French on the Internet:

Key to the Canadian Identity and the Knowledge Economy

Follow-Up Study by the Commissioner of Official Languages

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Executive Summary

In implementing the provisions of the *Official Languages Act,* the Government of Canada cannot escape the necessity of promoting the French language on the Internet. For this, it needs to have in place an integrated strategy, a targeted action plan, and the necessary investment, all based on a global perspective of the issues. In August 1999, the Office of the Commissioner of Official Languages released *The Government of Canada and French on the Internet.*[1] This special study offered twelve recommendations to the Government of Canada aimed at establishing the policy framework, strategy and investments needed to increase the use of French on the Internet. This follow-up study, entitled *French on the Internet: Key to the Canadian Identity and the Knowledge Economy,* begins by assessing what progress the Government of Canada has made in implementing these recommendations. It concludes that while some progress has been made, there remains much to do. To be blunt, the performance of the Government of Canada in promoting French on the Internet leaves much to be desired, since fewer than half of the recommendations from the 1999 special study have been followed up in any significant fashion. That is why this study was needed.

Following this assessment, the study ventures into territory beyond the 1999 study, examining the current state of affairs with respect to the French language and the Internet. It reviews the numerous changes that have taken place in various Internet technologies and in the way people use this network of networks. On the basis of this status report, the Commissioner of Official Languages draws an overall judgment and develops a new series of recommendations. The study proposes that the government begin a process of review and recommends courses of action with respect to the current situation, the policy framework, the critical mass of content, the language industries, and Canada's foreign policy with a view towards bringing respect for the Canadian principle of language duality to the Internet. It is not only a legal and constitutional principle unique to Canada that is at stake, but also the image that Canada would like to project to the world, not to mention an important factor in economic growth.

The Internet is now at the very core of global communications networks and is the stage for the government's on-line service commitments. It is also a catalyst for major change in the linguistic, social, cultural and economic character of Canadian society. The Government of Canada must ensure that the development of the Internet is consistent with Canada's

linguistic duality. Specifically, the study's 19 recommendations are designed to foster the emergence of a global vision and a coherent governance framework to promote French on the Internet. The Minister of Industry and the Treasury Board Secretariat are identified as key players in this governance framework (Recommendations 1 to 3). The remaining recommendations are structured according to three strategic initiatives aimed at promoting linguistic duality on the Internet: the development of a critical mass of French-language content on the Internet; the development of the language industries; and Canadian foreign policy issues.

The recommendations belonging to the first strategic initiative primarily concern content development, training for network managers, the language quality of federal sites, digitization of federal collections, and adoption of a strategy to support content development in the private sector (Recommendations 4 to 10). The recommendations in the second strategic initiative focus on: the general deployment of computer workstations ready to operate in both official languages, support for standardization, support and research for the language industries, purchases of computer equipment that supports both official languages, and the provision of technolinguistic tools over the Internet without charge (Recommendations 11 to 16). The third and final strategic initiative is devoted to foreign policy issues, and the recommendations include: promoting the equal representation of both official languages on sites maintained by foreign embassies in Canada, non-governmental organizations (NGOs) and international organizations; the adoption of an international strategy to help developing countries in the Francophonie to build their Internet capacities; and the creation of mechanisms to promote Canada's official languages in an integrated America (Recommendations 17 to 19).

The development of the French language on the Internet offers Canada a unique opportunity to affirm its identity and to develop the knowledge economy. The Government of Canada can and must accept the challenge!

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Introduction

The digital revolution is more and more affecting the way the Government of Canada conducts its business. By 2005, most primary government services will be delivered directly to citizens via the Internet. Interactive Internet sites will allow users to make purchases, to search databases, to submit forms, and to find information on a great variety of subjects. Citizens will enjoy a much wider range of choices and options for all services offered by the federal government. The transition from a demand-driven system to one available 24 hours a day, seven days a week will lead to a true paradigm shift in the delivery of government services. The structure of the federal government, the methods of work, the flow of information, the language of service and the language of work will all change in response to the widespread and regular use of the Internet.

The consequences of the digital revolution on the application of the *Official Languages Act* are enormous, because they directly affect the delivery of government services (Part IV of the Act) and the language of work in the public service (Part V). But the most significant impact probably relates to Part VII of the Act, which states that the federal government is committed to promoting the full recognition and use of English and French in Canadian society. Clearly, then, the principle of linguistic duality applies and must be applied to the Internet. (See Appendix A.)

This study, *French on the Internet: Key to the Canadian Identity and the Knowledge Economy,* follows up on a special study published in August 1999 entitled *The Government of Canada and French on the Internet.* The present report assesses the government's progress in implementing the 12 recommendations offered in the first study, updates the current situation with respect to French on the Internet, and recommends courses of action for the government in order to ensure the full respect and promotion of Canada's linguistic duality, one of the country's founding values, on the network of networks. By actively responding to this challenge, the Government of Canada will not only fulfill its commitment with respect to Canada's linguistic duality, but will also promote one of Canada's major economic and cultural advantages: the visibility of our two official languages on the Internet.

METHODOLOGY

On December 1, 1999, the Government of Canada responded to the Commissioner's study, released in August of that year, detailing the commitments it was prepared to undertake to implement the report's 12 recommendations.[2] In December 2001, in response to a request from the Commissioner's Office, it reported back on its progress in meeting these commitments. This follow-up study takes all this information into account, including information gathered in writing and through interviews with the staff of departments affected by these recommendations. Our assessment of the government's implementation of these recommendations is based on all these data.

Our observations on the current state of affairs draw on expertise and documents from a variety of institutions and organizations (complete list in Appendix B). In addition to the briefs and studies cited in the bibliography, we conducted interviews with a number of experts from government, universities, research organizations and private industry.

CURRENT STATE OF AFFAIRS

CANADA

Compared with the rest of the world, Canada has one of the most advanced fibre-optic networks and among the lowest Internet access costs. Canada is also the first major country to have connected all its schools and public libraries to the Internet. Canada is in the vanguard of the most-connected countries of the G8. With an Internet penetration rate of close to 45%, it ranks third among the G8, behind the United States (60%) and the United Kingdom (55%).[3] According to Statistics Canada, in 2001 one of every two households (51%) had at least one family member using the Internet on a regular basis. While the Internet penetration rate is rising in all provinces, it remains lowest in Quebec (44%). Statistics Canada notes that "Francophones are less likely to use the Internet than Anglophones,"[4] a point that clearly signals the relevance of language issues. Indeed, 44% of French-speaking Canadians use the Internet, compared with 58% of English speakers,[5] and the current trend suggests that the digital divide between Anglophones and Francophones is likely to widen. Quebec also has the lowest rate of Internet use among young people aged 15 to 24 at 77%, compared with 87% in Ontario and 92% in British Columbia.[6]

To explain this gap, some have suggested that the development of high-speed connectivity (i.e., the capacity for rapid Internet communication) has lagged in Quebec relative to other regions of Canada. And yet cable and DSL access to the Internet is as widely available in Quebec as in other parts of Canada.[7] The answer may have more to do with content than with infrastructure. "Lower rates of Internet use may be due to francophones' reluctance to use the Net because much of the content is available only in English. According to the General Social Survey (GSS), young francophones are less satisfied than their anglophone counterparts with the provision of content in their mother tongue. Virtually all young anglophones who use the Internet believe that there is enough English whereas only 59% of francophone users feel there is enough French (…)."[8] A study by the Centre francophone de recherche en informatisation des organisations (CEFRIO) in 2000 indicated that Quebec respondents with French as a mother tongue were less likely (38%) to use the Internet than non-Francophones (49%).[9] Yet 61% of Canadians judge it very important to be able to use the Internet in both official languages.[10] The introduction of new technologies therefore has the potential to create new inequalities in Canada, and we must be careful to minimize the negative impact of technological change.

ELSEWHERE IN THE WORLD

The Internet now has about a half billion users worldwide, and this number continues to grow rapidly. While this network of networks knows no borders, its geography can be mapped out according to the distribution of users and the nature of the Web-published content. For much of its existence, the Internet was relatively homogeneous in the sense that the majority of the content was English. In recent years, however, the Internet has made significant inroads into Europe and

Asia, and it is now estimated that by 2005 the network will have one billion users, 700 million of whom will live outside of North America. There is little doubt that the Internet is on the verge of becoming more multicultural and more multilingual.

The rapid spread of the Internet outside of North America is directly related to the broader linguistic diversity of its users and its content. Today, close to half of Internet users have English as a mother tongue, but this proportion will inevitably decline. Several studies have noted the trend towards greater linguistic diversity on the Internet. They show that French now accounts for about 2% of available content.[11] The question of plurilingualism in the information society was the subject of a conference organized by UNESCO in March 2001.[12] The impact of linguistic diversity on the Internet is also being felt in electronic commerce. For example, it is estimated that, by 2003, 61% of electronic retail transactions will take place between individuals of whom at least one is not a native English speaker. The rate is expected to be even higher (63%) for business-to-business transactions.[13]

The spectacular growth of the Internet around the world has not yet started to narrow the digital divide. There are many factors—linguistic, political, cultural, economic and technological—that make certain groups "info-poor." It should be noted that unequal access to information technologies not only exists between countries but also within countries. In many cases, Internet connectivity is only available in the capital or major cities and is generally reserved for the richer classes.

The digital divide and the question of linguistic and cultural diversity on information networks has attracted the interest of many international organizations, including UNESCO, the United Nations Economic and Social Council (ECOSOC) and the G8. At the Kyushu-Okinawa Summit in July 2000, the heads of the G8 countries adopted the *Charter on Global Information Society,* which specifically states that information technologies must enhance cultural diversity. The Summit also stressed the importance of these technologies for global economic growth. Meanwhile, the language engineering market is a rapidly growing sector both in Canada and around the world, and its expansion will only accelerate in the future with the continuing growth of Internet users, greater linguistic diversity and the more widespread availability of language tools on the Web. The countries that have French in common (the Francophonie) are very aware of these issues. Their efforts to promote the use of French on the Internet is part of a larger program to support plurilingualism and the democratization of Internet access.

Promoting French on the Internet, therefore, is an issue with both domestic and international implications, and Canada must act at both these levels. If the Government of Canada is to seriously address the question of linguistic duality on the Internet, it needs to develop an adequate governance framework and a coherent and integrated strategic plan.

GOVERNANCE FRAMEWORK

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: ensure that any federal government policy framework or initiative pertaining to the Internet affirms linguistic duality as one of its guiding principles and includes the obligation to create a volume of information of sufficient quality and pertinence to ensure fruitful exchanges in French (rec. 1).

