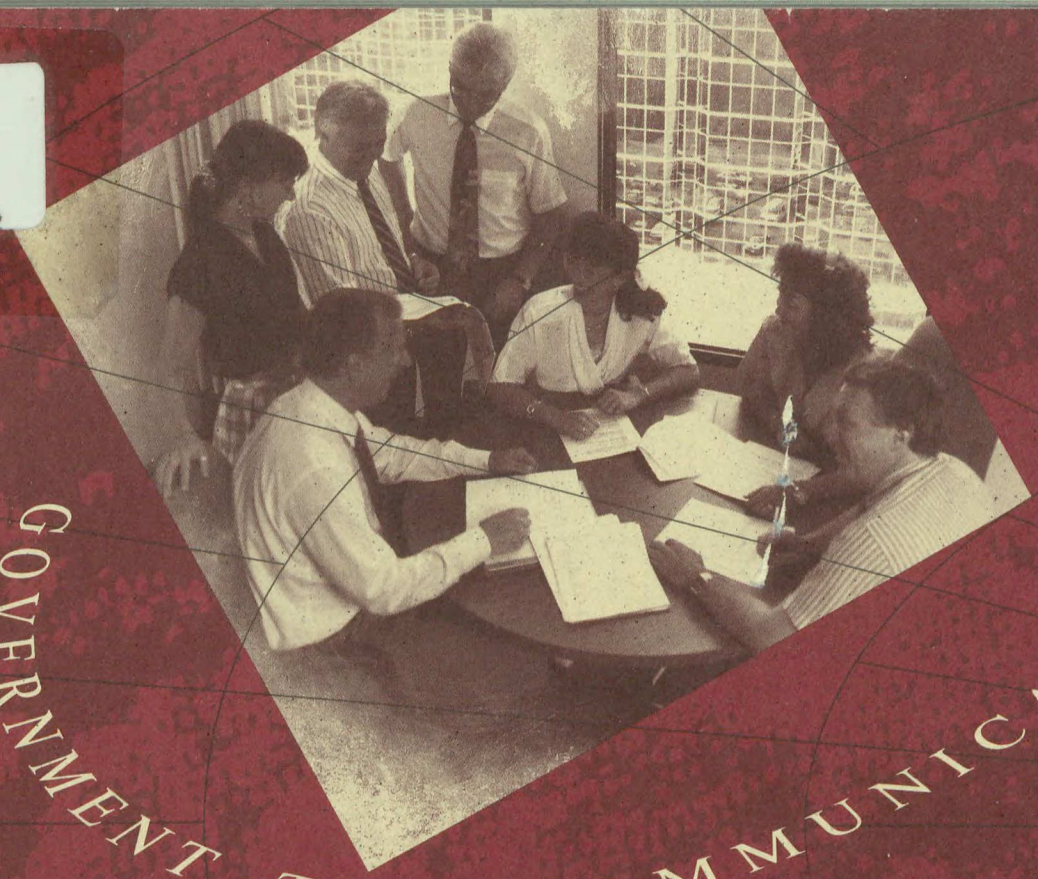
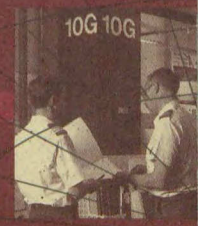
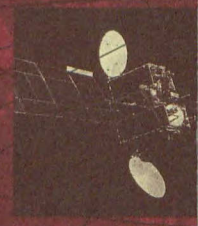
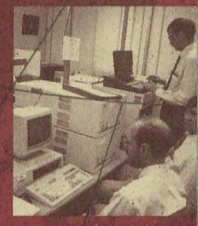
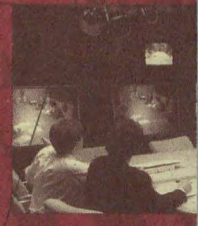


GOVERNMENT TELECOMMUNICATIONS AGENCY









Annual Report 1991-92

Canada

Our Mission

To bring information and telecommunications products and services to government for effective delivery of services to Canadians.

Contents

Explanation of cover page design

The background, representing a computerized planet Earth, suggests ideas such as globalization, human community and interdependance.

