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Annual
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Report
May 1993

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**Summary of Program
and
Administrative Performance**

1992-93 ANNUAL MANAGEMENT REPORT'S PARTICULARITIES

In January 1992, as part of the Increased Ministerial Authority and Accountability Program (IMAA), the Department of Communications (the Department) and Treasury Board renewed the Memorandum of Understanding (MOU), signed on June 19, 1989, for another three-year period. This MOU outlines the authorities delegated and defines the respective responsibilities of the Department and Treasury Board necessary for ensuring effective management in view of the limited resources available, while at the same time making the two organizations more accountable for achieving good results in both program delivery and implementation of Treasury Board policies. Hence, this Annual Management Report (AMR), covering fiscal year 1992-93, is the first produced by the Department since the extension of the Memorandum of Understanding.

This report, covering fiscal year 1992-93, highlights the main achievements accomplished during this period in terms of delivery of departmental programs. For comparison purposes, various statistics are provided in support of the performance analysis. We have also included details regarding changes in the objectives and priorities of certain initiatives. Finally, achievements that were not part of the IMAA have sometimes been mentioned because of their significance.

Another particularity of the present report is the fact that while negotiating the Shared Management Agenda, the Department has undertaken to rationalize all the corporate reports it submits to Treasury Board, including the AMR. Consequently, for the preparation of the AMR, it was agreed that, whenever possible, we would use the new performance indicators set out in the Operational Plan Framework (OPF), revised in December 1992, and retain certain indicators no longer included in the OPF but for which data was compiled in 1992-93. Again in an effort to rationalize reports, it was also agreed to eliminate certain indicators which are duplicated in other reports to Treasury Board.

The structure of this AMR therefore differs somewhat from previous years' reports. The first part of the AMR sets out the Department's achievements, in some instances supported by detailed narrative text, and in others by concise narrative text, according to the following activities structure: 1) communications research and development; 2) telecommunications, broadcasting and cultural affairs; 3) spectrum management; 4) government telecommunications and information exchange; and 5) corporate services. The second part is a review of our performance with respect to policies on program and resource management, personnel, administrative and information management, official languages, corporate review and financial administration. The third part reports on how the Department has discharged the departmental authorities granted to it under the IMAA and on the monitoring of IMAA delegations.

Our mission - **Nation-building: Helping Canadians to share their ideas, information and dreams** - clearly demonstrates the important role which the Department plays within the federal government, namely to make Canada an active country in the fields of culture and communications. Through various forms of expression or technology, we help communicate commercial information, scientific knowledge, Canadian cultural productions of all kinds and personal messages.

In order to carry out our mission and to make a real contribution to government priorities, the Department adopted the following strategic objectives in 1992-93: fostering Canadian creativity, strengthening access to Canadian cultural products, strengthening Canadian telecommunications, and renewing our management approach. What follows is therefore a report on the Department's most significant achievements during that period.

However, we must point out that this report was prepared prior to the decisions concerning the June 25, 1993, governmental reorganization, and, more recently, the appointment of the new Cabinet and the Secretaries of State on November 4, 1993.

PART I - PROGRAM ACCOUNTABILITY

1. COMMUNICATIONS RESEARCH AND DEVELOPMENT

Canadian Workplace Automation Research Centre (CWARC)

Multimedia and Multimodal Human-Machine Interfaces

Through its expertise in multimodal dialogue between users and multimedia systems, CWARC is in a position to find optimal ergonomic solutions to problems faced by users requiring access to customized knowledge across time and distance. For instance, the Multimedia Telecommunications project, in which CWARC is currently a participant, integrates these technologies into a collaborative work environment using communications networks.

Similarly, CWARC has acquired in recent years an excellent reputation in cognitive technologies and methods for constructing computer-assisted learning systems. The Centre has developed solutions for "just-in-time" delivery of specialized knowledge and skills required for performing complex tasks.

Nexfotel Project

One important result of the Nexfotel project was the NX-100, an intelligent modem for high speed digital communications over a fibre-optic network. The NX-100 was officially placed on the market in April 1993. This project is the outcome of the strategy implemented at the end of the Consortel project in December 1990. In the intervening two years, CWARC has invested more than \$500,000 in prototype development. These efforts generated \$16.5 million in private sector investments and led to the establishment of a new firm, ABL Canada.

Fourth International Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92)

CWARC played host to the Fourth International Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92), held in Montréal on June 24-27, 1992. The Centre was responsible for both the program and organization of this international event. The effort invested in organizing this conference paid off handsomely: the event broke all attendance records and the Centre received unanimous praise from the participants, who came from around the world. This conference confirmed CWARC and the Department of Communications as leaders in the field of computer-aided translation.

Telework Project

This project, carried out by the Ontario Region of Communications Canada in cooperation with CWARC, was designed to study organizational changes conducive to reducing staff turnover at the Department's Toronto office. The goal of the project was to reduce turnover rates and training costs by setting up satellite offices closer to employees' residences, thus improving the quality of life in the workplace. New technologies (particularly microcomputer and telecommunications equipment) have made it possible to reassign many employees to these satellite offices.

Contributions of Information Technologies to the Needs of Persons with Disabilities (Access)

CWARC has produced a study (the first of its kind in Canada) about the state of domestic and foreign R&D into applications of information technologies to the needs of the disabled. This project falls under the federal government's National Strategy for the Integration of Persons with Disabilities and will serve as a basis for developing a platform of applied research in this area at the Centre.

Pan-Canadian Network of Research Centres

The Pan-Canadian Network of Research Centres was created in 1992-93. This significant event is only the first step in creating a critical mass of Canadian researchers who will work in a laboratory "without walls" and international in scope. At present the network joins centres conducting research in fields closely related to CWARC's areas of expertise. The links established between network members will enable them to co-operate on a regular and ongoing basis.

The review revealed that, for the projects examined, the Program is a relatively effective mechanism for transfer of technology. The project scientific objectives are generally attained, and the projects result in the development of prototypes in half the cases and even, sometimes, in the creation of new products. However, the review also showed that the impact of the Program could be increased, since several projects do not involve a CWARC researcher and the partner-clients do not all have the capability to adopt and use the technology.

Communications Research Centre (CRC)

Following the review conducted by the National Advisory Board on Science and Technology in 1990-91, it was decided to make the Communications Research Centre a "research institute" capable of functioning with greater flexibility and autonomy but dependent on contractual ties with its clients for its funding. In so doing, we sought to eliminate obstacles to better targeted research and to more effective technology transfers, to broaden the range of clients and beneficiaries and to maintain a vigorous and distinctive scientific culture at the Communications Research Centre.

A transition team recommended an interim structure, which would take a year and a half to set up (with a target date of October 1, 1993). Four research sectors were selected: broadcast technologies, devices and components; radio sciences and communications; satellite communications; and a sunset program, the mobile satellite program (MSAT). Finally, when the new president of the Communications Research Centre was appointed in February 1993, it was also announced that the Canadian Workplace Automation Research Centre would in future report to the CRC.

Microelectronics Facility and Microwaves and Optical Labs

Several significant achievements were made in the laboratories over the past year. Here are some examples: optoelectronic photodetectors with operating bandwidths over 10 GHz, useful for data rates in excess of 15 Gbits/second were demonstrated and an industrial partner is being sought for marketing them. Heterojunction bipolar transistors operating up to 50 GHz realized in the labs will be demonstrated in an advanced optical component in partnership with the Solid-State Optoelectronics Consortium. The technology of photosensitivity in optical fibres has been patented and can be applied to switching, routing and sensing components for smart structures and fibre networks and a consortium of Canadian industry has been formed to exploit this.

Digital Radio Broadcasting (DRB)

The CRC continued to be an active participant in national, North American and international committees involved in the development of standards for a Digital Radio Broadcasting (DRB) service which is intended to replace AM and FM broadcasting. For instance, a number of tests have been conducted to characterize the delivery channel at 1.5 GHz and the results have been used in computer simulations of proposed radio technologies to ensure compatibility with Canadian service objectives and requirements.

Advanced Television Evaluation Laboratory

The CRC established its Advanced Television Evaluation Laboratory in 1991 to undertake tests of the five advanced television (ATV) systems, then being considered for possible adoption as a new terrestrial broadcast standard for North America. This work was completed with support from Canadian industry and was part of a joint United States/Canada effort overseen by the Federal Communications Commission's Advisory Committee on Advanced Television Service. In addition, the CRC contributed to the analysis of the test data with respect to system robustness under interference conditions and conducted laboratory tests. Television transmission simulation systems studies, to evaluate and compare various digital television transmission approaches, were also carried out. The ATV evaluation results have led to the decision to further test the systems with improvements or, if possible, to develop a single system that would incorporate the best features of all previously tested systems. The CRC's participation in this ATV work secured opportunities for Canada to participate in critical, decision-making bodies of the Advisory Committee. At the same time, the CRC's research results are contributing to the development of a family of worldwide standards for digital video systems for applications in the telecommunications and broadcasting industries.

Natural Language Interface

The natural language interface developed at the CRC has been demonstrated as an alternative to menu systems for presenting information. Its use on the National Capital FreeNet community bulletin board showed that it could be useful as a tool for discovering the information needs of the public. Its potential for use in interactive broadcast services was also demonstrated. In 1992-93, planning was completed for a multimedia conference held in Banff, Alberta in April 1993. The conference, which covered the areas of markets, applications and services, technologies, policy and regulatory issues, was co-sponsored by the Department and six outside organizations. The conference consisted of papers by authors from 14 countries and demonstrations by 23 companies which included a view of the entertainment, educational, health and business applications of the emerging multimedia communications technologies.

Contributions and Leverage obtained through External Research Organizations

Sixty percent (\$9.1 million) of the funds were either contracted out or spent in shared research programs. These funds generated investments close to \$100 million. In addition the Department was instrumental in obtaining investments in R&D through the regional economic development agency of approximately \$5.9 million and levered an additional \$15.9 million from the partners. In the shared research category, the leverage factor was twelvefold: that is, for every dollar invested by the Department in R&D, the partners invested twelve dollars. This demonstrates both the relevancy of our R&D activities and their contribution to increasing investments in R&D in Canada.

Standards Program Office

The Standards Program Office (SPO) initiates ground work to support Canadian industry competitiveness through wider access to information technology and telecommunications national and international voluntary standards development process. It establishes a focal point for co-ordination of departmental positions and assists the Treasury Board of Canada on strategic issues in information technology and telecommunications standards.

The SPO also provides Canadian leadership role on North American Open Systems Testing and Certification Policy Council to achieve harmonization of testing and certification for Open Systems within North America and with other geographical regions. It initiates and achieves significant global harmonization of accreditation criteria towards a basis for "one-stop" testing of standards-based, multi-vendor products so that Canadian products destined to foreign markets need to undergo expensive testing and certification only once. The SPO provides technical, strategic and research information to Canadian industry and universities in the form of research direction and technology transfer by disseminating strategic information to more than 1,500 organizations on a regular basis.

National Strategy on the Integration of Persons with Disabilities

Over 15 projects were undertaken this year including the first Canadian needs study on communications for persons with disabilities, the development of a tool for access to graphical user interfaces for the visually impaired and the first real-time French-language closed captioning system in the world.

Fessenden Scholarship Program

A new departmental funded scholarship program was established and launched to provide annual awards and summer or CO-OP employment to outstanding undergraduate and postgraduate students from across Canada, who wish to pursue careers in radio science or communications. The undergraduate scholarships which were developed by the Department will be administered by Industry, Science and Technology Canada via the Canada Scholarships Program. Over a period of three years, ten awards of \$1,000 each will be presented annually to students enrolled in communications-related engineering studies.

Satellite Communications Industry

Industrial and economic support programs include direct support (\$2.8 million annually) to the Canadian satellite communications industry through cost-shared projects under the Space Industry Development (SID) program. Specific achievements in 1992-93 include the start of Phase A2 of the system definition for the next generation of communications satellites (Ka-Band Advanced Satcom).

Bilingual Keyboard

As a result of close collaboration with industry and provincial governments, the Department developed a national bilingual keyboard and negotiated its production. The Canadian Standards Association approved this new standard for English and French languages in 1992-93. Supply and Services Canada procurement process now requires that suppliers comply with the standard. Commercial production has begun and the first major sales have been made to organizations in both the public and private sectors.

2. TELECOMMUNICATIONS, BROADCASTING AND CULTURAL AFFAIRS

The telecommunications industry is on the threshold of major changes, as a result of far-reaching technological advances, notably in the fields of fibre optics, satellites and microelectronics, and of the trend toward greater competition in the provision of both conventional and new telecommunications services. The Department's main achievements in this area are as follows:

Telecommunications Legislation

The Standing Senate Committee on Transport and Communications completed a review of the new telecommunications legislation (Bill C-62) which the Minister tabled in the House of Commons on February 27, 1992. The Bill has passed and received Royal Assent on October 25, 1993. The Act provides a new unified and comprehensive telecommunications policy framework for Canada that facilitates the development of more competitive environment, simplifies the regulatory system, strengthens Canadian ownership and control provision over the telecommunications carrier industry, and responds to provincial and regional interests. The Committee's final report expressed considerable support in principle for the legislation and made various recommendations for changes which are under consideration by the Minister.

Public Cordless Telephone Service

Digital cordless telephone service is the next generation of cordless telephones utilizing digital technology. Following a call for commercial licence applications, the Minister announced, in December 1992, that four companies (Mobility Personacom Canada, Rogers Cantel Mobile Inc., Canada Popfone Corporation, and Telezone People) had been selected to provide public cordless telephone service in Canada. This service which should be inaugurated in mid-1994 will utilize CT2 plus Class 2 technology in the 900 MHz band and will provide the public the capability to use the same cordless handset at home, at work and in public. Preparations for the next steps in personal communications services are being planned co-operatively with industry in a number of fora. In this context, a departmental policy discussion paper will be developed.

Spectrum Policy Framework for Canada

In 1990, the Department began broad public consultations with a view to developing a Canadian spectrum policy framework. This consultation process culminated in the publication in September 1992 of a document entitled Spectrum Policy Framework for Canada. The goal was to reaffirm the fundamental objectives which form the basis of Canada's strategic spectrum policy. The document also provides guidelines on spectrum policy and management: spectrum use and allocation policies, licensing of radio systems, research and development, standards, planning, public consultations, international issues and new spectrum resource management methods.

Local Networks Convergence

The Local Networks Convergence Committee was established by the Minister of Communications in May 1991 to review the evolution of the local telecommunications infrastructure in Canada and to identify public policy and regulatory issues that should be considered in light of this evolution. The report of the Committee's co-chairs entitled Convergence • Competition and Co-operation - Policy and Regulation Affecting Local Telephone and Cable Networks was presented to the Minister of Communications in November 1992. It contains recommendations which are aimed at promoting an open and competitive local communications infrastructure in which Canadians have access to an increasingly wide array of voice, data, video and multimedia communications services through the networks of the telephone and cable companies.

R&D Incentives Program

During the period covered by this report, the Department created the R&D Incentives Program. This five-year program was allocated a budget of \$40 million. In connection with the Program, a five-year, \$7.5 million contribution agreement was prepared and approved for the World Electronic Data Interchange (EDI) Institute. Within the framework of the advanced communications component, part of \$2.5 million to be distributed over four years, was allocated for the funding of projects such as Nexfotel (for development of fibre optic telecommunications terminals), Lanser (for a digital radio business communications network modelled on cellular communications) and R&D pertaining to digital sound broadcasting demonstration stations.

Cultural Undertakings

In general, Canadian-owned cultural undertakings are not in good financial health, namely because of a major foreign presence in the Canadian market. In the past few years, a number of initiatives have been developed to make cultural industries in Canada more competitive and profitable. In 1992-93, the Department carried out several projects in an effort to consolidate the gains of recent years and to continue our development efforts.

Publications Distribution Assistance Program (PDAP) (postal subsidies)

In June 1990, in follow-up to a Cabinet decision, the Minister announced that the postal subsidies program would be gradually eliminated over three years and replaced by a program of direct assistance. The Program's budget was to be progressively reduced, taking it from \$220 to \$110 million. Consequently, foreign-owned publications, controlled circulation periodicals and large community weeklies were eliminated from the Program. Dailies, for which the postal rate increased by 25 percent, will also be eliminated in March 1994.

During the 1992-93 fiscal year, the Department was obliged to negotiate a memorandum of understanding with Canada Post for reintegration of large national and regional weeklies and ethnic or minority official language weeklies. Another memorandum of understanding was signed for reducing the planned rate increase for small community weeklies.

Following the Economic and Fiscal Statement, an additional 10 percent cut was made to the Program's budget. The Department succeeded in negotiating an agreement in principle with Canada Post to extend by two years the component of the Program aimed at paid circulation periodicals and small community weeklies. For 1993-94, \$100.8 million will be allocated to the Publications Distribution Assistance Program.

The Department has also undertaken consultations with the book industry to ensure creation of a book rate replacement program. The terms of reference of this program have been developed and we are awaiting Treasury Board approval of the financial resources required for its implementation.

Phase II of Copyright Legislation Revision

Following approval of the policies set out in the Memorandum to Cabinet in December 1991, the ministers of Communications and Consumer and Corporate Affairs created, in March 1992, an advisory committee made up of creators and users of protected works and gave that committee the mandate to analyze the proposed text. Once the consultation process will be completed, the revised legislative instructions will allow for drafting of the bill planned for early fall 1993.

Film and Video Policy Review (financial issues)

In 1992-93, the Department and industry directed considerable attention at identifying ways to improve the private financing situation for the film and television production industry. There is a general industry view that the current Capital Cost Allowance Program is not effective and the Department has indicated its willingness to consider alternative approaches and assess their effectiveness, once the industry had presented its views. The primary focus for this activity was the Task Force on Production Incentives for the Film and Video Sector, whose report was presented to the Department in the context of the Television Summit in the fall of 1992.

The Book Publishing Industry Development Program (BPIDP)

In 1992-93, the total budget available to the BPIDP was \$25.6 million, a considerable increase from the 1991-92 budget of \$7 million, resulting from Treasury Board's approval of an interim assistance program to aid book publishers, as announced by the Minister of Communications in January 1992. This interim program consists of four components: Aid to Publishers, Aid to Industry and Associations, Book Promotion Assistance for Canadian-authored Titles and International Marketing Assistance. Book publishing assistance is also highly concentrated in Quebec (\$8.1 million) and Ontario (\$8 million), which represents 81 percent of the total assistance of \$20 million for domestic initiatives. Consultations on the design of a permanent BPIDP for Canadian book publishers are now completed. The new program provides funding of \$114 million over the next four years for Canadian book publishers.

Radio Action Plan

The Radio Action Plan Consultative Group submitted its report to the Minister on June 17, 1992. The report contained 28 recommendations directed to the radio industry, the CRTC and the government, designed to address the short-term economic recovery needs of the industry and its transition to digital technology over the longer term. A certain number of initiatives have been implemented. These included a 90-day review of the CRTC's regulations, policies and procedures as they affect radio; the announcement of up to one million dollars in federal funding for joint digital radio research projects; an analysis of the CRTC's broadcasting licence fees; and the formation of a Task Force on the Introduction of Digital Radio to assist in the implementation of this new technology.

Canadian Broadcasting Corporation (CBC)

During 1992-93, the matter of CBC funding remained an issue. The CBC indicated that it was faced with a shortfall that would make it more difficult to carry out its mandate under the *Broadcasting Act*. Cabinet granted the CBC an additional \$46 million for the 1992-93 fiscal year.

The CBC has continued its efforts to reposition itself as a distinct service in a context of multiplication of television services. For example, it intends to offer, in co-operation with the Power Corporation, a new Canadian programming service called "Northstar" in the United States. In addition, the CBC plans to apply to the CRTC for a licence to operate a French-language news service in Canada.

Television Northern Canada (TVNC)

The Department of Communications contributed \$3.1 million to TVNC during 1992-93 which was in its first full fiscal year of operation. TVNC is the first national aboriginal television network of its kind, serving 94 remote northern communities with aboriginal and educational programming in eight aboriginal languages and dialects from three uplink locations in the North.

Sound Recording Development Program (SRDP)

In 1992-93, \$7.5 million (\$4.9 million from the Department and \$2.6 million from various sources such as Factor/Musicaction/Canada (FMC), radio broadcasters, Canada Council and other contributions) was spent under the SRDP. We notice that 83 percent of the total sound recording assistance is spent in two provinces: \$2.2 million in Ontario and \$2.7 million in Quebec. This situation is not surprising given the concentration of publishers and the recording industry in these same two provinces.

Canada-Ontario Subsidiary Agreement for Cultural Development

In 1991-92, phase II of the evaluation of the Canada-Ontario Subsidiary Agreement for Cultural Development was completed. This four-year Cultural Development Agreement provided up to \$50 million funding to non-profit and commercial organizations to carry out projects in four broad areas: feasibility and planning studies; infrastructure development; cultural enterprises development, and marketing of cultural activities and products. By far the largest proportion of total Cultural Development Agreement contributions, 86 percent, went towards infrastructure development projects to support the construction, renovation and restoration of cultural facilities and exhibits and preservation of heritage sites. Two-thirds of the CDA funding for this type of project were given to three large projects to create world-class cultural facilities in Ontario. The projects were the Elgin and Winter Garden, the Royal Ontario Museum and *icomm*, a new interactive telecommunications museum. The evidence suggests that almost all of the projects examined were completed close to schedule and within budget. The evaluation concluded that projects funded under the cultural development agreement provided Ontario residents with greater opportunities to participate in and benefit from a wide variety of cultural activities.

Evaluation of Canada-Quebec Subsidiary Agreement on Cultural Infrastructures

The five-year Canada-Quebec Subsidiary Agreement on Cultural Infrastructures, which was signed on March 29, 1985, was given an overall envelope of \$73.5 million, contributed in equal parts by the respective governments. This agreement was aimed at encouraging the establishment and/or modernization of cultural infrastructures. Four cultural infrastructure projects involving more than 63 percent of the total investments were selected for evaluation of cultural and economic impact: the Montréal Museum of Fine Arts (57.2 percent of the funds granted), the Centre de production cinématographique de Montréal, the Théâtre du Rideau Vert (Montréal) and the Salle Albert-Rousseau (Québec City).

As might be expected, given the size of the investment, the Montréal Museum of Fine Arts project is the one which generated the most revenue for the governments of Canada and Quebec. The federal government, through taxation, has recovered a total of some \$5.5 million, or 15.1 percent of its total investment under the agreement. For the Government of Quebec, this one project has generated \$10.8 million in taxes, allowing it to recover 29.4 percent of its investment. If one adds to these figures the revenue generated by the Théâtre du Rideau Vert and Salle Albert-Rousseau projects, the amount recovered rises to 16 percent for the federal government and 30 percent for the Quebec government.

The evaluation showed that the agreement has made it possible to increase the economic impact of cultural activities in Quebec, while providing Quebec citizens with better conditions for participation in a larger number of cultural activities.

Status of the Artist Act

The *Status of the Artist Act* (Bill C-7) officially recognizes a professional status for artists by establishing a legislative framework which governs their professional relations with producers. Although the bill was passed in September 1992, proclamation of the *Status of the Artist Act* was delayed until the end of 1992-93. This Act provides, among other things, for the establishment of the Canadian Artists and Producers Professional Relations Tribunal, which will monitor compliance with certain provisions of the Act.

Cultural applications for the Electronic Highway

The Electronic Highway initiative is a major focus for the Department which has involved significant cooperative effort among all of the sectors. Working under the Steering Committee, four task forces were set up, including an Applications Task Force which contained a Cultural Applications Working Group. This Working Group brought together departmental staff from the Arts and Heritage Sector and the Cultural Industries Branch along with portfolio agency representatives from the National Library, the Media Arts Section of the Canada Council as well as representatives of the Secretary of State and the Canadian Heritage Access Project. The Working Group produced a report entitled The Emerging Information Infrastructure: Network Applications for the Arts and Heritage Communities and Cultural Industries. This paper will become part of the Final Report of the Steering Committee.

Technology Assessment Centre (TAC)

The Technology Assessment Centre (TAC), which evaluates the usefulness of applications and emerging technologies for the museum environment, is now operational. Focusing on imaging research this year, the TAC has completed an interactive compact disk entitled "Charting the New World" in collaboration with ON/Q Corporation and the David M. Stewart Museum of Montréal. The TAC negotiated two educational CD-ROM projects, one entitled "Canadian Dwellings through Time" in collaboration with the Ontario Ministry of Education, Fitzhenry and Whiteside, and Parks Canada and the other with the National Film Board and the Canadian Museum of Civilization on "Canada's Visual History". Other demo products were created and TAC staff gave many demonstrations, training sessions and lectures, in addition to producing a number of articles.

3. SPECTRUM MANAGEMENT

The program manages a steadily growing radio user population. In 1992-93 more than 850,000 radio station licences were in effect. Annual growth rate in this licence population is approximately six percent, which translates to over 57,000 applications processed by program staff. Program staff also processed over 4,700 applications from broadcast and CATV clients. In addition, over 8,000 examinations for radio operator certificates and approximately 9,000 radio interference investigations were carried out. Attached to these volume related activities are planning and engineering functions of the program such as the development of policy, standards, procedures, system plans, equipment specifications and international and bilateral agreements, etc. These activities affect both licensed radio devices, as well as millions of unlicensed devices, such as garage door openers, baby monitors and cordless telephones, that Canadians use every day

For 1992-93, the Department forecasts expenditures of \$58.6 million from the funds appropriated to the spectrum management activity by Parliament. Also, in 1992-93 the program credited to the consolidated revenue fund \$105.4 million for the issuance of licences for non-broadcasting radio communications equipment.

Over the past decade, through the increased use of automation the program has managed to cope with an increased workload and a compressed resource base. The program has automated its operational activities in order to realize efficiencies to better cope with an escalating workload. In addition, it has modified operational practices and implemented regulatory changes to realize increased efficiencies.

Organizational changes were also implemented to better address the demographics elements of the rising workload. Field offices were consolidated or downsized to respond to this changing workload. This included both resource and functional shifts throughout the organization.

The radiocommunications industry in Canada has been increasingly critical of the significant over-recovery of the costs of spectrum management. Revenues from radio licence fees have increased from \$15 million in 1981-82 to well over \$100 million in 1992-93 while current costs of administering the spectrum are in the vicinity of \$58 million. The Canadian communications industry was supportive of changes to the licence fee schedule to increase licence fee revenues to full cost recovery in the mid-1980s, but since revenues have advanced well beyond costs, that support for licence fee policy has disappeared.

The program has developed a number of characteristics which require a new way of doing business. Changes to the spectrum management program are required to continue to improve its efficiency and maintain program integrity. A mechanism such as a revolving fund is required to facilitate changes to program delivery while maintaining services to clients.

Assigning Frequencies to Clients

The spectrum program aims specifically at ensuring an optimal response to applications for radio licences, broadcasting certificates and examinations for radio operator's certificates, while at the same time taking into account the availability of frequencies and endeavouring to issue licences in a timely manner. As of the end of the 1992-93 fiscal year, 851,715 radio station licences, representing all station categories, were in effect -- down slightly from the figure of 867,597 reported for 1991-92.

For certain types of applications, as the number of spectrum users increases it is becoming more difficult to find frequencies to assign that are compatible with all other existing uses, resulting in longer delays for clients. However, since its introduction in the late 1980s, fleet licensing has improved the efficiency of the spectrum sector and has helped deal with the annual workload from fixed and mobile earth stations. However, it should be pointed out that the volume of fleet licensing in these services now appears to be stabilizing.

International Agreements

Through international agreements, the Department has pursued its efforts to meet Canada's current and future radio frequency needs. The following are a few highlights of our efforts to ensure that Canada is well positioned on the international scene:

Canada-France Agreement

An international spectrum sharing agreement was ratified between the administration of France and Canada. This agreement dealt specifically with VHF and UHF spectrum around the islands of St. Pierre et Miquelon, near Newfoundland.

International Compatibility

Authoritative investigative work over several years and technical papers presented at a "Comité consultatif international sur les radiocommunications" meeting in Montréal, in September 1992, were instrumental in finalizing international compatibility criteria between FM broadcasting and aeronautical navigation and communication services to ensure air safety.

Implementation of Digital Audio Broadcasting (DAB) in the L-band

Innovative engineering studies, analytical software development and extensive field tests were carried out to facilitate domestic implementation planning of DAB in the L-band (1452-1492 MHz) in Canada. Close liaison was maintained with the broadcast industry in this planning. International promotion of the facts established by the planning work was highly successful in demonstrating to other countries, such as Germany, the technical and economic feasibility of the Canadian L-Band proposals. Moreover, new service area concepts and plans to replace AM and FM radio services were investigated. Transition scenarios were studied for the introduction of DAB to ensure there will not be disruption to the current radio service enjoyed by the public.

CBC and private broadcasters conceived and planned, in co-operation with the Mexican Administration, a DAB demonstration in Mexico City and OAS/CITEL DAB seminar which was scheduled for April 1993 to further promote and enlarge the market for DAB.

Survey of Client Satisfaction with Spectrum Management Services

In 1992-93, the Department conducted a national survey of licensed spectrum management clients which supplements the information obtained by the two regions - Quebec and the Prairies - that had taken the initiative to survey their clients the previous year. More than 4,818 licensees were interviewed in November and December 1992. A preliminary analysis of the results showed that overall, most clients contact the Department essentially for license renewal. In general, clients are extremely satisfied with departmental personnel and their courtesy and competence. Sources of dissatisfaction include speed of response to problems, costs of a licence, the waiting period for issuing a licence, and the clarity of forms and documents. Finally, clients' demands, level of knowledge of spectrum management activities and levels of satisfaction with departmental services vary by type of client.

4. GOVERNMENT TELECOMMUNICATIONS AND INFORMATION EXCHANGE

Government Telecommunications Agency (GTA) Services

While it is difficult to compare GTA rates with various discount and promotional rates offered by telecommunications suppliers, GTA continues to be competitive. With respect to the commercial non-discounted Direct Distance Dialling (DDD), the savings offered by GTA's Intercity Calling Service were approximately 50 percent.

The Government Intercity Calling Service (GICS), in association with the Local Telephone Services (Centrex/EEWD), continue to be the principal common services provided by GTA. However, new services are increasing their impact on the overall GTA portfolio. The estimated overall savings to the government resulting from the provision of GTA services during 1992-93, was 20.8 percent (\$83.3 million) on an estimated retail value of \$401 million.

The GICS, which provides North American and overseas long distance calling and voiceband data services, saw its usage in 1992-93 increased by 8 percent (from 240 million to 260 million minutes) over the previous year, while the cost to departments was reduced by 9 percent (from \$63 million to \$58 million). At the same time, there were major reductions in the commercial long distance rates through the introduction of new discount plans. The net result was a 17 percent saving for the government compared to discounted commercial rates in 1992-93 for the voice network.

The Government Message Handling Service (GMHS) was introduced to enable the interworking of different E-Mail systems, using the X.400 standard as the common denominator.