In its answer to the 1999 study's first recommendation, the government undertook to have the Committee of Deputy Ministers responsible for Official Languages (CDMOL) take action to reaffirm the importance of linguistic duality on the Internet in all federal departments and agencies. In February 2000, this Committee made it a priority to respect the objectives of the *Official Languages Act* in government Internet communications and to develop a timetable for achieving this goal. Responsibility for the government response was assigned to the Deputy Minister of Canadian Heritage.

Accordingly, Canadian Heritage created an Interdepartmental Working Group on French on the Internet (IWGFI), with a mandate to encourage greater use of French on the Internet by federal institutions by coordinating the mandated activities of various departments and agencies,

including Canadian Heritage, the Treasury Board Secretariat, Industry Canada, Public Works and Government Services Canada, and the Department of Foreign Affairs and International Trade. The Committee has met a few times to discuss issues of translation and digitization as per recommendations 4 and 5 of the 1999 study.[14] The IWGFI also commissioned a study to determine departments' translation needs in relation to the Internet. Unfortunately, this study was never completed.

The Committee on the Sharing of Language Technology (CSLT) was also set up to support the work of the IWGFI and to follow up on the 1999 study's recommendation 8, which urges support for the research and development of technolinguistic tools, as well as recommendation 9, which stipulates that the Government of Canada should make available without charge on the Internet the language tools that it owns.[15] To this end, on March 7, 2000, the CSLT held a *Round Table: Language Industry: Strategic Orientations* to assess the state of the language industries in Canada. The work of this round table and subsequent follow-up produced an inventory of technolinguistic tools useful to promoting French on the Internet and affirmed the importance of Canadian support for international standardization bodies and of encouraging government purchase of made-in-Canada technolinguistic products. The Committee also presented seven proposals to

Government On-Line (GOL), including a computer-aided translation project.[16] The GOL, which does not seem to have put any special priority on research to promote linguistic duality on the Internet, refused the projects. A study was also commissioned to investigate the possibility of offering free on-line access to *Termium,* the government's terminology bank. As we will see, this study did not result in any concrete action.[17]

These interdepartmental bodies are supplemented by committees from individual departments, such as Industry Canada's Departmental Committee on French on the Internet. This patchwork of organizations, programs and initiatives, which together constitute the federal government's current governance framework for French on the Internet, becomes even more complex when initiatives at the international level are added. Among these are: the DOT Force (Foreign Affairs and International Trade), the Institute for Connectivity in the Americas (International Development Research Centre), and the Centre international pour le développement de l'inforoute en français (CIDIF). (See Appendix C.)

Other structures have also been established. The Treasury Board Information Management Sub-committee (TIMS) is intended to operate as an administrative tool to support the decisions and orientations of CDMOL. While these various initiatives have signalled the beginning of an examination of the

problem of French on the Internet, we feel that, overall, these committees have produced little in the way of concrete results. What seems to be missing is a clear and convincing message from the Government of Canada that linguistic duality is one of the guiding principles governing all federal Internet initiatives. In the limited view of federal agencies and departments, linguistic duality means translating documents so that they can be published in both official languages. A broader vision needs to be developed at the highest ranks of government responsibility and spread throughout the federal system.

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: by July 1, 2000, develop an integrated strategy with regard to the presence and quality of French-language content and services on the Internet and control procedures to ensure its effective implementation (rec. 2).

An integrated strategy regarding the availability and quality of French-language content and services on the Internet was recommended by the Commissioner of Official Languages for July 2000. Two years later, this strategy has yet to emerge. The Government of Canada has set up a number of structures, each with its own merits, but as we have seen the result of these various initiatives has been a

patchwork quilt of organizations and programs. An overall strategic direction is sorely needed.

On April 25, 2001, the Prime Minister of Canada assigned increased responsibility to the President of the Queen's Privy Council and Minister of Intergovernmental Affairs for coordinating official languages issues. The minister was given a mandate to develop new measures to ensure that linguistic duality was concretely recognized as a fundamental component of Canadian identity and an issue of primary importance to the Government of Canada.[18] A reference group composed of several ministers was established. The Committee of Deputy Ministers responsible for Official Languages has created a support committee.

In the wake of these major changes, the IWGFI and the CSLT ceased operations, and the Treasury Board Secretariat established the Interdepartmental Consultative Committee on Language Industries (ICCLI) in November 2001. This Committee includes representatives of the public service executive, drawn from Treasury Board, Foreign Affairs and International Trade, the Translation Bureau, the National Research Council, Canadian Heritage, and Industry Canada. The committee members are charged with examining strategic issues related to research and development in the technolinguistic industry, supported by working subgroups on human resources and on economic development and innovation. This new governance structure is just getting under way, and it is hoped that it will yield concrete results.

We reiterate that it is essential for the federal government to establish an integrated strategy that includes accountability mechanisms and that allocates sufficient resources. This will require the development of strategic orientations at the administrative level that apply to the full range of federal government initiatives relative to official languages on the Internet. Given that the Treasury Board Secretariat is responsible for ensuring the compliance of federal programs with the *Official Languages Act,* particularly with reference to linguistic duality on the Internet, and given also the urgent need for an integrated strategy, the mandate of the ICCLI should be expanded to achieve this objective.

In addition, we believe that the complexity and speed of Internet development and the significant impact of this issue on Canadian society as a whole demand that the Government of Canada call upon top-notch experts and actors to help develop its strategy—a Canadian advisory committee on official languages on the Internet—so as to ensure the strategy's completeness and relevance. This committee would be composed of representatives from private-sector language industries, researchers, and representatives of the main interest groups involved. Within its two-year mandate, this committee, which would come under the Minister of Industry as the federal official responsible for the Internet, would be expected to produce a report for the Government of Canada recommending

projects that would provide effective measures to ensure the growth of the knowledge economy by promoting English and French on the Internet.

Lastly, the governance framework for linguistic duality on the Internet would be incomplete without ongoing federal-provincial co-operation. We believe such co-operation is essential in order to share responsibility and coordinate initiatives among the various levels of government, particularly that of Quebec, the heart of Canada's Francophone community. On May 19, 2000, a first meeting on French and the Internet was held in Montreal. Representatives from various Canadian and Quebec departments discussed possible cooperative ventures. It soon became apparent that there was a convergence of interest in a number of areas, such as the harmonization of practices, the certification of French-language software, and the importance of greater coordination of initiatives to foster the use of French on the Internet. This event should become an annual affair, and departmental representatives from other provincial governments should also be invited. This would be the ideal forum for those groups to discuss global issues in the context of their respective jurisdictions. This initiative could draw upon the new resources for coordinating and facilitating interdepartmental coordination on Canadian Francophone affairs that became available in December 2001.

RECOMMENDATION 1

The Commissioner of Official Languages recommends that the Minister of Industry create a Canadian Advisory Committee on Official Languages on the Internet, with a two-year mandate, to recommend to the Government of Canada effective measures to ensure the growth of the knowledge economy by promoting English and French on the Internet.

RECOMMENDATION 2

The Commissioner of Official Languages recommends that the Treasury Board Secretariat put in place a coherent, ongoing and integrated governance framework that includes permanent accountability and follow-up mechanisms in order to ensure compliance with the principle of linguistic duality on the Internet, in particular with respect to Government On-Line (GOL).

RECOMMENDATION 3

The Commissioner of Official Languages recommends that the Interdepartmental Consultative Committee on Language Industries (ICCLI) of the Treasury Board Secretariat become the *Strategic Committee for French on the Internet* (SCFI), with an expanded mandate to develop an integrated strategy.

The rest of our assessment of progress on the 1999 study's recommendations will be presented in the form of three strategic initiatives that we believe are essential to promoting French on the Internet. They are: more rapid creation of French-language content on the Internet in order to achieve a critical mass favouring the use of the language; development of the language industries to create and bring to market technolinguistic tools to make using French on the Internet easier; and foreign policy that integrates the principle of linguistic duality into all of its components.

FIRST STRATEGIC INITIATIVE: THE DEVELOPMENT OF A CRITICAL MASS OF FRENCH-LANGUAGE CONTENT ON THE INTERNET

The first step in encouraging Canadians to make greater use of the Internet in French is to ensure that a mass of documents of sufficiently high quantity and quality is available. Because of its size and the scope of its responsibilities, the Government of Canada is one of the primary producers of information in Canada. Federal Internet sites are very popular; the Government of Canada portal[19] and the Strategis[20] site, for example, receive millions of visitors every month. More than 44% of Canadian households that are connected to the Internet have used government sites, according to a PricewaterhouseCoopers study,[21] and the majority make regular visits to the sites of federal departments and agencies. Canada ranks fifth in the world in terms of use of government sites.[22]

To generate this critical mass of content, action is required in four main areas: content production, translation, digitization and access. Federal institutions develop a great deal of content concerning all aspects of life in society. A coherent action plan targeting these four areas should result in a significant increase in the quantity and quality of material in French on the Internet. This wealth of information, in turn, will encourage the use of the Internet in French.

CONTENT PRODUCTION

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: ensure that any federal government policy framework or initiative pertaining to the Internet affirms linguistic duality as one of its guiding principles and (second part) includes the obligation to create a volume of information of sufficient quality and pertinence to ensure fruitful exchanges in French (rec. 1).

In its response to the second part of recommendation 1 from the 1999 study, the Government of Canada referred to the contribution that Industry Canada has made to the development of educational content, particularly in reference to the Canadian School Network, usually called SchoolNet. SchoolNet's activities stimulate the growth of French content on the Internet and especially the use of the

Internet by French-speaking students in Canada. SchoolNet also pursues the same objectives for the country's English-speaking students.

> For example, SchoolNet has completed more than 3500 projects that have produced French content.

The mechanisms are established, the technologies are fully functional, and all this could easily be transferred to other federal departments.

The Treasury Board Secretariat has produced a *Policy on the Production of Texts in the Two Official Languages* as well as a *Policy on Using the Official Languages on Electronic Networks*.[23] However, it is interesting that these documents do not discuss the importance of having documents originally drafted in French. French should not, generally speaking, be a translated language only. The discrepancy that exists in federal institutions between the proportion of documents drafted in French and the proportion of Francophone public servants is disquieting. The overall volume of translations produced by the Translation Bureau is more than 80% into French. Yet 27% of public servants in institutions subject to the *Official Languages Act* are Francophone. This gap is indicative of the relative disadvantage French-speaking public servants face in terms of their language of work. In fact, the working language of Francophone federal employees is all too often English. The Government of Canada must encourage its employees

to exercise their right to work in their language of choice. A right that is not used soon becomes a right that exists on paper only.