While the thin lines, that symbolize telecommunications, information, networks and the common integrated architecture, converge at a focal point, the small pictures are a prelude to the different chapters of this Report.

Finally, the title itself shows GTA as an organization in full upward movement, motivated by the dynamism of a truly dedicated team.

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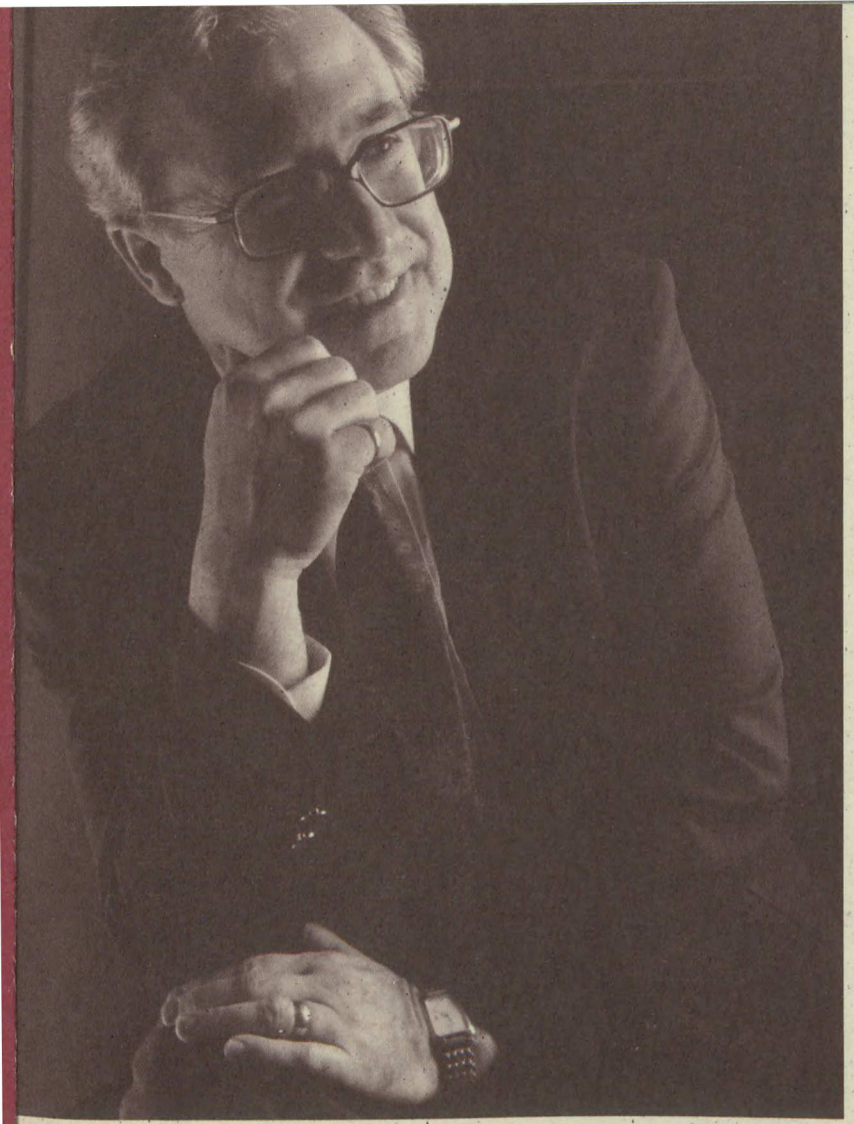