GTA introduced a comprehensive portfolio of teleconferencing services by adding videoconferencing using the Government Videoconferencing Service (GVS), and Business Television (BTV) to the well-established audio conferencing using the Government Teleconferencing Service (GTS).

Total Quality Management

GTA provided leadership in the management of telecommunications in the government by actively participating in committee activities. In consultation with GTC and TAP, GTA is continuing to address the subject of performance indicators and standards, focusing on client satisfaction. An associated initiative is the introduction of Total Quality Management in GTA. The newsletter "Focal Point" continues to be published to keep all departments informed of the progress being made under the Telecommunications Architect Program and to generate dialogue on the challenges to be met.

Telecommunications Architect Program Forum '92

The "Telecommunications Architect Program Forum '92" was attended by over 300 participants. Its purpose was to inform government colleagues and clients on plans and progress made under the Architect Program and to give them the opportunity to provide direct input pertaining to common networking issues. Client views were consolidated and will be incorporated into further developments of the Architect Program. General consensus was that clients were satisfied with the Architect Program and GTA services as a whole.

Senior Executive Network Services (SEN)

By March 31, 1993, approximately 1,500 clients had subscribed to the SEN with the full executive complement of about 4,000 expected to subscribe by the end of 1994. Following two competitive tenders issued by SEN, SHL Systemhouse Inc. was awarded the contracts for client training and for installation and integration support to client departments and agencies.

Treasury Board has approved a Multi-Year Operational Plan submission which extends the Network's mandate and outlines a vigorous expansion initiative striving for full cost recovery in 1994. Full and immediate acceleration of SEN services to the entire executive community was approved by the Board and acceleration activities were well under way by year-end.

Finally, a major new application was developed during 1992-93 which enables clients to post comments on emerging Treasury Board policies. This bulletin-board-type application, entitled ConnEXions, represents a commitment by Treasury Board both to consult the executive community and to use SEN to do so. SEN committed extensive resources to both the development of the application and modifications to the SEN software in support of the application.

5. CORPORATE SERVICES

In order to meet the numerous challenges which the Department constantly face, it has adopted an organizational structure which is well adapted to current needs but which also provides a certain degree of flexibility.

The Department's many significant achievements are undoubtedly the result of our management philosophy, which is based primarily on the human element. By using bold methods, the Department has been continually innovative in managing its human, financial and material resources. In 1992-93, it adopted the following management objectives: to delegate greater authority to employees, to improve service to clients, starting by adopting service standards, and to position ourselves in order to deal more effectively with financial austerity.

Federal-Provincial Relations

A conference of federal, provincial and territorial deputy ministers responsible for culture and historical resources was held in August 1992. The deputy ministers reaffirmed the importance of co-operation to better meet the needs of the arts and heritage communities during this period of fiscal restraint.

During the fiscal year, the Department concluded agreements on culture with Alberta, Newfoundland and Nova Scotia and an agreement on communications technology with Manitoba. Moreover, negotiations with British Columbia concerning an agreement on communications and cultural industries were finalized.

International Relations

As far as international expositions are concerned, given the success of the Canadian pavilion at the international exposition in Seville, the Department is continuing to co-ordinate and manage Canadian participation in Expo 93 in Taejon, Korea.

A departmental delegation played a central role in the International Telecommunications Union (ITU) Plenipotentiary Conference (APP 92) which made significant modifications to the ITU structure and operations. The changes made will improve ITU efficiency, to ensure that the Union can meet and protect future Canadian interests in international telecommunications and radio frequency management. The Department also participated actively in the policy discussions of the ITU Americas Telecommunications Development Conference and the marketing activities of Americas TELECOM 92.

Significant inroads are being made in promoting privileged bilateral telecommunications relationships with priority countries. Co-operation agreements, prerequisites to building greater trade and investment momentum, were signed with the People's Republic of China and the Russian Republic whose markets represent significant opportunities for Canadian industry. Under the aegis of existing co-operation agreements, telecommunications policy consultations took place with Japan, China, and Mexico.

As Chairman of the General Agreement on Tariffs and Trade Telecommunications Working Group, a departmental representative helped steer a key element of the Uruguay Round and continues to participate in meetings on the trade rules for telecommunications services. The Department has also represented Canada's interests in the North American Free Trade Agreement negotiations and work continues on its implementation (Bill C-115). In film and television co-productions, the Department negotiated and signed Protocols of Amendment with France and New Zealand and entered into negotiations with a view to updating bilateral agreements with Italy, Spain, Czechoslovakia, Russia and the Commonwealth of Independent States.

The Department participated in a variety of multilateral fora dealing with arts, heritage, and cultural issues including: UNESCO activities relating to the World Decade for Culture and committees on Development, Communication, Information and Informatics, and International Education. The Minister participated in the 7th Conference of Ministers Responsible for TV5 (the international French language satellite television consortium) where full support was given to launch TV5 in Africa and Latin America/Caribbean.

The evaluation concluded that the Department had an important and unique department-level role to play in supporting exports from Canada's telecommunications sector. Exporters indicated that the Department had produced positive impacts, including among others: providing useful market information, identifying opportunities that have led to significant sales, providing support to the Minister, acting as a conduit for industry's access to senior departmental officials, identifying and contributing to the funding of foreign missions, leading visiting delegations, and providing information on the operation of Canadian federal departments. Furthermore, the evaluation reported a consensus reached by exporters which would assure that the Department could achieve much more by adopting a three point strategic approach. The Department has since completely re-organized this function, adopting the direction proposed in the evaluation which will enhance its effectiveness and allow substantial cost saving.

Corporate Management

For more detailed information under this sub-activity, see the following section dealing with administrative accountability. However, it should be pointed out that in the area of informatics, the Department developed and implemented in 1992-93 a preliminary corporate communications infrastructure which will provide all departmental employees with access to corporate data, electronic mail and other services. The Department has also acquired new equipment which will be used to provide important computer systems. Finally, an informatics steering committee was established in an effort to effectively respond to informatics challenges and to the Department's strategic orientation in this sector.

PART II - ADMINISTRATIVE ACCOUNTABILITY

Program and Resource Management

Having put in place a single operating budget pilot project, the Department modified the expenditures review process to bring it in line with the management philosophy for this system. The fifth- and ninth-month reviews have been combined in a single semi-annual review. We have to note that managers made effective use of the flexibility provided by the single operating budget system and requested a reprofiling of funds to 1993-94, within the limits imposed - that is, 2 percent of the single operating budget total.

In 1992-93, a gross amount of \$659 million was included in the Main Estimates for budgetary and non-budgetary expenditures. Of this amount, \$226 million corresponded to revenues credited to the vote. The balance of \$433 million requested in parliamentary appropriations had, before the tabling of the Main Estimates, been cut by nearly \$6 million as part of the preparation of the budget speech (\$35 million over five years). Additional cuts were made at the time of the budget speech, resulting in reductions of \$1.8 million and \$760,000 in the operating and communications budgets respectively.

The major components of the Department's budget are as follows: \$119 million was allocated to salaries (18.1 percent) and \$177 million was allocated to specific programs, where there is extremely limited flexibility for reallocation. The postal subsidy (\$112 million accounted for 17 percent of the total resources allocated to the Department. The Government Telecommunications Agency manages a revolving fund which was allotted a budget of \$216 million in 1992-93.

To fund new initiatives, additional budgets totalling \$34 million were allocated to the Department, and \$18 million of this amount went to the Book Publishing Industry Development Program, while \$5.7 million went to various contributions to federal-provincial projects and agreements in the cultural field. New resources were also allocated to the Spectrum Management Program (\$4.9 million) and the Communications Technology Incentives Program (\$7.3 million). The resources allocated to spectrum management will make it possible to generate some \$100 million in new revenue over five years. This revenue will go to the Consolidated Revenue Fund.

Finally, the Minister of Finance's Economic and Fiscal Statement of December 2, 1992, imposed an additional \$3.5 million reductions in the Department's operating budgets. In follow-up to this new reduction, and in order to deal with the budget cuts that will be imposed on the federal administration in future years, the Department of Communications established a strategic review process for all departmental programs and activities.

Personnel Policy

In 1992-93, the Department continued to pursue its no lay-off policy. Through the Career Management and Workforce Adjustment programs, the Department has endeavoured to provide affected employees with all the necessary counselling services in terms of training, assignment and appointment to positions commensurate with their qualifications.

During the fiscal year, the Department made an official undertaking whereby all employees are entitled to a minimum of three days of training or development each year. Training and development needs are determined through the annual performance review and employee appraisal exercise. To this end, the In-House Training and Development Service offered 99 training courses in 1992-93.

All-Employee Survey

The Department's second all-employee survey was carried out in December 1991 and January 1992. Preliminary results from the survey were available in May 1992. The results were shared with employees and management teams in a series of townhall meetings over the course of the summer and fall. The meetings provided opportunities to validate the survey findings and probe selected issues in more detail. Two reports were prepared on the results of the survey and townhall meetings, one containing highlights and recommendations and the second a detailed and technical account of the data gathering procedures and data analysis.

Senior management has targeted the Department's response to developing a plan to increase the people management skills of the management team and to increase employees skills and knowledge to assist in their career development and planning. The Deputy Minister met with all managers and with all employees during the spring period to, among other things, comment on the all-employee survey. In addition, the Department is currently undertaking a major strategic review of its activities which should help clarify the question of the Department's mission, direction and mandate.

Administrative Management Policy

The Department issued 954 service contracts in fiscal year 1992-93, of which 819 or 86 percent were sole source contracts. The Department uses sole source contracts to obtain the specialized expertise in the fields of telecommunications, research, museology and conservation.

Official Languages Policy

The Department proceeded with a study of the service area of each of its offices during the last fiscal year, in order to determine where service must be provided in both official languages. The managers concerned were informed of the results of this study and established the mechanisms needed to provide services in both official languages. This study was ratified by the Treasury Board Secretariat.

Moreover, no complaints were received regarding the linguistic quality of services provided to the public. In those of the Department's offices where there is no bilingual staff, toll-free telephone lines allow for services in both official languages and/or calls are redirected to an office providing bilingual service.

During the year, the percentage of incumbents of positions identified as bilingual and providing personal services who met the language requirements of their position rose from 82.3 percent to 85.4 percent. Since the situation is continuing to improve, the Department should attain its objective (88 percent) by the end of the 1993-94 fiscal year. During the same period, the percentage of incumbents of positions identified as bilingual and providing central services rose from 83 percent to 85.3 percent. The Department attained the objective it had set for itself.

Finally, we think it is worth mentioning that the Department has played a leading role in development and adoption of a new national standard for creation of a completely Canadian keyboard that will not be detrimental to the interests of Francophones. The departmental policy respecting the purchasing of keyboards for computers encourages the purchase of "Canadian" keyboards.

Corporate Review

The contribution of the corporate review function is not limited to studies; it is also involved in a wide range of activities, such as management consulting, special surveys, developing client-satisfaction and performance indicators, co-ordinating external reviews and liaison with the central agencies.

The annual assessments of the program evaluation and internal audit functions conducted by the Office of the Comptroller General have been very positive. The evaluation of the International Research and Development and International Marketing Initiatives Program carried out during the fiscal year provides a good example of a value-added activity. Indeed,

the evaluation provided crucial and credible information on the program's effects and the effectiveness of partnerships and helped develop alternatives. The Department has since completely reorganized this function, which will enable it to become more effective and to realize substantial savings.

In a context where employees are an organization's primary asset and where management of human resources is essential, the Department's second all-employee survey and the series of group meetings with employees from all sectors and all regions is another good example of the value-added aspect of the corporate review function.

PART III - IMPLEMENTATION OF THE IMAA MOU

Whenever possible, existing processes are used to monitor the delegations of authority and information is gathered periodically through management indicators to monitor expenditure trends.

The new Operational Plan Framework (OPF), published in December 1992, reflects two major changes that have had an impact on the management of departmental activities. First, the regional offices were given additional responsibilities for program implementation, thereby becoming primary service points providing a wide range of departmental services to the Canadian public. As mentioned earlier, in April 1992, the government granted the Communications Research Centre (CRC) research institute status and gave the Canadian Workplace Automation Research Centre (CWARC) greater autonomy, to enable them to function in a context of increasingly more specialized research geared toward market needs.

CONCLUSION

On reading this report on the performance of the Department's programs for the 1992-93 fiscal year, you will once again note our wide array of activities as well as the innovative and far-reaching character of certain initiatives. We believe that we demonstrated sound, effective management throughout the year. Maintaining and improving the quality of the services we provide to our clients continue to be the cornerstone of our action.

In order to cope more effectively with current budget reductions and future cuts, the Department conducted a strategic review in early 1993 of all its programs and administrative procedures as well as its organizational structure. This exercise was made possible by the knowledge and creativity of many employees from all levels who closely participated in working groups examining the range of its activities. The Task Forces' reports propose a series of conditional scenarios and a host of suggestions aimed at encouraging greater discussion and a more in-depth examination of the issues facing us.

In closing, we would like to point out that the decisions relating to the governmental reorganization which started on June 25, 1993, and the appointment, on November 4, 1993, of the new Cabinet and the Secretaries of State will have a profound effect on the federal public service as a whole. We have concluded the first transitional phase leading to the abolishment of the Department of Communications and to the creation of the Department of Canadian Heritage. We have obviously already begun to give thought to the future shape of the accountability exercises (such as the Annual Management Report) of the new departmental

components. Hence, the future will bring changes in strategic and administrative goals and priorities. However, we firmly believe that all the communications and culture issues will continue to be essential to the economic development and identity of our country, regardless of the structure within which they will be addressed.

Part I:
Program Accountability

1.0 COMMUNICATIONS RESEARCH AND DEVELOPMENT

1.1 Communications Research

1.1.1 Performance Indicator

Expenditures (\$ and FTE) by core substantive area.

Performance Target

Actual expenditures and trends over time in \$ and FTE.

Achievements

Type of Research	1992-93	
	FTEs	\$ M
Broadcast Technologies	48	4.527
Communications Devices and Components	52	4.128
Satellite Communications*	38	3.282
Radio Communications Technologies*	59	4.826
Workplace Automation (CWARC)	43	10.824
Total Research Resources	240	27.587

* Radio & Satellite Communications Technologies Branch is now: Satellite Communications Branch and Radio Communications Technologies Branch

Dollar figures include expenditures for goods and services, capital investments, grants and contributions, salaries, overtime and allowances.

1.1.2 Performance Indicator

Extramural contracts, grants and contributions as percentage of total research related activity.

Performance Target

Current level (43 percent) to be maintained if overall funding remains stable.

Achievements

Because of relatively new modus operandi of CWARC and CRC which is more oriented towards shared research and partnership agreements, it was difficult to assess if the 43 percent target had been reached.

1.1.3 Performance Indicator

Significant findings or applications from research efforts.

Performance Target

Descriptive

Achievements

Canadian Workplace Automation Research Centre (CWARC)

Language Technologies

The Centre's expertise in natural languages can be applied to solving co-operation problems thanks to translation tools that help eliminate language barriers, and the computerization of processes linking translation teams and their clients. CWARC is known internationally for the excellence of its research in this area. Its expertise in language technologies has been applied in a variety of projects, including TASF-Mediatex.

Multimedia and Multimodal Human-Machine Interfaces

Through its expertise in multimodal dialogue between users and multimedia systems, CWARC is in a position to find optimal ergonomic solutions to problems faced by users requiring access to customized knowledge across time and distance. For instance, the Multimedia Telecommunications project, in which CWARC is currently a participant, integrates these technologies into a collaborative work environment using communications networks.

Similarly, CWARC has acquired in recent years an excellent reputation in cognitive technologies and methods for constructing computer-assisted learning systems. The Centre has developed solutions for "just-in-time" delivery of specialized knowledge and skills required for performing complex tasks. New research projects will extend these paradigms to learning situations in which participants must perform tasks remotely from each other and in real time, in multimedia environments.

Anthropology of Technology

Deployed as an intrinsic component of our methods in "user-centered contextual design", this expertise is useful for predicting the social and cognitive consequences of introducing new technologies into a given environment, and for proposing customized solutions adapted specifically to the skill level of end users.

In addition, CWARC's experience in "micro work process re-engineering" is being enhanced through its advanced study of problems related to "telework", and through the creation of a research platform in computer-supported collaborative work.

Content Technologies

CWARC's expertise in this area is directed toward increasing the productivity of those who manipulate complex and widely distributed informational materials. Research is currently underway to study the implementation of these concepts in work environments where several users create and manipulate information.

This work will be useful for increasing the performance of complex sets of distributed tasks (processes) in the area of electronic data interchange (EDI) or for providing solutions to a number of problems generated by the integration of CALS-type technologies into corporate networks.

Neuroclass Project

Exploratory research into neural networks, supplemented by prototype development work in the laboratory, has demonstrated the potential for applying this technology to problems of document classification.

A project proposal submitted to the Artificial Intelligence Fund (administered by Industry, Science and Technology Canada) has been accepted based on the positive results obtained to date. A similar prototype will be developed in co-operation with the private sector to train classification officers at Transport Canada, which will serve as a real-life pilot site. Construction of the prototype, a showcase for artificial intelligence technology, got underway in the spring.

Resource and Advice to Practitioners (RAP) Network

The purpose of this project was to increase the effectiveness of the detection, diagnosis, and treatment of mental health problems, by facilitating co-operation between front-line medical workers and specialists.

CWARC participated in the implementation of the Resource and Advice to Practitioners (RAP) network, the goal of which is to offer continuous training. It has three main components: a network for expert consultation using electronic mail, a clinical pharmacology database, and a medical information and education bulletin. Terminals providing access to the practitioners' assistance network have been set up in three pilot-regions: Outaouais, North Shore and Montréal.

CWARC's principal partners in this project are the Association des médecins psychiatres du Québec, Clinidata Inc., Corporation professionnelle des médecins du Québec, the Community Health Department of the Montréal General Hospital, the Fédération des médecins omnipraticiens du Québec, and UpJohn of Canada.

Nexfotel Project

One important result of the Nexfotel project was the NX-100, an intelligent modem for high speed digital communications over a fibre-optic network. The NX-100 was officially placed on the market in April 1993. This project is the outcome of the strategy implemented at the end of the Consortel project in December 1990. In the intervening two years, CWARC has invested more than \$500,000 in prototype development. These efforts generated \$16.5 million in private sector investments and led to the establishment of a new firm, ABL Canada.

Protocol Test Centre

On November 12, 1992, Hewlett-Packard announced the establishment of a Protocol Test Centre in the Montréal area. Businesses can use this centre's services to test their products for conformity with international standards.

This centre is the result of co-operation between CWARC, the Department of Communications, the Federal Office of Regional Development--Québec, Hewlett-Packard, and the Québec Industrial Development Corporation (SDI).

TASF-Mediatex Project

The TASF-Mediatex project, considered the first of its kind in the world, has developed a real-time French-language closed caption system for hearing impaired individuals. This system, developed in co-operation with Radio-Canada, the French-language network of the Canadian Broadcasting Corporation, and IBM France, can be used to caption live television broadcasts. Software produced in this 30-month project is now in use at the Canadian Broadcasting Corporation. An agreement to market the system worldwide has been concluded with IBM France.

Interface Project

The purpose of this project is to design, develop and validate methods and tools for designing and implementing performance support systems for operators of complex, rapidly evolving real-time computer systems. The project is the result of collaboration between the ADGA Group, CWARC, CRIM, Hydro-Québec, the provincial government of Québec (through the Fonds de développement technologique du Québec), and Virtual Prototypes Inc. It involves two high-technology areas critical to improving the efficiency of Canadian organizations: human-machine interfaces and learning.

Research in these areas will speed the development of sophisticated software systems with easy-to-use human-machine interfaces requiring minimal programming while providing powerful applications support. Development of a simulation and training workstation (integrating physical elements, software and methodologies) is also part of this research. The workstation will be designed to provide users with quick, effective and personalized learning in the workplace.

Deversys Project

This project combined two relatively new technologies: knowledge-based systems and hypermedia systems. Its purpose was to develop a computerized decision support tool to help emergency response teams from the federal and provincial environment departments cope with chemical or oil spills in the St. Lawrence River. The system is designed to identify the most effective means for cleaning up and restoring shore segments should such incidents occur. The system's advantages include quick access to environmental information; data processing capabilities; integration of a variety of environmental data; environmental knowledge updates; more coherent decision making; and lower-cost access to expertise.

Among the organizations participating in this project are the Canadian Association of Petroleum Producers, the École polytechnique de Montréal, the Environmental Protection Branch of the Quebec Department of the Environment, Groupe Conseil LGG, the St. Lawrence Centre, and the River Road Environmental Technology Centre (both of Environment Canada).

CHAP Project

The goal of this project was to broaden and improve Canadians' access to their national heritage, history and cultures through innovative applications of information technologies related to multimedia. CWARC acted as a consultant in this project with respect to the application of multimedia technologies to the national heritage. A number of cultural institutions are participating in the project: the Canadian Heritage Information Network, the Canadian Museum of Civilization, the Canadian Museum of Nature, the Canadian Studies Association, Environment Canada, the National Archives, the National Film Board, the National Gallery of Canada, the National Library of Canada, and the National Museum of Science and Technology.

Fourth International Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92)

CWARC played host to the Fourth International Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92), held in Montréal on June 24-27, 1992. The Centre was responsible for both the program and organization of this international event. The effort invested in organizing this conference paid off handsomely: the event broke all attendance records and the Centre received unanimous praise from the participants, who came from around the world. This conference confirmed CWARC and the Department of Communications as leaders in the field of computer-aided translation.

Bi-Text Tools

CWARC continued its exploration of the so-called bi-text approach by developing new forms of support for human translation. These innovative projects have been well received by the scientific community and show a great deal of promise for applications.

The first application of this approach was the development of a new tool, a bilingual concordancing system, with which a translator can search a database of past translations for ready-made solutions to problems encountered in producing new translations.

Work on a second application, automatic detection of translation errors, progressed so well that a first-of-its-kind prototype translation critiquing system should be available during fiscal year 1993-94.

A third application concerns the development of a voice dictation system specifically designed for translators. Under an agreement signed in 1992-93 with researchers in voice technology at CRIM, an initial prototype will be produced jointly during fiscal year 1993-94.

Telework Project

This project, carried out by the Ontario Region of Communications Canada in co-operation with CWARC, was designed to study organizational changes conducive to reducing staff turnover at the Department's Toronto office. The goal of the project was to reduce turnover rates and training costs by setting up satellite offices closer to employees' residences, thus improving the quality of life in the workplace. New technologies (particularly microcomputer and telecommunications equipment) have made it possible to reassign many employees to these satellite offices. CWARC would like to apply the telework concept to similar situations in other public and private organizations.

Canadian Seniors Network Project

The purpose of this project was to assess appropriate ways in which information technologies can be applied to the needs and interests of senior citizens. The initial phase of the project included a literature review; an analysis of the attitudes, behaviour, interests and needs of the target clientele; and an inventory of existing services in Canada and elsewhere. In addition, priorities for applications and services have been identified in consultation with senior citizens associations across Canada.

In the second phase, a specialized forum will be held for individuals interested in developing experimental information technology products and services for senior citizens. The results from this research will then be applied in a pilot project to provide this clientele with information network services.

Contributions of Information Technologies to the Needs of Persons with Disabilities (Access)

CWARC has produced a study (the first of its kind in Canada) about the state of domestic and foreign R&D into applications of information technologies to the needs of the disabled. This project falls under the federal government's National Strategy for the Integration of Persons with Disabilities and will serve as a basis for developing a platform of applied research in this area at the Centre.

Pan-Canadian Network of Research Centres

The Pan-Canadian Network of Research Centres was created in 1992-93. This significant event is only the first step in creating a critical mass of Canadian researchers who will work in a laboratory "without walls" and international in scope.

At present, the network joins centres conducting research in fields closely related to CWARC's areas of expertise. The links established between network members will enable them to co-operate on a regular and ongoing basis. The current member centres are:

Canadian Centre for Marine Communications (CCMC)

CulTech Research Centre

The Canadian Centre for Image and Sound Research Society (CI*SR)

The Governors of the Banff Centre for Continuing Education (The Banff Centre)

Centre d'expérimentation et de développement des technologies multimédia (Centre ECHO)

Canadian Language Technology Institute (CLTI)

Integrated Service for Information Resources (ISIR)

The Integrated Service for Information Resources (ISIR) which manages and distributes scientific information on new information technologies, was established to serve CWARC's staff, clients and partners as well as the entire Canadian scientific community. ISIR services are also available internationally over existing telecommunications networks. The Centre plans to use ISIR as a reference centre "without walls", specialized in information technologies.

Notable among ISIR's accomplishments is the commercialization of the "Thesaurus of Information Sciences and Technologies". This reference can now be purchased Canada-wide through government documents retail outlets.

In addition, in order to meet the information needs of the international community, ISIR has begun publication of "Flash Information", a weekly bulletin listing periodical articles in the ISIR collection. This bulletin is distributed over the M400 network in Canada and in other countries, such as the United States, Great Britain and Australia.

Communications Research Centre (CRC)

In 1990 and 1991, the National Advisory Board on Science and Technology, chaired by the Prime Minister, reviewed the performance of research conducted by the federal departments. The Board's work led to the Report of the Committee on Federal Science and Technology Expenditures (Lortie Report).

Following an excellent analysis of the obstacles to efficient and effective management of research in public laboratories, the Committee concluded that government research should be confided to semi-autonomous institutes, each under the direction of a single manager and a board of directors drawn from the private sector. It recommended that each institute establish contractual ties with the department responsible for its research program, negotiate the funding of its operating expenses with that department, and establish a framework to ensure periodic evaluations by various means, including third-party evaluations, of the quality, relevance and productivity of the research program.

The Department of Communications concurred with these conclusions. It also recognized that the model advocated by the Lortie Report offered a way to address problems - and to take advantage of opportunities - previously identified in internal studies and evaluations. Although the latter attested without exception to the international calibre of the research conducted by the CRC, they also indicated that there was a need to enhance the visibility of the Centre's activities and the transfer of knowledge to industry.

It was therefore decided to make the Communications Research Centre a "research institute" capable of functioning with greater flexibility and autonomy but dependent on contractual ties with its clients for its funding. In so doing, we sought to eliminate obstacles to better targeted research and to more effective technology transfers, to broaden the range of clients and beneficiaries and to maintain a vigorous and distinctive scientific culture at the CRC. The changes also require that the Department identify research projects it needs to meet future challenges.

Approval of increased authority and powers by Treasury Board (Treasury Board 817792, January 20, 1992) allows the CRC to generate revenues through its research activities and to keep those revenues. The same authority was delegated to the Canadian Workplace Automation Research Centre. This Centre is not officially part of the pilot project; the same authority was delegated to it simply to facilitate implementation of the best possible management methods at this Centre.

To facilitate the establishment of a research institute based on the Lortie model, the Department tasked a transition team to recommend an appropriate process to senior management. The team recommended an interim structure, which would take a year and a half to set up (with a target date of October 1, 1993). Four research sectors were selected: broadcast technologies, devices and components; radio sciences and communications; satellite communications; and a sunset program, the mobile satellite program (MSAT). Finally, when the new president of the CRC was appointed in February 1993, it was also announced that the Canadian Workplace Automation Research Centre would in future report to the CRC. Although the two institutions will remain separate, it was deemed that "synergistic" results might be achieved by placing them under the authority of a single individual. A detailed description of the work of the various research sectors is provided below.

The transition team also recommended that the mandate to provide various research and support services be transferred from departmental headquarters to the CRC. In addition to providing technical support services to researchers, Centre management is responsible for maintaining the premises for all CRC tenants, including some components of the Department of National Defence and the Canadian Space Agency, and the four branches of the Department which conduct research. The nature of these services is described later, but they could essentially be compared to the services provided by the Department of Public Works to other departments.

During the coming year, the CRC will have to organize itself as best it can in order to carry out its mandate and meet the needs of its clients. The Centre's objective, to demonstrate leadership and excellence in communications research, is mirrored by the enthusiasm of its staff and their commitment to meeting these challenges.

The Centre's new mandate is to conduct R&D in telecommunications and related fields, in co-operation with or on behalf of the Department, other federal departments and agencies, the provincial governments, universities and the private sector. To this end, it must:

- develop and promote telecommunications technologies, systems and services;
- support the effective use and management of the radio-frequency spectrum;
- help develop national and international standards for telecommunications technologies, systems and services;
- provide services, advice and R&D facilities in the field of telecommunications and support the centres for the application of telecommunications technology sponsored by the Department in the regions;
- transfer technologies to clients;
- lend the assistance of experts to support government initiatives;
- participate in and facilitate the implementation of international R&D agreements.

The new Microelectronics Facility and Microwave and Optical Labs are now in full operation and are being used to support both the CRC's internal R&D program component research as well as related initiatives in Canadian industry. Work in the laboratories is concentrated on microwave, optoelectronic, photonic and digital component technology for use in satellite, radio and fibre-optic networks of the future. The facility has the equipment and infrastructure to "engineer" prototype integrated components from the starting semiconductor material to the final package. Plans are to increase industrial participation and collaborative use of the facility through creation of an incubator site over the coming year.

Several significant achievements were made in the laboratories over the past year. Optoelectronic photodetectors with operating bandwidths over 10 GHz, useful for data rates in excess of 15 Gbits/second were demonstrated and an industrial partner is being sought for marketing them. Heterojunction bipolar transistors operating up to 50 GHz realized in the labs will be demonstrated in an advanced optical component in partnership with the Solid-State Optoelectronics Consortium. The technology of photosensitivity in optical fibres has been patented and can be applied to switching, routing and sensing components for smart structures and fibre networks. A consortium of Canadian industry has been formed to exploit this. A millimeterwave antenna with an integral active amplifier all integrated into one semiconductor chip 7.5 mm X 3 mm X 0.1 mm was demonstrated. Its use in millimeterwave in-building communications is being pursued. A miniature 20 GHz low-noise block downconverter for signal reception from the Olympus satellite was completed and has been transferred to industry.

Very active co-operation with universities continued both through posting of graduate students in the lab and through collaborative R&D. Through the initiatives of the labs, two new university networks were established in the area of active MMIC and optically controlled phased arrays for spacecraft with funding support from NSERC and Spar Aerospace. A total of five universities are participating with CRC and Spar.

Digital Radio Broadcasting

A worldwide allocation has triggered the planning for the introduction of a digital radio broadcasting (DRB) service in Canada that will replace AM and FM broadcasting. The CRC continues to be an active participant in national, North American and international committees involved in the development of standards for DRB. The goal is to achieve a single worldwide

standard for the DRB emission format and the CRC conducts research to support this objective. Tests have been conducted to characterize the delivery channel at 1.5 GHz and the results have been used in computer simulations of proposed radio technologies to ensure compatibility with Canadian service objectives and requirements. In addition, a unique listening room, which features Canadian technological innovations and the associated expertise in subjective evaluation of audio codecs, enabled Canada to host Consultative Committee for International Radio (CCIR) tests which were crucial in the selection of one codec for DRB. As well, the CRC has developed coverage prediction software and demonstrated the program to broadcasters and regulators to assist them in planning the frequency allocation and the coverage of the future radio service.

