics call for restricted participation. The Internet provides an environment of narrowcasting, which allows for building relationships with many small, targeted audiences. In some cases rather than aiming for mass-participation, energies can be concentrated in facilitating a dialogue

between specific audiences, with selected objectives, one of the functions of the internet that works best. A participant to the Roundtable on Online Engagement tried to define a mental image of what mass participation would be: if the internet does indeed create a mass channel to government, it does not necessarily mean everybody should be heard at the same time. The quality of relationships is equally important as the quantity. Above all citizens want openness about the process, not necessarily participation.

In the network model, the key is the architecture of these relationships. They are not masses of individuals relating to a center. Looking at Putnam's description of the region of Emilia-Romagna, Litvack and Stamps²³ describe instead myriads of associations relating to each other. From the point of view of governance, this implies a distributed form of mass-participation, based on a platform of many associations talking to each other, far from the notion of 'everybody being heard at the same time'.

Trust

Trust accumulated in the famous web of mutual-aid associations in Emilia-Romagna is known to have enabled the civic regions of Italy to invent credit in the Middle-Ages. Trust is an essential factor in government dialogues with the public. Participants from the public to the public dialogues organized by Canadian Policy Research Networks insist that their contribution is associated with concrete policy development processes.²⁴ They need to know that they are getting influence for the efforts that they put in. This might be an argument against relying too much on an institution that is too far from government.

However, the abysmal level of many online discussions hardly create a climate of trust. A review of America Online's `Washington Connection` shows that "the ephemeral nature of many threads is inauspicious for the formation and continuation of deliberation on a range of policy issues." As Wilhelm reports,²⁵ evidence exists that "the size of the potential participant pool is often inversely related to the quality of discussion that can be achieved". He notices that "many forums comprise postings that are primarily information providing, a phenomenon that does not require that users exchange viewpoints and consider other opinions".

Dutch minister Roger Van Boxtel, responsible for minorities, inner cities and e-government, has managed to develop a sustainable online relationship with citizens, building on the online tradition brought upon by the pioneering efforts of the Amsterdam free-net. These discussions are carefully planned and promoted. Sometimes they imply a public information initiative to ensure issues are properly understood. An online discussion with the public servants involved in the specific policy development issue follows. The discussion is open, but moderated by a representative of the independent Institute for Political Participation. This institute, while independent, is closely associated with the minister's office. Weekly summaries are issued, as the discussion runs for one month. At the end of the month, citizens have direct access to the minister, through a one-hour live chat. This session is promoted in the previous morning paper.²⁶ A climate of trust results from both the preparation and the close involvement of the minister.

In North America, non-profit associations also test various dialogue models. The group Web Lab organized online dialogues on the U.S. President impeachment processes between November 1998 and March 1999. An initial report shows that "70% of the 750 registrants for example learned something about the impeachment process – a phenomenal figure given the saturation

coverage in traditional media....Most registrants interviewed indicated that they were better able to understand others, especially those with whom they disagreed.” The model used by Web Lab, called RealityCheck, is not revolutionary, according to this organization. As a matter of fact, the report states that only “small but potentially important adjustments to the technical and social structure of the familiar online dialogue” needed to be made. “The technical and social changes implemented in this project created an atmosphere of respect, learning, community and positive relationships...”. 27

The basic principles of this online dialogue were:

- Limited entry, to avoid “an ever-changing...but inherently amorphous group membership”.
- Fixed exit, to avoid lingering of discussion.
- Commitment to participate during the one month life.
- Introductions to allow a period of silent observation.
- Benign monitoring: watching but rarely intervening.
- External prodding: modelling of exemplary contributions

Volume

Reviewing experiences of online networking, it is striking to note how often it is not the volume but on the contrary, the lack of volume that is cited as an issue.

In some cases, public discourse suffers from a public place invaded by a small and vocal group of citizens, with elected officials largely absent from the discussions 28. In many cases, marketing is cited as the issue. During the Roundtable on Online Engagement nobody at the table reported concrete examples of an avalanche of self-declared stakeholders. On the contrary, some participants reported problems expanding the participation, and reaching out to Canadians. The challenge seems more at this point to widen the range than to deal with numbers. 29 Concerns about reaching beyond the predictable groups, to new communities were raised: the need to balance the views of the typical internet surfer with a larger sample of citizens. Governments fear the potential of the net to rally, to create quick coalitions through for example electronic post card campaigns but they have not yet turned this fear into their advantage.