René Guindon
President
Government Telecommunications Agency

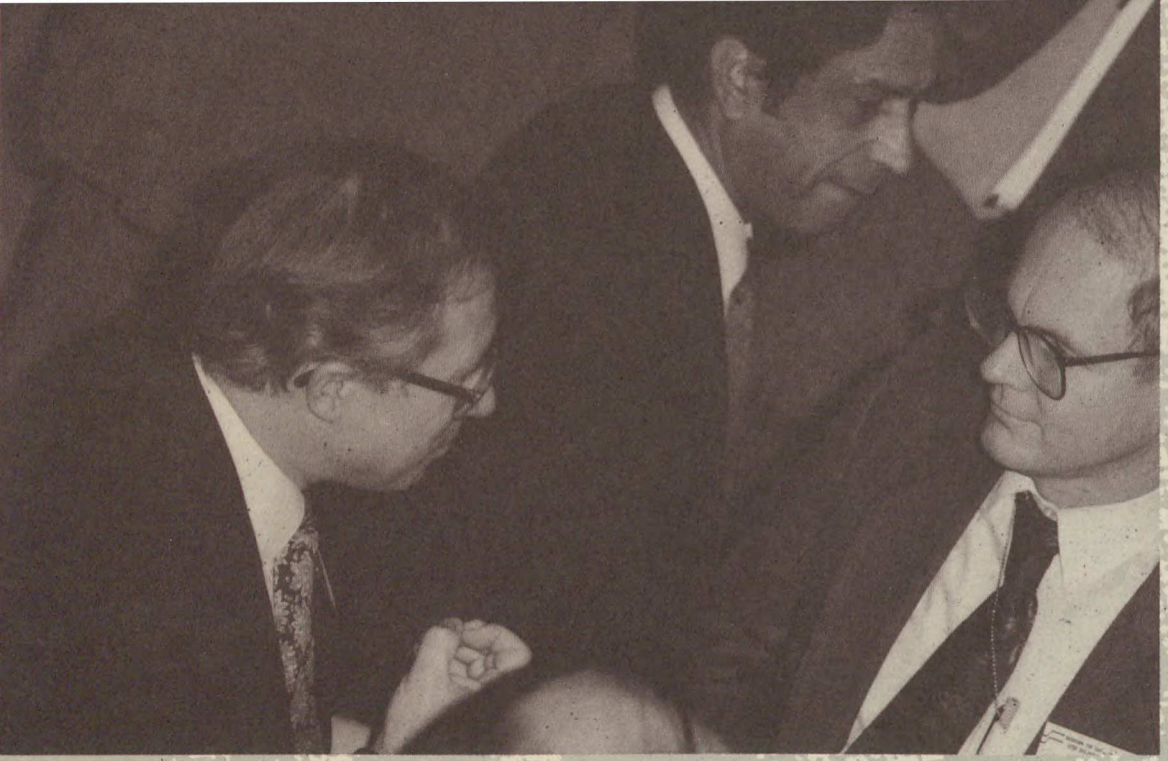
LETTER FROM THE PRESIDENT

"Let the artisan be judged by his work," wrote Jean de La Fontaine in one of his fables. As the President of the Government Telecommunications Agency, and as someone aware of the many accomplishments made possible over the past year by the tireless efforts of its personnel, it is clear to me that this quote fits GTA like a glove. When I see the professionalism and dedication of these people, it is virtually impossible to ignore the giant strides we have made as a Special Operating Agency.

The work under discussion is clearly the result of several factors combined. First, collegiality — genuine collegiality, not some insincere pretense! This means that GTA works closely on a regular basis with the Government Telecommunications Council and the Telecommunications Advisory Panel, whose members consist of peers, colleagues and customers. These joint efforts have enabled us to develop together the most sophisticated and effective integrated telecommunications and information network imaginable for the government, which in turn is able to better serve the people of Canada.

Another important factor in the achievement of any organization's objectives is of course its personnel, who are not unlike the members of a symphony orchestra, all of whom have specific tasks, but are also interdependent, if their performance as an orchestra is to be a scintillating one. For the support of both the regions and GTA Headquarters, whether in connection with sales and marketing, network operations, engineering and architecture, finance and personnel, or corporate policy and public affairs, I sincerely and deeply thank here all GTA personnel.

And what can I say about our colleagues-customers, on whom we set such great store, and who make our endeavour all the more worth while in so many ways. By coming to

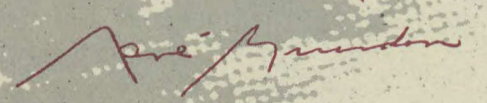


René Guindon, President of GTA, conferring with colleagues at the Forum on Open Architectures.

us for innovative telecommunications and information solutions, they have enabled us to increase our government telecommunications market share by approximately 4 per cent, and at the same time to keep product and service prices at the lowest possible levels, thus making the most of every dollar received from Canadian taxpayers. I am proud to say that the federal community has, in this context, been able to save approximately $90 million by choosing the services of the Agency, which is in itself a plus value.