Advanced Television Evaluation Laboratory

The CRC established its Advanced Television Evaluation Laboratory in 1991 to undertake tests of the five advanced television (ATV) systems then being considered for possible adoption as a new terrestrial broadcast standard for North America. This work was completed with support from Canadian industry and was part of a joint United States/Canada effort overseen by the Federal Communications Commission's Advisory Committee on Advanced Television Service. In addition, the CRC contributed to the analysis of the test data with respect to system robustness under interference conditions and conducted laboratory tests. Television transmission simulation systems studies, to evaluate and compare various digital television transmission approaches, were also carried out. The ATV evaluation results have led to the decision to further test the systems with improvements or, if possible, to develop a single system that would incorporate the best features of all previously tested systems. The CRC's participation in this ATV work secured opportunities for Canada to participate in critical, decision-making bodies of the Advisory Committee. At the same time, the CRC's research results are contributing to the development of a family of worldwide standards for digital video systems for applications in the telecommunications and broadcasting industries.

Natural Language Interface

The natural language interface developed at the CRC has been demonstrated as an alternative to menu systems for presenting information. Its use on the National Capital FreeNet community bulletin board showed that it could be useful as a tool for discovering the information needs of the public. Its potential for use in interactive broadcast services was also demonstrated. In 1992-93, planning was completed for a multimedia conference held in Banff, Alberta in April 1993. The conference, which covered the areas of markets, applications and services, technologies, policy and regulatory issues, was co-sponsored by the Department and six outside organizations. The conference consisted of papers by authors from 14 countries and demonstrations by 23 companies which included a view of the entertainment, educational, health and business applications of the emerging multimedia communications technologies.

Telesat Mobile Incorporated

Telesat Mobile Incorporated (TMI) signed a contract worth over \$35 million with Westinghouse Corporation for the design and construction of the ground infrastructure and the associated mobile terminals for the Mobile Satellite System (MSAT). Completion of the contract is expected in February 1995. The Communications Research Centre successfully completed a number of MSAT-related developments and transferred them to Canadian industry. These include the MSAT modulator/demodulator technology and mobile satcom antennas. Five companies were involved in this technology transfer. A unique aeronautical satcom antenna suitable for small business aircraft is under development and will be flight tested in mid-93 before transfer to industry.

A \$2.2 million Phase A2 contract entitled "Advanced Satcom Mission Payload Definition and System Feasibility Study" started during the reporting period with completion planned for August 1993. This contract, which is being jointly funded by the Department of Communications (\$1.6 million) and a consortium of Canadian contractors (\$0.6 million) under the leadership of Spar Aerospace Limited, is continuing the detailed feasibility study of an integrated Ka/Ku-band advanced technology demonstration payload which is designed to provide a variety of new personal, mobile and private business communications services in Canada.

1.1.4 Performance Indicators

- Quality of research and nature and incidence of its use.
- Continuing relevance of the R&D.

Performance Targets

- Quality comparable to that obtained in similar private sector labs.
- Findings from the 1988-89 evaluation of research labs. Targets to be developed based on this evaluation.
- In the opinion of current and prospective clients and the Department research management, and in light of research conducted elsewhere.

Achievements

Review of Canadian Workplace Automation Research Centre's (CWARC) National Program for the Exchange of Specialized Personnel

The CWARC has been in operation since 1985. It employs approximately 125 people, including some twenty administrative staff, some twenty researchers employed by the federal Public Service, and some 85 researchers who are at CWARC under the exchange program.

On February 28, 1985, Treasury Board authorized creation of a national program for the exchange of specialized personnel, in order to support the secondment of scientists and engineers to CWARC. In effect, if Canadian industry is to be able to benefit from the research done at CWARC and thus improve its market position, there must be a continuous and effective transfer of research results to the industry. Discussions with the industry had revealed that exchanging personnel would be by far the best mechanism for transfer of technology. Thus, when it was created, the national exchange program was aimed at opening CWARC up to industry and university representatives, who would be able to work at CWARC for a period of one, two or three years. Contribution agreements to cover pay and benefits and the seconded employees' other expenses are signed with the participating organizations or institutions. The program has an annual budget of \$1.8 million.

The review revealed that, for the projects examined, the Program is a relatively effective mechanism for transfer of technology. The project scientific objectives are generally attained, and the projects result in the development of prototypes in half the cases and even, sometimes, in the creation of new products. However, the review also showed that the impact of the Program could be increased, since several projects do not involve a CWARC researcher and the partner-clients do not all have the capability to adopt and use the technology.

The review also showed that the work done is generally relevant. The Program does not really affect CWARC's orientation, since one of the project selection criteria is that the project be in line with the strategic plan.

The partners say that they are generally satisfied with the program. They say that they are particularly satisfied with the following: the project selection process, the ability of CWARC staff to understand them, the technical quality of the research and the researchers, the quality of CWARC's equipment, the end product, the support received from CWARC personnel in the transfer of the technology, the clauses in the contracts, and the clauses pertaining to intellectual property. However, the partners believe that the administrative rules could be improved.

Following this review, a number of recommendations were elaborated which will improve the management of the Program.

1.1.5 Performance Indicator

Relative costs and benefits of intramural R&D.

Performance Target

Findings from the research labs evaluation and CWARC organizational study. Targets to be developed based on these studies.

Achievements

The following table indicates the funds that were spent both in shared research programs and contracted research. They indicate that 60 percent (\$9.1 million) of the funds were either contracted out or spent in shared research programs. These funds generated investments close to \$100 million. In addition, the Department was instrumental in obtaining investments in R&D through the regional economic development agency of approximately \$5.9 million and levered an additional \$15.9 million from the partners.

**Breakdown of 1992-93 CRC/CWARC Contributions and Leverages
Obtained through External Research Organizations
(in \$ Millions)**

Type of Collaboration (1)	Contributions (2)	Leveraged Funds (3)	Leveraged Ratio (4)
Shared Research	8.1	97.3	12.0
Contracted Research	1.0	2.4	2.4
Regional Development	5.9	15.9	2.7
TOTAL	15.0	115.6	7.7

Table 2 indicates that in the shared research category, the leverage factor was twelve-fold: that is, for every dollar invested by the Department in R&D, the partners invested twelve dollars. This demonstrates both the relevancy of our R&D activities and their contribution to increasing investments in R&D in Canada.

**Breakdown of 1992-93 CRC/CWARC Contributions and
Leverages Obtained through Shared Research
(in \$ Millions)**

Place (1)	Contributions (2)	Leveraged Funds (3)	Ratio (3)/(2)
CRC	2.8	17.1	6.1
CWARC	5.3	80.2	15.1
Total	8.1	97.3	12.0

1.1.6 Performance Indicator

Level of expenditure by industry support program or thrust (\$ and FTE).

Performance Target

Actual expenditures and trends over time in \$ and FTE.

Achievements

Technology Transfer Office's (TTO) main activity is the transfer of technology from the Department and its laboratories to the communications industry. The two vehicles for accomplishing this task are through: a) project development and management, and b) licensing or collaborative agreements to use departmental technology or know-how or unique facilities. TTO managed directly 18 large R&D projects funded by the NRC IRAP program. Most of these involved technology transfer from CRC. TTO was also involved in submitting and receiving approval for another eight new large IRAP projects with significant technology transfer from CRC. It also transferred technology through some 70 licence agreements. Revenues from licensing alone were \$175,000. This will increase as royalties begin to build up from sales of products. Most of these agreements did not involve direct government contributions although there has been significant investments in research facilities over a number of years which now benefit private industry. TTO also coordinated the technical evaluation by CRC of over 70 R&D projects submitted to other departments or organizations.

1.1.7 Performance Indicator

Ratio of annual expenditures or other forms of industry support to full-time equivalents.

Performance Target

Actual ratio and trends over time.

Achievements

\$1.5 million per FTE.

An average of 4 major projects developed and technical evaluation of 12 smaller projects co-ordinated per FTE.

1.1.8 Performance Indicator

Ratio of annual expenditures (or other forms of program support) to level of demand.

Performance Target

Actual ratio and trends over time.

Achievements

The demand for support is usually proportional to the degree which the Technology Transfer Office (TTO) can seek or develop R&D projects or licensing opportunities. These are activities which are nurtured over a number of months. The level of project development depends highly on the NRC IRAP budget. The more funds we have access to, the more projects will be developed. Internally, the level of marketing and promotion affects directly the number of collaborative projects and licensing agreements and hence, the number of technology transfer opportunities. A small marketing budget of \$35,000 has helped generate some 70 licence agreements with revenues of \$175,000. This will grow as royalties flow from these agreements in future years.

This major activity of SCAP is the utilization of the Olympus satellite for applications development using Ka-band. In order to save fuel to prolong the operation of Olympus, European Space Agency have been operating the satellite in an inclined orbit. Antenna tracking retrofit was required for the Olympus ground segment. The Canadian utilization of the Olympus 30/20 GHz payload continues to support technical experiments and user trials and demonstrations. CRC is considered by ESTEC as a prime user of the 30/20 GHz payload and has been used as an example of being successful in developing the right mix of technical experiments and applications trials. The following projects were undertaken. Technical experiments performed by DSAT in double-hop On-Board-Processing, rain fading countermeasures and uplink power control were supported. Demonstrations of telephony transmission through the FDMA/TDM SAW group demodulator were given. Technical development by DCS in high performance 19 GHz LNB and 30/20 GHz transceiver completed. The first 19 GHz LNBs have been produced by industry and evaluated. A highly transportable 30/20 GHz prototype video uplink for Satellite News Gathering (SNG) was integrated and made operational for the trans-Atlantic press videoconferencing between COMDEV and Alenia of Italy for the signing of a \$7 million contract for supplying the On-Board-Processor for the European mobile system.

1.1.9 Performance Indicators

- Extent to which Canadian industries are better able to compete in foreign and domestic markets as a result of the program.
- Extent to which industry support activities have resulted in increased domestic and foreign market sales for Canadian communications technologies, products and services.
- Adequacy of program resources and their distribution relative to objectives sought.

Performance Targets

- Findings of the 1990-91 evaluation. Targets will be developed based on the evaluation.
- Increased market share over time. More precise targets will be developed based on the 1990-91 evaluation.
- Relative cost-effectiveness of particular activities. Targets to be developed based on the 1990-91 evaluation.

Achievements

Evaluation of International Marketing and International Research and Development

International Marketing and International Research and Development used to be both undertaken by the Department of Communications' International Co-operation and Technical Marketing Directorate, known as "DMS". In short, DMS's programs:

- support the marketing of products and services introduced by Canadian telecommunications industries, and
- facilitate collaborative R&D relationships between Canadian institutions and counterparts abroad in order to foster the development and access to new technology.

DMS had 13 FTEs and a budget of \$1.1 million for the 1992-93 fiscal year.

The evaluation concluded that the Department had an important and unique department-level role to play in supporting exports from Canada's telecommunications sector. The presence of the Minister and Deputy Minister was considered, particularly by the larger exporters, to be the most important tactical role for the Department. It was felt that this involvement has demonstrated the Department's commitment to the industry. Furthermore, they believed that a similar level of direct senior involvement would not be forthcoming from other partner departments, primarily because they were responsible for a wider range of industrial sectors.

Exporters indicated that DMS had produced positive impacts, including among others: providing useful market information, identifying opportunities that have led to significant sales, providing support to the Minister, acting as a conduit for industry's access to senior departmental officials, identifying and contributing to the funding of foreign missions, leading visiting delegations, and providing information on the operation of Canadian federal departments. These were all considered to be important factors supporting export marketing.

Furthermore, the evaluation reported a consensus reached by exporters which would assure that DMS could achieve much more by adopting a three point strategic approach.

First, it was widely believed that DMS should reconsider its role - it should not be performing "technical marketing" - and should have a three-pronged approach as follows:

- DMS should use the Department's access to foreign counterpart institutions to develop relationships with senior officials and promote the profile and capability of Canadian industry, particularly in emerging markets; and
- DMS should use its access to Canadian companies' marketing strategies to help shape the Department's department-level strategy.

Second, interviewees were of the view that DMS should consult companies when developing its own strategy and when providing support at the tactical - or transaction - specific level.

Third, DMS should co-ordinate its strategy much more closely with that of its partner departments and develop a more on-going and interactive working relationship.

In addition, the evaluation concluded that DMS's accountability framework needed to be defined more clearly. However, it was recognized that accountability for trade support is complex and multi-dimensional. The complex nature of accountability for export support suggests that an accountability structure should be developed in conjunction with companies and the Department's partner departments. According to the evaluation, a sound accountability structure would assist in setting realistic strategies and goals, determining each partners' contribution to these strategies and goals, and providing a sound basis for reporting on the achievement of intended objectives.

The Department has since completely re-organized this function, adopting the direction proposed in the evaluation which will enhance its effectiveness and allow substantial cost saving.

1.1.10 Performance Indicator

Expenditures under the Economic Regional Development Agreements (ERDAs).

Performance Target

Actual levels against Economic Regional Development Agreements (ERDAs) targets.

Achievements

The \$40 million Canada-Quebec Subsidiary Agreement in Communications Enterprises Development was signed on February 1, 1985. It was allocated an additional \$3.6 million, with half provided by each government, to finance, among other things, Canadian participation in TV-5. By March 31, 1993, \$21,555,900 of the federal share of the Agreement had been spent. Four projects, worth a total of \$244,100, remain to be completed.

The \$10 million Canada-Saskatchewan Agreement in Communications Technology was signed on September 12, 1991. It includes a Communications Product Development and Technology Transfer Program and a Communications Applications Program. During 1992-93 fiscal year, five projects were funded. By March 31, 1993, \$1,797,526 of the federal contribution had been expended.

The \$10 million Canada-Alberta Agreement in Communications Technology was signed on March 17, 1992. It includes Information Technology Development and Microelectronics R&D Programs. During the 1992-93 fiscal year, two projects were funded. By March 31, 1993, \$2,328,905 of the federal contribution had been expended.

The \$10 million Canada-Manitoba Agreement in Communications Technology Research and Industry Development was signed on November 9, 1992. Programs include communications technology development, communications business development, opportunity identification and development, and communications industry promotion. During the 1992-93 fiscal year, two projects were funded. By March 31, 1993, \$378,753 of the federal contribution had been expended.

As of March 31, 1993, the federal share of spending under the communications agreements were as follows:

Province	Expenditures (\$)	Budget
Quebec-Communications	21,555,900	21,800,000
Saskatchewan-Communications	1,797,526	5,000,000
Alberta-Communications	2,328,905	5,000,000
Manitoba-Communications	378,753	5,000,000

1.1.11 Performance Indicator

Extent to which ERDA projects have met their goals.

Performance Target

Findings of the 1989-90 evaluations of Manitoba and Quebec communications ERDAs.

Achievements

No evaluations of communications agreements were completed during the 1992-93 fiscal year. Other evaluations will be performed as other agreements come to an end.

1.2 Industry and User Support

1.2.1 Performance Indicator

Number of organizations dealt with.

Achievements

Standards Program Office

The Standards Program Office (SPO) has memberships on advisory boards and committees involving 64 organizations. It is also a member/chairman of 18 standards committees. The SPO contracts with six Canadian industry and university organizations.

The SPO also provides trusted third-party function in the form of committee chairmen on eight key national standards committees, member of the Board of Directors for the Canadian Interest Group on Open Systems (CIGOS), member of the Advisory Board for the Hewlett-Packard (Canada) Protocol Test Centre.

1.2.2 Performance Indicator

Incremental economic and social benefits obtained through the program.

Achievements

Standards Program Office

The Standards Program Office (SPO) initiates ground work to support Canadian industry competitiveness through wider access to information technology and telecommunications national and international voluntary standards development process. It establishes a focal point for co-ordination of departmental positions and assists the Treasury Board of Canada on strategic issues in information technology and telecommunications standards.

The SPO also provides Canadian leadership role on North American Open Systems Testing and Certification Policy Council to achieve harmonization of testing and certification for Open Systems within North America and with other geographical regions. It initiates and achieves significant global harmonization of accreditation criteria towards a basis for "one-stop" testing of standards-based, multi-vendor products so that Canadian products destined to foreign markets need to undergo expensive testing and certification only once. The SPO provides technical, strategic and research information to Canadian industry and universities in the form of research direction and technology transfer by disseminating strategic information to more than 1,500 organizations on a regular basis.

Regional Seminars

The SPO conducted five regional seminars on strategic issues in the information technology and telecommunications standards field. The seminars identified opportunities and obstacles in the Canadian standards-making process, proposing possible improvements to allow the regions greater participation. The findings of the seminars were developed by SPO into recommendations for which an action plan and a resource strategy is being worked out in collaboration with Telecommunications Standards Advisory Council of Canada.

Policy Development

To ensure Canadian industry maintains a healthy capability to respond to Canadian communications needs, the Department fosters private sector competitiveness in the domestic and international market places through policies to encourage the exploitation of intellectual property from the Department's laboratories, the harmonization of Canadian and international standards, strategic advice and brokerage services, and policies to enhance private sector investment in product and service innovation.

Communications Development

The Department identifies the telecommunications needs of Canadians and assists Canadian industry to develop the technical capabilities to meet these needs. The Department plans and implements end-user application programs and projects to meet the communications

requirements of special needs groups as well as certain key economic and social sectors in Canada. Finally, the Department provides specialized support to the satellite communications industry through cost-shared projects under the Space Industry Development (SID) Program, satellite communications being a necessity given the Canadian geography.

1.2.3 Performance Indicator

Achievements against major initiatives and policy targets.

Achievements

Bilingual Keyboard

As a result of close collaboration with industry and provincial governments, the Department developed a national bilingual keyboard and negotiated its production. The Canadian Standards Association approved this new standard for English and French languages in 1992-93. Supply and Services Canada procurement process now requires that suppliers comply with the standard. Commercial production has begun and the first major sales have been made to organizations in both the public and private sectors. A user program has been implemented in the Department with keyboards in use in various departmental branches including the Deputy Minister's office. A user manual has been written and distributed.

Canadian Open Systems Interconnection (OSI) Registration Authority

A technical and administrative framework was initiated to accommodate a Canadian national registration authority to facilitate implementation of Open Systems Interconnection (OSI) in Canada. The Department has contracted CGI Information Management and Consultants Inc. to establish and operate the Canadian OSI Registration Authority to meet Canadian requirements.

Regional Harmonization of OSI Testing and Certification

As Canadian Interest Group on Open Systems (CIGOS) representative on the North American OSI Testing and Certification Council, the Department contributed to the development of a consensus set of principles for voluntary testing and certification for North America to accelerate the establishment of mutual recognition between North American and other national and regional programs. The document outlining the agreed principles was circulated for public comment.

Conformity Assessment

The Department, acting on behalf of CIGOS and the Standards Council of Canada (SCC), initiated an international project to develop laboratory accreditation criteria for the information technology and telecommunications field. The initiative led to the creation of a Conformity Assessment function within the Joint Technical Committee 1 (JTC1) of the International Organization for Standardization.

Standards Council of Canada (SCC) — Testing Accreditation Working Group

The Department made a presentation to the SCC Testing Accreditation Sub-Committee in support of the creation of the information technology and telecommunications Working Group which would work towards establishing an information technology and telecommunications accreditation capability within SCC. SCC approved the creation of the Working Group and requested the

Department's chairmanship. The information technology and telecommunications accreditation capability will be used as a basis for mutual recognition of test results between Canada and its trading partners.

Privacy Survey

The Department managed the Canadian privacy survey on behalf of the eight project sponsors, including Amex Bank of Canada, Canadian Bankers Association, Consumer and Corporate Affairs Canada, Communications Canada, Equifax Canada Inc., Privacy Commissioner of Canada, Statistics Canada and Stentor Telecom Policy Inc. This large national survey polled Canadians on their knowledge, opinions and experiences of privacy issues. The final report, Privacy Revealed: The Canadian Privacy Survey, was released to the public at a press conference on March 29, 1993.

National Strategy on the Integration of Persons with Disabilities

Over 15 projects were undertaken this year including the first Canadian needs study on communications for persons with disabilities, the development of a tool for access to graphical user interfaces for the visually impaired and the first real-time French-language closed captioning system in the world.

Other Special Needs Groups

The Department co-ordinated activities with respect to non-profit community communication networks in general, and the National Capital Freenet (NCF) in particular, which was launched officially on February 1, 1993. These allow free public access to computer communications systems on a local and national basis, thereby attracting new groups of users and helping to bridge the gap between the information-rich and the information-poor.

As a result of ongoing departmental support, three repertoires of Aboriginal Syllabics were accepted by the Canadian Standards Association. Through a Federal Working Group chaired by the Department, the management of this activity has now been transferred to the National Association of Cultural and Educational Centres (NACEC). The Department will continue to provide guidance and support to NACEC.

Fessenden Scholarship Program

A new departmental funded scholarship program was established and launched to provide annual awards and summer or CO-OP employment to outstanding undergraduate and postgraduate students from across Canada, who wish to pursue careers in radio science or communications. The Fessenden Scholarship Program, founded in collaboration with the Department's Communications Research Centre, is named after one of history's greatest but seldom recognized pioneers in radio communications, Canadian-born-and-educated Reginald A. Fessenden. The undergraduate scholarships which were developed by the Department will be administered by Industry, Science and Technology Canada via the Canada Scholarships Program. Over a period of three years, ten awards of \$1,000 each will be presented annually to students enrolled in communications-related engineering studies.

Science and Technology Policy

Significant activities occurred this year with the Organization for Economic Co-operation and Development (OECD) Expert Group on Economic Implications of Information Technology (EIIIT). The Department headed a Canadian delegation, including representatives from Stentor and

Canadian Business Telecommunications Alliance, to the Special Session on Information Technology in October 1992 and presented the Canadian paper, The New Governance, recommending a significant review by member countries of the EIIT's mandate and activities. As a result, a sharper focus was put on EIIT's activities in order to better meet Canadian priorities.

Industry R&D Policy

The Department is responsible for developing and implementing R&D policies for industry. Specific activities during 1992-93 included: renewed R&D commitments from cellular service providers; R&D commitments were factored into licensing decisions for new services such as public cordless telephone (i.e. CT2 plus); and an agreement was finalized with Motorola to establish a new \$4 million over three years R&D facility on mobile data communications in Vancouver. As well, the Department participated in the preparation of Industry, Science and Technology Canada's telecommunications equipment sector campaign by providing input on intelligence gathering and dissemination, standards and applications development.

Intellectual Property Policy

Major policy changes have occurred in intellectual property policy in terms of the ownership of intellectual property under Crown contracts involving R&D, and awards to inventors. The Department has reflected policy and procedural changes in intellectual property policy.

Research Directions for Departmental Laboratories

On April 1, 1992, the Communications Research Centre (CRC) became a research institute in keeping with the recommendations of the National Advisory Board on Science and Technology. The President of CRC as well as the new boards of directors for CRC and CWARC have now been appointed.

The past evaluations of departmental laboratories found that they clearly perform a valuable function and that the quality of the research work is world-class. However, the evaluations also noted there was a lack of awareness of some of the lab activities and a need to focus research efforts more clearly on defined client needs and departmental priorities. To address some of these issues, the following activities were completed in 1992-93:

- the finalization of the Memorandum of Understanding between the CRC and the Department;
- the establishment of the kinds of directions the Department wish CRC and CWARC to adopt;
- the conduct of interviews to define the Department's needs for R&D policy support (from CRC and CWARC); and
- the sponsorship of a study on Best Research Management Practices and the presentation of the findings to the labs and to the Finance subcommittee of the Assistant Deputy Ministers Science and Technology Committee.

Satellite Communications Industry

Industrial and economic support programs include direct support (\$2.8 million annually) to the Canadian satellite communications industry through cost-shared projects under the Space Industry Development (SID) program. Specific achievements in 1992-93 include the start of Phase A2 of the system definition for the next generation of communications satellites (Ka-Band Advanced Satcom). Seven new contribution agreements were awarded to Canadian Satcom

companies under the SID program. A new program, Satellite Communications Infrastructure Development (SCID), was developed and included in the Long Term Space Plan which will be presented after the federal election to Cabinet for consideration.

Vision 2000

The Department facilitated and acted as a catalyst for Vision 2000 to develop and implement collaborative and strategic R&D by government, industry, university and research organizations. In 1992-93, the Department participated in further development of the seven project areas, particularly the "future fax", a national public system for interchange of messages, text, data, documents and images. This project has identified four specific initiatives - fax and EDI, fax and multimedia, universal addressing, and fax and electronic mail.

Videoconferencing

Various options for the Department's videoconferencing applications were analyzed and costed out. Recommendations were made to senior management on how to install and operate a system. This proposal has been accepted and funded at approximately \$3 million over three years. This effort resulted in significant savings from previous estimates.

Intelligent Vehicular Highway Systems

An Intelligent Vehicular Highway System Working Group on Communications (comprised of government and industry) has been formed and is chaired by the Department. A jointly funded (\$30,000) study on the impacts of Intelligent Vehicular Highway Systems on communications will be conducted in 1993-94. As well, international activities are being studied and members have participated in Intelligent Vehicular Highway Systems America meetings.

Intelligence Role

Significant effort and financial resources were expended in 1992-93 on information gathering and dissemination. Strategic assessment studies were sponsored on technology trends over the next five to ten years, user needs, international initiatives and policies, and Canadian strengths and opportunities. As well, the Department published statistical profiles on the communications and information technologies industries, R&D activities, and user penetration of various technologies and services. This information should contribute to a common understanding of the nature of the communications and information technology sector and the challenges and opportunities to be addressed by the Department and in partnership with others.

Communications Innovation Strategy

A communications innovation strategy was developed to address the communications needs of Canadians through technological innovation. Intelligence gathering and dissemination, strategic directions for the research labs, encouraging R&D and strategic alliances are elements of the strategy.

Electronic Highway Initiative

The Department has played a key role by raising awareness of CANARIE and is now a joint partner with Industry, Science and Technology Canada in phases two and three of CANARIE; drafting the first MC on the Electronic Highway; chairing the applications working group; formulating an applications development program; and having staff participation in all four working groups associated with the electronic highway.

2.0 TELECOMMUNICATIONS, BROADCASTING AND CULTURAL AFFAIRS

2.1 Telecommunications Policy

2.1.1 Performance Indicator

Achievements against major initiatives and policy targets.

Performance Targets

The 1992-93 Telecommunications, Telematics and New Media policy targets are listed under the section Achievements.

Achievements

Telecommunications Legislation

The Standing Senate Committee on Transport and Communications completed a review of the new telecommunications legislation (Bill C-62) which the Minister tabled in the House of Commons on February 27, 1992. The Bill has passed and received Royal Assent on October 25, 1993. The Act provides a new unified and comprehensive telecommunications policy framework for Canada that facilitates the development of more competitive environment, simplifies the regulatory system, strengthens Canadian ownership and control provision over the telecommunications carrier industry, and responds to provincial and regional interests. The Committee's final report expressed considerable support in principle for the legislation and made various recommendations for changes which are under consideration by the Minister.

Telecommunications Privacy Principles

Following an extensive consultation process, the Minister announced in December 1992 a set of Telecommunications Privacy Principles intended to ensure that the demand for more efficient and sophisticated telecommunications services is balanced with appropriate safeguards for personal privacy. The Principles also recognize that the privacy needs of different users can vary and that it is necessary to strike a balance between these various needs. At the same time, the Minister announced the creation of a Telecommunications Privacy Protection Agency to enforce these Principles. The Agency will be funded by industry and run by consumer groups, privacy experts and industry representatives. Its decisions will be binding and public.

Cellular Privacy Initiatives

Bill C-109, which was introduced in Parliament in December 1992, has passed and received Royal Assent on August 1, 1993. It includes amendments to the *Radiocommunication Act* that will make it an offence to divulge or use information obtained through eavesdropping on radio-based telephone communications. As well, the *Criminal Code* will be amended to clarify and further enhance the protection afforded radio-based telephone services: an encrypted radio-based telephone communication will be deemed to be a private communication; the interception of radio-based telephone communications which are carried out maliciously or for gain will be prohibited; and the disclosure or other use of information obtained from the interception of communications between any remote unit primarily used for radio-based telephone communications and a base station will be prohibited.

The Minister of Communications is also initiating the following measures: cellular service providers will be required to offer affordable encryption services as a customer option; and telephone companies will be exploring the feasibility of ensuring that any call made through a cellular service is identified by an audible signal on the line. To further protect the privacy of cellular telephone users, the Department is currently studying the possibility of imposing restrictions on digital scanners capable of tuning cellular frequencies.

Public Cordless Telephone Service

Digital cordless telephone service is the next generation of cordless telephones utilizing digital technology. Following a call for commercial licence applications, the Minister announced, in December 1992, that four companies (Mobility Personacom Canada, Rogers Cantel Mobile Inc., Canada Popfone Corporation, and Telezone People) had been selected to provide public cordless telephone service in Canada. This service which should be inaugurated in mid-1994 will utilize CT2 plus Class 2 technology in the 900 MHz band and will provide the public the capability to use the same cordless handset at home, at work and in public. Preparations for the next steps in personal communications services are being planned cooperatively with industry in a number of fora. In this context, a departmental policy discussion paper entitled: "Personal Communications Services - Where do we go from here" will be developed.

Spectrum Policy Framework for Canada

In 1990, the Department began broad public consultations with a view to developing a Canadian spectrum policy framework. This consultation process culminated in the publication in September 1992 of a document entitled Spectrum Policy Framework for Canada. The goal was to reaffirm the fundamental objectives which form the basis of Canada's strategic spectrum policy. The document also provides guidelines on spectrum policy and management: spectrum use and allocation policies, licensing of radio systems, research and development, standards, planning, public consultations, international issues and new spectrum resource management methods.

World Administrative Radio Conference (WARC-92) and Domestic Spectrum Policy Review

Three years of preparatory work by a Committee involving the government and Canadian industry took place in advance of the WARC-92 which was held in February 1992 (WARC-92), at which decisions were made to allocate frequencies for a wide range of new and innovative radio communications facilities and services. The Department lead the Canadian delegation which had representation from industry. Plans are also underway as a follow-up to develop a series of policy proposal papers in various frequency ranges to be issued for public comment in the second quarter of 1993. The Department will then issue the Canadian Table of Frequency Allocations and spectrum policies to support the implementation of a wide range of radio services.

Spectrum Policy Review for the 30-960 MHz Frequency Range

As Part II of this review, policy proposals were developed for the remaining portions of the spectrum and will be published for public comment during 1993.

Privatization of Telesat Canada

All of the activities relating to the sale of the government's 53 percent ownership interest in Telesat Canada were concluded and policy assessments were completed on all of the outstanding issues. These included the new restructuring plan for Telesat Canada by its new

owners, Alouette Telecommunications Inc., the appeal by Canadian Pacific (CP) to prevent the new owners from forcing it to sell its 3.7 percent interest in Telesat, and the sale of CP's 30 percent interest in Telesat Mobile Inc.