More generally, we feel that the federal government must support the creation of original content in French for the Internet the same way it has done for television productions.[24] Some steps have been taken in that direction for cultural content. One example is support for culture in new media through the redefinition of Telefilm Canada's program. On December 6, 2001, Telefilm launched the *New Media Fund,* designed to support the creation of new media products aimed at the general public and to improve the image and promote the presence of these products on the Internet. The Fund guidelines indicate that linguistic criteria play a role in awarding assistance: one third of the assistance given to production and one half of that given to distribution and development are to be directed towards French-language projects.

However, linguistic criteria are not always included in programs to fund the production of digital Canadian content. For example, on December 20, 2001, Canadian Network for the Advancement of Research, Industry and Education (CANARIE Inc.) launched the Applied Research in Interactive Media (ARIM) Program, with the support of Canadian Heritage. The aim of this program is to increase innovation in the digital industries and to help the new media industries, artistic and cultural organizations and independent Canadian artists to become world leaders in the development and exploitation of electronic

media. Cultural content designed for broadband distribution will enrich the critical mass of Canadian cultural content on the Internet.[25] It is unfortunate, however, that ARIM's criteria make no mention of encouraging the creation of new content in both English and French, especially considering that this is one of the main objectives of Canadian Heritage's Canadian Digital Cultural Content Initiative.

RECOMMENDATION 4:

The Commissioner of Official Languages recommends that Canadian Heritage ensure that all assistance forthcoming from programs to fund the production of Canadian digital content include guidelines and criteria that take into account the principle of Canada's linguistic duality.

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: in co-operation with all the departments and agencies concerned, develop a bank of resources on the Internet for learning English and French as second languages (rec. 10).

For more than thirty years, the Government of Canada has invested large sums of money into English and French language training. Many teaching methods, data banks, educational videos and so on have been produced with the help of federal funding. The advent of the Internet means that these resources can be made widely available, benefiting official languages on the Internet as well as second-language learning. In 1999, recommendation 10 of our study noted the importance of this issue. Considering that these materials can make a significant contribution to Internet content, the issue should be examined from this perspective. Distance education, particularly over the Internet, has in fact become a major growth industry. Inventories of resources are available on-line.[26] By offering on-line access to its English and French teaching materials, Canada could play a major role in Internet-based training.

Training is a $2000 billion business worldwide, and we believe, as suggested in the report *The e-Learning Evolution in Colleges and Universities: A Pan-Canadian Challenge,* that a national, one-stop portal for on-line education should be set up as means of contributing to the critical mass of French-language documents on the Internet. This project would also enhance Canada's strategic position on the markets for electronic training in English and French and would be an asset in the export of Canadian expertise.

Canadian Heritage is now running a pilot project on teaching resources for English and French as second languages. Industry Canada, meanwhile, has offered for the past two years the Coin linguistique, a virtual tool for improving French-language skills as a first or second language in the form

of a portal to on-line French linguistic resources. French-language Canadian universities also need to establish strategic alliances with the help of the Canadian government in order to take a more active role in the language-training industry.

Direct access via the Internet to all federal services under the Government On-Line (GOL) initiative, first announced in the Speech from the Throne to be ready by 2004, has now been delayed to 2005. GOL represents a drastic change in the relationship between the federal government and Canadian citizens. Federal departments and agencies must rethink how they serve and communicate with the public. Judging from the current state of this government initiative, which basically consists in approving pilot projects from participating departments, little has been done to encourage the development of projects in French as a first, and not a translated, language. Moreover, GOL sites are not equipped with the technolinguistic tools required to permit full access in French. The GOL Advisory Panel, which was created in September 2001, should turn its attention and efforts to such issues as French on the Internet, technolinguistic solutions to technical constraints regarding the linguistic and cultural respect for both official languages, and the use of federal on-line services in French. To this end, the Treasury Board Secretariat should include linguistic duality in the GOL guidelines.[27]

RECOMMENDATION 5

The Commissioner of Official Languages recommends that the Treasury Board Secretariat ensure, as part of the implementation of Government On-Line (GOL), that an equitable share of content is produced originally in French.

In our view, the training given to the network and content managers of federal sites, who are key players in implementing these programs, is deficient in terms of providing an understanding of the issues, rights and responsibilities associated with official languages. It came out in our interviews that these managers are not always aware of the importance of language issues as they relate to the Internet and do not know about existing solutions to some of the problems. Yet these are the managers who make decisions with a direct impact on the working language of public servants and the language quality of federal sites. Ongoing training should be offered to network and content managers to make them more knowledgeable about the *Official Languages Act* and the practical consequences of the linguistic duality principle. This training should pay special attention to using the proper technolinguistic tools and indexing techniques to ensure that government sites are fully useful in either of Canada's official languages.

RECOMMENDATION 6

The Commissioner of Official Languages recommends that Public Works and Government Services Canada (PWGSC) provide ongoing training to network and content managers of federal institution Web sites in order to increase their awareness of official languages issues and of the technolinguistic tools available to promote the production of content that respects the special character of Canada's two official languages.

TRANSLATION

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: significantly increase resources in order to provide, by the year 2002, the expertise necessary to deal with the volume and enhance the quality of translation of documents of federal departments and agencies to be posted on the Internet (rec. 4).

Information intended to inform and serve Canadians should obviously be posted on the Internet in both of Canada's official languages. However, such information is more often produced in English and then translated in French. Accordingly, translation into French is essential to the goal of increasing the critical mass of French content on the Internet.

Because the resources devoted to translation by federal departments and agencies are decentralized, it is very difficult to determine the total budget spent on translation. Translations may be done internally or by private firms. One thing is certain, however: the demand for translation has shot up since federal institutions started to use the Internet on a large scale. According to the Translation Bureau, the annual increase in demand linked to globalization and the Internet ranges between 15 and 25%. As we indicated in the 1999 study, inadequate translation resources impose a systemic brake on even more rapid growth in content in both official languages on the 7000 federal Internet sites. Yet the Treasury Board Secretariat failed to allot any additional resources to meet the increasing need for translation. The lack of resources is currently exacerbated by a shortage of professional translators.

RECOMMENDATION 7

The Commissioner of Official Languages recommends that the Treasury Board Secretariat commit the budgetary resources necessary to allow federal departments and agencies to meet the increasing need for translation in response to the publication of content in both official languages on the Internet.

The increasing demand for translation is coupled with a relative shortage of professional translators. The Translation Bureau is hard pressed to recruit enough translators from Canadian universities. The number of translation training programs has fallen in the last few years, and the ranks of graduates are currently inadequate to the needs of government and industry. The market requires on the order of 1000 new translators a year, while universities barely produce 300.

Aware of the problem, the Translation Bureau is examining what measures could be taken in the public and private sectors to ensure an adequate supply of translation services in Canada. The Canadian Translation Industry Sectoral Committee indicated in its 1999 final report that the translation industry is facing major challenges and strategic issues that could compromise the supply of translation services in Canada. The Government of

Canada must do its part to remedy the situation, since this represents a constraint on its ability to fulfil its responsibilities with respect to official languages. For example, the Government of Canada should cooperate with the provinces in finding ways to train more translators.

The quality of the content on government sites occasionally leaves something to be desired from one organization to another. Following complaints, the Commissioner of Official Languages recommended in its report *Use of the Internet by Federal Institutions*[28] that this situation be addressed. The Treasury Board Secretariat is responsible[29] for ensuring compliance with the *Official Languages Act* in the delivery of federal government programs and services. Such compliance extends to the quality and cultural adaptation in both official languages of content on federal Internet sites. Worthy of note is an initiative by the Translation Bureau, which has created a localization/multimedia team that departments and agencies can engage to adapt their Web sites in accordance with the cultural and linguistic characteristics of English and French. In addition, internationalization services make it possible to develop English and French content simultaneously on Web sites. The Translation Bureau is collaborating with the Université du Québec à Hull and the Université de Montréal to create two localization certificates.

RECOMMENDATION 8

The Commissioner of Official Languages recommends that the Treasury Board Secretariat take the appropriate steps to ensure that the content in both official languages on federal Internet sites is of high quality and to propose corrective measures to institutions as needed.

DIGITIZATION

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: provide additional resources so as to significantly increase, by the year 2002, the quality and the volume of digitized documents of federal departments and agencies in French to be posted on the Internet (rec. 5).

We would like to congratulate Canadian Heritage for its announcement on March 22, 2001 of its Canadian Digital Cultural Content Initiative, which will see the establishment of a series of funds designed to increase the availability of Canadian cultural content on the Internet in both official languages.

Canadian Heritage has made a commitment to invest more than $108 million over three years (2000-2002) to digitize federal collections with cultural relevance. The Minister indicated that half of this amount will be earmarked for French Internet content. The 2000 budget also indicated that the federal government was committed to increasing Canadian cultural content on the Internet in the context of a Canadian Digital Content Strategy. This strategy satisfied recommendation 5 of the 1999 study and partially addressed recommendation 2 regarding an integrated content strategy, as well as recommendation 11 on an investment strategy for developing a digital content industry.[30] This strategy includes putting on-line reference works, encyclopedias and dictionaries, digitizing collections from the National Archives of Canada, the National Library of Canada, the CBC, the National Film Board, Telefilm Canada, and the Virtual Museum of Canada, which groups collections from almost a thousand Canadian museums, and expanding Industry Canada's Francommunautés virtuelles program. Investments have also been made in partnership with the private sector to make learning products for schools available on-line. The overall aim of these initiatives is to make it easier for all Canadians to access cultural resources that are otherwise rare or unavailable to the general public.

RECOMMENDATION 9

The Commissioner of Official Language recommends that Canadian Heritage step up the pace of investment in order to encourage the digitization of Canadian cultural content in both official languages on the Internet.

ACCESS

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: create a portal introducing and describing all of the artistic and cultural, economic and financial and scientific and technical sites of the Government of Canada and promote the development of many electronic links with non-profit agencies (rec. 6).

The current site of the Government of Canada[31] offers a wide range of information and services in both official languages. These services are logically grouped according to client: individuals, companies, and international. The cultural gateway of Canadian Heritage currently under development aims to bring together Canadian cultural content in both official languages and to facilitate access to resources for the development of key reference materials, all with the aim of providing a Canadian cultural portal. The Treasury Board Secretariat is still working on developing portals focused on employment, Native people, consumer issues, the elderly, and education, which will all systematically reflect Canada's linguistic duality.