This year, GTA wanted to "bridge the gap" by showing at the Forum held in Ottawa last November that the activities related to the Architect Program entrusted to it by the government were transparent. In view of the Forum's resounding success, and the dialogue and joint efforts that resulted between private and public sector partners, I believe that it is now possible to look to the future with considerable optimism. In fact, we can expect in the very short term the completion of all kinds of government telecommunications projects, ranging from videoconferencing to distance education, from the optimization of the existing network to the introduction of an integrated enterprise network architecture, from the conversion of the multipoint access system to government services into a one-stop access point for the public.

The GTA *Annual Report* for last year was very well received. I trust that this year's will be welcomed as warmly and that it will generate even more interest among those who this year made possible, and witnessed, an evolution which is still far from being completed. I therefore hope that by reading our *Report* you will be able to ascertain the truth in the saying that the artisan ought to be judged by his work!



Message from the Director, Corporate Policy and Public Affairs

Collegiality: an evocative word, a key word and a success word for the Government Telecommunications Agency and its colleagues-clients in the federal community.

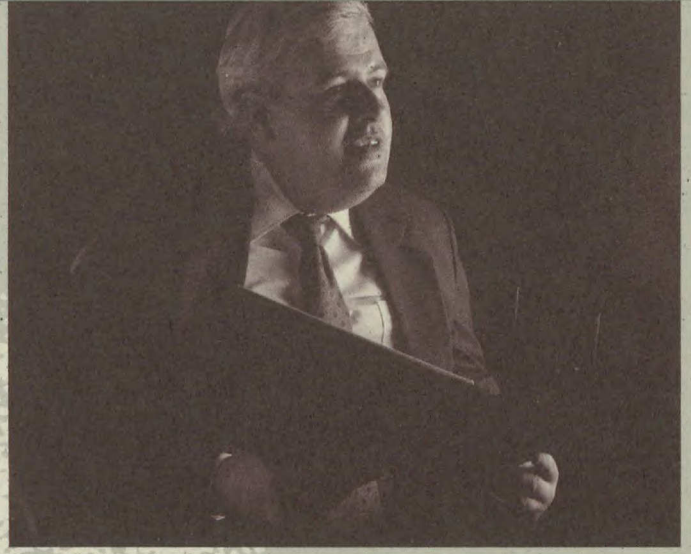
Evocative, because it suggests the idea of a collectivity working together towards a common goal: to provide the Canadian government with a state-of-the-art and futuristic telecommunications and information network, that is efficient for public servants, effective in serving the public and at the lowest possible cost. Accomplishing this requires creativity, realism and, especially, a vision on the part of the Government Telecommunications Council.

Key, because the technical support provided by the Telecommunications Advisory Panel, along with its periodic and close scrutiny of individual and collective departmental projects and of the step-by-step integrated architecture proposed by the Agency, now make feasible what had appeared impossible in the past, in terms of compatibility and interconnection.

Success: definitely, for GTA as a new breed of competitive organization, as a vehicle *par excellence* for government cooperation, and as a dynamic team dedicated to customer service and satisfaction.

Yes, collegiality and the Government Telecommunications Agency go together from now on, and they will continue to do so for a long time!

Jean-Pierre Couillard



Jean-Pierre Couillard, Director, Corporate Policy and Public Affairs; Secretary, Government Telecommunications Council and Telecommunications Advisory Panel