Extension of Teleglobe's Monopoly

With the expiration of Teleglobe's sole provider mandate in 1992 under the terms of the 1987 legislation by which the company was privatized, the government was obliged to make a review of the company's performance and determine whether renewal of its monopoly was in the public interest. A study of Teleglobe Canada's performance was carried out by an independent consultant and a policy assessment was completed. Based on the results of this study and an analysis of policy issues and options, Cabinet determined that it is in the public interest that Teleglobe's monopoly be renewed for another five years.

Transborder VSAT Services

In November 1992, the Department announced a revised policy for licensing earth stations used to provide VSAT and similar transborder services which are carried on Canadian and US domestic fixed satellites. Any person who is eligible for a radio licence under the *Radiocommunication Act* may apply for a licence for an earth station to be used in a VSAT network having points on either side of the Canada-USA border. Criteria for the equitable utilization of Canadian satellites are now under development to facilitate the review of transborder VSAT licence applications.

Local Networks Convergence

The Local Networks Convergence Committee was established by the Minister of Communications in May 1991 to review the evolution of the local telecommunications infrastructure in Canada and to identify public policy and regulatory issues that should be considered in light of this evolution. The report of the committee's co-chairs entitled Convergence • Competition and Co-operation -Policy and Regulation Affecting Local Telephone and Cable Networks was presented to the Minister of Communications in November 1992. It contains recommendations which are aimed at promoting an open and competitive local communications infrastructure in which Canadians have access to an increasingly wide array of voice, data, video and multi-media communications services through the networks of the telephone and cable companies. For government, as well as for the Canadian Radio-television and Telecommunications Commission and the industry, the report will be a valuable resource, guiding the development of policies and regulations that will encourage the introduction of new and innovative services.

Intercity Radio Licensing Policy

On April 18, 1992, a Discussion Paper to Consider Relaxing the Intercity Radio Licensing Policy was published in the *Canada Gazette* in order to begin the public consultation process towards relaxing the present policy. The comments received have been analyzed and a draft policy is being finalized.

The Telecommunications Standards Advisory Council of Canada (TSACC)

Since its establishment in May 1991, TSACC has agreed on a framework and process for the development of its strategic work program. This framework focuses on the identification of strategic standards issues and their resolution. As a major issue, TSACC is in the process of

acting upon some recommendations from two major studies commissioned by the Department (Hall and Salter reports) to improve the Canadian information technology and telecommunications standards infrastructure and process.

TSACC has also successfully participated in major global information technology and telecommunications standards activities such as the Americas Telecommunications Standards Symposium, the Interregional Telecommunications Standards Conference (now called the Global Standards Co-operation Group - GSC), as well as the active participation in CITELE PTC.1. TSACC representatives also attended the European Telecommunication Standards Institute General and Technical Assemblies, as invited guest.

National Summit on Information Policy

A National Summit on Information Policy was held in Ottawa, in December 1992. The Summit brought together, for the first time, the diverse constituents of the information society: governments, telecommunications, broadcasting, cable, database, cultural industries, users from libraries, educators, and representatives of aboriginal groups and persons with disabilities to discuss policies and strategies to take account of the impact of advanced information technologies and the changing role of information. A report prepared by the conference organizers was submitted to the Minister in June 1993.

Support and Promotion for Information Retrieval through Information Technology (SPIRIT)

To strengthen the abilities of Canada's database industry, the Department worked with the Information Industries Committee of Information Technology Association of Canada (ITAC) to develop a comprehensive business plan and strategy for a national SPIRIT Alliance. The ITAC board of directors unanimously adopted the strategy and has asked for continued departmental partnership in the implementation.

Telecommunications Requirements for International Electronic Data Interchange (TRI-EDI)

Canadian industry faces serious competitive challenges as more and more businesses in our major trading partners accelerate their move to electronic commerce. Traditional paper-based transactions are being replaced by innovative electronic systems that are transforming the ability of firms to design, produce and deliver goods and services. A strategic agreement on electronic commerce TRI-EDI was signed between the Department and the Commission of European Communities for a joint Canada-Europe two-year study on global trading systems. The study comprises four elements which are: infrastructure, policy and regulations, standards and organizational impacts.

R&D Incentives Program (RDIP)

During the period covered by this report, the Department created RDIP. This five-year program was allocated a budget of \$40 million. In connection with the program, a five-year, \$7.5 million contribution agreement was prepared and approved for the World Electronic Data Interchange (EDI) Institute. Within the framework of the advanced communications component, part of \$2.5 million to be distributed over four years, was allocated for the funding of projects such as Nexfotel (for development of fibre optic telecommunications terminals), Lanser (for a digital radio business communications network modelled on cellular communications) and R&D pertaining to digital sound broadcasting demonstration.

French-Language Centres of Excellence Program

Created in 1978, this program is aimed at developing, in French-speaking scientists and technicians, an interest in studying matters relating to the Department's sector of activities and research mandate. During the 1992-93 fiscal year, the Department issued 14 research contracts valued at \$361,000.

EDICOM

The Department continued its involvement in the EDICOM project, which is aimed at the development and implementation of an electronic data interchange (EDI) system in the Montréal port community. During the 1992-93 fiscal year, the Department spent \$151,890 in this connection.

Symposium on Standards

In June 1992, the Department held a symposium on the impact of standards on Quebec's information technology and telecommunications industries. The purpose of this symposium was to increase the Quebec industry's awareness of the importance of information technologies and telecommunications standards and the world economic context. Special emphasis was placed on the globalization aspect, which is a major economic challenge, at the closing of the twentieth century. The symposium, conducted under the general co-ordination of the Department's Standardization Programs Office, was a forum for exchanging information and increasing awareness with respect to standards as a tool for competitiveness in our information technology and telecommunications industries. It attracted a highly qualified group of persons from various firms and institutions operating in this sector in Quebec. A consensus was reached, and the main points agreed on were included in an action plan set out in the Hall report, published in December 1992.

2.2 Broadcasting and Cultural Industries

2.2.1 Performance Indicator

Achievements against major initiatives and policy targets.

Performance Target

Develop options and provide advice to the Minister in areas listed under the section Achievements.

Prepare briefing notes, memoranda to Cabinet and legislative drafting instructions in areas listed under the section Achievements.

Achievements

Canadian Independent Film and Video Corporation

Following the elimination of the Non-Theatrical Fund in March of 1991, the Department assisted the industry in the formation of a new funding source to support development, production, and distribution of non-theatrical film and video products. In 1992-93, in addition to resources from the National Film Board and Telefilm Canada (\$500,000 and \$1 million, respectively) the Department contributed \$70,000. As no commitment for funding is in place after March 31, 1993,

the Corporation has undertaken a three-year fund-raising strategy with an ultimate goal of \$6 million per annum from federal and provincial governments and agencies, as well as private sources.

A Memorandum to Cabinet was prepared by the Department proposing reallocation of existing funds from the Film Products Importations Office to meet the Corporation's long-term financial needs. The Department is also continuing to pursue funding possibilities with agencies.

Publications Distribution Assistance Program (PDAP) (postal subsidies)

In June 1990, in follow-up to a Cabinet decision, the Minister of Communications announced that the Postal Subsidies Program would be gradually eliminated over three years and replaced by a program of direct assistance. The Program's budget was to be progressively reduced, taking it from \$220 million to \$110 million. Consequently, foreign-owned publications, controlled circulation periodicals and large community weeklies were eliminated from the Program. Dailies, for which the postal rate increased by 25 percent, will also be excluded from the Program in March 1994.

During the 1992-93 fiscal year, the Department was obliged to negotiate a memorandum of understanding with Canada Post for reintegration of large national and regional weeklies and ethnic or minority official language weeklies. Another memorandum of understanding was signed for reducing the planned rate increase for small community weeklies.

Following the Economic and Fiscal Statement, an additional 10 percent cut was made to the Program's budget. The Department succeeded in negotiating an agreement in principle with Canada Post to extend by two years the component of the Program aimed at paid circulation periodicals and small community weeklies. For 1993-94, \$100.8 million will be allocated to the PDAP.

The Department has also undertaken consultations with the book industry to ensure creation of a book rate replacement program. The terms of reference of this program have been developed and we are awaiting Treasury Board approval of the financial resources required for its implementation.

Cultural Industries Development Fund (CIDF)

Since its creation on April 1, 1991, the CIDF has been administered by the Federal Business Development Bank. It offers financing and consulting services to eligible enterprises in the publishing, sound recording, and film sectors. Its principle objective is to strengthen the capital base of Canadian cultural industries in order that they may adapt to economic and technological change, compete effectively in the Canadian market and develop new markets.

Loans have been disbursed as follows:

(\$ million)

Sector	1991-92	% of Total	1992-93	% of Total
Book Publishing	3.083	44.7	1.997	21.9
Magazine Publishing	.754	9.4	1.979	21.7
Film	2.118	30.2	3.080	33.8
Sound Recording	1.065	15.2	1.678	18.4
Multimedia	—	—	.375	4.1
TOTAL	7.020	100	9.109	100

Phase II of Copyright Legislation Revision

Following approval of the policies set out in the Memorandum to Cabinet in December 1991, the ministers of Communications and Consumer and Corporate Affairs created, in March 1992, an advisory committee made up of creators and users of protected works and gave that committee the mandate to analyze the proposed text. Once the consultation process will be completed, the revised legislative instructions will allow for drafting of the bill planned for early fall 1993.

Home Copying

A draft Memorandum to Cabinet recommending an appropriate home copying regime has been prepared by the Department. It is hoped that, following approval of the Memorandum by all departments involved, Cabinet will approve a regime that would compensate right holders for losses associated with the home copying of sound recordings and that it will become part of the Phase II revisions to the *Copyright Act*.

Film and Video Policy Review (financial issues)

In 1992-93, the Department and industry directed considerable attention at identifying ways to improve the private financing situation for the film and television production industry. There is a general industry view that the current Capital Cost Allowance Program is not effective and the Department has indicated its willingness to consider alternative approaches and assess their effectiveness, once the industry had presented its views. The primary focus for this activity was the Task Force on Production Incentives for the Film and Video Sector, whose report was presented to the Department in the context of the Television Summit in the fall of 1992.

The report recommendations underlined the need for a mechanism to improve the role of private financing of production in a manner which would promote corporate growth. A number of interesting concepts were raised in the course of the Task Force's work and the Department will be pursuing further analysis of these proposals in the new fiscal year. The objective will be to define an effective private financing strategy for the film and video industry which would attract new private capital to the industry and strengthen corporate development, while remaining consistent with government cultural and fiscal policies.

Book Publishing Industry Development Program (BPIDP)

In response to the industry's immediate financial difficulties, the Department delivered an interim assistance program in 1992-93, which provided funding of \$20 million to Canadian book publishers through a sales-based formula.

Consultations on the design of a permanent BPIDP for Canadian book publishers are now completed. The new program provides funding of \$114 million over the next four years for Canadian book publishers. The BPIDP, which was developed in consultation with national publishers' associations, takes into account the special considerations of the various publishing sectors (i.e., linguistic factors, size, and region).

125 Gold Song Contest

In November of 1991, the Minister of Communications officially launched a songwriting contest in order to promote the talents of Canada's professional songwriters and to create an original song celebrating Canada's 125th Anniversary of Confederation. The winning song was to be the Canada 125 Corporation's official theme song.

Factor/Musicaction/Canada administered the contest on behalf of the Department. The winning songwriters received a prize of \$10,000. The winning song, *Listen to the Land/Rassemblez les coeurs*, which was officially launched in Ottawa by the Minister on June 18, 1992, was produced in compact disc format and distributed to all radio and television stations across Canada for use throughout Canada's anniversary celebrations.

Canadian Sound Recording Service Organizations Program

This program provides funding assistance in the form of contributions to Canadian sound recording service organizations in exchange for information, counsel, and analyses of areas concerning different sectors of their industry. In 1992-93, 14 sound recording service associations were granted contributions, expanding the program's total budget of \$350,000 per annum. As the program was to expire on March 31, 1992, the Department requested and obtained Treasury Board approval to renew the terms and conditions of the program for a five-year period.

Task Force on the Future of the Music Industry in Canada

In November of 1992, the Minister of Communications announced the creation of the Task Force on the "Future of the Music Industry in Canada".

The Task Force will, in consultation with the Department, analyze and report on the impact of technological changes and trends, examine current governmental policies and legislation, and formulate policy recommendations to the Minister to ensure the long-term viability of the Canadian music industry. The Task Force will present its final report in three years and may produce interim reports.

Television Summit/Building Partnerships — Television in Transition

As a result of discussions at the Television Industry Summit held in Montréal on December 9 and 10, 1991, the Minister of Communications asked an industry-government steering committee to follow up on the ideas that were put forward at the Summit. This led to the formation of a number of working groups which included representatives of all sectors, public and private, involved in all facets of the production, distribution and broadcasting of Canadian television. In November 1992, the Minister of Communications published a compilation of reports, resulting from these working groups' discussions, entitled Building Partnerships — Television in Transition in which he noted that, although an industry consensus did not emerge on all the issues examined, many interesting solutions were put forward. These were pursued further at the public hearing on the structure of television services, held by the Canadian Radio-Television and Telecommunications Commission in March 1993.

Radio Action Plan

The Radio Action Plan Consultative Group submitted its report to the Minister on June 17, 1992. It contained 28 recommendations directed to the radio industry, the CRTC and the government, designed to address the short-term economic recovery needs of the industry and its transition to digital technology over the longer term. A certain number of initiatives have been implemented. These included a 90-day review of the CRTC's regulations, policies and procedures as they affect radio; the announcement of up to \$1 million in federal funding for joint digital radio research projects; an analysis of the CRTC's broadcasting licence fees; and the formation of a Task Force on the Introduction of Digital Radio to assist in the implementation of this new technology.

Task Force on the Introduction of Digital Radio

During the summer of 1992, the Minister of Communications established an industry/government Task Force to co-ordinate and advise on the timely introduction of digital radio in Canada. The Task Force's objective is to ensure that all matters - regulatory, policy, research, technical, marketing and information strategies - are co-ordinated and addressed in a comprehensive and complementary manner leading to the successful introduction of digital radio in Canada in late 1995.

TV5

Feasibility studies on extension of the TV5 signal in member countries of the Community of Independent States and in Asia are underway. TV5 Afrique was inaugurated on September 30, 1992, in Dakar, and TV5 Amérique Latine et Caraïbes Inc. went on the air on October 19, 1992.

Canadian Broadcasting Corporation (CBC)

During 1992-93, the matter of CBC funding remained an issue. The CBC indicated that it was faced with a shortfall that would make it more difficult to carry out its mandate under the *Broadcasting Act*. Cabinet granted the CBC an additional \$46 million for the 1992-93 fiscal year.

The CBC has continued its efforts to reposition itself as a distinct service in a context of multiplication of television services. For example, it intends to offer, in co-operation with the Power Corporation, a new Canadian programming service called "Northstar" in the United States. In addition, the CBC plans to apply to the CRTC for a licence to operate a French-language news service in Canada.

Television Northern Canada (TVNC)

The Department of Communications contributed \$3.1 million to TVNC during 1992-93 which was in its first full fiscal year of operation. TVNC is the first national aboriginal television network of its kind, serving 94 remote northern communities with aboriginal and educational programming in eight aboriginal languages and dialects from three uplink locations in the north.

National Broadcast Reading Service (NBRS)

The NBRS expanded its cable distribution, in its second year of operation, in Quebec and western Canada, and is now available free of charge to approximately five million cable subscribers. The service has strong support from the volunteer sector, with over two hundred individuals providing readings and other operational duties.

Violence on Television

In response to a petition containing 1.3 million signatures, the Standing Committee on Communications and Culture examined this issue and called several representatives from industry and academia to suggest possible measures to curb televised violence.

At a conference sponsored by the C.M. Hincks Institute entitled, *Reclaiming Childhood: Responsible Solutions to TV Violence and our Children*, the Minister of Communications unveiled the government's five-part strategy to reduce the amount of violence on television. A key aspect of the strategy is to devise measures to assist parents in making informed and responsible viewing

choices for their children. To assist in the development of such measures, the Department organized an International Colloquium to draw on the experiences of other countries that have introduced codes and classification systems. The colloquium is to take place in April 1993 and will be hosted by the National Action Group.

Digital Sound Broadcasting

In the field of experimental broadcasting technology, a working group on development and introduction of a digital sound broadcasting service in North America was established. The Department manages \$1 million in funding for demonstrations of digital broadcasting stations.

Institut national de l'image et du son (INIS)

The Department played an active role in following up on and developing the INIS in Montréal. The INIS provides advanced training in the film and audio-visual sector. Thanks to the Department, the INIS received a \$60,000 contribution for maintaining its activities and reviewing its implementation report.

Montréal Design Institute

In the design field, the Department provided financial support in 1992-93 for establishment of the Montréal Design Institute. The Institute's objectives are to engage in research and training activities and develop Canadian expertise in all design sectors. The Department's participation, valued at \$750,000, is for five years.

2.2.2 Performance Indicator

Volume, value and distribution of grants, contributions and tax advantages by province.

Performance Target

Actual levels and trends over time for the Sound Recording Development Program (SRDP), the Book Publishing Industry Development Program (BPIDP) and service organizations.

Achievements

In 1992-93, \$7.5 million (\$4.9 million from the Department and \$2.6 million from various sources such as Factor/Musicaction/Canada (FMC), radio broadcasters, Canada Council and other contributions) was spent under the SRDP. The Program consists of eight components, four of which are administered by FMC. These four components provide loans, loan guarantees or funding for sound and music video production, syndicated radio programming and international touring. The Department's total contribution to FMC for these four components is \$3.7 million per year. The fifth component is administered by the Canada Council. Used to promote specialized music recordings of Canadian composers, the Department's total contribution to the Canada Council for this component is \$250,000 per annum. The remaining three components (international marketing, business development and specialized music distribution) are administered by the Department. The total budget for these three components is \$800,000 per year.

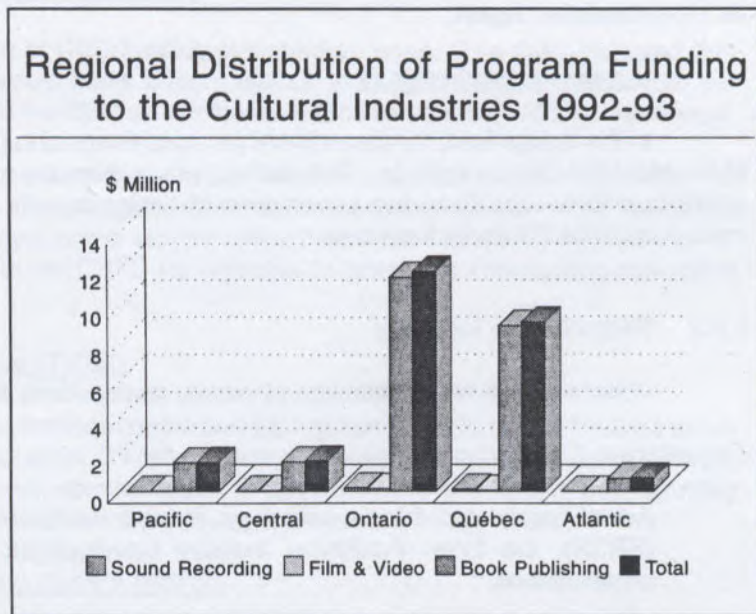
In 1992-93, the total budget available to the BPIDP was \$25.6 million, a considerable increase from the 1991-92 budget of \$7 million, resulting from Treasury Board's approval of an interim assistance program to aid book publishers, as announced by the Minister of

Communications in January 1992. This interim program consists of four components: aid to publishers, aid to industry and associations, book promotion assistance for Canadian-authored titles and international marketing assistance.

As illustrated in the Figure 1, 83 percent of the total sound recording assistance is spent in two provinces: \$2.2 million in Ontario and \$2.7 million in Quebec. Book publishing assistance is also highly concentrated in Quebec (\$8.1 million) and Ontario (\$8 million), which represents 81 percent of the total assistance of \$20 million for domestic initiatives. The budget for international marketing assistance of \$2 million is not included in the regional breakdown, as this component is administered by the Association for the Export of Canadians Books.

Total funding under the departmental cultural industries programs is highly concentrated in Ontario (\$8.031 million) and Quebec (\$8.159 million). This imbalance is not surprising given the concentration of publishers and the recording industry in these same two provinces.

Figure 1



2.2.3 Performance Indicator

Ratio of applications processed and inquiries to full-time equivalents (FTEs).

Performance Target

Actuals to be reported for the Sound Recording Development Program (SRDP) and the Book Publishing Industry Development Program (BPIDP).

Achievements

In 1992-93, Factor/Musicaction/Canada, the Canada Council and the Department handled 2,020 requests for assistance related to the SRDP compared to 2,003 in 1991-92. The five departmental staff handled 130 requests (121 in 1991-92).

In 1992-93, the BPIDP staff dealt with 250 applications for assistance under the aid to publishers component, up 16 percent from the 236 applications that were received in 1991-92. The three staff members also responded to some 7,000 telephone inquiries this year, compared to the 6,000 fielded in 1991-92 by the same staff complement.

2.2.4 Performance Indicator

Ratio of value of grants and contributions to value requested in applications.

Performance Target

Actuals and trends to be reported for the Sound Recording Development Program (SRDP) and the Book Publishing Industry Development Program (BPIDP).

Achievements

In 1992-93, \$14.1 million was requested from the SRDP and 54 percent (\$7.6 million) of this demand was satisfied.

In 1992-93, \$20 million was requested under the aid to publishers component of the interim assistance program; 100 percent of this demand was satisfied in 1992-93. Other program components provided funding for industry groups and professional associations. The international marketing assistance component was administered by the Association for the Export of Canadian Books.

2.2.5 Performance Indicator

Program costs vs overall value of grant/contributions approved.

Performance Targets

Actuals to be reported for the Sound Recording Development Program (SRDP) and the Book Publishing Industry Development Program (BPIDP).

Achievements

The 1992-93 operational budget for the SRDP was \$250,000 which corresponds to 25.4 percent of the value of approved contributions totalling \$982,610.

For 1992-93, the BPIDP had an operational budget of \$318,000 or 1.3 percent of the total value of the grants/contributions approved which was \$24.6 million.

2.2.6 Performance Indicator

Radio listening, television viewing and cable subscriptions statistics.

Performance Target

Actuals for most recent year available; trends overtime.

Achievements

Television Viewing

As Figure 2 indicates, Canadian programs have continued in recent years to maintain their share of the television viewing audience. Canadian programs aired on English-language stations continue to achieve a share of close to 30 percent of the viewing audience. Those aired on French-language stations continue to achieve a share of more than 75 percent of the viewing audience.

Radio Listening

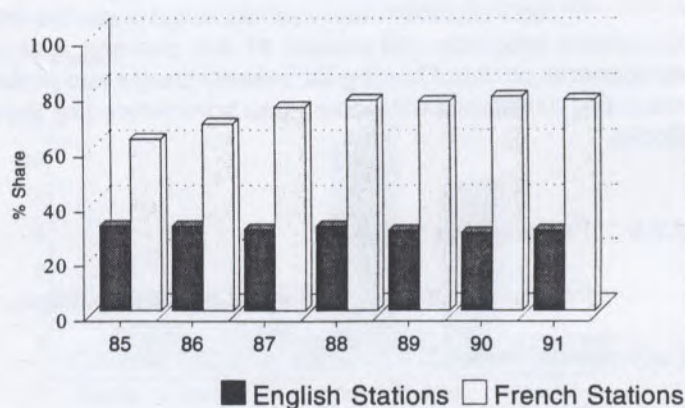
On average, Canadians have increased the number of hours that they listen to radio each week, from 20 hours in 1989, to 21 hours in 1990 and 1991.

Cable Television Subscriptions

By 1991, 92 percent of Canadian households were offered cable, 79 percent of which chose to subscribe.

Figure 2

Viewing of Canadian TV Programs



Source: BBM Fall TV Survey

2.2.7 Performance Indicator

Expenditures under the Economic Regional Development Agreements (ERDAs).

Performance Target

Actual levels against ERDA targets.

Achievements

A \$40 million Canada-Quebec Subsidiary Agreement on Cultural Infrastructures, shared equally between the two governments, was signed on March 29, 1985. The agreement was amended in 1990, increasing its budget by \$33.5 million for a total of \$73.5 million. The objective of this agreement was the creation and improvement of certain key cultural infrastructures like the Montréal Museum of Fine Arts and the Montréal Film Centre. By March 31, 1993, all of the federal contribution had been spent.

A \$3.55 million Canada-Prince Edward Island CO-OPERATION Agreement on Cultural Development was signed on August 2, 1990. On July 10, 1991, the agreement was amended and its total envelope increased to \$6.55 million. In 1993, the agreement should be amended again to reflect Treasury Board's approval of \$1.2 million federal contribution for the \$4 million construction of the Summerside Regional Cultural Events Centre, increasing the amount of the agreement to \$7.75 million. During 1992-93 fiscal year, 59 projects were funded. By March 31, 1993, \$3.5 million of the federal contribution had been expended.

A \$5 million Canada-New Brunswick CO-OPERATION Agreement on Cultural Development, shared equally between the two governments, was signed on October 11, 1990. The agreement provides four programs aimed at promoting the growth of the cultural sector and sustaining its long-term viability; increasing revenues and employment; and improving artistic expression and appreciation of the arts and cultural heritage. During the 1992-93 fiscal year, 118 projects were funded. By March 31, 1993, \$859,626 of the federal contribution had been expended.

A \$5 million Canada-Newfoundland CO-OPERATION Agreement on Cultural Industries, cost shared on a 70 percent (Canada) and 30 percent (Newfoundland) basis, was signed on July 24, 1992. The agreement contains programs providing assistance to book and periodical publishing, film and video, sound recording, performing and visual arts and community museums. During the 1992-93 fiscal year, 34 projects were funded. By March 31, 1993, \$289,798 of the federal contribution had been expended.

A \$5 million Canada-Nova Scotia CO-OPERATION Agreement on Cultural Development, shared equally between the two governments, was signed on August 27, 1992. The agreement contains programs providing assistance to book and periodical publishing, film and video, sound recording, performing and visual arts, production crafts and historical resources. During the 1992-93 fiscal year, 32 projects were funded. By March 31, 1993, \$202,085 of the federal contribution had been expended.

A \$5 million Canada-Saskatchewan Partnership Agreement on Culture was signed on October 18, 1991. It includes a Cultural Industries Assistance Program for enterprises in film and video, sound recording and book publishing. During the 1992-93 fiscal year, 21 projects were funded in addition to a \$112,500 contribution to SASKFILM. By March 31, 1993, \$1.5 million of the federal contribution had been expended.

A \$7 million Canada-Alberta Agreement on Cultural Industries was signed on April 22, 1992. It included three industry support programs for the film and video, sound recording, book publishing and periodical publishing sectors. During the 1992-93 fiscal year, 19 projects were funded. By March 31, 1993, \$732,703 of the federal contribution had been expended.

As of March 31, 1993, the federal share of spending under the cultural ERDAs and Co-operation Agreements were as follows:

Province	Expenditures (\$)	Budget
Quebec-Culture	36,750,000	36,750,000
Prince Edward Island-Culture	3,456,803	5,700,000
New Brunswick-Culture	859,626	2,500,000
Newfoundland-Culture	289,798	3,500,000
Nova Scotia-Culture	202,085	2,500,000
Saskatchewan-Culture	1,518,211	2,500,000
Alberta-Culture	732,703	3,500,000

2.2.8 Performance Indicator

Extent to which ERDA projects have met their goals.

Performance Target

Findings from evaluations of cultural ERDAs.

Achievements

Canada-Ontario Subsidiary Agreement for Cultural Development

In 1991-92, phase II of the evaluation of the Canada-Ontario Subsidiary Agreement for Cultural Development was completed. This four-year Cultural Development Agreement provided up to \$50 million funding to non-profit and commercial organizations to carry out projects in four broad areas: feasibility and planning studies; infrastructure development; cultural enterprises development; and, marketing of cultural activities and products. By far the largest proportion of total cultural development agreement contributions, 86 percent, went towards Infrastructure development projects to support the construction, renovation and restoration of cultural facilities and exhibits and preservation of heritage sites. Two-thirds of the funding for this type of project were given to three large projects to create world-class cultural facilities in Ontario. The projects were the Elgin and Winter Garden, the Royal Ontario Museum and *icomm*, a new interactive telecommunications museum. The evidence suggests that almost all of the projects examined were completed close to schedule and within budget.

The evaluation concluded that projects funded under the cultural development agreement provided Ontario residents with greater opportunities to participate in and benefit from a wide variety of cultural activities. Among several things, the new or renovated cultural facilities enabled existing museums to display and store their collections properly and acquire priceless collections of artifacts. Furthermore, the completed cultural facilities resulted in an increase in annual attendance (notably in numbers of school tours of museums, galleries and theatres). In the area of marketing of cultural activities and products, the cultural benefits range from substantial increase in fundraising, tickets sales and attendance to the development of "how to" market and develop

arts organizations. In the area of cultural enterprise development, the installations of computer systems and databases have, among other things, facilitated the distribution and sale of Canadian film, video and sound recording in Canadian and foreign markets. Also, several funded projects in this area resulted in increasing the viability of Canadian cultural enterprises.

The direct economic impacts, associated with the initial construction phase and project implementation, generated an estimated 877.5 full-time equivalents of employment and \$242 million in income. The ongoing operations of the new or expanded facilities and enterprises, combined with the increased participation of the public, will generate 258 ongoing jobs resulting in incremental income of over \$34 million per year. Finally, although this is extremely difficult to measure, it was estimated that the expenditures of tourists specifically attracted to Ontario by the new or enhanced facilities developed with the support of the agreement will result in at least \$1.6 million in incomes annually for Ontario residents.

Given the cultural benefits and economic impacts produced by the projects that were funded through the cultural development agreement, the program can be viewed as a success overall. Discussions with recipients indicated that there is no other funding source available to cultural endeavours that offers the scope or flexibility that the cultural development agreement does; without the agreement, many of these projects would not have been considered. Finally, it was observed that the cultural development agreement presented a unique opportunity for the pooling of federal and provincial resources as well as for a good blending of federal and provincial cultural objectives. To a certain extent, these achievements were possible as a result of a highly consultative and consensus building approach to decision-making whereby the priorities and expertise of each government were considered, thus resulting in closer contact between the two levels of government.

Evaluation of Canada-Quebec Subsidiary Agreement on Cultural Infrastructures

The five-year Canada-Quebec Subsidiary Agreement on Cultural Infrastructures, which was signed on March 29, 1985, was given an overall envelope of \$73.5 million, contributed in equal parts by the respective governments. This agreement was aimed at encouraging the establishment and/or modernization of cultural infrastructures. The subsidiary agreement had three specific objectives: facilitating high-quality cultural production and greater commitment on the part of national and international producers; allowing for a greater opening up of the labour market to the professional and technical work force in the cultural field; and ensuring better conditions for conservation and dissemination of heritage and thereby increasing its visibility with Quebec, Canadian and international publics. This program was in follow-up to the Economic and Regional Development Agreement signed on December 14, 1984, by the governments of Canada and Quebec. The main objective of that agreement was to encourage consultation and co-ordination with respect to the two governments' economic and regional development policies, programs and activities.