However, as regards other initiatives, what is clearly lacking is a global vision and overall coordination from the federal government. Federal institutions are continually launching portals of one kind or another. Some of them remain "under construction" and others are poorly maintained after their launch, offering broken links and out-of-date references in both official languages. For example, the site access.ca[32] was cited by the government in its response and was announced as a major initiative in the Speech from the Throne, which invited all Canadians to use this address. Yet two years later the only content on the site is the message: "Coming Soon: Your personal gateway to on-line Canadian government information and community content" (verified in March 2002). Nothing is more counterproductive than to direct citizens to resources that are dead, inactive or even non-existent. Another example is the site Canada Place,[33] which theoretically is a showcase and portal providing access to Canadian artistic, cultural and heritage sites, yet all too often offers only broken links on both English and French.

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: develop and implement an investment strategy to promote the expansion of private sector and non-profit agencies working in the areas of French-language content and services (rec. 11).

The dynamism of Canada's official languages and the promotion of Canadian content on the Internet depend on private portals that are dynamic and profitable. Yet the Government of Canada very rarely advertises on Canadian English- or French-language portals.[34] While the federal promotional budget is imposing, its funds are directed almost entirely towards the traditional media. The vitality of private portals is key, however, to encouraging regular visits to Canadian sites in both official languages and thereby promoting

the general use of the Internet in English and French. In recommendation 11, the Commissioner of Official Languages urged the Government of Canada to devise an investment strategy in this area. Such a strategy has not been announced and, overall, the government has paid little attention to the issue.

It would be useful for Communication Canada to carry out a study on the Government of Canada's policies and practices with regard to promotional spending in order to improve the situation.

RECOMMENDATION 10

The Commissioner of Official Languages recommends that Communication Canada develop by 2003 a federal investment strategy aimed at fostering the development of private-sector and non-profit organizations working in the area of French-language content.

Canadian content (7000 federal Internet sites)	→	• Development of content • Translation • Digitization • On-line access	→	Clients Canadian citizens (45% of households have Internet access) Institutions subject to the *Official Languages Act* (178)[35] International consumers (500 million Internet users)
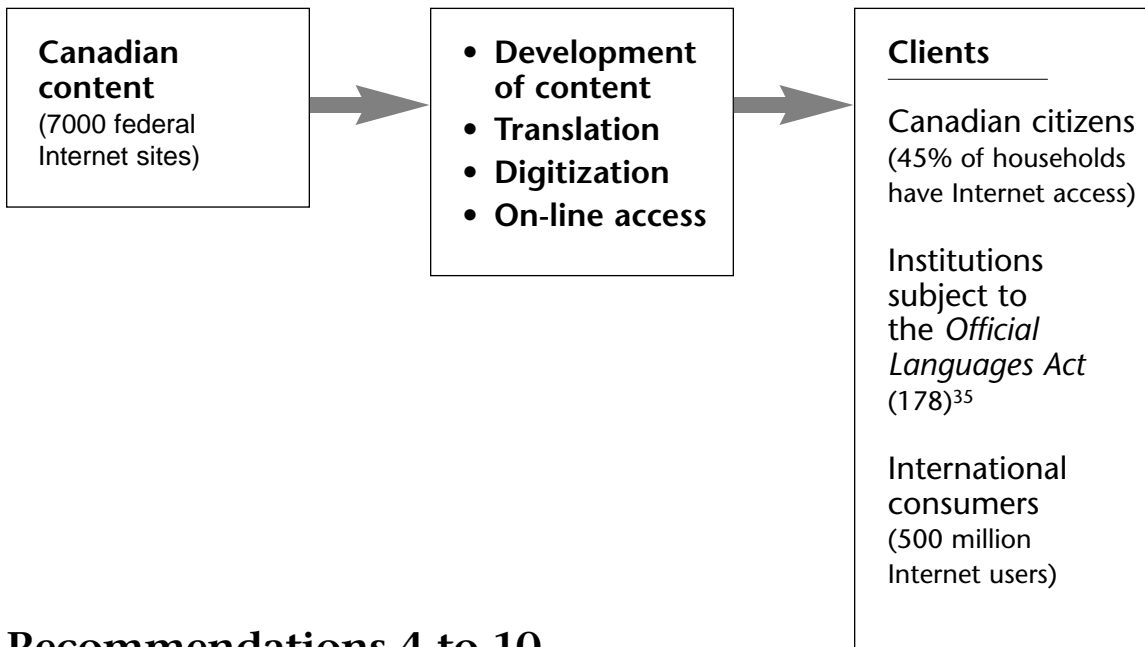
Recommendations 4 to 10

DIAGRAM 1: The first strategic initiative is the creation of a critical mass of French-language content on the Internet

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The objective is to create a critical mass of Internet content in both English and French. As one of the most important suppliers of information in Canada, the federal government has a key role to play in this regard.

Achieving this critical mass will require a coherent action strategy aimed at integrating content development, translation, digitization and on-line access. The critical mass will target different types of clients and will satisfy the criteria for Government On-Line and electronic commerce.

SECOND STRATEGIC INITIATIVE: DEVELOPMENT OF THE LANGUAGE INDUSTRIES

While it is important that the Internet offer a critical mass of French-language content, it is equally important that the information produced in French be widely available, easily accessible and efficiently processed. To this end, the Government of Canada should ensure that norms and standards to encourage the use of French in information technologies and on the Internet are established and enforced. It should also define a coherent strategy to support the development of even more advanced technolinguistic tools.

Such initiatives would not only respect the principle of Canada's linguistic duality, but would also promote the economic expansion in Canada of an industry with a promising future. The tens of millions of dollars that the U.S. government and the European Union spend every year on research into voice recognition, machine translation, automatic summarization, etc. indicate that language should not be regarded as an impediment to economic development but rather as an incentive. Three areas need to be addressed to stimulate the development of these industries: standards, computerized processing of official languages, and strategic support for the language industries.

STANDARDS

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: improve the Web servers of federal government sites so as to take into account the language negotiation feature and facilitate searches in both official languages (rec. 7).

There is no doubt that almost all of the major developments in the history of computing have occurred in the United States.[36] The key role played by U.S. research and development efforts in the world of computers, combined with the fact that English has no accented or compound characters,[37] explains why information technologies and the Internet have developed around the use of standards and products that are not well suited to other languages. Today the most recent standards allow French and a host of other languages to be used on the Internet without restriction. Nonetheless, there are a number of steps that the Government of Canada can take to ensure that French can be easily used on networks. For instance, adding a language negotiation feature to federal sites would allow a visitor's official language of choice to be taken into account. Search results on these sites could be presented first

in the user's language of choice. Unfortunately, federal agencies have done very little to implement this technique. The standards adopted by the TBS for federal sites still make no mention of the language negotiation feature.

Another problem is that the keyboards currently used by federal employees do not always allow the use of French characters. Similarly, the keyboards currently supplied to employees in bilingual regions and at service points do not always conform to CAN/CSA Z243.200-92, the most recent standard for Canadian multilingual keyboards.[38] The transition, in the context of GOL, from a demand-based to a universal model for the delivery of federal services in the two official languages over the Internet by 2005 will require that federal employees have at their disposal computer workstations that are equipped to function in both official languages, including software, interfaces, manuals and multilingual Canadian keyboards. In fact, all workstations in the Government of Canada should be ready on a proactive basis to operate in both official languages. This would assist employees' job mobility with respect to language of work and would foster the creation of a working environment that is conducive to the use of both official languages.

RECOMMENDATION 11

The Commissioner of Official Languages recommends that the Treasury Board Secretariat require that all workstations in the federal government be ready to operate in both official languages by 2005.

The use of domain names with accented characters is being studied by the Internet Engineering Task Force (IETF). It would appear that the implementation of such addresses would be facilitated by representations from interested countries to the competent authorities.[39] Accordingly, the Government of Canada should instruct the Canadian Internet Registration Authority that standards allowing the use of French diacritical marks should be adopted as quickly as possible in Canada to make it possible for federal institutions to use such marks in their domain names. The Government of Canada should also closely monitor and support work to internationalize Internet domain names and should support the participation of French-speaking Canadians in national and international standardization organizations by providing support for Canadian non-profit organizations with a mission to promote the use of French on the Internet.

It should also be noted that the integral use of French is sometimes an issue in sending and receiving e-mail and in displaying data retrieved from federal databases on the Web. To correct these problems, the Government of Canada would be well advised to standardize on software that supports the Unicode standard, which permits encoding of characters from all languages of the world. It should also take action to urge international organizations and software producers to integrate Unicode support into all word processing, e-mail and database management products.[40]

Not only should federal institutions quickly put into practice Treasury Board policy on Common Look and Feel (CLF), but they should also ensure that the norms and standards under development by standards organizations such as IETF and the World Wide Web Consortium (W3C) fully respect the present and future needs and expectations of French-speaking users of information technology and the Internet. Here again Francophone Canadians should play a more proactive role, since they are currently poorly represented on the major international bodies. Some of the regulations now being decided will be crucial to the future use of languages on the Internet. For example, two emerging standards, RDF[41] and VoiceXML, could have an enormous impact on the ability of computers to interpret meaning and process voice.

RECOMMENDATION 12

The Commissioner of Official Languages recommends that the Treasury Board Secretariat participate actively in and support the work of international organizations working to establish standards to enhance linguistic diversity on the Internet.

COMPUTERIZED PROCESSING OF OFFICIAL LANGUAGES

To achieve progress in linguistic duality on the Internet and a critical mass of French-language documents, tools for automatic processing of French are needed to improve the quality of service offered to French-speaking citizens and entrepreneurs. These tools, sometimes referred to as products of the language industries,[42] are software packages that allow computers to use language in a similar way to human beings. They are designed for many different tasks: some allow a human being to communicate with a computer using his voice; others help the user to understand information produced in a foreign language; some assist with the classification and retrieval of information; others assist with the writing of documents; others recognize characters printed on paper; and so on.

Without technolinguistic tools, Francophones (and Anglophones, too) would be hard pressed to productively deal

with the growing amount of information that must be processed. Some examples may be helpful in illustrating the kinds of problems that need to be solved.

- It is estimated that by the end of 2000, the Web contained some 550 billion electronic documents. In addition, between 610 and 1100 billion e-mails were sent and received last year.[43] The federal government's contribution alone is several tens of millions of electronic documents. Given these facts, it is clear that without better and faster retrieval tools, French-language users will have a hard time finding the right piece of information at the right time.