The Dutch experience shows that allowances can be made to circumvent volume problems: processes were adapted in order to meet the expectations of citizens. Participants to these dialogues expected an answer from policy makers within a maximum of 48 hours. This is considerably quicker than the usual paper correspondence standards. It also took flexibility from Minister Van Boxtel, who has had some busy chats, answering in some instance 80 questions in the one hour session.

Veterans of online debates know that reaching a critical mass of participants is essential. MPLS-ISSUES, the Minneapolis Issues Forum was not inaugurated until 100 participants were registered. 30

The mass-media, the good old intermediary

The mass-media are often cited as an important player in the citizen engagement process. Note that in Dutch minister Roger Van Boxtel's online networking strategy, the mass-media also played a key role. It is also interesting to note the role of the media in the Minneapolis Forum: the initial list of invited participants resided in the facilitators' – talk show host David Brauer – rolodex. Recently the branch of journalism known as Civic Journalism has been particularly concerned about citizen engagement. Some members of the media believe they have a role in helping audiences “come to public judgment”.

Like other institutions, they experience with networking technology. The Online Journalism Review describes how ‘Civic Journalism Takes Root on the Web’. St.Louis Post-Dispatch communities editor Arthur Charity describes the potential of the Web to re-engage the public with the policy decision-making process, and uses all the online tools to do so: archives, transcripts, for a. Yet the participation and traffic anticipated has not materialized. 31

Some argue that just like the mass-media is becoming fragmented, public discussion is affected by the fact the Web is ‘splintered’. “For a democracy to work, you need a shared body of information and a common place to discuss it. Public journalism has to move beyond providing information. You have to create a conversation. The Web is an ideal place to do that, but it's going to take a lot of time and coalescing of effort” notes Buzz Merritt, consultant and author of Public Journalism and Public Life 32

From that point of view, online dialogues sponsored by governments have a definite advantage: properly managed, the results might have a better chance to be integrated in the policy development process. This is an example of disintermediation, a characteristic of the internet. Governments have a direct channel to the citizens and another option than relying solely on the mass-media to be an intermediary.

Re-intermediation

These new channels need to be managed. From the public service perspective, this network environment “pulsating with continuous action” stretches the public environment analysis over a much longer time frame of policy development. It is an iterative process: quick immediate inputs can be gathered at various stages, from agenda-setting to decision-making. It is necessary to identify the objective of the consultation and where it is situated in the decision-making process. This poses management problems: what is the process to respond to many iterations?

A key component of governance in a network environment is knowledge-management. An efficient use of knowledge automatically generated by software can be a key, often overlooked mechanism. Query reports and search engine results lead to development of a web site to better respond to client needs. The experience with rural citizens was cited as an example. Notes based on public inquiries were used to create pathfinders on various subjects. 33

Newsgroups monitoring is a growing mass-listening practice, useful to follow the concerns of specific stakeholders to qualify opinion polling. But if issues are to be detected through newsgroup monitoring, tools for content analysis are needed. There is a reluctance to “listen in” even though many department's policy issues are discussed on newsgroups. A proposal to “mine” newsgroups in a Canadian federal department has been discarded because it was

considered an invasion of privacy. The trends in Access to Information are also a concern, since e-mails now tend to be included in the range of documents that fall under access to information regulation. 34

Integrated Services and Functions

Online technology brings a unique opportunity to implement a “no wrong door” policy but this will be impossible without appropriate coordination within and across departments. References are made in Canada of consultations whereby computer firewalls between departments stopped them from using a common database. The same firewalls did not exist between the departments and the general public.35

Since the role of government is evolving towards a role of facilitation, concerns are raised about whether departments are giving the appropriate support to the stakeholders. Government should improve the capacity of stakeholders to relate to their own networks. Such community groups and associations often need resources and assistance to consult their members and to do the required research.

The network environment implies new networks within the public service. One federal department for example, aiming at bringing the IT function closer to the social agenda created a strategic forum at the senior management level to explore how technology can support the department’s social and community-building agenda. This had created an extra workload, since this task was on top of the other jobs to be done. Strategic fora are also needed across departments. Public service organizational culture is an issue: for example, buy-in from program managers, communication and policy shops, and the Minister’s office within a department is needed and new alliances between the groups have to be created.36

Identity crisis

Some Canadian public servants look at the United Kingdom with concern: increasingly the names and e-mail addresses of public servants involved in an initiative are promoted. In order to increase accountability of the public service the public is encouraged to contact bureaucrats instead of their Members of Parliament.