Evaluation Findings

Four cultural infrastructure projects involving more than 63 percent of the total investments were selected for evaluation of cultural and economic impact: the Montréal Museum of Fine Arts (57.2 percent of the funds granted), the Centre de production cinématographique de Montréal, the Théâtre du Rideau Vert (Montréal) and the Salle Albert-Rousseau (Québec City).

Cultural impact

Montréal Museum of Fine Arts (MMFA): The expansion and upgrading work on the MMFA placed the museum in the ranks of international-calibre museums. Among other things, it is now able to receive major temporary exhibitions. In addition, the MMFA's enviable reputation in the field of art work restoration could not have been maintained if its equipment had not been modernized to bring it up to international standards.

It is the public areas, including the exhibition galleries, which benefited the most from the investments (increase of 53.8 percent). At the end of the work, 20 percent of the permanent collection will be accessible to the public. In the past, only 3.0 percent was accessible. Positive effects are already being felt. Requests for information and requests to borrow from the MMFA collections have increased significantly, as have donations to the MMFA's permanent collection. It should also be noted that more than 81 percent of the visitors questioned said that they agreed completely with a statement to the effect that these were fantastic new facilities that would be of benefit for generations to come.

In addition, by renting out the meeting room (Grande Verrière), the MMFA will be able to increase its visibility by attracting a new clientele made up of business people and participants in conferences, and will be able to generate significant revenue. Finally, there has been an increase of some 6,500 in the number of new subscriptions (36.1 percent), taking the number of Friends of the Museum from 18,000 to approximately 24,500, resulting in an increase in revenue of 75 percent.

Other noteworthy benefits are as follows: (1) the increased accessibility to MMFA collection storage rooms and archives means that university researchers can now obtain data that was, in the past, expensive to put together; (2) the expansion of the areas used for storage of collections means that these areas can now be accessed easily by, among others, Canadian researchers and curators, with the result that it will be possible to include these collections in world heritage; (3) the increased capacity and quality of the laboratories will benefit the discipline and will have an impact in the medium term on the creation of a qualified specialized work force.

Centre de production cinématographique de Montréal: the specialized clienteles questioned say that service to the clients of the Centre's studios has improved greatly on the technical level and meets contemporary requirements in this field. The investment made it possible to fill a vacuum in Quebec by allowing for establishment of a high-calibre company specializing in film production services. Without the studios of the Centre de production cinématographique de Montréal, the shooting of television mini-series such as the hugely successful Les Filles de Caleb, could not have been done in Montréal, unless the projects' scope had been considerably reduced.

Théâtre du Rideau Vert: The investments made by the two levels of government for completing redoing the interior of the Théâtre du Rideau Vert made it possible for this facility to retain its original vocation as a theatre, while providing the theatre space required for presentation of larger productions.

Salle Albert-Rousseau: The investments made completed the funding required for finishing Phase I of the work on the Salle Albert-Rousseau. Without this contribution, the project would no doubt have been completed, but it would not have had the same scope and would have taken more time.

The Salle Albert-Rousseau now has great flexibility and can attract a wide variety of productions and better manage the strategic development of its role as a dissemination facility on the market by positioning itself more specifically and thus making itself more competitive.

Economic Impact

Analysis of the capital expenditures shows that the Montréal Museum of Fine Arts project alone generated spending of more than \$45 million on goods and services, including \$20 million for wages. The Montréal Museum of Fine Arts project was, of course, that which employed the largest number of workers (446 FTEs), compared with 39 and 17 FTEs for the Salle Albert-Rousseau and the Théâtre du Rideau Vert respectively.

As might be expected, given the size of the investment, the Montréal Museum of Fine Arts project is the one which generated the most revenue for the governments of Canada and Quebec. The federal government, through taxation, has recovered a total of some \$5.5 million, or 15.1 percent of its total investment under the agreement. For the Government of Quebec, this one project has generated \$10.8 million in taxes, allowing it to recover 29.4 percent of its investment. If one adds to these figures the revenue generated by the Théâtre du Rideau Vert and Salle Albert-Rousseau projects, the amount recovered rises to 16 percent for the federal government and 30 percent for the Quebec government.

Other Evaluation Findings

From the point of view of government managers, administration of the agreement has encouraged the following: harmonization of choices and priorities for action; centralization of resources with respect to analysis, supervision, project management and targeting of the available funds at the projects with the most potential; a speeding-up and simplification of the decision-making processes; and improved communication between managers in the two levels of government, making possible frank discussions regarding a number of matters in which both are involved, but which are not covered by the agreement.

The evaluation showed that the agreement has made it possible to increase the economic impact of cultural activities in Quebec, while providing Quebec citizens with better conditions for participation in a larger number of cultural activities.

2.3 New Media

New Media Technologies in Education

The Department and the Council of Ministers of Education, Canada announced a strategy to support the development of new media materials designed to meet the curriculum needs of the provinces. The Department approved contributions totalling \$990,000 over two years for six pilot projects. These contributions are part of a continuing strategy to open new educational regional markets for Canada's publishing industry and to ensure its future financial stability.

New Media Policy Paper

In December 1992, the Minister released New Media...New Choices: The Information Society. The policy paper outlines an integrated approach to the development of a new media information policy which reflects Canadian economic, social and cultural values and positions within a knowledge-based information society. Broad consultation with industry and industry associations, academia, consumers and federal and provincial partners will be undertaken within the context of the Electronic Highway Initiative.

Asia-Pacific Economic Co-operation

The Asia-Pacific Economic Co-operation forum was established in 1989 to promote economic co-operation among 15 Asia Pacific Economies including Canada. The Department's participation is most active in the Telecommunications Working Group. At its March 1993 meeting, the Working Group approved departmental policy proposal in the area of electronic data interchange (EDI) and electronic commerce. Canada agreed to serve as the project leader for the development of a policy roadmap for the EDI project group.

Centre ÉCHO

The Department is helping to promote the new multimedia research activities at the Canadian Workplace Automation Research Centre. Some \$30 million in funding, spread over five years, has been allocated to this project. The Department's regional office in Montréal is responsible for managing the agreement respecting the Centre ÉCHO, a Quebec member of the Canadian Multimedia Research Centres Network, which was established through this fund in 1992-93. Under the agreement, a \$1 million contribution, spread over five years, has been allocated to the Centre. During the 1992-93 fiscal year, four research projects, including two in the multimedia field, were undertaken at the Centre.

2.4 Arts, Social Sciences and Humanities

2.4.1 Performance Indicator

Achievements against major initiatives and policy targets.

Performance Targets

Develop options and provide advice to the Minister in areas listed under the section "Achievements".

Prepare briefing notes, memoranda to Cabinet and legislative drafting instructions in areas listed under the section "Achievements".

Achievements

Federal Arts Policy Framework

The development of an arts policy framework was overtaken by several concurrent priorities in 1992, including the analysis of constitutional proposals, the Status of the Artist legislation, ongoing concerns about the funding of arts organizations and the proposed merger between the Canada Council and the Social Sciences and Humanities Research Council. However, the 1993 Government Response to the report of the House of Commons' Standing Committee on Culture and Communications entitled "The Ties that Bind" sets the context for the preparation of an arts policy framework that would encompass the entire "chain" (training, creation, production, distribution, and audience development).

Status of the Artist (Bill C-7)

The Status of the Artist legislation was enacted in June of 1992. Proclamation was delayed, however, until after the end of fiscal year 1992-93. The Act provides for the creation of the Canadian Artists and Producers Professional Relations Tribunal, which will oversee the professional relations regime contained in Part II of the legislation.

Canadian Advisory Committee on the Status of the Artist

The Committee is a "provisional" version of the Canadian Council on the Status of the Artist which is to be officially created under Part I of the Status of the Artist legislation. The Department provides office support services and general secretarial services to the Committee.

The Committee held three two-day meetings (in addition to meetings of sub-committees and other regular contacts between members and the arts community), and also provided the Minister of Communications with regular advice on issues related to the Status of the Artist and funding of the arts.

Canada Council

The Department worked closely with central agencies and the Council toward preparation of the merger between the Canada Council and the Social Sciences and Humanities Research Council, which was to be implemented pursuant to Bill C-93, still before the House of Commons at the end of fiscal year 1992-93. Meanwhile, the Canada Council received additional funds of \$2.6 million for 1992-93 and benefited from the renewal of its temporary allocation of \$8 million. For fiscal year 1993-94, it was announced that the Council would be subject to the government-wide 10 percent cut in the budget for grants and contributions (however, that 10 percent cut would be applied only once the temporary funds had been made part of the Council's base budget).

Confederation Centre of the Arts

After having helped the Centre address its problem of a chronic operating deficit and its long term debt burden, the Department monitored the Centre's application of its new business plan. As required under the Canada-Prince Edward Island ERDA agreement, the Centre entered the 1993-94 season free of an accumulated deficit, for a second year in a row.

National Arts Centre

The Department continued, in 1992-93, to provide the Minister and senior management with the support required in policy matters related to the National Arts Centre.

Canadian Art Consumer Profile

The "Findings" Report, which provides an overview and general analysis of the data collected through the Canadian Arts Consumer Profile, was published and widely circulated in Canada and abroad. Information sessions were held by the Department on applying the Profile to arts marketing challenges. The preparation of two supplementary reports has been undertaken, one dealing with data on Music and Opera, the other on Theatre and Dance. Also initiated is the setting up of the Profile data into a database that will lend itself to further and more refined statistical analysis, for the benefit of both the Department policy functions and arts organizations marketing needs.

Task Force on Professional Training in the Cultural Sector in Canada

The Department has been working with a number of other departments to follow up on elements of the Task Force Report submitted in January 1992. Employment and Immigration Canada (EIC), in consultation with the Canadian Conference of the Arts and the Department, has begun a \$400,000 human resource study of the cultural sector and a \$1.4 million Statistics Canada survey of the cultural labour force. EIC is also providing funding to assist in the formation of a National Sectoral Council for Culture, similar to other joint business-labour councils in other sectors.

National Arts Training Schools

In 1992-93, the National Theatre School received \$400,000 while the National Ballet School was awarded \$1.23 million (an amount including \$730,000, which is the balance of the federal government's matching contribution for the renovation of the School's training facilities). A strategy is being prepared to deal with funding of the National Ballet and Theatre Schools in the longer term. A contribution over two years of \$250,000 was approved for the École nationale de cirque to be paid in equal parts in 1992-93 and 1993-94. An additional contribution of \$200,000 was approved for 1993-94, bringing the total for that year to \$325,000. The purpose of the contributions is to make up the School's shortfall linked to operating costs.

Design

In all the provinces, design and its creators play a prominent role in a variety of fields, including architecture, fashion and urban planning. In 1992-93, research was conducted into the design policies of other countries, including Taiwan, Spain and Japan, and in 1993-94 these policies will serve to supplement our analysis in establishing the link between culture, the arts and design, and the eventual implementation of a design strategy. The Department will continue to collaborate with other departments, in particular Industry, Science and Technology, and Statistics Canada, on initiatives that will support the promotion of design both nationally and internationally. It will also continue to work closely with national organizations such as the National Design Alliance and the Society of Graphic Designers in projects that specifically respond to the needs of the design community.

Crafts

In light of the findings of a forum organized by the Bronfman Foundation on the future of crafts in Canada in the next decade and ongoing consultations with the community, the Department will pursue its analysis of the role the federal government might play in this area of cultural activity, so it can advise the Minister accordingly.

Visual Arts

For more than a year now, the Department has been conducting research into the area of visual arts. In addition to drawing a portrait of the present situation within the visual arts community in terms of production, broadcasting, distribution, funding and training, this document will highlight the principal issues related to the future development of this discipline. Most notably, it will make possible a better grasp of any important changes which have arisen in the field of visual arts over the past few years and put into place a precise definition of this domain. The submission of the completed research report is planned for the fall of 1993.

Media Arts

Our research into the visual arts community has enabled us to confirm the relationship which exists between visual arts and media arts. In fact, the boundaries separating such disciplines in the arts are becoming less and less definable and both research and practice in these areas often grow from the same general aesthetic. The vitality of this sector is remarkable, and the quality of Canadian productions is recognized throughout the world. Over the last year, the Department has enhanced its relations with this community in a manner which appropriately reflects these emerging realities within the setting of federal arts policy.

Cultural Applications for the Electronic Highway

The Electronic Highway initiative is a major focus for the Department which has involved significant co-operative effort among all of the sectors. Working under the Steering Committee, four task forces were set up, including an Applications Task Force which contained a Cultural Applications Working Group. This Working Group brought together departmental staff from the Arts and Heritage Sector and the Cultural Industries Branch along with portfolio agency representatives from the National Library, the Media Arts Section of the Canada Council as well as representatives of the Secretary of State and the Canadian Heritage Access Project. The Working Group produced a report entitled The Emerging Information Infrastructure: Network Applications for the Arts and Heritage Communities and Cultural Industries. This paper will become a part of the Final Report of the Steering Committee.

Cultural Research

On April 29, 1992, the Department hosted a Strategic Workshop entitled Making the Linkages: Cultural Research in the 1990 in collaboration with the Canadian Conference of the Arts, the Canada Council, the Social Sciences and Humanities Research Council and Statistics Canada. This event was an important step in making connections between academic researchers, private consultants and public policy makers. The same group of partners, along with representatives from l'Institut québécois de recherche sur la culture, have subsequently been working to examine options for further action. A second gathering is tentatively planned for Calgary in late May or early June of 1994, and models for information networking are being explored.

Minority Linguistic Communities

In 1992-93, the Department, in conjunction with the Secretary of State, was especially active in its relations with minority linguistic communities, in particular French-speaking Canadians from outside of Quebec. In addition to enhancing its visibility through participation in symposia, meetings, conferences, and other events initiated by these communities, the Department studied the relevance and the feasibility of putting in place a special federal-provincial fund for the support of artistic initiatives within these communities. Due to a lack of adequate funding, this project has been postponed.

350th Anniversary of Montréal

Montréal celebrated the 350th anniversary of its founding during the period covered by this report, and there was an upsurge in activity in all cultural fields as a result. The Department did its part by providing financial assistance to the Théâtre d'aujourd'hui and the Monument national.

Quebec Cultural Infrastructures Envelope

In 1990-91, Treasury Board provided an envelope of \$39.3 million for implementation of a series of initiatives aimed at strengthening the cultural infrastructures network in Quebec. The main projects funded during the 1992-93 fiscal year were the Salle de concert at the Université du Québec à Montréal, the Redpath Museum, the vestiges of the Ancien hôpital des Frères Charron, the Monument national and the Société de développement du Musée des arts du spectacle vivant. This represented financial commitments totalling \$3.8 million.

Cultural Initiatives Program

In Quebec, during the 1992-93 fiscal year, 327 applications, valued at \$8.5 million, were received, 95 projects received a total of \$5.6 million in funding, and 3.7 full-time equivalents were assigned.

2.4.2 Performance Indicator

Program costs vs. overall value of grants/contributions approved.

Performance Target

Maintain program cost-effectiveness while keeping administrative costs at a minimum.

Achievements

The Cultural Initiatives Program expended \$699,000 on salaries (16.25 FTEs) and operations compared with a total granting budget of \$13.7 million in 1992-93.

2.4.3 Performance Indicator

Volume, value and distribution of grants, contributions and tax advantages (by program, by province, by region and nationally).

Performance Target

Reflect, where possible, the actual population distribution.

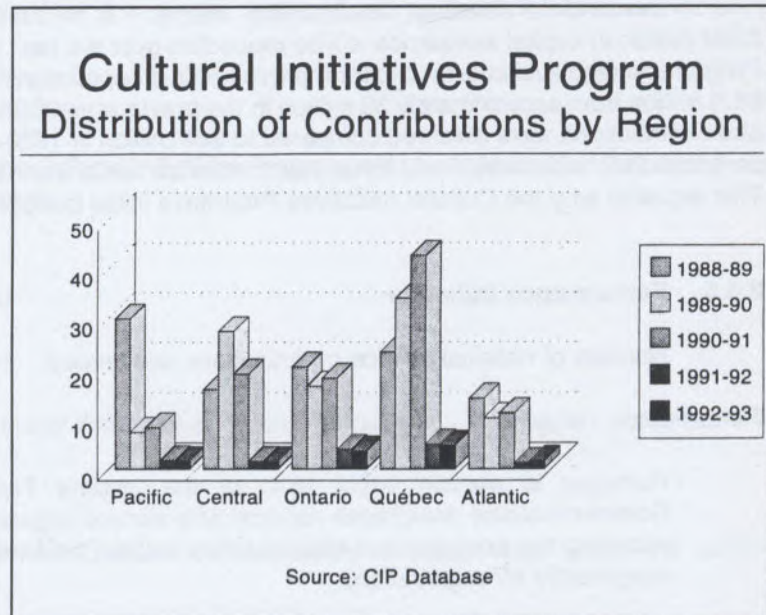
Apportion program funding according to the concentration of artistic activities across Canada.

Achievements

Figure 3 shows the breakdown of funds distributed under the Cultural Initiatives Program in the past three fiscal years, as well as the breakdown of total funding since 1980. It shows the large annual fluctuations in regional contributions.

Since the Program is intended to improve Canadians' access to theatre and visual arts, the regional distribution of funding is particularly important.

Figure 3



2.4.4 Performance Indicator

Ratio of applications processed and inquiries to full-time equivalents (FTEs).

Performance Target

Maintain or improve current ratios.

Achievements

In 1992-93, 316 applications were approved by 16.25 FTEs out of a total of 781 applications received. In 1991-92, more than 712 Cultural Initiatives Program (CIP) applications were reviewed by 12 officers in the Department's regional offices. In addition to preparing analyses and recommendations for the projects submitted to the CIP, these employees handle various files for which the culture and communications sectors are responsible.

2.4.5 Performance Indicator

Ratio of value of grants and contributions to value requested in applications.

Performance Target

Fund (support) projects that respond effectively to program objectives, priorities or thematic trends.

Achievements

Demand for funding outstrips the supply. It is estimated that between \$300 and \$500 million in capital assistance will be requested over the next five years, yet Cultural Initiatives Program funding available for capital improvements dropped significantly last year, to approximately \$5.6 million from approximately \$9 million in the previous year. In 1992-93, \$14.3 million in grants and contributions were awarded compared to \$24 million in 1990-91. Note that the total figure for contributions made over these three years includes funds from other sources (such as ERDAs). This explains why the Cultural Initiatives Program's initial budget were exceeded.

2.4.6 Performance Indicator

Number of national service organizations designated.

Performance Target

Pursuant to section 149.1 (6.4) of the *Income Tax Act (1992)*, the Minister of Communications designates national arts service organizations for the purpose of their receiving the equivalent of charitable tax status (the Minister of National Revenue being responsible for registration).

Achievements

In 1992-93, the Department received 13 applications, four of which resulted in designation by the Minister of Communications and registration by Revenue Canada.

2.4.7 Performance Indicator

The terms of reference established to review the Cultural Initiatives Program cover two issue types. The first considers **administrative** issues which deal with the effectiveness of the management framework, the efficiency and cost-effectiveness of program delivery practices, and the impact of regionalization. The second category deals with **program-specific** questions to examine the Program's objectives and impacts.

Performance Target

Develop targets based on the following program evaluations.
1991-92: the Orchestra Marketing Fund

Achievements

Orchestra Marketing Fund

The Orchestra Marketing Fund, a distinct element of the management assistance component of the Cultural Initiatives Program, was allocated \$1.5 million in 1988-1989 for a two-year period. The activities connected with this program ended in 1991, and the fund was evaluated in 1991-92, at the request of Treasury Board.

The results of the evaluation indicate, first of all, that the orchestras would not have been able to undertake marketing projects without the Program's assistance. However, the Program does not seem to have been a tool perfectly suited to the needs of the orchestras. Marketing

should be fully integrated into the long-term planning of an orchestra's overall activities. An ad hoc program based solely on marketing does not necessarily encourage integration, so, ideally, government assistance should cover the whole range of an orchestra's activities, including marketing.

Cultural Initiatives Program

Regionalized in 1991, the Cultural Initiatives Program will be evaluated in 1993, along with the Museums Assistance Program.

2.5 Canadian Heritage

2.5.1 Performance Indicator

Achievements against major initiatives and policy targets.

Performance Target

Develop options and provide advice to the Minister in areas listed under the section entitled Achievements.

Prepare briefing notes, memoranda to Cabinet and legislative drafting instructions in areas listed under the section entitled Achievements.

Achievements

Canadian Museum Policy

The following bears witness to the efforts made by Canadian Heritage Information Network and the Canadian Conservation Institute to meet the Canadian Museums Policy's objectives.

Databases have been established to provide new and expanded information for users of the network. To the two already existing national databases (that for the humanities and social sciences and that for the natural sciences) has been added a national database on archaeological sites. Three new reference databases are also available - namely, the Heritage Directory, the database on the collections of the Canadian Society of Zoologists, and the index of publications on collections history and conservation. Another reference database, a bibliography of laws respecting heritage, will soon be made available to the network's users. Finally, the Canadian Heritage Information Network (CHIN) has become manager of the reference databases of the Conservation Information Network, whose clients are from 23 countries around the world and include 600 organizations.

Provincial networks have now been established in Quebec, Ontario, Saskatchewan and British Columbia. Negotiations are under way with representatives of the Maritime Provinces who also want to establish a regional network linking the museums in those provinces.

Following the implementation of the Documentation Research Fellowship Program, three fellows were hired and produced reports on the following subjects: a) the development of documentation standards for contemporary art; b) a proposal for a functional natural sciences database model for Quebec museums to meet the needs of the various clientele; c) and a review of the different approaches to the classification of museum objects with a view toward improving the formal structure and standardization of data in the CHIN National Humanities Database.

The Technology Assessment Centre (TAC), which evaluates the usefulness of applications and emerging technologies for the museum environment, is now operational. Focusing on imaging research this year, the TAC has completed an interactive compact disk entitled "Charting the New World" in collaboration with ON/Q Corporation and the David M. Stewart Museum of Montréal. The TAC negotiated two educational CD-ROM projects, one entitled "Canadian Dwellings through Time" in collaboration with the Ontario Ministry of Education, Fitzhenry and Whiteside, and Parks Canada and the other with the National Film Board and the Canadian Museum of Civilization on "Canada's Visual History". Other demo products were created and TAC staff gave many demonstrations, training sessions and lectures, in addition to producing a number of articles.

In 1992-93, the Canadian Conservation Institute continued to provide technical and financial assistance to Laval University in support of the development of the French-language conservation training program. Laval University anticipates that provincial authorization for the program to begin in the fall of 1994 will be forthcoming. Financial assistance for a number of priority conservation projects was provided through CCI. These projects include a survey of the extensive collections of furniture held in New Brunswick, continued work on the altar of the Ursulines chapel in Québec City, conservation of a series of painted banners in Manitoba and extensive work on a 17th century polychrome sculpture from Nova Scotia. A book was produced as well as more than 20 technical publications (over 100,000 copies distributed in both official languages). The Museological Resource Centre, in collaboration with CHIN and the International Council of Museums, completed, tested and demonstrated the prototype of an international database of museological bibliographic information. The CCI Library processed 1,900 interlibrary loans and 1,150 acquisitions, and responded to over 1,000 reference requests.

Archaeology Policy

Initiatives originating from the Archaeology Policy announced in 1990 included the provision of technical and financial assistance to the Canadian Archaeological Association in its initiation of consultations with Aboriginal peoples. Another initiative involved completing, in collaboration with provincial archaeological resource managers, the first phase of a Ship Information Database designed to assist in the protection and management of archaeologically significant shipwrecks in Canadian waters. As well, technical advice was provided respecting the heritage components of the government's negotiation of Aboriginal claims.

Government's Use of Stable Alkaline Paper

As a parallel initiative to the decision on the "Federal Government's Use of Stable Alkaline Paper", the Minister requested the formation of an Interdepartmental Steering Committee to examine the feasibility of introducing a policy on the use of stable alkaline paper for government records of permanent value. Following consultations, the Committee reported to the Minister and presented the following recommendations: a) the use of high-quality alkaline paper for significant records in government, such as ministerial and Cabinet records; b) the creation of a permanent Treasury Board Information Technology Standards (TBITS) co-ordination working group; and c) the development of a Canadian standard for permanency of paper specifications, as well as policy directions to reflect government-wide paper requirements.

Heritage Applications for the Electronic Highway

For details on this initiative, please refer to Performance Indicator 2.4.1.

Museum Infrastructures and Montréal's 350th Anniversary

The Department's action with respect to Montréal museums within the framework of the 350th anniversary of the city's founding was marked by the inauguration of numerous museum projects funded by the Department - specifically, projects involving the Montréal Museum of Fine Arts, the McCord Museum, the Musée d'histoire et d'archéologie de Montréal, the Musée des Hospitalières de Saint-Joseph, the Maison Saint-Gabriel and the Fondation Lionel-Groulx.

Canada-France Co-operation Agreement Respecting Museums

On November 26, 1990, the Minister of Communications of Canada and the Minister of Culture of France signed an agreement respecting co-operation and exchanges in the field of museology.

The main purpose of the Canada-France agreement is to create and develop special and lasting links between Canadian and French museum institutions and between the professionals in the museums field for the purposes of a joint quest for excellence. The agreement also covers the related field of archaeology.

Funding was provided under the agreement for numerous projects, including the exhibition entitled "Chefs-d'oeuvres de la peinture française du 17e siècle", which was put on by the Montréal Museum of Fine Arts, in co-operation with the Musée des beaux-arts de Rennes and the Musée Fabre de Montpellier, "Le Canada au secours de l'Europe", the exhibition at the Mémorial de Caen, the terminology project of the Canadian Heritage Information Network and France's Direction des musées. During the period covered by this report, 45 projects were received. One full-time equivalent was assigned to management of the agreement, and seven projects received funding totalling some \$995,300 during 1992-93.

Triennial Congress of International Council of Museums

In the museums field, the Department's activities included a special event, the triennial congress of the International Council of Museums, held in Québec City from September 17 to 26, 1992. The congress brought together more than 1,800 delegates from 84 countries. In addition, it made possible discussions that were essential for continuation of the Department's work in the museums field on the level of international co-operation.

2.5.2 Performance Indicator

Program costs vs. overall value of grants/contributions.

Performance Target

Maintain program cost-effectiveness while keeping administrative costs at a minimum within the Museums Assistance Program (MAP), the Movable Cultural Property Program (MCP) and the Access to Archaeology Program (AAP).

Achievements

In 1992-93, the value of MAP grants and contributions amounted to \$14.9 million while the MAP program costs totalled \$321,038. MAP program costs represent 2.2 percent of grants and contributions.

During this same period, the value of grants awarded under the MCP represented \$1,316,889. It is estimated that .2 FTE (\$36,000) is required to process the approximately 40 grant applications received annually.

In 1992-93, the AAP administered \$700,000 in grant monies. The Program is managed by 1.4 FTEs, and has expended \$21,516 in operations.

2.5.3 Performance Indicator

Volume, value and distribution of grants, contributions and tax advantages (by program, by province, by region and nationally).

Performance Targets

Reflect, where possible, the actual population distribution.

Apportion program funding according to the distribution of museums and art galleries across Canada.

Achievements

Under the Access to Archaeology Program, figures 4 and 5 show the patterns of request and distribution of grant monies provided to clients within the country. The awarded percentages are based on \$700,000 available for grants. In addition, the Program was responsible for two IMAA contributions, totalling \$15,000: \$10,000 in British Columbia and \$5,000 in Ontario.

Figure 4

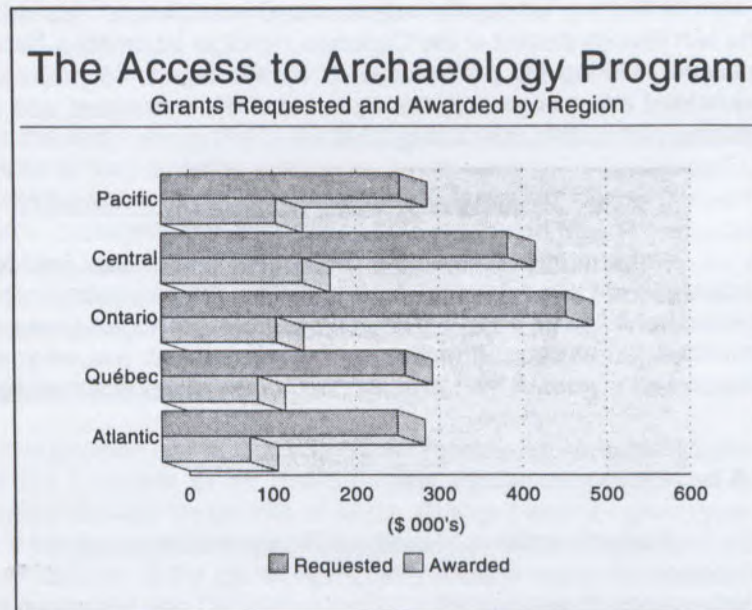
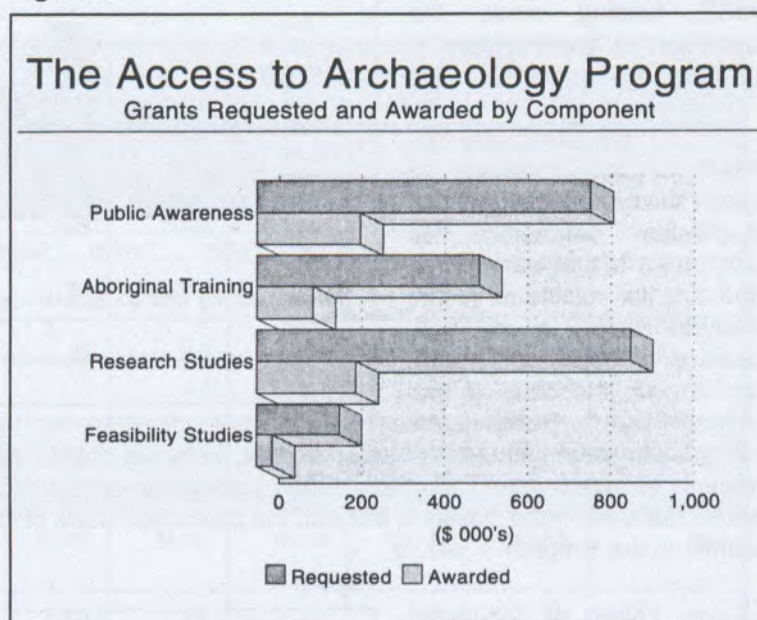


Figure 5



Grants awarded by the Movable Cultural Property Program are approved by the Minister on the recommendation of the Canadian Cultural Property Export Review Board pursuant to section 35 of the *Cultural Property Export and Import Act* (see figure 6). The annual distribution of funds varies significantly depending on the availability for purchase of specific objects and the acquisition mandates of designated institutions. Three grants with a total value of \$74,384 were awarded to retain objects in Canada; twenty-six grants with a value of \$1.2 million were awarded to repatriate objects to Canada.