Collegiality

Chairman of GTC

This is the second *Annual Report* published by the Government Telecommunications Agency since it became a Special Operating Agency (SOA). When GTA assumed its status of an SOA, an important innovation was the formal implementation of a more collegial approach in the relationships between GTA and its clients. Two senior advisory bodies were subsequently established, one of which is the Government Telecommunications Council (GTC). I have the honour of being the first Chairman of the Council, and am pleased with the role it has played over this past reporting period. ◆ The Council's membership comprises high-level representatives of the largest users of telecommunications services in the federal government. The members provide executive leadership and direction to the strategic management and application of telecommunications and information in government. GTC's role has been compared to that of a Board of Directors, responsible for ensuring that GTA's investments achieve government-wide efficiencies and enhanced program delivery. ◆ We are all aware of the financial restrictions under which federal departments and agencies must operate. The rate of growth in government expenditures has declined, while the demands for the services we provide have escalated. As managers, we must marshal our resources, spending more prudently so that the level of service provided to Canadians remains high, even in the face of fiscal restraint. ◆ Telecommunications and information play increasingly important roles as key instruments in the delivery of government programs. I really think that GTA is making a significant contribution to federal fiscal responsibility by ensuring that its clients are able to optimize their use of telecommunications for the efficient and cost-effective delivery of services. ◆ As representatives of the

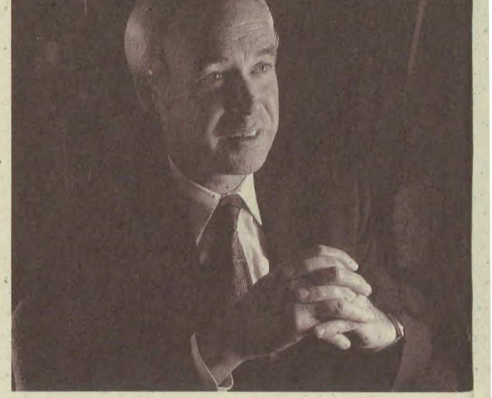
largest users of telecommunications services in the federal government, the members of GTC understand the needs of GTA's clients and are able to guide the Agency in its development of new services and products which will correspond to the current and future telecommunications requirements of federal departments and agencies. The Council is also well placed to ensure that, in meeting the needs of individual departments, GTA bears in mind the overall requirements of the federal government. ◆ The Council and the Agency work together in an environment of mutual self-interest. It is in our interest, as GTA's major shareholders, to provide advice to the Agency which will permit it to succeed in its endeavours to supply the most cost-efficient and effective telecommunications services possible. Moreover, it is in GTA's interest to devise strategies which will ensure that it flourishes and prospers as a Special Operating Agency. ◆ The Council and the Agency are pioneering partners in the new world of SOAs. As Chairman of the Government Telecommunications Council, I look forward to a continuation of our productive partnership with GTA.

Phil McLellan

Member of TAP

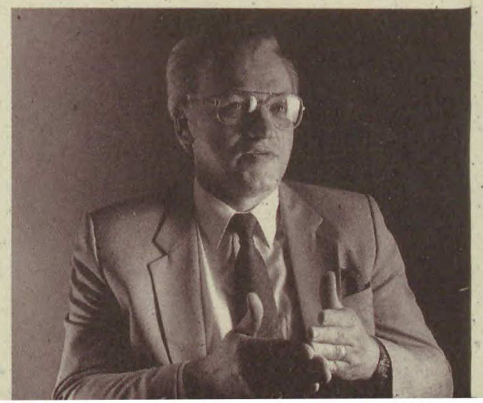
As a representative of the members of the Telecommunications Advisory Panel (TAP), I take a great deal of pleasure in contributing to the second *Annual Report* of the Government Telecommunications Agency. ◆ The Panel provides GTA with advice on the management of telecommunications issues within the federal government. In light of their hands-on experience and the fact that the Panel meets six times a year, TAP members regularly advise GTA at the operational rather than the theoretical level. Our perspective is that of the individual department, and our concern is to ensure that GTA's actions meet our particular needs. Given that TAP members are more involved in the operational and technical aspects of the Agency than are those of the Government Telecommunications Council, the Panel also provides objective assessments to the Council with respect to GTA's progress in achieving its goals. ◆ The collegial planning that this interdepartmental committee structure encourages is, from my point of view, one of the major benefits resulting from the establishment of GTA as a Special Operating Agency, as the Agency now serves as a focal point for the energies and experience of telecommunications and information experts across the government. The Panel therefore also offers a tremendous opportunity to have a profound influence upon the evolution of an integrated telecommunications system within the federal government. The collective expertise of TAP members has thus been harnessed and focused on the major telecommunications challenge of the 1990s — the design of a truly interoperable, government-wide telecommunications system. ◆ In the past year, TAP has advised GTA on the development of new telecommunications products and services which have provided both improvements and major savings to government departments and agencies. Among other innovations, these include the establishment of the Government Satellite Network and the implementation of the Consolidation Management System. A great deal of progress has been made on the Telecommunications Architect side as well, with the definition of standards for universal wiring systems, the evolution of router-based networking, the implementation of X.400-based networking for departmental messaging systems, the adoption of naming and addressing standards and the determination of OSI registration requirements. ◆ My involvement with TAP has been extremely gratifying. I am delighted that the Panel has played such an important role in the successes which GTA has achieved over the last two years, and I have every confidence that the Panel's advice and counsel, in conjunction with the professionalism and dedication of the Agency's personnel, will guarantee continued triumphs in the years to come.