Some public servants are concerned that by giving citizens a mass channel to government, they may be subverting the parliamentary process. If online dialogues are used to detect issues early in the decision-making process, even before discussion papers are presented to stakeholders, the roles played by Members of Parliament who are conveyors of public opinion from their ridings is affected. Some Canadian MPs describe themselves as front line information officers and want to be connected to the online engagement process. 37

Roles tend to be blurred in online dialogues. Public servants are more tempted to participate as citizens in an online discussion where formalities are limited and spontaneity is valued. It is not clear in what capacity a public servant would be responding: as a citizen, as the representative of the department, the minister? 38

Yet both public servants and Members of Parliament might find that their skills as coordinators and facilitators are in growing demand. Lipnack and Stamps cite the role of the coordinator in the network environment. “The Coordinator brings to life the network, matching needs with

resources”. They cite Seymour Saranson and Elizabeth Lorentz for conceptualizing the role of the coordinator “scanner of possibilities...[in the network environment.]” 39

Castells also cites “the switchers” as being “the power holders. Since networks are multiple, the interoperating codes and switches between networks become the fundamental sources in shaping, guiding, and misguiding societies” 40

Still fuzzy, the network model does not offer yet enough guidance to draw a concrete model for governance. “Nodes and links vibrant with activity. People intuitively use the idea with remarkable consistency that continues to surprise us.” remark Lipnack and Stamps, as they describe the successful model which they have been documenting since the late seventies 41. Nevertheless they emphasize the volatile aspect of the model, adding: “Where people do get fuzzy is in describing how a network actually does anything coherent”. Not quite precise enough to apply to government yet.

Even the strongest advocates of genuine dialogue struggle with the impact of online engagement on leadership. Daniel Yankelovitch, who has conceptualized the idea of Public Judgment, has clearly been wrestling with this notion. He actually credits his wife, Mary K. for “her thinking on the leadership implications of the new information society framework”. Daniel and Mary K. suggest a vision that conciliates leadership and public judgment in a networked society. In reviewing the implications for leadership of communication technologies Yankelovitch writes: “the essence of the leadership style implicit in the new framework is not that it is more democratic in the process in the sense of shared decision-making, but that it is more democratic in the process that leads up to the final decision.”42

Links, nodes, web: this vibrant structure defies government traditions built for vertical accountability. However a close examination of the network model allows to select elements which can be turned into a strategic advantage, and alleviate some of the obstacles. The network model for example addresses the fear of volume: since the network is made of myriad associations relating to each other, responsibility in maintaining these relationships is distributed. If government does have a responsibility in fostering these relationships, the maintenance is shared with the stakeholders.

Practice shows that traditional hierarchy does have a role in this environment: the involvement of the minister is a key ingredient of success in an online dialogue. Evidence of efficient online dialogues is accumulating, where issues of volume and mass-listening are addressed successfully. It is interesting to note that even though they have generations of know-how accumulated in their roles as ambassadors of public opinion, the traditional media are grappling with many of the same challenges as public servants in the network environment.

Information management and knowledge-management remain key issues as they are in all sectors who are learning to operate in the network environment. Roles in these new boundaries still need definitions. As federal departments are pressured to increase their relationships with stakeholders through the use of Information and Communications Technologies, they face new definitions of roles, processes and structures. The work is not easy: the IT people must be able to interpret how programs relate to citizens and program officers must be able to understand how technology has, and can, change how they connect with citizens. Moreover, both government IT and government programs need to have an integrated approach to understanding what information citizens need and how they want to receive it, and how they want to interact with

their governments. They must imagine the re-engineering of their processes. Line departments must take the time to document their experiences and share them across the Board. Central agencies, pipe-line builders must support this work, facilitate, anticipate the needs.

The familiar landmarks are absent in this exploration. However, the '90's have been a decade of profound change and public servants have learned to adapt. They have even managed to innovate and pioneer new relationships within and beyond their organizations. With the network model as a framework, and the critical mass of experiences starting to be documented, many pieces of the puzzle are coming together and public servants are starting to see the new role they play, as their organizations become links and nodes in this environment.