Figure 6

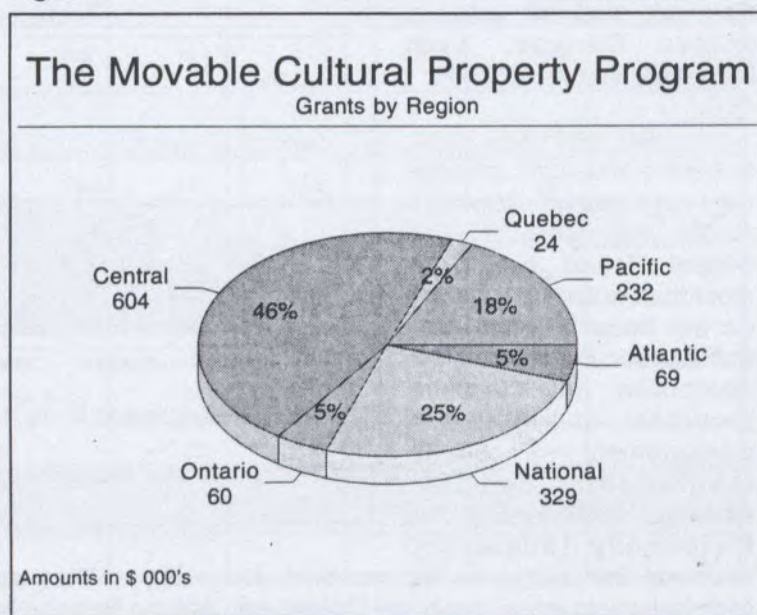


Figure 7 displays the regional distribution of the MAP grants and contributions (expressed as percentages). As there has been some fluctuation over time in the relative share of each region, the distribution of cumulative MAP funding since the inception of the Program in 1972 is also included.

The figure shows that MAP funding continues to move toward reflecting actual population distribution as compared to previous years. Funding for museums in the Central Region is still high relative to population share, as is also the case in the Atlantic Region. However, the disparity between population distribution and the share of MAP funding has been narrowed in both regions in recent years. Similarly, MAP funding for museums in Ontario and Québec in recent years has been more closely in line with the population share of these provinces than was the case earlier in the Program's history.

Figure 8 compares the distribution of MAP funding to the distribution of museums and art galleries across Canada, both historically and for 1992-93.

As can be seen, museums and public galleries are not evenly distributed across the country. The Central Region has many more than would be expected on the basis of population, and Quebec has fewer. The distribution of museums provides an objective measurement of overall institutional demand. However, MAP funding has historically addressed structural inequalities in the museum community.

Thus one sees that MAP grants and contributions to museums in the Québec and Atlantic Regions have historically been greater than would be expected on the basis of the distribution of institutions, while funding in the Ontario and Central Regions has been somewhat lower.

Figure 7

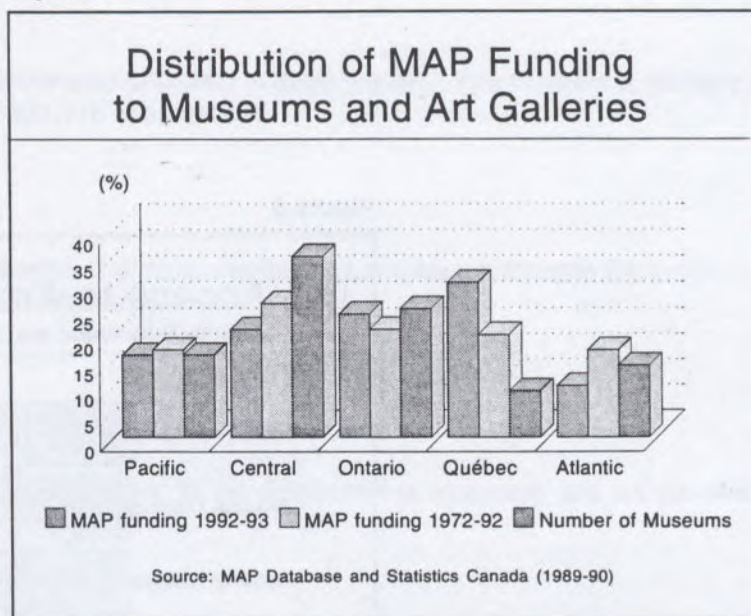
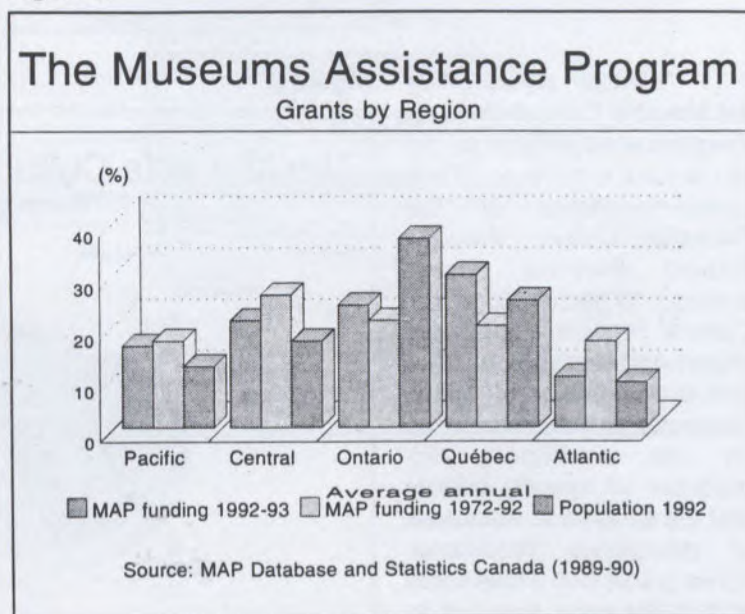


Figure 8



2.5.4 Performance Indicator

Ratio of applications processed, records documented and inquiries to full-time equivalents (FTEs).

Performance Target

Maintain or improve current ratios.

Achievements

Program Activity	1988-89	1989-90	1990-91	1991-92	1992-93	% Change (1991-92 to 1992-93)
Movable Cultural Property Program (7 FTEs):						
▫ tax certificate applications per FTE	188	189	289.5	132	149.7	13.4
▫ export permit applications per FTE	100	118.5	90	49.5	43.9	-11.3
▫ grant applications per FTE	12	11.8	8.5	3.9	4.14	6.2
▫ designation applications per FTE	3	3.5	3	2.6	5.86	125.4
Canadian Heritage Information Network (42 FTEs)**:						
▫ total number of artifact records documented a/o maintained per FTE	85,781	94,824	105,542	137,587	187,076	36.0
▫ total data bases maintained (not based on FTEs)	111	118	122	128	142	10.9
Canadian Conservation Institute (78 FTEs):						
▫ requests for consultations or services per FTE	12.6	19.4	17.9	22.0	19.8	-10.0
Museums Assistance Program (8 FTEs):						
▫ grant applications per FTE	n/a	24.6	31.6*	26.4	23.8	-9.8
Heritage Services (8 FTEs):						
▫ ETS revenue (in dollars)		492,100	750,000	837,000	845,000	1.0
▫ total number of exhibitions (crates) transported			6,519	7,809	8,576	9.8
▫ institutions served		88	89	106	130	22.6
▫ FDAS - applications reviewed		39	48	81	80	-1.3
▫ FDAS - site visits		39	81	73***	85	16.4
Access to Archaeology Program (2 FTEs):						
▫ grant applications per FTE			n/a	36.5	31	-15.1

* adjusted

**Note: The data given for 1989-90 to 1991-92 were based on 34 FTEs.

***Note: Due to the spending freeze, a number of planned trips were cancelled and others deferred to 1992-93.

For CHIN, the number of artifact records documented and/or maintained is based on the ratio of FTEs. For example, in 1992-93 there were in fact almost eight million records maintained.

With regard to the Access to Archaeology Program, the productivity measure has not shown the drop anticipated after the first year of operation because of the number of new clients applying to the Program.

2.5.5 Performance Indicator

Ratio of value of grants and contributions to value requested in applications.

Performance Target

Fund (support) projects that respond effectively to program objectives, priorities or thematic trends.

Achievements

Grants awarded under the Access to Archaeology Program comprised 38.3 percent of the total value of financial assistance requested in 1992-93. The total amount requested was \$1.8 million during this period. Figures 4 and 5 show the ratio of value of grants approved to value of grants requested.

The Movable Cultural Property Program met 100 percent of eligible demands for grants.

Grants under the Museums Assistance Program comprised 75 percent of the value of financial assistance requested in 1992-93 as compared to 60 percent in 1991-92.

2.5.6 Performance Indicator

Types of technical advice and assistance provided or number of databases maintained.

Performance Target

Implement initiatives and provide services aimed at helping museums to better preserve, manage and facilitate access to their collections (Canadian heritage resources).

Achievements

The Heritage Services Division has expanded its technical expertise to include architectural preservation and has deepened its resources in the planning and design of buildings. This has permitted the development of more activities related to market analysis assistance as well as the commencement of new publications.

In 1992-93, Canadian Conservation Institute (CCI) scientists were involved in 25 research projects; CCI conservators also provided the Canadian museum community with approximately 18,000 hours of treatment services during the same period. In co-operation with provincial museum and conservation officials, CCI conservators and scientists provide courses and advice on conservation techniques across Canada. They also provide intermediate and advanced training for conservators in the CCI laboratories. In 1992-93, CCI presented 24 two-day conservation

workshops across Canada, reaching an audience of over 250 museum workers. CCI also provided seven one-year conservation fellowships and received 10 interns, five from Canada, four from Germany and one from France. Finally, CCI staff responded to 1,545 requests for assistance, services or consultations.

During 1992-93, CCI helped to organize and teach seven workshops on packing and shipping works of art as part of its commitment to the Art in Transit project undertaken with the Conservation Analytical Laboratory of the Smithsonian Institution, the National Gallery of Art (Washington) and the Tate Gallery (London). Over 400 participants attended the six American and one Canadian workshops. The conservation treatment of the "Drapeau de Carillon" from the Musée du séminaire de Québec was completed and returned to the museum.

The Canadian Heritage Information Network provides technical advice and assistance to museums on technologies relating to museum functions through consultations, demonstrations and presentations. These include software applications and multimedia technologies, especially imaging. They also include compact disk development and products. During 1992-93, CHIN provided 16 training courses attended by 96 participants. These courses allowed Canadian institutions to participate in accessing national database information and to develop skills in collections management functions relevant to their own institutions. Also, three courses were held to enable 23 attendees to understand and utilize the Conservation Information Network reference database. During the same period, CHIN staff spent 5,886 hours on consultative advice and assistance on collections management and other related projects.

CHIN also assists museums in managing information through access to collections and other databases, education and research activities (i.e. standards for collections data, and consultations). In 1992-93, CHIN maintained 142 databases, an increase of 10.9 percent over the previous year.

Audit of the Canadian Heritage Information Network (CHIN)

An audit of the Canadian Heritage Information Network (CHIN) was completed. The objective and scope of this audit were to review and assess the efficiency and effectiveness of CHIN in providing services to its clients, and the adequacy of management controls in its systems.

Furthermore, Corporate Review Branch participated in an advisory capacity in the design of the questionnaire for a user survey undertaken by CHIN, at a later stage.

The audit concluded that CHIN excelled in terms of its approach to client service because of its strong emphasis on satisfying clients. CHIN has efficiently and effectively discharged its responsibilities with respect to its mandate and business objectives.

Although CHIN's systems management was considered satisfactory, some recommendations were presented for additional improvements within the following areas: formalization of the planning process; documentation of client services procedures; development of contingency planning/disaster recovery procedures; communication of system performance standards; streamlining procurement practices; refinement of the Trillium Network management.

2.5.7 Performance Indicator

The terms of reference established to review the Museums Assistance Program cover two issue types. The first considers **administrative** issues which deal with the effectiveness of the management framework, the efficiency and cost-effectiveness of program delivery practices, and the impact of regionalization. The second category deals with **program-specific** questions to examine the Program's objectives and impacts.

Performance Target

Develop targets based on the following program evaluations.

Achievements

Museums Assistance Program

Regionalized in 1991, the Museums Assistance Program will be evaluated in 1993, along with the Cultural Initiatives Program, through a contract prepared by the Corporate Review Branch of the Department of Communications.

3.0 SPECTRUM MANAGEMENT

3.1 Spectrum Planning and Engineering

3.1.1 Performance Indicator

Number of interference complaints and the ratio of this to number of new users.

Performance Targets

Actual trends will be reported. Targets will be established for the 1991 AMR..

Achievements

Canada-France Agreement

An international spectrum sharing agreement was ratified between the administration of France and Canada. This agreement dealt specifically with VHF and UHF spectrum around the islands of Saint-Pierre et Miquelon, near Newfoundland.

Representation at International Meetings

The Department was successfully represented at the CCIR, CCITT, IEC/CISPR and other spectrum related international meetings.

International Compatibility

Authoritative investigative work over several years and technical papers presented at a CCIR meeting in Montréal, in September 1992, were instrumental in finalizing international compatibility criteria between FM broadcasting and aeronautical navigation and communication services to ensure air safety.

Implementation of Digital Audio Broadcasting (DAB) in the L-band

Innovative engineering studies, analytical software development and extensive field tests were carried out to facilitate domestic implementation planning of DAB in the L-band (1452-1492 MHz) in Canada. Close liaison was maintained with the broadcast industry in this planning.

International promotion of the facts established by the planning work was highly successful in demonstrating to other countries, such as Germany, the technical and economic feasibility of the Canadian L-Band proposals.

New service area concepts and plans to replace AM and FM radio services were investigated. Transition scenarios were studied for the introduction of DAB to ensure there will not be disruption to the current radio service enjoyed by the public.

The Canadian Broadcasting Corporation and private broadcasters conceived and planned, in co-operation with the Mexican Administration, a DAB demonstration in Mexico City and OAS/CITEL DAB seminar which was scheduled for April 1993 to further promote and enlarge the market for DAB.

High Definition Television (HDTV)

Channel allotment plan options were developed for the introduction of HDTV in Canada followed by preliminary discussions with the United States concerning spectrum sharing along the Canada/United States border and an eventual agreement between the two countries.

The Department produced technical documents for CCIR committees on possible characteristics for satellite HDTV which will ensure the orderly introduction of this new technology.

System studies were carried out on the possible accommodation of HDTV systems within the current UHF-TV band and its impact on existing services. The Department discussed with the FCC improvements to the proposed systems and scenarios for their introduction.

Broadcast Regulations

The Department provided amendments and improvements to the current broadcasting regulations for their incorporation in the general review and restructuring of all regulations and alignment with the new *Radiocommunication Act* and *Broadcasting Act*.

Illegal Broadcasting

The Department is responsible for enforcing the *Radiocommunication Act* which requires that all broadcasters must have a certificate issued by the Department and a licence issued by the CRTC to operate a broadcasting station. Over the years, a number of TV operators commenced broadcasting without a certificate or licence. Following an extensive national information campaign conducted (fall of 1991) by the Department and the CRTC to encourage compliance, many illegal stations ceased to operate or applied for a certificate and a licence. However, some remaining operators continued operating illegally and others commenced operations in open defiance of the law. Enforcement actions were taken under the authority of the *Radiocommunication Act*. There has been no further proliferation of illegal TV stations.

Illegally Modified Satellite & Cable Decoders

The Department is responsible for enforcing the *Radiocommunication Act*, Sections 9(1)(c) and 10(1)(b) which prohibit manufacturing, distributing, sale, possession or use of chipped decoders which allow for the reception of scrambled satellite subscription television programmes without payment of subscription fees, thereby depriving program creators and distributors of revenues needed to sustain their services. Early in 1992, it became evident that the sale and distribution of chipped decoders was widespread across the country. Therefore, a national information campaign was conducted followed by enforcement action by the RCMP which was focused on major manufacturers and distributors of satellite and cable chipped decoders.

The effectiveness of the enforcement campaign on the sale and distribution of chipped decoders will be reviewed by the Department and the RCMP during fiscal year 1993-94 taking into consideration new developments such as improved encryption methods.

Automated Program

The Department introduced an automated system for the production of radio operator examinations and a computer registry for all radio operator certificates.

Low Power Multipoint Communication Systems and Digital Cordless Telephones

In response to client concerns, the Department developed and implemented a licensing procedure for multipoint communication systems as well as digital cordless telephone networks. These two innovative licensing procedures allowed Canadians to implement state of the art technology radiocommunication systems.

Implementation of the results of the World Administrative Radio Conference (WARC-92)

Engineering studies have been carried out by the Department in support of implementation of the results of WARC-92. Proposals including their technical rationale will be released for public comment early in the new fiscal year.

FCC/DOC Cross Border Sharing Arrangements

Sharing arrangements were concluded with the FCC for 900 MHz Multipoint Communication Systems and for Air/Ground telephone service. Progress was made in harmonizing standards for mobile equipment and for an agreement for use of spectrum in the 900 MHz band.

Standards for Digital Cordless Telephones

Standards for digital cordless telephones (RSS 130 and SRSP 508) were published. RSS 128 was developed for digital cellular in Canada.

Interference Causing Equipment Regulations

The Interference Causing Equipment Regulations were promulgated and the Radio Apparatus were advanced.

Spectrum 20/20 1992

Spectrum 20/20 was held in Toronto in September 1992 and was very successful. Over 200 participants from the telecommunications and broadcasting industries and government shared two days of presentations and dialogue dealing with the future use and management of the radio spectrum. The theme of the symposium "Transitions" was most appropriate, considering the rapid advancement of personal communications and decisions of WARC-92.

Personal Communications

Engineering studies in support of Canadian allocation of spectrum were completed. No further action was required for current MSAT activities.

Artificial Intelligence

Using resources from Industry, Science and Technology Canada's Artificial Fund, significant progress has been made in developing a case-based reasoning system for radio interference investigations.

Certification of Radio & Terminal Equipment

The number of certificates issued for radio equipment was 927. This is four percent higher than last year (891). Four issues of the Radio Equipment List were published.

Four radios were tested for type approval. All the other certification testing was performed by the private sector. Fourteen radio units were audited during this twelve-month period.

Support to Technology Transfer

In support of Technology Transfer (DTT), the Department has regularly organized seminars and tours of the Clyde Avenue Laboratory for representatives of other countries. An Industrial and Scientific Exchange was arranged between the Department and Spectrocan Engineering Inc. to provide Jabatan Telekom Malaysia with the primary skills to operate the Engineering Laboratory equipment on site in Kuala Lumpur, Malaysia. This exchange began on August 13, 1992, for a two-month period.

Engineering Support

In a co-operative effort with the Department of National Defence, a new generation of frequency hopping military transceiver was examined by the Department to determine if co-existence was possible and the effect it could have on the existing services. This radio uses 2,300 channels in the 30-80 MHz band, which is occupied by television broadcast, amateur radio, model airplane remote control and land mobile communications. From the test results, compatibility and operating restrictions were determined.

Survey of Client Satisfaction with Spectrum Management Services

The Department conducted a national survey of licensed spectrum management clients which supplements the information obtained by the two regions - Quebec and the Prairies - that had taken the initiative to survey their clients the previous year. Five types of licensed spectrum clients (i.e., amateur radio operators, holders of ship radio licences, holders of aeronautical licences, public commercial licence holders, and private commercial licence holders) totalling 4,818 licensees were interviewed in November and December 1992. Interviews were conducted with clients from all regions of the country.

A preliminary analysis of the results was available in March 1993. The results showed that:

1. Overall, most clients contact the Department essentially for license renewal. The Department's role and the extent of its mandate for managing the spectrum are either unknown, or confused or unclear for many clients since other services such as the handling of interference complaints, the issuing of temporary licences and the need to share frequencies are used only by a fraction of the clientele.
2. In general, clients are extremely satisfied with departmental personnel and their courtesy, availability to listen, and competence.
3. Sources of dissatisfaction include speed of response to problems, costs of a licence, the waiting period for issuing a licence, and the clarity of forms and documents.

-
4. Clients' demands, level of knowledge of spectrum management activities and levels of satisfaction with departmental services vary by type of client, with public commercial companies having the highest levels of demand for service and the lowest levels of satisfied. In particular, public commercial companies are looking for faster issuing of licences, lower or at least not increasing licence fees, and better accessibility of services and advisory help.

The survey finding will be used to updating service standards.

3.2 Authorization

3.2.1 Performance Indicator

Volume and timeliness of radio licences issued, broadcast certificates issued and examinations conducted by radio operators.

Performance Target

The overall target is the optimal response to demand in light of spectrum availability. Timeliness will be judged by the degree to which licences are issued within time periods specified in the Sector's Management Manual (e.g., 45 percent of land-fixed applications processed within 15 days, 60 percent within 30 days and 90 percent within 90 days).

Achievements

Performance standards are set for the length of time to process radio licence applications. For certain types of applications, as the number of spectrum users increases, finding frequencies for assignment that are compatible with all other users becomes more complex and time consuming.

In 1992-93, 76,031 individual licences were issued compared to 94,526 in 1991-92. The total number of system licences including cellular now stands at 10,916. At the end of fiscal year 1992-93, 851,715 radio station licences, representing all classes of stations, were in effect which is slightly less than the 867,597 reported for 1991-92. In 1992-93, 1,939 microwave applications were processed (up 3.1 percent from 1991-92), as well as 20,214 land-mobile applications (down 6.1 percent from 1991-92) and 15,632 land-fixed applications (down 0.2 percent from 1991-92). Also, a total of 18,825 ship, aircraft and amateur applications were processed (down 2.9 percent from 1991-92) and 758 space and earth applications.

In 1992-93, response times for the processing of applications for licences in the land-fixed, land-mobile, ship, aircraft and amateur services are marginal when compared to established standards for these services. However, there was considerable improvement in response time for the processing of applications for microwave, space and earth stations.

Increased demand for access to the spectrum is one factor affecting the level of service. Expenditure restraint is another factor that impacts the program's ability to meet established performance standards - as budget reductions translate to less resources available to deal with rising workloads. Since its introduction in the late 1980's, system licensing has provided the program with efficiency gains to help deal with the annual workload of land-fixed and land-mobile applications. However, the impact of system licensing in these areas appears to be stabilizing.

Figures 9 through 13 present an historical comparison of performance response times over the past six years for the various categories of licence applications.

Figure 9

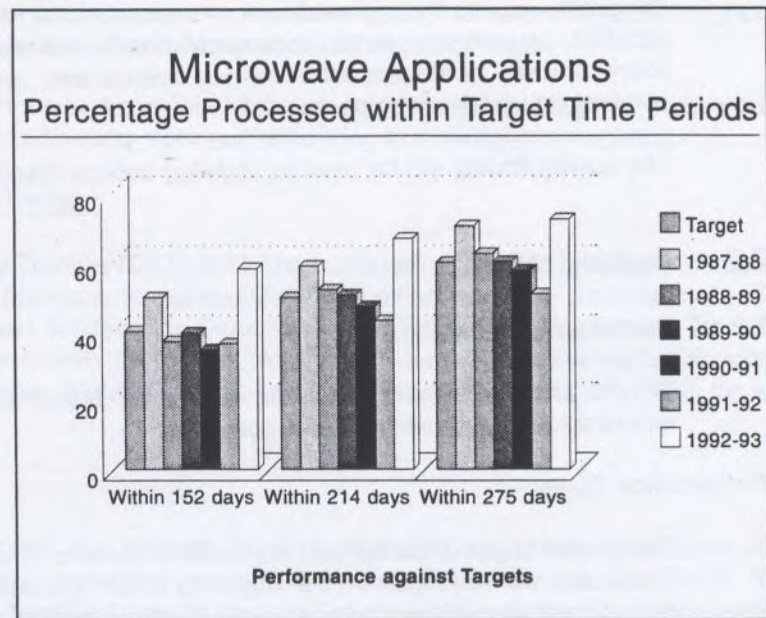


Figure 10

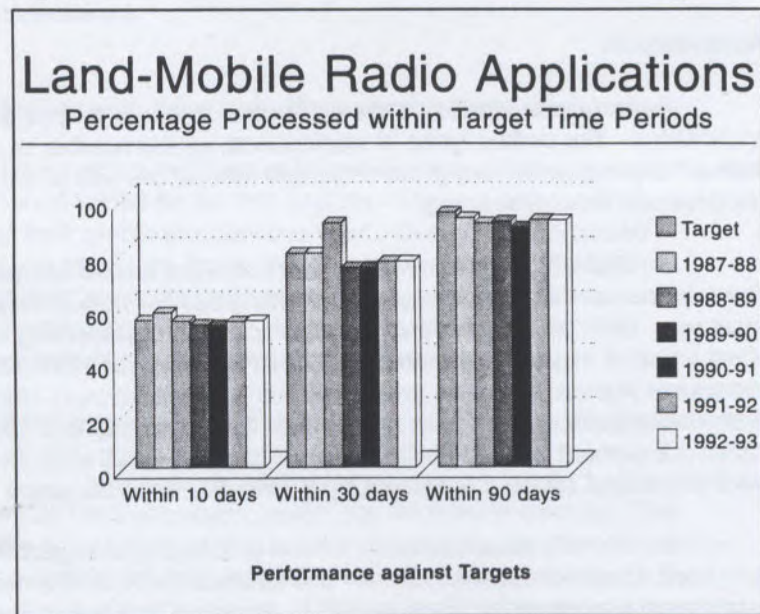
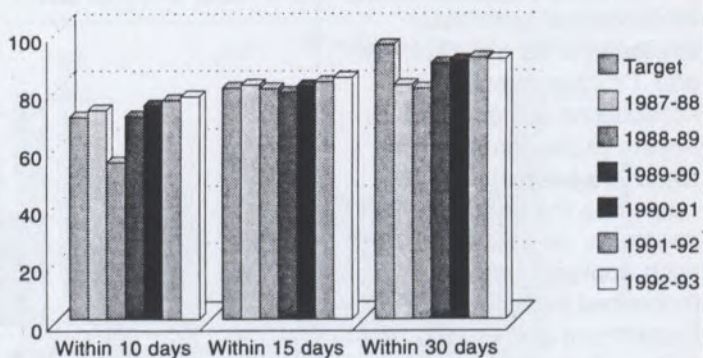


Figure 11

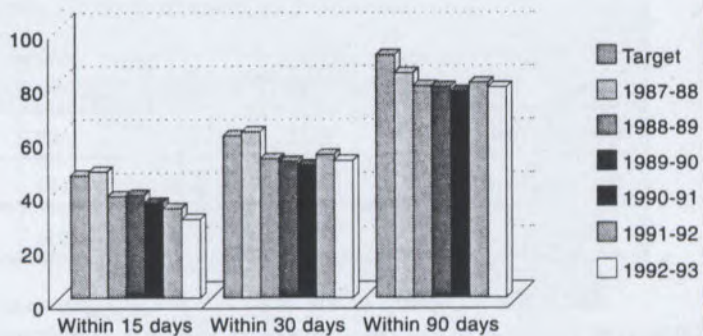
Ship, Aircraft and Amateur Applications Percentage Processed within Target Time Periods



Performance against Targets

Figure 12

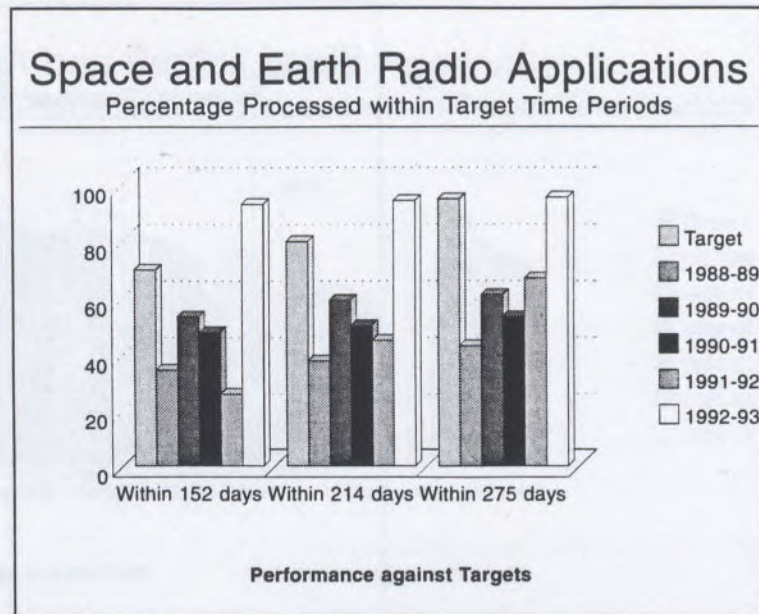
Land-Fixed Radio Applications Percentage Processed within Target Time Periods



Performance against Targets

The Department conducts technical evaluations of CATV, television, AM or FM undertakings to ensure that technical standards are met as part of the review process for broadcast certificate applications as well, AM, FM and TV international notifications are analyzed to ensure protection of Canada's interests with respect to the broadcast spectrum. In 1991-92, 6,733 such applications were processed by the Department and in 1992-93, 4,720. This reduced activity can be attributed to the recessionary climate of that period.

Figure 13



The following table represents the Department's historical involvement in the examination of professional radio operators.

Number of Examinations Conducted for the Certification of Radio Operators						
	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
DOC Examiners	16,427	10,784	10,307	9,040	10,501	8,091
Non DOC Examiners	0	8,581	12,629	14,870	23,093	22,219
TOTAL	16,427	19,365	22,936	23,910	33,594	30,310

Since the inception of the program to delegate examination authority to qualified personnel external to the Department in 1987-88, significant efficiency gains have been made by doubling the number of examinations conducted yet reducing departmental staff involvement.

3.2.2 Performance Indicator

Volume of individual, system and fleet licences issued relative to full-time equivalents over time.

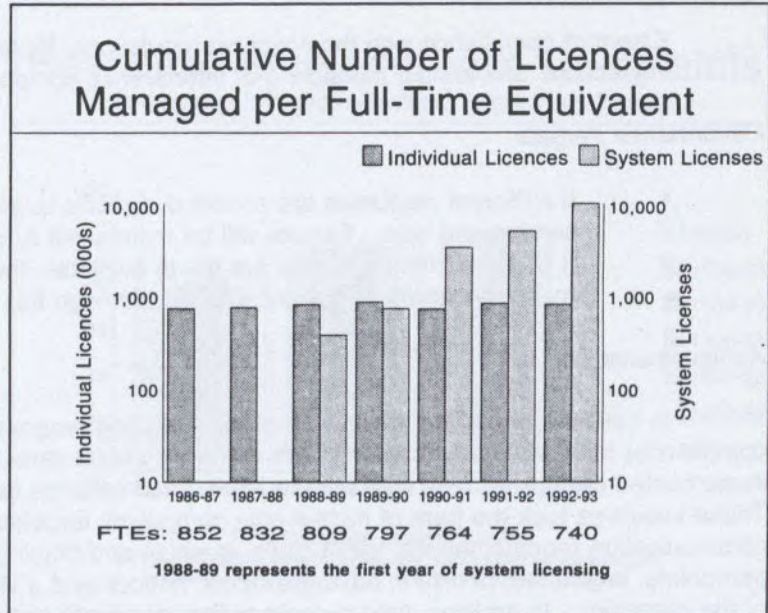
Performance Target

Monitor trends.