- In a similar vein, machine translation tools may also be used to allow Anglophone and Francophone users to access information in the other official language. For example, a French-speaking user who jumps via a hyperlink from a federal site (say, Strategis) to a non-government site (such as a U.S. university) would to able to consult a draft translation in French of an English-language study. Translingual search engines could allow users to enter a French keyword to find pertinent texts in the other official language.

- Speech-recognition software is experiencing an upswing in interest because, among other things, it will make it possible to miniaturize Internet-access devices and will simplify user-to-computer communication by telephone, via Internet or in the car. It is important

that software such as this be developed in both official languages in order to enhance accessibility to information produced by the Canadian government and to reduce management costs. These innovations will also greatly improve access to government services for the visually impaired.

STRATEGIC SUPPORT FOR THE LANGUAGE INDUSTRIES

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In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: promote research and development of linguistic tools in both official languages in order to further develop the language industry in Canada (rec. 8).

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In response to recommendation 8, the Treasury Board Secretariat created the Interdepartmental Committee for Co-operation on the Language Industries in November 2001. This committee complements the Translation Bureau's Committee on the Sharing of Language Technology Expertise. These two committees plus the National Research Council's Institute for Information Technology (ITI) represent the main initiatives of the federal government on this important issue.

However, the language industries are not only crucial to linguistic duality on the Internet but are also a key sector for

economic development and the export of Canadian technology. A concerted and broad-based effort is needed to allow Canada to benefit from its internationally recognized expertise in this area. Much remains to be done to support research and development in the language industries, and partnerships need to be forged with private industry. Given the importance of the language industries, significant measures in a variety of forms should be introduced to promote the computerized processing official languages.

In the wake of the recommendations made by the Round Table on the Language Industries held by the Committee on the Sharing of Language Technology Expertise, the Department of Canadian Heritage developped a program to support new media, to promote research on multimedia applications, and to develop technolinguistic tools. This initiative is a step in the right direction and responds to recommendation 8 of the 1999 study. Industry Canada should make the language industries a priority for its programs in order to capitalize upon Canadian expertise and to promote the export of Canadian know-how in this very dynamic sector.

In its response to the first Internet study, the federal government had mentioned the possibility of creating a centre of excellence devoted to developing technolinguistic tools to facilitate access to the Internet in French, and to making the information on existing tools more widely available. The centre would promote the development of language processing tools and seek out significant commercial opportunities for Canadian businesses. Creating such a centre of excellence is crucial on both linguistic and economic grounds. It should be noted that the National Research Council's Institute for Information Technology (ITI) is itself pursuing the development of some of these technologies to facilitate access to the Internet in both official languages. The Extractor text summarization system, for example, can quickly extract and translate information from a document.

The language industries are an emerging sector of potentially great importance. The Government of Canada spends more than $3 billion a year on computer hardware and software. The Department of Public Works and Government Services should promote the development of the language industries by specifying in its calls for tenders that support for the two official languages in terms of hardware, software, manuals and training is a prerequisite for all purchases by federal institutions. This approach would have a major impact on the language industries and on linguistic duality on the Internet. All too often the software and computer systems purchased by federal institutions are developed in English, with French added at the last minute. To achieve full respect for both official languages, the calls for tenders issued by the Government of Canada should stipulate from the very beginning that what is required are systems with full support for both official languages, including training and user interfaces.

RECOMMENDATION 13

The Commissioner of Official Languages recommends that Industry Canada work in close cooperation with key players and federal departments with economic responsibilities to ensure that the Canadian language industries become a driving force of the knowledge economy.

RECOMMENDATION 14

The Commissioner of Official Languages recommends that National Research Council Canada (NRC) establish a Centre of Excellence to promote the development of technolinguistic tools by 2003.

RECOMMENDATION 15

The Commissioner of Official Languages recommends that, by 2003, Public Works and Government Services Canada (PWGSC) specify in all calls for tenders issued by the Government of Canada that hardware, software, manuals and training must be provided in both of Canada's official languages.

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: make available without charge on the Internet, the terminology banks, bilingual and specialized search modules and linguistic transfer tools that are the property of the Government of Canada (rec. 9).

The Government of Canada should systematically make available to researchers and industries the linguistic resources it has created over the years. Access to the these tools (including collections of texts, electronic dictionaries, grammars, and so on) is essential to the development of efficient tools. One of these resources is *Termium,* a trilingual terminology bank (English, French and Spanish) developed using public funds. The first version dates back to 1976. It covers virtually all domains: agriculture, transportation, health, computers, business, administration, services, technology and more. The government had agreed to study the possibility of offering *Termium* and the Translation Bureau's other language and terminology resources for free on the Internet, including *Querium,* a bilingual interrogation tool.[44] A study with control groups commissioned by Public Works

and Government Services Canada, the Translation Bureau and Canadian Heritage concluded, however, that *Termium* was a specialized tool that would not be of great interest to the public if offered free on the Internet: "If free access to *Termium* were granted to the general public, it is doubtful that the product would be of interest to a substantial number of citizens or employees of Canadian businesses."[45] However, the study also indicated that more than half of respondents would use *Termium* if it were offered free of charge.[46] Moreover, some simple interface improvements to enhance its usability would encourage more people to use this terminology bank of international repute, which took 25 years of research to develop with public funds.

However, the conclusion reached by the government testifies to a lack of a strategic vision about the importance of language-processing tools in economic and cultural terms. *Termium,* in fact, is not only an essential tool for language professionals, but also an authoritative reference for many different clients. Indeed, the study's conclusions were refuted by the great success of the on-line version of the *Grand dictionnaire terminologique,* a bank of more than three million terms in English and French that the Office de la langue française has made freely available on the Internet since September 18, 2000. About

1.3 million sessions were recorded in the first month after the launch of the *Grand dictionnaire*—proof of the interest generated by this kind of computerized language resource. As we indicated in recommendation 9 of the 1999 study, free on-line access to a complete suite of technolinguistic tools, like the combination of *Querium* and *Termium,* would represent a concrete Canadian initiative to promote language fluidity on the Internet. Given the relatively little follow-up on recommendation 9 of the 1999 study by the Government of Canada, the Commissioner of Official Languages reiterates and strengthens this recommendation.

RECOMMENDATION 16

The Commissioner of Official Languages recommends that, by 2003, Public Works and Government Services Canada (PWGSC) make available free-of-charge on the Internet a complete suite of technolinguistic tools, including writing and translating aids, terminology banks like *Termium,* and specialized bilingual research modules in order to facilitate access to information in both official languages for all Canadians.

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┌─────────────────────────────┐          ┌──────────────────────┐
│ • Standards                 │          │ Clients              │
│ • Computerized              │  ───────▶ │ ──────────           │
│   processing of             │          │ Canadian citizens    │
│   official languages        │          │ (45% of households   │
│ • Strategic support         │          │ have Internet access)│
│   for language              │          │                      │
│   industries                │          │ Institutions subject │
└─────────────────────────────┘          │ to the Official      │
                                         │ Languages Act        │
                                         │ (178)[35]            │
                                         │                      │
                                         │ International        │
                                         │ consumers            │
                                         │ (500 million         │
                                         │ Internet users)      │
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Recommendations 11 to 16

DIAGRAM 2: The second strategic initiative is the development of the language industries

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The objective of this initiative is to develop Canada's language industries in order to foster the emergence of a wide range of technolinguistic tools to provide access to new Internet services.

The majority of Internet users throughout the world do not use English as their mother tongue. The Internet must evolve into a more multicultural and multilingual environment, and the leaders in this new socio-economic space may well be those who control the language industries.

THIRD STRATEGIC INITIATIVE: CANADIAN FOREIGN POLICY ISSUES

The Internet is a global medium whose political, economic and cultural importance for Canada's interest and objectives abroad cannot be overestimated. It should be a major theme of our country's foreign policy and international co-operation policy. As our 1999 study indicated,[47] Canada's foreign policy should take account of French on the Internet not only as one of the dimensions of its activities with the Francophonie, but also, as this study proposes, as the pivot of its cultural components and as a key factor in the development of the knowledge economy.

SHOWCASING CANADIAN CULTURE AND VALUES ON THE INTERNET

The equal status granted to English and French under the *Canadian Charter of Rights and Freedoms* and the quasi-constitutional status of the *Official Languages Act* have been the backdrop to Canadian initiatives in the international Francophonie. Since 1993, promoting Canadian culture and values has been one of the three pillars of our foreign policy, along with prosperity and security. Moreover, Canadian cultural diplomacy has defined its objectives around the export of Canadian cultural and educational products and Canadian studies programs abroad.

French is an international language and enjoys official-language status in most of the major international organizations in which Canada participates. These organizations typically have their own Web sites that usually reflect the multiplicity of their official languages. Yet when we look at the Internet sites of the Organization of American States, the North Atlantic Treaty Organization or the G8, for example, we see very little French. Canada can make a major contribution to the use of French by international organizations by encouraging them to use French on their Internet sites. For example, as host of the Kananaskis Summit, Canada should insist that the G8 Internet site respect our two official languages.

It is unfortunate that many of the Internet sites of foreign embassies in Ottawa do not offer French versions of their content. The Embassy of the United States of America, for example, offers an English-only Web site with links leading to French content from the Department of Foreign Affairs and International Trade (DFAIT), the international program of the U.S. State Department, as well as their embassy in France. The sites of the U.S. consulates in Vancouver, Calgary, Toronto, Halifax and even Montreal are exclusively English. Only the U.S. consulate in Quebec City provides a home page in English and French. However, the site of the U.S. embassy in France offers complete content in English and French. The site of the British High Commission in Ottawa is English only and Canadian visitors are redirected to the embassy in Paris for French-language content. DFAIT should take appropriate action to ensure that foreign embassies offer both English and French on their Web sites, just as Canada generally does with respect to

the languages used in the countries where its own embassies and foreign missions are located.

RECOMMENDATION 17

The Commissioner of Official Languages recommends that the Department of Foreign Affairs and International Trade (DFAIT) immediately take appropriate action to ensure that foreign embassies in Canada, non governmental organizations, and international organizations in which Canada is a full participant include information in both English and French on their Internet sites.

CONNECTIVITY AND LINGUISTIC DIVERSITY

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: open a window on Canada's linguistic duality to the rest of the world and to this end strengthen the trend of co-operation with the institutions, states and member governments of the Francophonie for »the sharing of knowledge and the complementarity of projects so that French may to an even greater extent be an international language of access to culture and technology (rec. 3).