References:

1. Jessica Lipnack and Jeffrey Stamps. *The Age of the Network. Organizing Principles for the 21st Century*. P.87 Essex Junction, c1994
2. Nancy Nazer, Barry Wellman, Emmanuel Koku. *Networked Organizations in a Wired World*. P.32
3. James R. Taylor and Elizabeth J. Van Every, *The Vulnerable Fortress: Bureaucratic Organization and Management in the Information Age* (Toronto: University of Toronto Press 1993) 207
4. Manuel Castells. *The Information Age. Economy, Society, Culture*. Vol. 1 *The Rise of the Network Society*. P.471
5. Leslie A. Pal. *The Internet as a Model of Contemporary Governance*. Paper presented to Inet97. http://www.isoc.org/inet97/proceedings/G7/G7_1.HTM
6. Putnam, Robert, 1992. *Making Democracy Work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
7. Guidi, Leda. *Bologna Civic Network*. G8 Government On-line and Democracy White Paper. 1998 <http://www.statskontoret.se/gol-democracy/italy.htm>
8. Agre, Philip E. *Information technology and Democratic Institutions*. Speech at the Governments on the Net '98 Conference. http://www.nrc.ca/forum/govnet98/speakers_e.html
9. O'Hara, Kathy, *Securing the Social Union*. Canadian Policy Research Networks CPRN Study No.2 p.107
10. Steven Rosell, *Renewing Governance: Governing by Learning in the Information Age* (Toronto, Oxford University Press, 1999). Chapter 5
11. Richard, Elisabeth. *Report on the Roundtable on Online Engagement*. Apr. 2000 Canadian Policy Research Networks. p.10
12. Kroeger, Arthur. *Speech to the Canadian Newspaper Association*. Ottawa November 23, 1999
13. Ekos Research Associates. *A Snapshot on Rethinking Citizen Engagement*. Oct. 99
14. Richard, Elisabeth. *Op.cit.* p. 4
15. Hale, Peter and Sourani, Lisa. *Virtual Workshop on Regulatory Efficiency: An Innovative Approach to Consultations*
16. www.canadian-health-network.ca
17. Brian Loaden and Barry Hague *"Digital Democracy: Discourse and Decision-Making in the Information Age"*; p. 110
18. Brian Loaden and Barry Hague *op.cit.* p.79

19. Lenos, Steven. Instituut voor Publiek en Politiek. Successful e-debates? Presentation to Wilton Park Conference on Electronic Government Nov 99
20. Brian Loaden and Barry Hague op.cit. p.181
21. Richard, Elisabeth. Op.cit p. 13
22. Jessica Lipnack and Jeffrey Stamps. The Age of the Network. Organizing Principles for the 21st Century. P.89
23. Lipnack and Stamps Op. Cit. P .187
24. Myriam Wyman, David Shulman, Laurie Ham. Learning to Engage: Experience with Civic Engagement in Canada report prepared for Civil Society in the New Millenium, a project of the Commonwealth Foundation
25. Brian Loaden and Barry Hague op.cit. p. 174
26. Lenos, Steven. Op.cit
27. Changing the nature of Online Conversation: An evaluation of RealityCheck.com.
<http://www.RealityCheck.com>
28. Brian Loaden and Barry Hague op.cit. p. 106
29. Richard, Elisabeth. Op.cit p. 5
30. Clift, Steven. A Wired Agora. <http://www.publicus.net/present/agora.html>
31. Bliss Osborn, Barbara. Civic Journalism Takes Root on the Web. Online Journalism Review. November 4, 1999. <http://ojr.usc.edu/content/story.cfm?id=271>
32. Bliss, Osborn, op.cit.
33. Richard, Elisabeth. Op.cit p. p.10
34. Richard, Elisabeth. Op.cit p. 10
35. Richard, Elisabeth. Op.cit p. 7
36. Richard, Elisabeth. Op.cit p. 14
37. Richard, Elisabeth. Op.cit p. 14
38. Richard, Elisabeth. Op.cit p. 8
Seymour Saranson and Elizabeth Lorentz. The Challenge of the Resource
39. Exchange Network: From Concept to Action rev.ed. 281p. 1988 reprint ed pap ISBN 0-914797-46-8 Brookline Books
40. Castells, Manuel, Op.cit.p.471
41. Lipnack and Stamps Op. Cit. P86
42. Rosell, Steven et al. Changing Maps, Governing in a World of Rapid Change. Carleton University Press. 1995 p. 252