Achievements

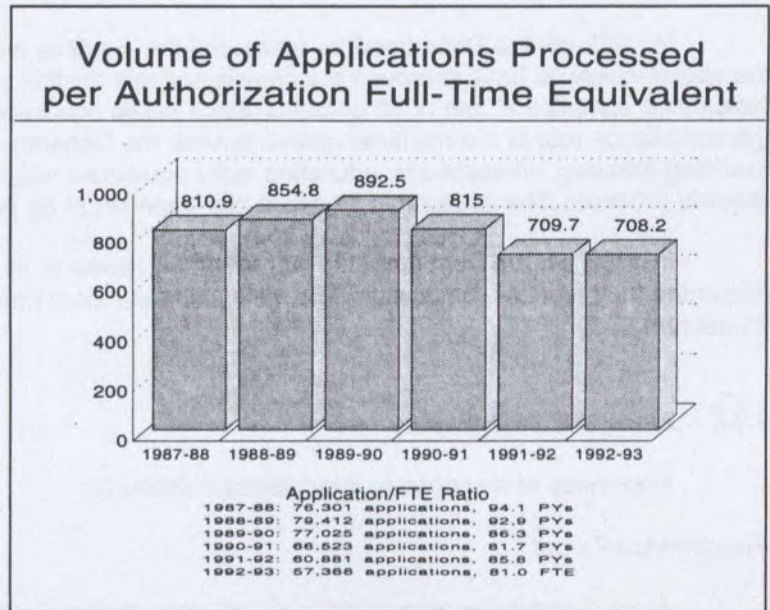
Figure 14 demonstrates the cumulative number of licences managed per full-time equivalent in the program since 1986-87. Since the introduction of system licensing in 1988-89, the requirement to issue individual licences has been reduced in certain services. This has helped the program to cope with increased demand for access to the spectrum.

Figure 14



The growth in the number of system licences since 1987-88 has helped to contain the individual licence population resulting in direct resource savings as demonstrated in Figure 15.

Figure 15



3.3 Spectrum Control

3.3.1 Performance Indicator

Extent of compliance with the licensing regulations, found as a result of periodic inspections and annual monitoring of interference complaints.

Performance Targets

- If sufficient resources are provided, specific targets will be developed for each service and type. Targets will be maintained or improved.
- If no additional resources are made available, the Department will try to maintain current compliance ratios, although this cannot be guaranteed.

Achievements

In 1991-92, based on the results of the sampling program and on results (60 percent compliance) from stratified samples of the maritime mobile service, the Department implemented client education initiatives to improve compliance rates within these services. These initiatives took the form of multi-media campaigns targeted at equipment suppliers, communication representatives, yacht clubs, marinas and boating enthusiasts. Posters, pamphlets, brochures, booklets, advertisements, notices and a video program formed the basis of the campaign. In addition, field personnel attended trade shows to distribute this material and provided seminars, when requested, on the importance of radiocommunications and the proper use of radio.

In 1992-93, the Department re-measured the maritime mobile service to determine if the above initiatives have improved the compliance rate for this service. The new survey again indicated a compliance rate of 60 percent. Since public education did not significantly improve the compliance rate in the maritime mobile service, the Department will review other options, including ticketing, prosecutions, educating radio equipment suppliers and reviewing the licence renewal process. The acceptable standard had been set at 88 percent.

In 1993-94, the Department is considering a review of municipal governments to determine their level of compliance. The acceptable standard has been increase from 88 to 95 percent.

3.3.2 Performance Indicator

Timeliness of response to interference complaints.

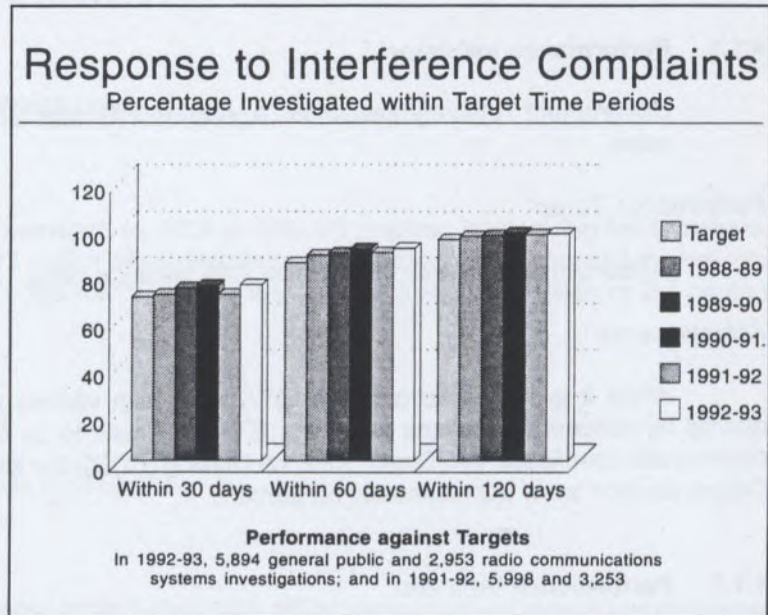
Performance Target

As per established standards (e.g., 95 percent of radiocommunications system investigations resolved within 120 days).

Achievements

For this indicator, service standards have been set which specify the proportion of investigations to be completed within 30, 60 and 120 days. As can be seen from this figure, in 1992-93 these targets were met and exceeded. The Department investigated a total of 5,894 general public and 2,953 radio communications systems interference reports.

Figure 16



4.0 Government Telecommunications and Information Exchange

4.1 Government Telecommunications Agency Services

4.1.1 Performance Indicator

Government Telecommunications Agency (GTA) rates as a proportion of common carrier rates.

Performance Target

Rates competitive with commercial long distance rates.

Achievements

While it is difficult to compare GTA rates with various discount and promotional rates offered by telecommunications suppliers, GTA continues to be competitive. With respect to the commercial non-discounted Direct Distance Dialling (DDD), the savings offered by GTA's Intercity Calling Service were approximately 50 percent.

4.1.2 Performance Indicator

Cost savings to the government from using GTA.

Performance Target

Maintain aggregate 30 percent savings or more (1989-90 estimate) on inter-city voice service.

Achievements

The Government Intercity Calling Service (GICS), in association with the Local Telephone Services (Centrex/EEWD), continue to be the principal common services provided by GTA. However, new services are increasing their impact on the overall GTA portfolio. The estimated overall savings to the government resulting from the provision of GTA services during 1992-93 was 20.8 percent (\$83.3 million) on an estimated retail value of \$401 million.

The GICS, which provides North American and overseas long distance calling and voiceband data services, saw its usage in 1992-93 increased by 8 percent (from 240 million minutes to 260 million minutes) over the previous year, while the cost to departments was reduced by 9 percent (from \$63 million to \$58 million). At the same time, there were major reductions in the commercial long distance rates through the introduction of new discount plans. The net result was a 17 percent saving for the government compared to discounted commercial rates in 1992-93 for the voice network.

4.1.3 Performance Indicator

Administrative costs as a percentage of service costs.

Performance Target

10 percent or less of service costs.

Achievements

Services provided and managed by GTA in 1992-93 resulted in revolving fund revenues forecast at \$203 million and \$115 million billed directly by our suppliers on our behalf for a net total of \$318 million. Administrative costs for this period are estimated at \$20.8 million or 7.1 percent of the service costs.

4.1.4 Performance Indicator

Overall cost-effectiveness of GTA.

Performance Target

Improved cost-effectiveness for administration, billing and consulting services as measured by 1993-94 evaluation; maintain cost-effectiveness for other services.

Achievements

Vigorous efforts to improve cost-effectiveness continue to be made. A comparison of the rates charged with those that would have been levied by commercial carriers showed an overall saving of 20.8 percent for GTA clients.

The Government Consolidated Management System (GCMS) was implemented at eight trial sites. The service provides client departments with on-line Service Order entry, Automated Inventory, Centrex/EEWD equipment, features and billing reconciliation and Management Report capabilities. Additional sites continue to be added according to a selection process established by the GCMS team.

4.1.5 Performance Indicator

GTA share of total departmental telecommunications operating expenditures.

Performance Target

The performance target will be determined based on the findings of the evaluation of the program. A target of 50 percent was proposed for 1989-90.

Achievements

The total government telecommunications expenditures have been estimated to be \$479.7 million for 1992-93. Total billing for GTA administered services, including direct billing by carriers to departments, is \$318.1 million. Thus, the GTA share of the operating expenditures is

66.3 percent. Since 1990-91, the expenditures for Centrex/EEWD services, which GTA provides and manages on behalf of the departments, are included as part of the GTA share of total telecommunications operating expenditures.

4.1.6 Performance Indicator

Client satisfaction with the quality of GTA services and range of services negotiated and provided.

Performance Target

Improved client satisfaction as demonstrated in the 1993-94 evaluation.

Achievements

The Marketing Group Account Management Team developed strategic account plans for the 20 largest customer departments to address business opportunities through the use of GTA services and to determine how GTA can assist in the delivery of their programs. Also, with the creation of focus groups chaired in many cases by customers, GTA is actively seeking input for the development of enhancements on existing services and the introduction of new products to better serve the government community.

GTA provided leadership in the management of telecommunications in the government by actively participating in committee activities. The President participated as a member in the Government Telecommunications Council (GTC) and as Chairman in the Telecommunications Advisory Panel (TAP). GTA also provides the secretariat for both committees. In consultation with GTC and TAP, GTA is continuing to address the subject of performance indicators and standards, focusing on client satisfaction. An associated initiative is the introduction of Total Quality Management in GTA. The newsletter "Focal Point" continues to be published to keep all departments informed of the progress being made under the Telecommunications Architect Program and to generate dialogue on the challenges to be met.

4.1.7 Performance Indicator

New technologies adopted, services provided and new initiatives undertaken to better meet client needs.

Performance Target

Plans in place for network growth and response to new technologies and standards.

Achievements

The "Telecommunications Architect Program Forum '92" was attended by over 300 participants. Its purpose was to inform government colleagues and clients on plans and progress made under the Architect Program and to give them the opportunity to provide direct input pertaining to common networking issues. Client views were consolidated and will be incorporated into further developments of the Architect Program. General consensus was that clients were satisfied with the Architect Program and GTA services as a whole.

In consultation with the TAP, great strides continued to be made in the development of a Government Enterprise Network, following the Government Enterprise Network Architecture (GENA). GTA conducted a pilot project to provide internetworking of different local area networks (LANs) using router technology.

The Government Message Handling Service (GMHS) was introduced to enable the interworking of different E-Mail systems, using the X.400 standard as the common denominator.

The Government Satellite Network (GSN) service, using VSAT technology, is now offered as a regular service. It provides significant savings opportunities both in the use of the network and in the sharing of terminals with co-located departments.

GTA introduced a comprehensive portfolio of teleconferencing services by adding videoconferencing using the Government Videoconferencing Service (GVS), and Business Television (BTV) to the well-established audio conferencing using the Government Teleconferencing Service (GTS).

GTA instituted a point-to-point facsimile service (Telefax) and an enhanced facsimile service (Telefax Plus) which can send a fax to multiple addressees and has a store and forward capability.

GTA inaugurated Tele56, which is an enhanced switched data service transmitting high-speed data at 56 kilobits per second, over specially conditioned trunk lines that form part of the Government Intercity Calling Family of Services.

4.2 Senior Executive Network Services (SEN)

4.2.1 Performance Indicator

Number of users and level of service.

Performance Target

Actual trends to be reported.

Achievements

By March 31, 1993, approximately 1,500 clients had subscribed to the Senior Executive Network (SEN) with the full executive complement of about 4,000 expected to subscribe by the end of 1994. Following two competitive tenders issued by SEN, SHL Systemhouse Inc. was awarded the contracts for client training and for installation and integration support to client departments and agencies.

Treasury Board has approved a Multi-Year Operational Plan (MYOP) submission which extends the Network's mandate and outlines a vigorous expansion initiative striving for full cost recovery in 1994. Full and immediate acceleration of SEN services to the entire executive community was approved by the Board and acceleration activities were well under way by year-end.

4.2.2 Performance Indicator

Growth of information services.

Performance Target

Actual trends to be reported.

Achievements

A major new application was developed during 1992-93 which enables clients to post comments on emerging central agency policies. This bulletin-board-type application, entitled ConnEXions, represents a commitment by Treasury Board both to consult the executive community and to use SEN to do so. SEN committed extensive resources to both the development of the application and modifications to the SEN software in support of the application.

5.0 CORPORATE SERVICES

5.1 Policy Management

5.1.1 Performance Indicator

Achievements against major initiatives and policy targets.

Performance Target

Federal/Provincial and International Relations targets are listed under the section "Achievements".

Achievements

Federal/Provincial Relations

Although no Minister's conferences were held in 1992, a conference of federal, provincial and territorial deputy ministers responsible for culture and historical resources was held in August 1992. The deputy ministers reaffirmed the importance of co-operation to better meet the needs of the arts and heritage communities during this period of fiscal restraint.

During the fiscal year, the Department concluded agreements on culture with Alberta, Newfoundland and Nova Scotia and an agreement on communications technology with Manitoba. Moreover, negotiations with British Columbia concerning an agreement on communications and cultural industries were finalized.

International Relations

As far as international expositions are concerned, given the success of the Canadian pavilion at the international exposition in Seville, the Department is continuing to co-ordinate and manage Canadian participation in Expo 93 in Taejon, Korea. The Department is using a partnership with the provinces, the private sector and the other federal government departments to develop the Canadian presence in Korea, in order to make the Canadian pavilion a real springboard for a series of integrated activities aimed at promoting Canadian business, educational, cultural and diplomatic interests.

A departmental delegation played a central role in the International Telecommunications Union (ITU) Plenipotentiary Conference (APP 92) which made significant modifications to the ITU structure and operations. The changes made will improve ITU efficiency, to ensure that the Union can meet and protect future Canadian interests in international telecommunications and radio frequency management.

The Department also participated actively in the policy discussions of the ITU Americas Telecommunications Development Conference and the marketing activities of Americas TELECOM 92.

Significant inroads are being made in promoting privileged bilateral telecommunications relationships with priority countries. Co-operation agreements, prerequisites to building greater trade and investment momentum, were signed with the People's Republic of China and the Russian Republic whose markets represent significant opportunities for Canadian industry. Under the aegis of existing co-operation agreements, telecommunications policy consultations took place with Japan, China, and Mexico.

The Department effectively represented Canadian communications and cultural interests in several multilateral trade and economic fora including the Organization for Economic Co-operation and Development (OECD) and the Asia-Pacific Economic Co-operation (APEC).

As Chairman of the General Agreement on Tariffs and Trade (GATT) Telecommunications Working Group, a departmental representative helped steer a key element of the Uruguay Round and continues to participate in meetings on the trade rules for telecommunications services. The Department has also represented Canada's interests in the NAFTA negotiations and work continues on its implementation (Bill C-115). The Department continues to work aggressively on behalf of Canadian companies experiencing difficulties in entering foreign markets (ex., MOTOROLA in the United States, Call-Net in the United Kingdom, and Northern Telecom in China). A departmental representative acted as co-chair of the Communications & Information Technology Working Group of the Canada/EC Joint Co-operation Committee to foster greater research co-operation.

In film and television co-productions, the Department negotiated and signed Protocols of Amendment with France and New Zealand and entered into negotiations with a view to updating bilateral agreements with Italy, Spain, Czechoslovakia, Russia and the Commonwealth of Independent States. Bilateral negotiations are ongoing with Japan, Denmark, Sweden, and Poland. A multiparty agreement entitled "The English-language Cinema Plan" was arranged to increase co-production activity between our English-language treaty partners. Similar negotiations continue with our Latin American partners.

The Department participated in a variety of multilateral fora dealing with arts, heritage, and cultural issues including: UNESCO activities relating to the World Decade for Culture and committees on Development, Communication, Information and Informatics, and International Education. The Department continues to contribute to the implementation, revision and accession to UNESCO conventions and recommendations in the cultural area. The Department also participates in a number of committees of the Council of Europe. The Minister participated in the 7th Conference of Ministers Responsible for TV5 (the international French-language satellite television consortium) where full support was given to launch TV5 in Africa and Latin America/Caribbean. The Department expanded its role in the Francophonie through participation in projects of the Francophonie Summit and the Agence de coopération culturelle et technique (ACCT).

The policy work of the Department was further enhanced by international comparative analysis and advice on a range of major issues and initiatives such as telecommuting, violence on television, Canada-EC telecommunications policy developments, cultural regionalism in media institutions, and cultural industry statistics. In addition, the first Integrated International Trade Development Plan was developed in the Department following broad industry consultation.

5.2 Corporate Management

5.2.1 Performance Indicator

Ratio of Corporate Management to total Department (in dollars and FTEs).

Performance Target

Maintain or improve current ratios.

Achievements

Fiscal Years	% of dollars	% of FTEs
1988-89	5.5	10.7
1989-90	5.1	10.7
1990-91	4.5	10.8
1991-92	4.3	10.4
1992-93	4.7	9.7

The ratio of Corporate Management's financial resources to those of the Department increased in 1992-93 as a result of the allocation of resources (\$4.2 million) to the information technology modernization project. If this special project is excluded, the ratio decreased to 4 percent.

5.2.2 Performance Indicator

Achievements against major initiatives and policy target.

Performance Target

Develop options in areas listed under the section "Achievements".

Achievements

Communications Infrastructure

The Department developed and carried out the preliminary implementation of an integrated communications infrastructure to provide the basis for common access to corporate data, electronic mail and other services for all departmental employees. The Communications Infrastructure project was divided into four main work activities: fact gathering, engineering, implementation and post-implementation evaluation. Based on the recommendations of the engineering study, major communications hardware components to be used for the delivery of major informatics systems were acquired from Stentor (Bell Canada) through a lease-to-buy agreement. This project will be fully implemented in 1993-94. A post implementation study will be conducted in the 1993-94 fourth quarter.

CP-6 Off-Load

Treasury Board had approved \$4.2 million for this project in 1992-93. An implementation plan for off-loading CP-6 mainframe applications to alternative processing environments was developed based on extensive consultation with clients. The processing components of the proposed new communications infrastructure were identified and resolved as a consequence of this project. Key hardware and software components required as part of the CP-6 Off-Load have been acquired. However, procurement delays have resulted in products being delivered later than expected. The bulk of the conversion work will be performed in 1993-94 through the use of consultants and a conversion cell staffed by students. As a result of the procurement delays, \$710,000 was rolled-over to fiscal year 1993-94 to complete this project.

Migration of CP-6 Applications

The Department planned and carried out the initial development of a Material Management Support System (MMSS) incorporating functions of the National Material Control System (NMCS) being off-loaded from the CP-6 mainframe.

Roll-out of the Single Operating Budget (SOB) System

Since April 1, 1992, the Allotment Reporting & Control System (ARCS) has been made available to all branches at the DG level. The system was modified to accept salary budget and commitment transactions as well as salary expenditures through an electronic transfer from DSS tapes. The Salary Planning Module (SPM) was delivered in March, 1993. A quick salary calculator function has been integrated to an already enriched set of basic system features.

In replacement to the CP-6 based National Capital Region-Financial Integrated System, a non-SQL prototype has been completed and tested satisfactorily.

Human Resources Systems

The Classification/Staffing system (Personnel Action Tracking System — PATS) was implemented April 1, 1992, and piloted in the Human Resources Management Branch for six months. During this period, extensive additional functionalities were developed and successfully rolled-out. A fully operational version of PATS has been implemented in each of the sectors and in one region as of March 31, 1993. Also, major enhancements were made to the Pay and Benefits Systems to provide common functionality with PATS. This system is in the final packaging for roll-out to the user community.

A PC-based version of the Comprehensive Position-Based System (CPBS) from Environment Canada has been imported to the Department. Work is currently underway for its implementation.

Strategic Plan for Investment in Information Technology

A Canadian software product (Naturel) as well as server based hardware were acquired to address special needs related to briefing and policy notes being prepared in the Department. The Department also worked in the analysis and development of electronic forms management tools. Several products were evaluated and a pilot of a Canadian product called EFORM is underway. Finally, another initiative undertaken in 1992-93 was the review of managers' needs throughout the Department relating to corporate informatics services available at their desktop. This study will form the basis of future development activities.

Videoconferencing

The Department's Strategy Committee approved procurement of an Executive Videoconferencing System (anticipated in 1993). A Request for Proposals (RFP) has been issued to selected service providers.

Departmental Informatics Steering Committee (DISC)

This committee was created to effectively address and resolve departmental informatics issues and strategic orientation. In addition, a new departmental sub-committee was formed to represent the broad spectrum of informatics expertise in the Department.

Information Technology and Systems Plan

The scheduled update to the Strategic Information Management Plan, which was sent to Treasury Board in 1990, was postponed due to ongoing negotiations with other areas of the Department concerning the informatics architecture. Decisions with respect to a comprehensive update of the document will depend on available resources in 1993-94.

5.2.3 Performance Indicator

Systems Availability.

Performance Target

Specific targets for 1992-93 are listed under the section "Achievements".

Achievements

Overall system availability for three of the four primary computer environments (Allotment Report and Control System (ARCS), Correspondence Control and Remote Job Entry) was targeted at 98 percent availability during normal working hours. Due to funding constraints which necessitated a reduction in maintenance support, the fourth computer environment (CP-6) was subjected to a reduced 95 percent availability target.

Overall system availability of the communications networks including the fibre optic link from Headquarters to CRC, the cross-Canada communications network and the Develnet system was targeted at 98 percent during normal working hours.

Through prudent management of system resources, most CP-6 hardware maintenance was re-scheduled to the off-hours or the system was kept operational at reduced capacity when problems arose, minimizing the impact on users and the off-load project. This resulted in up-time exceeding 99 percent, considerably surpassing the target of 95 percent.

All other systems availability targets were also exceeded for the fiscal year.

	Availability Target (%)	Achieved (%)
Overall Systems Availability	98	99.3
Overall Network Availability	98	99.9

Part II:
Administrative Accountability

1.0 Program and Resource Management Policy

LIVING WITHIN BUDGET AND GOVERNMENT RESOURCE DECISIONS

1.1 Performance Indicator

Requests for additional funding limited to policy items; price adjustments provided to all departments for unpredictable and unavoidable workload pressures.

Performance Target

Achieving planned results within approved resource levels.

Achievements

In 1992-93, a gross amount of \$659 million was included in the Main Estimates for budgetary and non-budgetary expenditures. Of this amount, \$226 million corresponded to revenues credited to the vote. The balance of \$433 million requested in parliamentary appropriations had, before the tabling of the Main Estimates, been cut by nearly \$6 million as part of the preparation of the budget speech (\$35 million over five years). Additional cuts were made at the time of the budget speech, resulting in reductions of \$1.8 million and \$760,000 in the operating and communications budgets respectively.

The major components of the Department's budget are as follows: \$119 million was allocated to salaries (18.1 percent) and \$177 million was allocated to specific programs, where there is extremely limited flexibility for reallocation. The postal subsidy (\$112 million) accounted for 17 percent of the total resources allocated to the Department. The Government Telecommunications Agency (GTA) manages a revolving fund which was allotted a budget of \$216 million in 1992-93. GTA provides telecommunications services to federal departments and agencies.

To fund new initiatives, additional budgets totalling \$34 million were allocated to the Department, and \$18 million of this amount went to the Book Publishing Industry Development Program, while \$5.7 million went to various contributions to federal-provincial projects and agreements in the cultural field. New resources were also allocated to the Spectrum Management Program (\$4.9 million) and the Communications Technology Incentives Program (\$7.3 million). The resources allocated to spectrum management will make it possible to generate some \$100 million in new revenue over five years. This revenue will go to the Consolidated Revenue Fund.

Having put in place a single operating budget pilot project, the Department modified the expenditures review process to bring it in line with this management philosophy for this system. The fifth- and ninth-month reviews have been combined in a single semi-annual review. The Department's financial situation was examined in depth, from the point of view of the Department's commitments and the new priorities. This examination gave each manager an opportunity to re-evaluate his or her operational plans and reallocate the budgets to reflect current realities. Managers made effective use of the flexibility provided by the single operating budget system and requested a reprofiling of funds to 1993-94, within the limits imposed - that is, 2 percent of the single operating budget total.

Finally, the Minister of Finance's Economic and Fiscal Statement of December 2, 1992, imposed an additional \$3.5 million reductions in the Department's operating budgets. In follow-up to this new reduction, and in order to deal with the budget cuts that will be imposed on the federal administration in future years, the Department of Communications established a strategic review process for all departmental programs and activities. The results of this review will be available in the 1993-94 fiscal year.

EXPENDITURE MANAGEMENT CYCLE

1.2 Performance Indicator

Timely submission of accurate and adequate financial and program data.

Achievements

In order to contribute to the proper completion of the government-wide expenditure management cycle, the Department provided, in a timely manner, the plan for implementation of the cuts announced in the Minister of Finance's Economic and Fiscal Statement. For determination of 1993-94 reference levels, the changes that affected preparation of the Multi-Year Operational Plan (mainly application of the single operating budget) and the impact of the Economic and Fiscal Statement were taken into account.

The content of the Main Estimates were substantially modified as a result of application of the new Operational Plan Framework with a view to providing more relevant information on the Department's strategic orientations, programs and activities. The document was ready in time for tabling.

2.0 Personnel Policy

STAFF TRAINING

2.1 Performance Indicators

- The degree to which training provided corresponds with identified needs.
- The extent of attendance at mandatory management training courses.
- The extent of attendance at mandatory communications training courses for departmental spokespersons.

Performance Targets

- Training evaluated and validated, appropriate follow-up action taken.
- Training provided in accordance with policy.

Achievements

Training is provided in line with training plans and needs identified jointly by the employee and the supervisor in the employee's performance review appraisal report and the departmental commitment to provide a three-day minimum entitlement to training for all staff. Analysis of actual training also provided useful data on employees' needs.

Training of departmental spokespersons was provided to 75 employees by an Ottawa-based consulting firm in 1991 and 1992. Employees can also attend the course offered by Training and Development Canada.

The Training and Development Section of the Department offered 99 courses during the 1992-93 fiscal year to a total of 843 employees.

CONFLICT OF INTEREST AND POST-EMPLOYMENT CODE

2.2 Performance Indicators

- Completion rate of Employee Certification Documents and Confidential Reports as required.
- Results of direction to specific employees concerning divestment of assets or curtailment of activities.
- Exit interviews conducted for employees subject to post-employment compliance measures.
- Incidence and results of non-compliance with the Conflict of Interest and Post-Employment Code.

Performance Targets

Targets were developed in areas listed under the section "Achievements".

Achievements

The Department met the requirements of the Conflict of Interest and Post-Employment Code by having all employees complete the appropriate form when they are appointed, when their status changes and when there is a change in their activities that could lead to an apparent or real conflict of interest situation.

PERFORMANCE REVIEW AND EMPLOYEE APPRAISAL

2.3 Performance Indicators

- Completion rate of performance review and employee appraisal documents.
- Distribution of appraisal levels.

Performance Targets

- All eligible employees appraised.
- Departmental distribution of appraisal levels consistent with service-wide policy standards.

Achievements

The Department continues to do very well and achieved in 1991-92 a completion rate of 98 percent of its performance appraisals representing 2,151 appraisals.

All-Employee Survey

The Department's second all-employee survey was carried out in December 1991 and January 1992. Preliminary results from the survey were available in May 1992. The results were shared with employees and management teams in a series of townhall meetings over the course of the summer and fall. The meetings provided opportunities to validate the survey findings and probe selected issues in more detail. Two reports were prepared on the results of the survey and townhall meetings, one containing highlights and recommendations and the second a detailed and technical account of the data gathering procedures and data analysis. Results of the survey and townhall meetings suggest several major issues.

1. Employees' concerns with a lack of opportunities for advancement, and career planning and with a lack of application of merit in hiring and promotion. Our analysis of other government department surveys suggests these concerns are endemic to government.
2. Concerns with the delivery of personnel functions and activities primarily the time it takes to do classification and staffing activities and, to a lesser extent, the delays in obtaining pay and benefits services.
3. Making the organization more responsive to the concerns and needs of lower level employees was identified as a significant issue. There are significant and systematic differences in the experience of work moving up the organizational hierarchy with senior managers much more likely to have high morale, and to view the organization as caring and concerned about employees compared to lower-level employees.
4. Although the majority of employees are at least moderately satisfied with the supervision they receive, a significant minority identified a lack of people management skills on the part of their supervisor as a problem. The need to improve upon specific people management skills has also been identified by other activities in the Department (i.e., upward feedback for managers).
5. A lack of vision, or direction in the Department, a lack of trust in senior management, and the rejection of Department's mission or overall mandate due to a failure to understand the rationale for spectrum management, telecommunications and arts and culture being under the same roof were also issues raised by significant minorities of employees.
6. Significant minorities of employees also expressed concern about declining levels of resources available to do the job, perceived declines in the level of commitment to provide service to clients and increased burnout.

Senior management has targeted the Department's response to developing a plan to increase the people management skills of the management team and to increase employees skills and knowledge to assist in their career development and planning. The Deputy Minister met with all managers and with all employees during the spring period to, among other things, comment on the all-employee survey. In addition, the Department is currently undertaking a major strategic review of its activities which should help clarify the question of the Department's mission, direction and mandate.

3.0 Administrative and Information Management Policy

CONTRACTING

3.1 Performance Indicator

The percentage of competitive to total contracts.

Achievements

The Department issued 954 service contracts in fiscal year 1992-93, of which 819 or 86 percent were sole source contracts. The following table provides details on these contracts:

Sole Source Service Contracts			
Value (\$000s)	Number	%	Average Value (\$)
0 - 10	538	65.7	3,771
10 - 25	160	19.5	17,611
25 and more	121	14.8	35,710

It should be noted that only 12 percent of the sole source contracts were higher than \$25,000.

In order to maintain its position as a leader in the fields of telecommunications, research, museology and conservation, the Department uses sole source contracts to obtain specialized expertise.

RECORDS MANAGEMENT

3.2 Performance Indicator

Records under approved retention and disposal schedules in relation to total record holdings.

Achievements

Of the 24,869 active operational type records, 16,205 records are under approved retention and disposal schedules. Disposal schedules for the remaining operational records have been established and will be submitted for approval to the National Archivist according to the agreement on a Multi-Year Disposition Plan signed in 1992 between the Department of Communications and the National Archives of Canada. All schedules pertaining to 24,983 housekeeping type records are covered under the National Archives of Canada's "General Records Disposal Schedules of the Government of Canada".

4.0 Official Languages Policy

SERVICE TO THE PUBLIC IN BOTH OFFICIAL LANGUAGES

4.1 Performance Indicator

Review the list of offices where significant demand must be met in accordance with the *Official Languages Act*, the Charter of Rights and Freedoms, and the Official Languages (Communications with and Services to the Public) Regulations.