It is essential for Canada and the Francophonie to have an intervention strategy designed to increase the importance of French on the World Wide Web. As a member of the Francophonie, Canada must become the promoter of an international strategy to encourage Internet use among the countries of the Francophonie. But how do we achieve more concrete results? At the 8th Summit of the Francophonie in Moncton in 1999, the Canadian International Development Agency (CIDA) launched the FrancoNet Canada program.[48] The purpose of this program is to contribute to sustainable development by promoting the use and exploitation of the Internet among fifteen developing countries of the Francophonie. Accordingly, the program aims to increase Internet access and skills in the countries of the Francophonie. Unfortunately, the available resources are not sufficient.

> The FrancoNet program is a step in the right direction, and CIDA should increase its investment in this sector.

This is a critical issue, for, as Boutros-Boutros Ghali stated, the Francophonie of the third millennium will either be connected or will not be at all.[49]

RECOMMENDATION 18

The Commissioner of Official Languages recommends that, in its programs, the Canadian International Development Agency (CIDA) do more to encourage the use of the Internet by the developing countries of the Francophonie.

The Canadian government has participated in several international forums that examined cultural and linguistic diversity on the Internet. For example, The Summit of the Americas, held in Quebec City in April 2001, issued two statements on connectivity, one entitled *Connecting the Americas* and the other devoted to the Institute for Connectivity in the Americas. The signatory countries made a commitment to use new technologies to "foster awareness and understanding of cultural and linguistic diversity of the countries in the Americas."[50] In particular, Canada promised to spend $20 million towards the establishment of the Institute for Connectivity in the Americas by the International Development Research Centre (IDRC). At the Summit, Quebec's Conseil de la langue française recommended the creation of an Interamerican Network to promote languages in an integrated America.[51] In co-operation with the Government of Quebec, the Canadian government should undertake proactive measures to encourage the implementation

of this recommendation and to help ensure a strong and active presence of the four continental languages in the various communications channels, including the Internet.
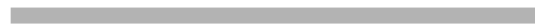
RECOMMENDATION 19

The Commissioner of Official Languages recommends that the Department of Foreign Affairs and International Trade (DFAIT) take the steps necessary to further the creation by 2003 of an Interamerican Network to promote English, Spanish, French and Portuguese in an integrated America.

The dialogue of cultures founded on cultural and linguistic diversity was chosen as the theme of the 2002 Summit of the Francophonie in Beirut. UNESCO also recommended that more be done to ensure the dynamic presence of the languages of the world on the Internet and to narrow the digital divide that still separates the countries of the South from those of the North.[52] Lastly, the World Summit on the Information Society, to be held in Geneva in 2003, organized jointly by the International Telecommunication Union (ITU) and UNESCO, will undoubtedly be an opportune occasion for participating states to clearly express their determination to narrow the digital divide.[53] Reducing the digital divide and promoting linguistic

diversity on the network are also key to expanding electronic commerce. Indeed, several studies have indicated that Internet-based electronic purchases are most often made in the user's language. Thus linguistic diversity on the Internet becomes a factor in economic development, and all federal departments should play a role in this area.[54]
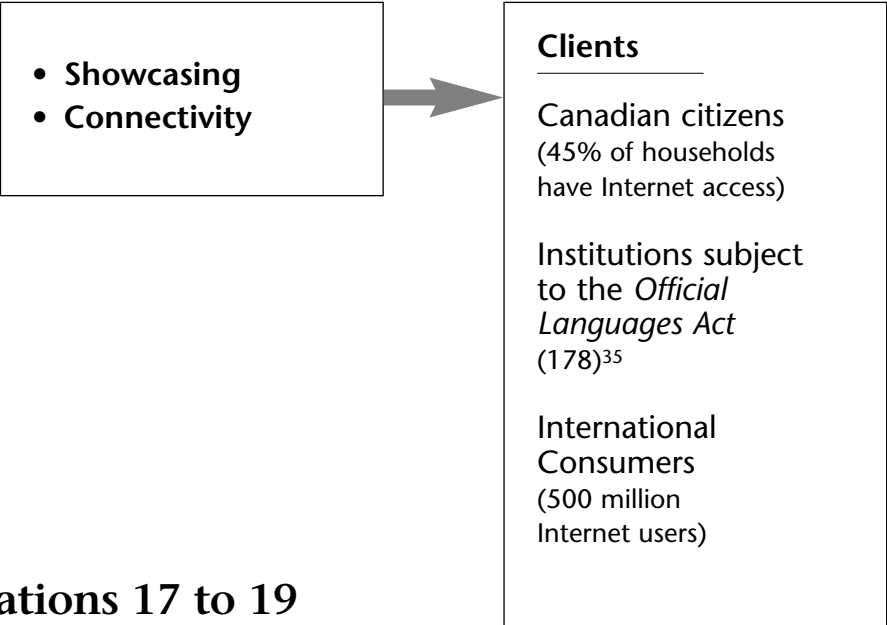
Lastly, the Centre international pour le développement de l'inforoute en français (CIDIF) can make a larger contribution to the development of French on the Internet, particularly by focusing its actions more on issues related to the internationalization of Internet applications and by receiving better support from the federal government, which has already been promised.

In the 1999 study, the Commissioner of Official Languages recommended that the Government of Canada: develop or promote the development of a portal on the Internet to make information on the member states of the Francophonie more easily accessible (rec. 12).

The Internet has evolved considerably since 1999. Today, thanks to a search engine such as Google or a meta-engine like Copernic, it is easy to find huge amounts of information, documents and multimedia content on the member states of the Francophonie.[55] Sites maintained by such bodies as the Organisation internationale de la Francophonie (OIF), the Agence intergouvernmentale de la Francophonie (AIF), the Agence universitaire de la Francophonie, and the Réseau international francophone d'aménagement linguistique (RIFAL) offer a wide range of high-quality information. Accordingly, we consider that investing in the development of a portal for the Francophonie is not as high a priority as it was in 1999, although it remains a useful idea.

• **Showcasing**
• **Connectivity**

Clients

Canadian citizens
(45% of households
have Internet access)

Institutions subject
to the *Official
Languages Act*
(178)[35]

International
Consumers
(500 million
Internet users)

Recommendations 17 to 19

DIAGRAM 3: The third strategic initiative is Canadian foreign policy issues

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Canada's foreign policy and co-operation policy will be strongly influenced in coming years by the Internet, since the Internet is one of the main vehicles of globalization.

CONCLUSION

In implementing the provisions of the *Official Languages Act,* the Government of Canada cannot escape the necessity of promoting the French language on the Internet. For this, it needs to have in place an integrated strategy, a targeted action plan, and the necessary investment, all based on a global perspective of the issues. The twelve recommendations contained in the 1999 special study have already pointed the way. So far, however, a clear political statement, a global vision, an integrated strategy and structural change have not been forthcoming on this issue, which is nonetheless central to the Canadian identity and to the knowledge economy. Despite some successful initiatives, it must be bluntly stated that the performance of the Government of Canada in promoting French on the Internet leaves much to be desired, since fewer than half of the recommendations from the 1999 study have been followed up in any significant fashion.

In light of this situation, the Commissioner of Official Languages has reviewed the issue and has formulated a new series of recommendations in order to impress upon the Government of Canada the urgent need to act and to take the steps required to ensure real change and concrete results with regard to promoting linguistic duality on the Internet. The implementation of these recommendations will signal the determination of the Government of Canada to take action on this important issue.

The development of the French language on the Internet offers Canada a unique opportunity to affirm its identity and to develop the knowledge economy. The Government of Canada can and must accept the challenge!

RECOMMENDATIONS BY THEME

GOVERNANCE FRAMEWORK

The Commissioner of Official Languages recommends:

1. that the Minister of Industry create a Canadian Advisory Committee on Official Languages on the Internet, with a two-year mandate, to recommend to the Government of Canada effective measures to ensure the growth of the knowledge economy by promoting English and French on the Internet.

2. that the Treasury Board Secretariat put in place a coherent, ongoing and integrated governance framework that includes permanent accountability and follow-up mechanisms in order to ensure compliance with the principle of linguistic duality on the Internet, in particular with respect to Government On-Line (GOL).

3. that the Interdepartmental Consultative Committee on Language Industries (ICCLI) of the Treasury Board Secretariat become the *Strategic Committee for French on the Internet* (SCFI), with an expanded mandate to develop an integrated strategy.

STRATEGIC INITIATIVES FOR FRENCH ON THE INTERNET

First strategic initiative: Development of a critical mass of French-language content for the Internet

The Commissioner of Official Languages recommends:

4. that Canadian Heritage ensure that all assistance forthcoming from programs to fund the production of Canadian digital content include guidelines and criteria that take into account the principle of Canada's linguistic duality.

5. that the Treasury Board Secretariat ensure, as part of the implementation of Government On-Line (GOL), that an equitable share of content is produced originally in French.

6. that Public Works and Government Services Canada (PWGSC) provide ongoing training to network and content managers of federal institution Web sites in order to increase their awareness of official languages issues and of the technolinguistic tools available to promote the production of content that respects the special character of Canada's two official languages.

7. that the Treasury Board Secretariat commit the budgetary resources necessary to allow federal departments and agencies to meet the increasing need for translation in response to the publication of content in both official languages on the Internet.

8. that the Treasury Board Secretariat take the appropriate steps to ensure that the content in both official languages on federal Internet sites is of high quality and to propose corrective measures to institutions as needed.

9. that Canadian Heritage step up the pace of investment in order to encourage the digitization of Canadian cultural content in both official languages on the Internet.

10. that Communication Canada develop by 2003 a federal investment strategy aimed at fostering the development of private-sector and non-profit organizations working in the area of French-language content.

SECOND STRATEGIC INITIATIVE: DEVELOPMENT OF THE LANGUAGE INDUSTRIES

The Commissioner of Official Languages recommends:

11. that the Treasury Board Secretariat require that all workstations in the federal government be ready to operate in both official languages by 2005.

12. that the Treasury Board Secretariat participate actively in and support the work of international organizations working to establish standards to enhance linguistic diversity on the Internet.

13. that Industry Canada work in close cooperation with key players and federal departments with economic responsibilities to ensure that the Canadian language industries become a driving force of the knowledge economy.

14. that National Research Council Canada (NRC) establish a Centre of Excellence to promote the development of technolinguistic tools by 2003.

15. that, by 2003, Public Works and Government Services Canada (PWGSC) specify in all calls for tenders issued by the Government of Canada that hardware, software, manuals and training must be provided in both of Canada's official languages.