Michel Plouffe



Assistant Commissioner Phil McLellan, Director of Informatics, Royal Canadian Mounted Police, and Chairman, Government Telecommunications Council

Michel Plouffe, Director General, Informatics Management Services, Transport Canada, and Member, Telecommunications Advisory Panel



Meeting of the GTC

Government Telecommunications Council Members

A/Commissioner Phil McLellan
(Chair)
Royal Canadian Mounted Police

Jean-Pierre Couillard
(Secretary)
Government Telecommunications Agency

Michael Binder
Department of Communications

Bernard Dertinger
Employment and Immigration Canada

Dr. Jocelyn Ghent-Mallet
Industry, Science and Technology Canada
(associate member)

René Guindon
Government Telecommunications Agency

Larry Hatt
External Affairs and International Trade Canada

Guido Henter
(associate member)
Canadian Radio-television and Telecommunications Commission

Peter Janega
Supply and Services Canada

Michael Magar
Environment Canada

Michel Plouffe
Transport Canada

John Riddle
Treasury Board of Canada Secretariat

Colonel Nigel Van Loan
Department of National Defence

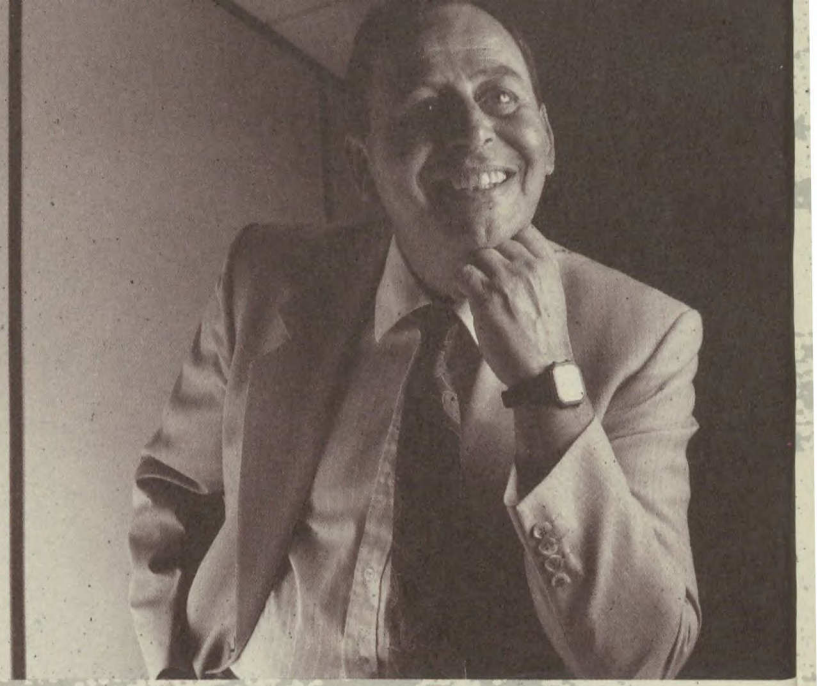
Message from the Director, Finance and Administration

The success of GTA ultimately depends on its ability to *deliver*: to fulfil the promise of a single architected network for the government; to provide quality products and services to our customers who depend on them for program delivery; and to render first-class *customer service*.

It is our people who deliver. I can assure our colleagues and our customers that no effort is being spared to have the right people doing the right job, with the right tools.