Performance Target

The list of these offices is updated and forwarded to the Treasury Board Secretariat and to the managers concerned.

Achievements

The Department proceeded with a study of the service area of each of its offices during the last fiscal year, in order to determine where service must be provided in both official languages. The managers concerned were informed of the results of this study and established the mechanisms needed to provide services in both official languages, as required under the regulations. This study was ratified by the Treasury Board Secretariat.

4.2 Performance Indicator

Inform the public of the availability of various services and programs in both official languages.

Performance Target

Ensure that all information posted and all messages disseminated through the various media are in both official languages.

Achievements

The Treasury Board Secretariat symbols are displayed at reception in all our regional offices where the Department provides services in both official languages. Only one office is unable to provide services in both official languages at this time. Steps are now being taken to correct this situation.

The Department ensures that its messages, informing the public of the services it provides, are disseminated in both official languages. During the 1992-93 fiscal year, this policy was not respected on two occasions. A departmental policy is now being developed to prevent such incidents in future.

As part of its action vis-à-vis the telephone companies to ensure the linguistic quality of entries in the blue pages of municipal telephone directories, GTA signed agreements with Maritime Tel and Bell Canada (Quebec and Ontario) stipulating that all texts for the directories must be translated by the Secretary of State. Negotiations between GTA and other telephone companies are proceeding with a view to nation-wide implementation of this approach.

4.3 Performance Indicator

Provide bilingual reception and service in the language chosen by the client at all times.

Performance Target

Ensure bilingual reception and service to information requests are provided in the official language chosen by the client at all times.

Achievements

No complaints were received regarding the linguistic quality of services provided to the public. In those of the Department's offices where there is no bilingual staff, toll-free telephone lines allow for services in both official languages and/or calls are redirected to an office providing bilingual service.

Voice Mail Survey

The Department undertook a study of the behaviour and attitudes of external clients (n=69) as well as employees (n=69) concerning the utility and effectiveness of the Department's voice mail system. In addition, 83 calls were made to 22 departmental offices across Canada to check on the availability of after hours service or message taking facilities. Data was collected during the April to August 1992 period. It was found that

1. a significant minority of external clients (30 percent), who might be expected to encounter voice mail when contacting departmental services, report that they have never done so. Clearly the system does not affect all clients.
2. a majority of both employees (73 percent) and clients (67 percent) who have experience with voice mail rated their overall satisfaction with the system as high. Employees are highly likely to believe either that voice mail has no effect or else it increases both the number of calls returned (96 percent) and the speed with which calls are returned (95 percent). Similarly, clients believe that voice mail has either no effect or else that it increases the speed with which calls are returned (81 percent) and that departmental employees are committed to returning their calls (95 percent). Most clients think that the Department's voice mail system is as good or better than other systems the client has encountered.
3. A majority of employees in the sample, who had functioning mail boxes, set up their mail box as recommended. That is, they include their name (96 percent), bilingual content (73 percent) and a description of the revert-to-operator feature (55 percent) in their greeting. In the vast majority of cases (98 percent), the revert-to-operator feature leads to a person rather than another mail box. In most cases (93 percent), the revert-to-operator feature leads to a person within two rings. In addition, in the majority of cases (91 percent) the message regarding the availability of the person is correct.

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4. Employees and clients identified recorded greeting that were too long, system failures, and for a minority of clients (19 percent), decreased speed of service as problems with the system. Additional potential problems included voice mail subscribers who had improperly initialized mail boxes (i.e., no greeting, just a message that the caller had reached a particular telephone number); subscribers who did not explain how to exit the mail box to talk to a person, a small number of employees in the sample who did not return the calls despite repeated attempts to contact the employee.

LANGUAGE OF WORK

4.4 Performance Indicator

Carry out a triennial survey of employees in the National Capital Region (NCR) to assess their degree of satisfaction with the availability of services and work instruments in the official language of their choice.

Performance Target

The results will allow management to develop the necessary corrective measures.

Achievements

In March 1992, the Department conducted a survey of its employees in the NCR, northern and eastern Ontario, the Montréal Metropolitan Area and New Brunswick. The survey results will be communicated to Treasury Board Secretariat in the near future.

4.5 Performance Indicator

Offer employees the training and development courses in the official language of their choice and, where possible, offer them to participate in an exchange program.

Performance Target

Employees are able to obtain training in the official language of their choice and, where necessary, are able to discuss technical and scientific problems in French. If they wish, they may participate in an exchange program.

Achievements

The Department provides all its training courses in both official languages in the NCR. However, some French-language courses had to be cancelled because of a lack of demand. During the 1992-93 fiscal year, 155 employees, including 2 Anglophones, took 19 French-language courses, while 688 employees, including 305 Francophones, took English-language courses. The Department will continue to encourage its employees to register for training and development courses provided in the official language of their choice. The Department will continue to provide a language training follow-up program, as well as a French-language centres of excellence development and promotion program. Within the framework of the latter program, seven French-language scientific lectures were given in 1992. No demand has been received during the fiscal year relating to the exchange program.

4.6 Performance Indicator

Ensure that employees can participate in management and information meetings in the official language of their choice.

Performance Target

Employees can participate in management and information meetings in the official language of their choice.

Achievements

According to the language-of-work survey held in March 1992, 90 percent of the respondents indicated that they had taken part in meetings. Of this number, 92 percent said that the persons chairing the meetings or conducting the information sessions had invited the participants to express themselves in the official language of their choice.

4.7 Performance Indicator

Inform employees of their rights to receive their work instruments in the official language of their choice.

Performance Target

Employees will receive their work instruments in the official language of their choice.

Achievements

In the language-of-work survey, 94.5 percent of employees in bilingual regions reported that they received their work instruments in the official language of their choice.

4.8 Performance Indicator

Ensure that personal and central services are available at all times in the official language chosen by the clients. To this end, the managers can use the language training offered by the Public Service Commission and private institutions. They can also use imperative staffing, when the policy permits it.

Performance Target

The percentage of incumbents of personal and central services positions providing services in the language chosen by clients will increase respectively from 81.6 percent to 88 percent and from 78.2 percent to 85 percent by 1992.

Achievements

During the year, the percentage of incumbents of positions identified as bilingual and providing personal services who met the language requirements of their position rose from 82.3 percent to 85.4 percent. Since the situation is continuing to improve, the Department should attain its objective (88 percent) by the end of the 1993-94 fiscal year.

During the same period, the percentage of incumbents of positions identified as bilingual and providing central services rose from 83 percent to 85.3 percent. The Department attained the objective it had set for itself. In addition, 95 percent of the respondents in the language-of-work survey conducted in the NCR, Metro Montréal, northern and eastern Ontario and New Brunswick reported that they were satisfied with the linguistic quality of the personal and central services.

4.9 Performance Indicator

The employees will be supervised and their performance will be appraised in the official language of their choice.

Performance Target

Oral and written communications between supervisors and their employees, as well as the employees' performance appraisals, will be in the employee's official language.

Achievements

According to the language-of-work survey, 96.1 percent of the respondents reported that they received their performance appraisal in the official language of their choice. In addition, 88.6 percent of the respondents has indicated that they were able to work in the language of their choice and that participation of both Anglophones and Francophones in the divisions was sufficient to create an environment favourable to the use of both official languages.

4.10 Performance Indicator

The Department will bilingualize its computerized systems in accordance with the requirements set out in TBS Circular 1988-31 as described in the Information Management Manual.

Performance Target

The deadlines identified in this circular will be respected.

Achievements

The results of the above-mentioned language-of-work survey indicate that the Department is implementing a program to bilingualize its computerized systems in accordance with the requirements set out in TBS Circular 1988-31:

- a) 88.5 percent of the respondents use software written in the official language of their choice;
- b) 90.3 percent of the respondents possess computer manuals written in the official language of their choice; and
- c) 92.5 percent of the respondents use a keyboard that is in the official language of their choice.

Some software is not available in both official languages.

The Department has played a leading role in development and adoption of a new national standard for creation of a completely Canadian keyboard that will not be detrimental to the interests of Francophones. The departmental policy respecting the purchasing of keyboards for computers encourages the purchase of "Canadian" keyboards.

EQUITABLE PARTICIPATION OF BOTH OFFICIAL LANGUAGES COMMUNITIES

4.11 Performance Indicator

Through its recruiting programs, the Department will invite qualified Francophones and Anglophones to participate in staffing activities for positions in the following employment categories both globally and in specific regions.

Achievements

Francophone and Anglophone Participation in Certain Employment Categories (in percentage)				
	<i>Performance Targets</i>	<i>Achievements</i>		
Global Situation	Long Term Franco. Partic. 1993	March 31, 1991	March 31, 1992	March 31, 1993
Management	30	35.8	39.1	35.2
Scientific and Professional	26	26	27	28.9
Technical	30	25.4	26.1	27.5
Operational	37	23.6	25.5	21.7
Regions	Long Term Anglo. Partic. 1993	March 31, 1991	March 31, 1992	March 31, 1993
NCR (Headquarters and CRC)				
- Administrative and Foreign Services	63	56.3	54.4	53
- Administrative Support	63	40.6	41.2	40.8
- Global	65	60.6	59.6	58.4
Quebec Region				
- Administrative and Foreign Services	14	3.9	5.2	3.5
- Technical	12	7.3	2.7	1.3
- Administrative Support	12	7.4	5.2	5.1
- Global	12	8.7	6.8	5.0
New Brunswick				
- Administrative and Foreign Services	67	32	38	41
- Technical	67	60	60	63
- Administrative Support	65	23	24	25
- Global	64	40	46	41

As the above table shows, the Department is continuing to make progress as far as equitable participation of both official language communities in its organization is concerned.

LANGUAGE TRAINING

4.12 Performance Indicator

Provide a language training program that will enable employees to meet the language requirements of their positions and/or develop their abilities in their second language.

Performance Target

Employees receive the basic language training they need to perform the duties of their positions or develop their abilities in their second language.

Achievements

The Department spent \$138,000 on language training for its employees. Of the 342 employees who registered for training courses, 54 opted for basic training, while 288 opted for development. As a result, the percentage of employees meeting the language requirements of positions identified as bilingual increased. The percentage of supervisors meeting the language requirements of their position rose from 78.4 percent to 82.1 percent during the last fiscal year. A language training plan was developed for each employee who was the subject of a non-imperative appointment. The Department has continued to reimburse employees who have taken language training courses outside working hours and has continued its research on innovative techniques, such as use of self-instruction software.

TRANSLATION

4.13 Performance Indicator

The translation co-ordination unit will ensure that requests comply with the standards established by the Secretary of State and set out in our departmental policy regarding official languages.

Performance Targets

- Except for press releases and certain prestige documents, the departmental translation service will not translate documents of less than 500 words.
- The Department will strive to limit the number of words translated annually to the envelope allocated.

Achievements

Despite the control mechanisms available to us, the Department had some 5,203,000 words translated even though the envelope was for only 4,451,697 words. In order to further limit translation of texts of fewer than 500 words, the Department will impose a surcharge on managers for translation of such texts. In addition, the Department has distributed its translation envelope among the sectors and regions.

OFFICIAL LANGUAGES INFORMATION SYSTEM (OLIS)

4.14 Performance Indicator

The Department will carry out a complete review of the data in the OLIS so that all information relating to the linguistic status of positions and their incumbents will be accurate.

Performance Target

OLIS will accurately reflect the situation with respect to positions and their incumbents.

Achievements

The Department will carry out a complete review of the data in the OLIS so that all information relating to the linguistic status of positions and their incumbents will be accurate.

MANAGEMENT

4.15 Performance Indicator

Development of a sectorial/regional official languages plan for each sector/region and implementation of an accountability management mechanism. These plans will constitute management contracts between the Deputy Minister and his managers.

Performance Targets

- All the objectives identified in the sectoral plans will be met.
- The performance appraisal of all senior managers will cover their success in implementing their respective plan.

Achievements

The Department plans to put in place an integrated human resources information system by the end of the 1993-94 fiscal year. At the time of the data transposition exercise, the Department will once again purge the OLIS.

BILINGUALISM BONUS

4.16 Performance Indicator

Check departmental files to ensure that only eligible employees receive the bilingualism bonus.

Performance Target

Only qualified employees will receive the bilingualism bonus.

Achievements

Employees responsible for the conduct of language exams continued to provide accurate information to the pay and benefits section, in order to ensure that only qualified employees receive the bonus. Any discrepancies are investigated immediately and corrective measures are taken.

5.0 Corporate Review

5.1 Performance Indicator

Implementation of the Treasury Board policies respecting program evaluation and internal auditing, as well as observance of the standards of the Office of the Comptroller General (OCG) in those areas.

Performance Target

The Department has objective, credible and pertinent information on its programs' performance and on the efficiency of the systems and practices in place. The Department uses this information to manage its programs and operations in a cost-effective and responsible manner.

Achievements

In accordance with the guidelines issued by the OCG, the Corporate Review Branch is conducting studies and independent reviews to provide strategic and timely information on matters relating to corporate management.

When it last assessed the Department's evaluation and auditing functions, the OCG made some very favourable comments that indicate clearly that the expectations regarding performance have in large part been met.

Integration of Evaluation and Auditing Functions

As part of the review of current management methods and practices in the Department, the Internal Audit and Evaluation directorates were combined in 1992 to form what is now called the Corporate Review Branch. We noted that, in addition to responding to the desire expressed by the Department's managers for a single review process, rather than two separate ones, this integration of services has made possible better co-ordination of the two types of studies and is increasing the heuristic value of both the auditing and the evaluation through the synergy it creates.

A good example of the success of this integration is the review of the Canadian Workplace Automation Research Centre's national program for the exchanging of specialized personnel. This review reflects senior managements' concerns with respect to matters that are traditionally associated with the two disciplines. However, it should be noted that not all reviews are integrated (that is, not all involve both evaluation and auditing). The Branch is continuing to what could be called "traditional audits" - for example, the audit of the heritage network and the audit of travel and relocation expenses now being conducted - as well as evaluations that do not include auditing elements - for example, the evaluation of international marketing and research and development initiatives.

The Corporate Review Branch decided to establish a mission statement. The work leading to the adoption of this statement proved to be a useful tool for the integration of the teams and cultures, perhaps even more than the statement itself, which, we believe, is essential. This mission statement will guide us in the establishment of work plans in close co-operation with senior management and other managers. In addition to guiding the work plan, this mission statement sets out the values that are fundamental for our organization - namely, partnership and team work in the common search for solutions to management problems.

Study Planning

The Branch's work plan flows both from the Operational Plan Framework (OPF) and special needs likely to arise from the changes made in the organization. Respect for the proposed schedule is not the only criterion for determining whether a review should take place: a review will be conducted only when the need is felt. Moreover, this adaptiveness of the Corporate Review Branch was fully recognized by the OCG in its most recent assessments.

The OPF was revised in the past year to better reflect the organization's restructuring. The Department intends to redefine the audit and evaluation universe, as well as the structure of the elements to be studied in accordance with the new OPF.

Integration of Functions in the Department

According to the OCG, the Corporate Review Branch is well-established and plays an integral role in the strategic management of the Department. The OCG recognized that, because the Branch has a multidisciplinary team, it is able to conduct studies that are highly professional at all stages, from planning to communication of findings. Moreover, the Branch's contribution is not limited to studies as such, since it is involved in a large range of activities (advice to management, special investigations, development of client satisfaction and performance indicators, development of service standards, co-ordination of outside reviews, liaison with the central agencies).

The Corporate Review Branch also helps the Department's managers develop and implement management and accountability frameworks when programs are being developed. These frameworks are an important management tool. They describe the type of information and data that should be collected to contribute to corporate management.

Coverage

With the exception of new initiatives, new programs and the telecommunications policy, all the Department's policies and major programs have been reviewed at least once.

This year, the Corporate Review Branch also completed evaluations of two major ERDAs namely, the Canada-Quebec and Canada-Ontario (Phase II) agreements on culture.

The 1992-93 fiscal year was a very active one for the Corporate Review Branch: in this annual management report, we are communicating the results of eleven studies, the great majority of which were major reviews. In addition, during 1992-93, we completed five evaluation frameworks: the National Strategy for Integration of Handicapped Persons, the partnership agreements between Canada and Saskatchewan on communications development and culture, the co-operation agreement between Canada and Newfoundland on cultural industries, and the co-operation agreement between Canada and Nova Scotia on cultural development.

Use of Study Findings

Obviously, one of the fundamental aspects of a healthy review function is the use that is made by the Department of the findings to confirm or modify programs, even if that use is difficult to pin down. The OCG pointed out that the studies led to significant changes in operations and in the mechanisms for the carrying out of the projects that were reviewed. In 1991-92, we reported on the evaluation of the Book Publishing Industry Development Program (BPIDP). That evaluation provided another example of the value added through evaluation. In effect, evaluation provided crucial and credible data aimed at reformulation of government policy, reorganization of the program in accordance with a new approach and justification for the obtaining of additional government funds.

The evaluation of the international development marketing and R&D initiatives, which was referred to in this year's annual management report, provides another example of the value added through corporate reviews. The evaluation provides crucial and credible data on the program's impact and the effectiveness of the partnerships, and allowed for development of alternative solutions. While the study found that the Department played an important and unique role in support for Canadian exports in the telecommunications field, it also revealed that the Department could obtain better results if a more strategic approach were adopted. The Department has since completely reorganized not only this function, but also management as a whole of international relations, by adopting the direction proposed by the evaluators. The result has been greater effectiveness and substantial savings.

Communication of Findings

The reports have to be complete and balanced in their presentation of programs' accomplishments and impact. In addition, the Branch endeavours to present the findings at a level of aggregation that satisfactorily reflects the audience's concerns, and it shares the findings with the parties involved throughout the process.

Communication of the findings outside the Department is also important. All the studies conducted by the Branch are in the public domain; copies of the reports are sent to the OCG and special presentations for officials of the central agencies and other departments are prepared on request. In addition, findings are communicated regularly at professional conferences, such as that of the Canadian Evaluation Society.

The following is a list of the various studies that were reported on in the previous AMRs and in the present one. The reader can refer to them for information regarding the main observations and conclusions pertaining to the programs reviewed.

LIST OF STUDIES REPORTED IN THE ANNUAL MANAGEMENT REPORTS (AMR)

1989-90 AMR

1. Evaluation of the Government Telecommunications Agency
2. Evaluation of the Confederation Centre of the arts
3. Evaluation of the Canada-Manitoba Subsidiary Agreement on Cultural Enterprises
4. Evaluation of the Canada-Manitoba Subsidiary Agreement on Communication Enterprises
5. Evaluation of the Canada-Quebec Subsidiary Agreement on Communications Enterprises Development
6. Evaluation of the Canadian Conservation Institute
7. Evaluation of the Exhibit Transportation Service
8. Evaluation of the Movable Cultural Property Program

1990-91 AMR

1. Evaluation of the Telecommunications Executive Management Institute of Canada
2. Evaluation of the Spectrum Management
3. Evaluation of research laboratories
4. Evaluation of the Sound Recording Development Program
5. Evaluation of the use of the Mansis system in the Central Region

1991-92 AMR

1. Evaluation of the Movable Cultural Property Program (second evaluation)
2. Evaluation of the Book Publishing Industry Development Program
3. Study of the Evaluation and Auditing Functions
4. Survey of Canadians' reading habits

1992-93 AMR

1. ADMCM sector employee survey of computerized leave application system pilot project
2. All-Employee Survey
3. Survey of Client Satisfaction with Spectrum Management Services
4. Voice Mail Survey
5. Canada-Ontario Subsidiary Agreement for Cultural Development
6. Evaluation of Canada-Quebec Subsidiary Agreement on Cultural Infrastructures
7. Evaluation of International Marketing and International Research and Development
8. Evaluation of the Orchestra Marketing Fund
9. Review of the Single Operating Budget Pilot Project
10. Review of Canadian Workplace Automation Research Centre's National Program for the Exchange of Specialized Personnel
11. Audit of the Canadian Heritage Information Network

6.0 Financial Administration Policy

6.1 Performance Indicators

Timeliness and accuracy of operational planning, budgeting, controls, financial management reports, financial management systems and accounts management.

Achievements

The guiding principle underlying financial administration functions at the Department is the proactive offer of services to managers. Financial services focused on development of easy-to-use systems, provision of appropriate advice and training with respect to finances are of the utmost importance in the context of the single operating budget system and the budgetary restrictions placed on the federal administration. The challenge facing Financial Services is to design tools suited to the managers' needs that they can use at each stage of the decision-making process.

In 1992-93, the budgeting and budgetary control processes and systems were modified and adjusted to reflect the needs connected with the Single Operating Budget (SOB), taking into account the restrictions imposed by the parliamentary appropriations structure. The Multi-Year Operational Plan development process allows for establishment and integration of the Department's priorities and objectives.

In the context of the single operating budget, the Department of Communications has adopted a policy of maximum delegation of financial authority to operational managers. Consequently, the role of Financial Services is changing in order to provide better guidelines and more judicious, relevant advice to ensure optimum and effective use of the funds allocated to the Department.

New techniques were used to develop the sectoral and regional wage envelopes, and a wage envelope management system was developed over the course of the year. The objective of this system is to give managers a better indication as to available resources and enable them to assess the financial consequences of the decisions they make every day. It is a tool which managers will be able to use to allocate wage resources in an optimum fashion, and is designed to make it possible to report to senior management on the Department's overall financial situation.

Under the SOB system, it is imperative that senior management have an overview of all departmental resources, rather than information that is compartmentalized by expenditure category. Consequently, Financial Services has modified the format, frequency and content of the financial reports. A system of monthly reports has been developed that focuses on analysis of the data contained in the reports. The expenditure review process has also been modified to reflect the needs connected with the SOB.

Accounts management is done in such a way as to minimize the number of outstanding invoices and the resulting interest payments. Revenue was collected and deposited promptly. As a result of good cash management, government funds were used effectively and efficiently.

Review of Single Operating Budget Pilot Project

In 1992-93, the Department of Communications experimented on a pilot-project basis with the Single Operating Budget (SOB) system, and a review was done at the end of the first year of operation, in order to take stock. A number of observations were made. Among the most

important are the observations that the increased flexibility is welcomed enthusiastically by the managers, who feel more responsible for their resources, especially with respect to management of wage expenditures. Although some change associated with introduction of the SOB has already been noted in management culture, there is a consensus that all the cultural changes have not yet taken place, since the review took place only at the end of the first year. In addition, a computerized management system covering all types of spending, including wages, would make it possible to maximize the benefits of the new system.

The most important effect is no doubt the change in the way managers perceive wage expenditures. Managers will now be more aware of the costs connected with the decisions they make regarding human resources, such as authorization of overtime and reclassification of positions.

A number of people believe that the level of output or of results will not vary substantially, despite the flexibility of being able to choose the optimum input mix more quickly, owing to the reduction in resources that has taken place in recent years.

The impact of the single operating budget on operations varies from sector to sector, depending on the type of operation and the level of delegation of authority granted to managers.

A few managers mentioned that they will, in the short term, continue to view their budget as being composed of different resource categories.

ADMCM Sector Employee Survey Computerized Leave Application System Pilot Project

The Corporate Management Sector (ADMCM) had put in place a new computerized leave application system that was used with the electronic mail. This initiative was installed as a pilot project for all ADMCM employees and was aimed at enhancing the quality and efficiency of communication in the Department. The pilot project was in place from June 22 to December 18, 1992.

In order to determine whether the pilot project reached its goals and if it should continue, a survey was conducted with all ADMCM employees. The main interest in the survey was to evaluate the participants attitude (employees and managers) regarding the new computerized leave application system.

At the end of the survey, four findings emerged:

- Only 11 percent of the respondents did not use the system, half for reasons beyond their control (ex: did not have access to a computer, not aware of the system...). Still, 84 percent of those who did not have an opportunity to use the system, did favour the implementation of the system.
- One distinct advantage of the new system is its faster processing time, although the new system does not seem simpler for users than the conventional method. Also, the layout of the system seems to be a little less clear. These two characteristics of the system are considered to be the most important factors by respondents.
- The overall level of satisfaction is relatively high at 64 percent and the majority of the respondents (80 percent) would like the system implemented on a permanent basis.

-
- Supervisors and co-ordinators are also satisfied with the system although to a lesser extent than the employees.

We conclude that the principle of an automated system has therefore been well accepted. The actual form is also well received but at a lesser extent. Simplicity of use and the overall layout should be improved. Some recommendations were made in order to improve the system.

Part III:
Implementation of the IMAA
Memorandum of Understanding

DEPARTMENTAL AUTHORITIES

1.0 Financial Management

RESOURCING ISSUE UNDERSTANDING

Issues affecting reference levels

Treasury Board approved reference levels (budgetary and non-budgetary appropriations) of \$423,776,000 for the Department for 1992-93 (TB 817667, 817784, 818061 817421). However, following the Budget Speech in February 1992, cuts of \$1,800,000 and \$760,000 were made in the operating and communications budgets respectively. Additional cuts totalling \$3,458,000 were made in the operating budget following the Economic and Fiscal Statement on December 2, 1992.

Allocations from Central Reserves

Adjustments were made in the reference levels in 1992-93 to reflect special circumstances and decisions made by Cabinet.

From the Priorities Reserve, the Department received \$18,000,000 for the Book Publishing Industry Development Program and \$259,000 for the communications strategy. The Atlantic Canada Opportunities Agency transferred \$1,400,000 for the co-operation agreements with Prince Edward Island, Nova Scotia and Newfoundland. Industry, Science and Technology Canada transferred \$2,800,000 for the Design Exchange and the Hockey Hall of Fame in Toronto. An allotment of \$3,500,000 was made from the reserve in the Quebec regional development financial framework for the performing arts facility in Sept-Îles and the Pélican floating museum project. An amount of \$7,300,000 was taken from the fiscal framework reserve for communications and culture. Finally, \$99,000 was allocated from the Treasury Board Programs Reserve for the Jeux de la Francophonie.

Supplementary Estimates

In 1992-93, sums of \$33,781 and \$470,000 were approved in the "A" and "C" Supplementary Estimates for authorizing interdepartmental transfers and allotments from the previously mentioned central reserves.

No funds were transferred from the salaries budget to any other single operating budget allotments.

REPROFILING EXPENDITURES BY FISCAL YEAR

In 1992-93, Treasury Board approved, within the framework of the updating of the 1993-94 Multi-Year Operational Plan, reprofiling to future years \$1,900,000 for cultural infrastructure projects in Alberta, \$1,800,000 for the Edmonton Concert Hall and \$1,600,000 for the M-SAT project.

PARLIAMENTARY APPROPRIATIONS AND ALLOTMENT CONTROL

Following announcement of the February 25, 1992 budget, frozen allotments were created in Vote 1 to offset the reductions imposed on the operating budgets (\$1,800,000) and the communications budgets (\$760,000). To offset the 2 percent budgetary reduction announced in the Economic and Fiscal Statement, frozen allotments were created for wages (\$533,000), other operating expenditures (\$2,044,411) and capital expenditures (\$773,955).

A special-purpose allotment for the contribution to the International Telecommunications Union (ITU) is still in place.

USE OF REVENUE

The Department's External User Fee Revenue Plan was updated as part of the 1992-93 MYOP process. The revenue projections were as follows:

\$ Million	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Revenues credited to CRF	91.3	913	95.5	95.5	95.5	95.5
GTA	211.5	217.4	221.6	233.7	244.2	*
Revenues credited to the Vote	1.0	.9	1.4	1.2	1.3	1.3

* To be determined

In addition, Treasury Board approved the Spectrum Management Program's plan for investment of \$25 million to respond to urgent needs under that program and ensure its financial viability. The revenue plan was revised as follows:

\$ Million	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Revenues credited to CRF	104.2	107.2	111.9	115.4	118.9	121.4

In response to the February 1992 budget speech, the Department committed itself to producing some \$54 million in additional revenue over five years. The revenue plan presented in the 1993-94 MYOP reflects this commitment.

Order in Council 92-617-01 authorized the Minister of Communications to establish fees for services connected with putting telecommunications equipment into service. Fees will be charged as soon as the service is inaugurated. At the present, the Department is not in a position to ascertain exactly what impact this authorization will have on departmental revenue.

CONTRIBUTIONS

In 1992-93, the Minister approved the terms and conditions of 69 new IMAA contributions. A total of some \$6.1 million was disbursed in 1992-93, including contributions that were approved in previous years, but that involved disbursements in 1992-93.

PERSON-YEAR CONTROL

With the introduction of the SOB in 1992-93, the Department was no longer obliged to control person-years. This item will be removed from the report.

CONTRIBUTIONS TO ITU

A contribution of \$5,081 was made to the ITU. The rate of exchange on the Swiss franc was \$0.90888.

2.0 General Administration

TRAVEL

International Travel

To facilitate our work, we have chosen to compile the number of trips made to the United States and elsewhere in the world on a fiscal-year, rather than a calendar-year, basis. To this end, we have had to add to trips made during the 1992-93 fiscal year trips made abroad between January 1 and March 31, 1992. The number of trips of this type made during this period was 782, fewer than the established limit of 817. This gap is no doubt a result of the budget restrictions placed on us.

Comprehensive Travel Allowances

No comprehensive allowances have been approved in the last four fiscal years.

Business Executive Class

In 1990-91 the business executive class was used in 295 instances and in 1991-92, in 224 instances. In 1992-93, it was determined that this class of travel was used in 164 instances, a reduction of 60 (27 percent).

CONFERENCES

The costs associated with conferences has decreased in the last fiscal year. In 1992-93, a reduction of \$61,559 (11 percent) was reported.

MEMBERSHIPS

There are presently 126 memberships in the Department compared to 98 in 1991-92 and 69 in 1990-91. The increase in 1992-93 is mainly due to the needs of greater membership in the Museums Assistance Program re: the France-Canada Agreement.

HOSPITALITY

In 1992-93, there were three single functions that required the Minister's approval, compared to 4 in 1991-92 and 6 in 1990-91. The Deputy Minister's approval was required for 18 functions in 1992-93, as opposed to 31 in 1991-92 and 33 in 1990-91.

The number of functions that were approved at the Assistant Deputy Minister and lower levels were 1,866 in 1992-93, 2,262 in 1991-92 and 1,991 in 1990-91.

In 1992-93, there were 693 functions where government employees exceeded guests, a reduction of 21 percent from last year.

EX-GRATIA PAYMENTS

There were 7 payments totalling \$764.80 in 1990-91 and 5 payments totalling \$3,600 in 1991-92. In 1992-93, 3 payments totalling \$282.88 were processed.

CONTRACTING

A total of 13 contracts were issued by the Department for Centres of Excellence totalling \$338,500. None of these contracts exceeded the \$100,000 authority granted to us through IMAA.

ACCOUNTABILITY REGIME

1.0 Monitoring of IMAA Delegations

Existing processes, wherever applicable, are being used to monitor the delegations and information is gathered periodically through management indicators to monitor expenditure trends.