16. that, by 2003, Public Works and Government Services Canada (PWGSC) make available free-of-charge on the Internet a complete suite of technolinguistic tools, including writing and translating aids, terminology banks like *Termium,* and specialized bilingual research modules in order to facilitate access to information in both official languages for all Canadians.

THIRD STRATEGIC INITIATIVE: CANADIAN FOREIGN POLICY ISSUES

The Commissioner of Official Languages recommends:

17. that the Department of Foreign Affairs and International Trade (DFAIT) immediately take appropriate action to ensure that foreign embassies in Canada, non governmental organizations, and international organizations in which Canada is a full participant include information in both English and French on their Internet sites.

18. that, in its programs, the Canadian International Development Agency (CIDA) do more to encourage the use of the Internet by the developing countries of the Francophonie.

19. that the Department of Foreign Affairs and International Trade (DFAIT) take the steps necessary to further the creation by 2003 of an Interamerican Network to promote English, Spanish, French and Portuguese in an integrated America.

RECOMMENDATIONS BY CENTRE OF RESPONSIBILITY

The Commissioner of Official Languages recommends:

INDUSTRY CANADA

→ that the Minister of Industry create a Canadian Advisory Committee on Official Languages on the Internet, with a two-year mandate, to recommend to the Government of Canada effective measures to ensure the growth of the knowledge economy by promoting English and French on the Internet.

→ that Industry Canada work in close cooperation with key players and federal departments with economic responsibilities to ensure that the Canadian language industries become a driving force of the knowledge economy.

TREASURY BOARD SECRETARIAT

→ that the Treasury Board Secretariat put in place a coherent, ongoing and integrated governance framework that includes permanent accountability and follow-up mechanisms in order to ensure compliance with the principle of linguistic duality on the internet, in particular with respect to Government On-Line (GOL).

→ that the Interdepartmental Consultative Committee on Language Industries (ICCLI) of the Treasury Board Secretariat become the *Strategic Committee for French on the Internet* (SCFI), with an expanded mandate to develop an integrated strategy.

→ that the Treasury Board Secretariat ensure, as part of the implementation of Government On-Line (GOL), that an equitable share of content is produced originally in French.

→ that the Treasury Board Secretariat commit the budgetary resources necessary to allow federal departments and agencies to meet the increasing need for translation in response to the publication of content in both official languages on the Internet.

→ that the Treasury Board Secretariat take the appropriate steps to ensure that the content in both official languages on federal Internet sites is of high quality and to propose corrective measures to institutions as needed.

→ that the Treasury Board Secretariat require that all workstations in the federal government be ready to operate in both official languages by 2005.

→ that the Treasury Board Secretariat participate actively in and support the work of international organizations working to establish standards to enhance linguistic diversity on the Internet.

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

→ that Public Works and Government Services Canada (PWGSC) provide ongoing training to network and content managers of federal institution Web sites in order to increase their awareness of official languages issues and of the technolinguistic tools available to promote the production of content that respects the special character of Canada's two official languages.

➜ that, by 2003, Public Works and Government Services Canada (PWGSC) specify in all calls for tenders issued by the Government of Canada that hardware, software, manuals and training must be provided in both of Canada's official languages.

➜ that, by 2003, Public Works and Government Services Canada (PWGSC) make available free-of-charge on the Internet a complete suite of technolinguistic tools, including writing and translating aids, terminology banks like *Termium,* and specialized bilingual research modules in order to facilitate access to information in both official languages for all Canadians.

COMMUNICATION CANADA

➜ that Communication Canada develop by 2003 a federal investment strategy aimed at fostering the development of private-sector and non-profit organizations working in the area of French-language content.

CANADIAN HERITAGE

➜ that Canadian Heritage ensure that all assistance forthcoming from programs to fund the production of Canadian digital content include guidelines and criteria that take into account the principle of Canada's linguistic duality.

➜ that Canadian Heritage step up the pace of investment in order to encourage the digitization of Canadian cultural content in both official languages on the Internet.

EXTERNAL AFFAIRS AND INTERNATIONAL TRADE

➜ that the Department of Foreign Affairs and International Trade (DFAIT) immediately take appropriate action to ensure that foreign embassies in Canada, non governmental organizations, and international organizations in which Canada is a full participant include information in both English and French on their Internet sites.

➜ that the Department of Foreign Affairs and International Trade (DFAIT) take the steps necessary to further the creation by 2003 of an Interamerican Network to promote English, Spanish, French and Portuguese in an integrated America.

CANADIAN INTERNATIONAL DEVELOPMENT AGENCY

➜ that, in its programs, the Canadian International Development Agency (CIDA) do more to encourage the use of the Internet by the developing countries of the Francophonie.

NATIONAL RESEARCH COUNCIL

➜ that National Research Council Canada (NRC) establish a Centre of Excellence to promote the development of technolinguistic tools by 2003.

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René MORIN, Analyst

Réjean ROY, Consultant

NOTES

1   The complete text of this study is available on-line at
   http://www.ocol-clo.gc.ca/gov_int.htm

2   The complete text of this response is available on-line at
   http://www.ocol-clo.gc.ca/reponse.htm

3   *Internet penetration rate* refers to the percentage of Internet users relative to the population
   as a whole. Our calculations are based on figures provided by the CyberAtlas
   (http://cyberatlas.internet.com), November 5, 2001.

4   DRYBURGH, Heather, "Changing our Ways: Why and How Canadians Use the Internet,"
   p. 4 http://www.statcan.ca/english/research/56F0006XIE/56F0006XIE00001.pdf and also
   Statistics Canada (2001), "Household Internet Use Survey," *The Daily,* July 26, 2001.
   http://www.statcan.ca/Daily/English/010726/d010726a.htm

5   *Ibid.,* p. 7.

6   ROTERMANN, Michelle, "Wired young Canadians." Statistics Canada, *Canadian Social
   Trends,* Winter 2001.

7   According to the Canadian Association of Broadcasters and Bell Canada.

8   *Supra,* note 6, p. 7.

9   http://www.infometre.cefrio.qc.ca/fiches/fiche281.asp

10 Statistics Canada, General Social Survey 2001.

11 *Surveying the Information Deficit.* InterNet Consulting Group. Report Commissioned by
   Internet Deficit: Canadian Solutions Steering Committee. University of Calgary and
   Université de Montréal. October 2001, p. 34.

12 See http://www.unesco.org/

13 ROY, Réjean. *Servir le monde. Les enjeux de l'internationalisation des sites Web québécois.*
   Montréal, CEVEIL, 2001. http://www.ceveil.qc.ca/fiq9.html

14 In the 1999 study, the Commissioner of Official Languages recommended that the
   Government of Canada: "significantly increase resources in order to provide, by the
   year 2002, the expertise necessary to deal with the volume and enhance the quality
   of translation of documents of federal departments and agencies to be posted on the
   Internet" (rec. 4) and "provide additional resources so as to significantly increase, by the
   year 2002, the quality and the volume of digitized documents of federal departments and
   agencies in French to be posted on the Internet" (rec. 5).

15 In the 1999 study, the Commissioner of Official Languages recommended that the
   Government of Canada: "promote research and development of linguistic tools in both
   official languages in order to further develop the language industry in Canada" (rec. 8)
   and "make available without charge on the Internet, the terminology banks, bilingual
   and specialized search modules and linguistic transfer tools that are the property of the
   Government of Canada" (rec. 9).

16 Information drawn from *Bilan des activités du Comité de concertation technolinguistique* (CCT). Translation Bureau, Ottawa, December 19, 2000, p. 2.

17 Second strategic initiative—support for the language industries.

18 Press release dated April 25, 2001. Privy Council Office, Ottawa, 2 p.

19 On-line at: http://www.Canada.gc.ca

20 On-line at: http://ww.strategis.ic.gc.ca

21 *Study on the Use of the Internet by Canadians.* PricewaterhouseCoopers. Canadian Consumers Technology Survey 2000. http://www.PricewaterhouseCoopers.com/extweb/ncsurvres.nsf/docid/0AD8B61796C17A148525699700708245

22 *Ibid.*

23 Policy of Treasury Board Secretariat, June 2001.

24 BERTRAND, Guy. "La diversité culturelle et linguistique des contenus dans la nouvelle économie." Journée thématique. Commission des États généraux sur la situation et l'avenir de la langue française au Québec, February 9, 2001. http://www.etatsgeneraux.gouv.qc.ca/pdf_journees/Bertrand_G.pdf

25 Broadband refers to connection speeds above 56 Kb/s.

26 Available on-line at http://www.cursus.cursus.edu

27 See: Canada. *Official Languages Requirements and Government On-Line.* Special study. Commissioner of Official Languages, Ottawa, 2002, 14 p.

28 Canada. *Use of the Internet by Federal Institutions*. Commissioner of Official Languages, Ottawa, 1999. http://www.ocol-clo.gc.ca/follow.htm

29 Under Section 46 of the *Official Languages Act:* "The Treasury Board has responsibility for the general direction and coordination of the policies and programs of the Government of Canada relating to the implementation of Parts IV, V, and VI in all federal institutions (…) and to monitor and audit federal institutions in respect of which it has responsibility for their compliance with policies, directives and regulations of Treasury Board or the Governor in Council relating to the official languages of Canada."

30 The Commissioner of Official Languages recommended in the 1999 study that the Government of Canada: "provide additional resources so as to significantly increase, by the year 2002, the quality and the volume of digitized documents of federal departments and agencies in French to be posted on the Internet" (rec. 5); "by July 1, 2000, develop an integrated strategy with regard to the presence and quality of French-language content and services on the Internet and control procedures to ensure its effective implementation" (rec. 2); and "develop and implement an investment strategy to promote the expansion of private sector and non-profit agencies working in the areas of French-language content and services" (rec. 11).

31 URL: http://www.Canada.gc.ca/

32 URL: http://www.access.ca/

33 URL: http://www.canadaplace.gc.ca/

34 According to reports from Communication Canada.

35 72 departments and organizations where the Treasury Board is employer, 63 distinct Crown corporations as employers, and 43 privatized agencies, according to the *Annual Report on Official Languages* from the President of the Treasury Board 2000-2001, Ottawa, p. 19.

36 ROY, Réjean, "Le français et les nouvelles technologies," in Michel Plourde (dir.), *Le français au Québec*. Montreal, Fides, 2000.

37 In technical terms, the use of 7-bit ASCII (128 characters) made it impossible for computers and the Internet to work with languages other than English, Swahili and Indonesian, which do not have accented characters.

38 Canadian Standards Council. http://ww2.scc.ca/std-en/std530.html

39 MARSAN, Carolyn DUFFY, 'Patent flap slows multilingual domain name plan." CNN, March 27, 2001. http://www.viagenie.qc.ca/fr/i18n/idn-CNN_news-20010327.shtml

40 Unicode support would also benefit communications between the government and Native Canadians.

41 Resource Description Framework.

42 Often known as language engineering products in other Francophone countries.

43 LYMAN, Peter et Hal R. VARIAN, *How much information?* Berkeley, University of California, 2000. http://www.sims.berkeley.edu/research/projects/how-much-info

44 *Querium* extends the scope of the search by proposing a list of synonyms for the search term. This allows the user to conduct a search of several related terms simultaneously. The synonym list includes both English and French terms, and the user can therefore search documents in both official languages with a single click.

45 Quantitative test of *Termium Plus*. PWGSC, Translation Bureau and Canadian Heritage. Études de Marché Créatec, Montreal, April 2000, p. 6

46 *Ibid.,* p. 14.

47 "The Commissioner of Official Languages recommends that the Government of Canada develop or promote the development of a portal on the Internet to make information on the member states of the Francophonie more easily accessible" (rec. 12).

48 URL: http://www.franconetcanada.org/

49 "La Francophonie à l'heure d'Internet," N.A. Journal ECO (Cameroon), May 1999.

50 Declaration of Quebec City, Summit of the Americas, section 17.

51 FRÉCHETTE, Christiane. *Language issues in the integration of the Americas.* Brief presented to the Commission des institutions de l'Assemblée nationale as part of consultations on the Free Trade Area of the Americas (FTAA) by the Conseil de la langue française du Québec. Quebec City, September 4, 2000, 21 p. http://www.clf.gouv.gc.ca/ReppubA.html#A125

52 Recommendation of the Expert Committee on the Promotion and Use of Multilingualism and Universal Access to Cyberspace. UNESCO, Recommendation 30 C/37 of the General Conference. Paris, 2001.

53 CLAVET, Alain. *The Issue of Multilingualism on the Internet: Towards a UNESCO Action Plan.* Presented to the13th Quadrennial and Statutory Regional Conference of the 50 National Commissions for UNESCO of the Europe Region. Montreal, July 2001, p. 3. http://www.unesco.ca/english/Documents/FinalReport/FinalReport-EN.pdf

54 *Supra,* note 21.

55 Mega-search engines coordinate the simultaneous use of search engines so that searches benefit from their combined characteristics.
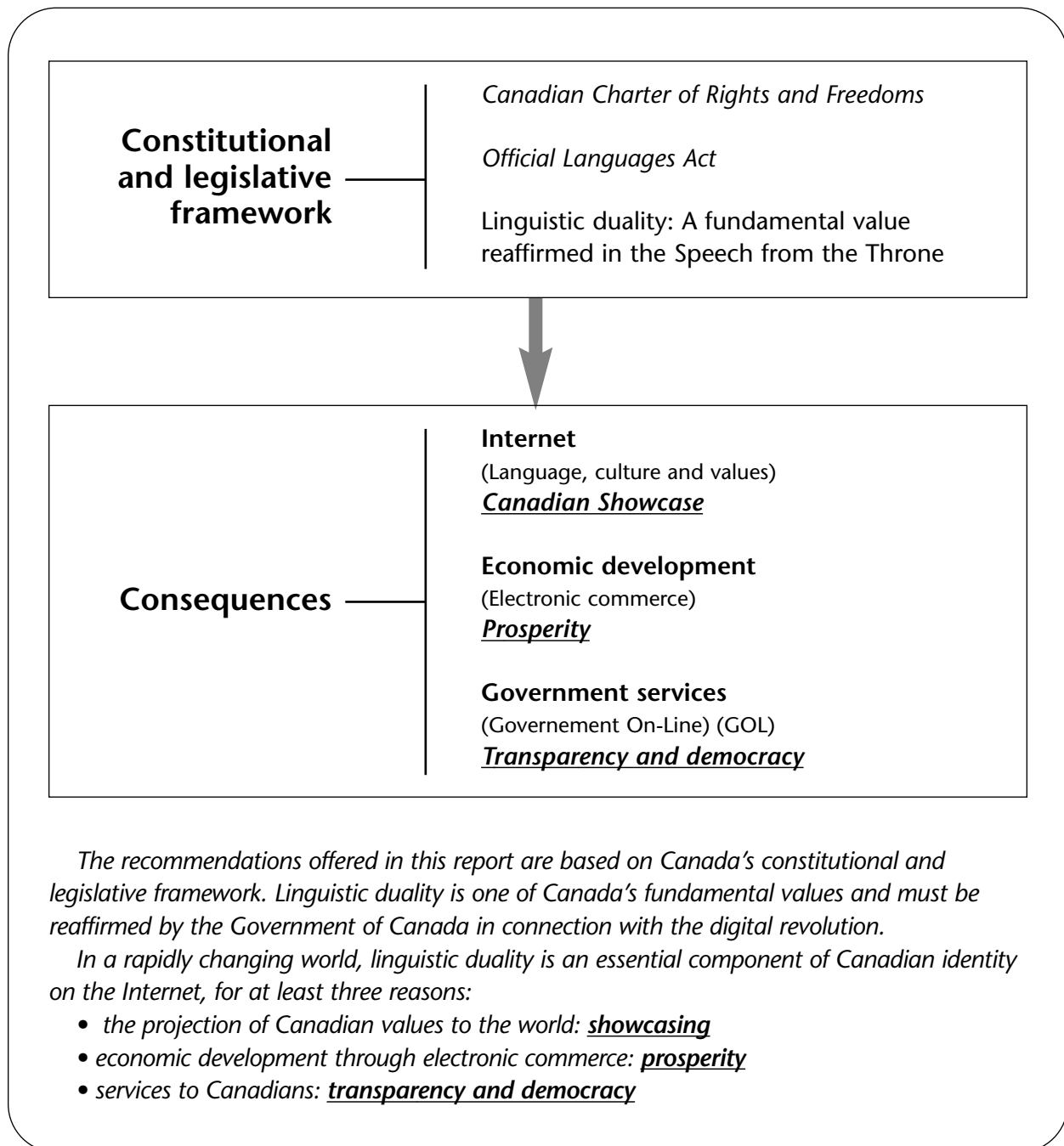
LIST OF DIAGRAMS

APPENDIX A

CONSTITUTIONAL AND LEGISLATIVE FRAMEWORK

Constitutional and legislative framework —

Canadian Charter of Rights and Freedoms

Official Languages Act

Linguistic duality: A fundamental value reaffirmed in the Speech from the Throne

Consequences —

Internet
(Language, culture and values)
Canadian Showcase

Economic development
(Electronic commerce)
Prosperity

Government services
(Governement On-Line) (GOL)
Transparency and democracy

The recommendations offered in this report are based on Canada's constitutional and legislative framework. Linguistic duality is one of Canada's fundamental values and must be reaffirmed by the Government of Canada in connection with the digital revolution.

In a rapidly changing world, linguistic duality is an essential component of Canadian identity on the Internet, for at least three reasons:

- *the projection of Canadian values to the world: **showcasing***
- *economic development through electronic commerce: **prosperity***
- *services to Canadians: **transparency and democracy***

APPENDIX B

LIST OF INSTITUTIONS AND ORGANIZATIONS CONSULTED

INTERNATIONAL:

Agence intergouvernementale de la Francophonie (AIF)

Centre international pour le développement de l'inforoute en français (CIDIF)

Délégation générale à la langue française du gouvernement français (DGLF)

Expert Committee on Multilingualism and Universal Access to Cyberspace, UNESCO

Information Society Branch, European Commission

Réseau international francophone d'aménagement linguistique (RIFAL)

Union Latine (UL)

CANADA:

Canadian Commission for UNESCO

Canadian Language Management Site (CLMS)

Centre francophone de recherche en informatisation des organisations (CEFRIO)

Conseil de la langue française (CLF)

Direction de l'autoroute de l'information, ministère de la Culture et des
   Communications du Québec (MCC)

ISOC-Québec, chapter of the Internet Society

Observatoire québécois des industries de la langue (OQIL)

Office de la langue française (OLF)

Recherche appliquée en linguistique informatique (RALI)

FEDERAL GOVERNMENT:

Canadian Heritage (CH)

Industry Canada (IC)

National Research Council Canada (NRC)

Public Works and Government Services Canada (PWGSC)

Statistics Canada (SC)

Translation Bureau (TB)

Treasury Board Secretariat (TBS)

APPENDIX C

BEYOND THE PATCHWORK QUILT: THE NEED FOR A GLOBAL VISION

INTERNATIONAL INITIATIVES

Canadian Heritage
- La Toile scolaire francophone and NetCorps Canada

Canadian International Development Agency (CIDA)
- FrancoNet Canada

CANARIE Inc.
- Applied Research in Interactive Media Program (ARIM)

Centre international pour le développement de l'inforoute en français (CIDIF)

Conférence des ministres francophones chargés des inforoutes

Foreign Affairs and International Trade (DFAIT)
- Digital Opportunities Task Force (DOT Force)

International Development Research Centre (IDRC)
- Institute for Connectivity in the Americas (ICA)

Preparations for the 2003 World Summit on the Information Society

Réseau international francophone de l'aménagement linguistique (RIFAL)

Treasury Board Secretariat
- Linguistic and terminological notices to the Department of Foreign Affairs and International Trade for the Agence de la Francophonie

UNESCO
- UNESCO Committee of Experts on Multilingualism and Universal Access to Cyberspace

FEDERAL INTERDEPARTMENTAL INITIATIVES

Canadian Heritage
- Working Group on French on the Internet (WGFI)

Industry Canada
- Interdepartmental Committee on Broadband

Justice Canada
- National Program for the Integration of Both Official Languages in the Administration of Justice (POLAJ)

Ministers' Reference Group on Official Languages

Translation Bureau
- Technolinguistic Coordination Committee (TCC)

Treasury Board Secretariat
- Committee of Deputy Ministers responsible for Official Languages
- Interdepartmental Consultative Committee on Language Industries (ICCLI)
- Information Management Sub-Committee
- Government On-Line Advisory Panel
- Canadian Language Management Site (CLMS)

FEDERAL DEPARTMENT AND AGENCY INITIATIVES

Canadian Heritage
- Canadian Culture Online National Advisory Board

Industry Canada
- Departmental Committee for French on the Internet (DCFI)

National Research Council Canada
- Institute for Information Technology (ITI)
- NRC's Consultative Committee on Official Languages

Telefilm Canada
- Advisory Committee and New Media Fund