The Finance and Administration Directorate is the unit that is responsible for staffing and related activities on behalf of the entire Agency. As its Director, I have had ample opportunity to witness the care and effort that have gone into building a balanced, professional and fully-integrated team. To me "Driving Force" implies a power that knows where it is going and that has what it takes to reach the ultimate goal. This is our team at GTA.

Michel Lafleur



Michel Lafleur
Director
Finance and Administration

GTA's Employees: Its Driving Force

Devoting a separate section to GTA employees, the driving force of the Agency, is *de facto* recognition of their strategic importance in the day-to-day operations and in the many successes of the GTA in its short history as a Special Operating Agency. ◆ Our organizational culture has undergone many changes over the past year, and our new status has required our personnel to continually go above and beyond the call of duty in moving the Agency from a more bureaucratic environment to one that is more business-oriented. As the transition took effect, personnel had to show exemplary flexibility to adapt appropriately to the new situation and meet the challenges involved. ◆ In order to do this, and to help existing personnel and round out its in-house expertise, GTA obtained the services of people from various sources, both government and private sector, including Bell Canada, Unitel, Bell-Northern Research,

Many of our employees carry their personal sense of mission and dedication to the service they provide to the community.

Ingrid Barclay addressing the Trinidad and Tobago Association of Ottawa as Master of Ceremonies, during that country's Republic Day Celebration.

Emmanuel Villanueva on the keyboard during a fund-raising concert. Last December, his group, the Himig Pilipino Choral Ensemble, raised funds for the victims of typhoon Thelma in the Philippines.

IBM, Sasktel, MPR, Telesat, DEC, Gandalf, NBTel and Northern Telecom. ◆ Last year, GTA set up new units designed to quickly show our customers that we had truly changed our way of doing business with them. This year, the leitmotiv for our personnel was a greater emphasis on customer satisfaction and outstanding service. These major orientations, which have now become part of the Agency's way of operating, were by and large properly followed by all our employees, whether at Headquarters, in the regions or at the district offices. ◆ Other activities contributed to our success as an organization: examples include the valuable advice received, and acted upon by us, from our colleagues-customers, as well as the constant improvements and special care we now give to our internal and external communications. In short, GTA employees are showing ingenuity in striving always to provide the most efficient and effective possible service. ◆ In spite of its many achievements over the year, GTA clearly does not intend to rest on its laurels; much remains to be done. The progress made to date, and the ongoing changes in culture, are promising. There is every reason to believe that the Agency, if it continues to meet the goals it has set for itself in terms of customers and cost savings for the government and also to work in harmony with its personnel, cannot fail in carrying out its mission and the mandate assigned by the government. ◆ In sports as in business, it goes without saying that the individual efforts are the foundation of the team's success!

Oswald Hoch, a member of the Big Brothers Association, is "bowling for millions".

Visually-handicapped people from Rilacom Inc. sending out GTA circular letters.

Message from the Vice-President, Marketing

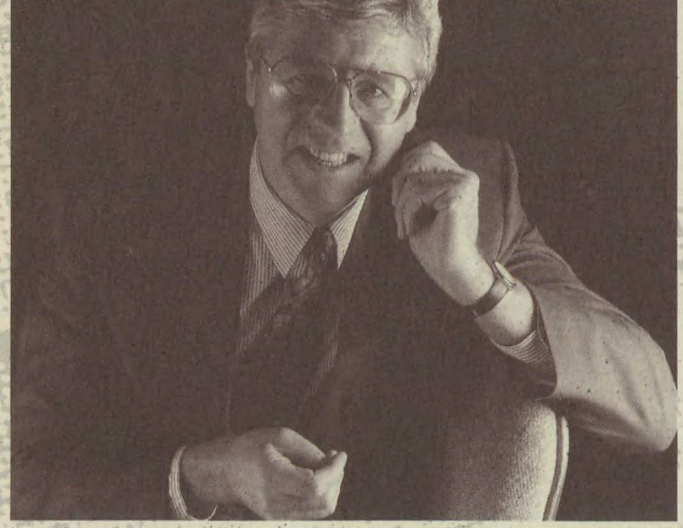
Our customers are our only business. They are our «raison d'être». It is our responsibility to satisfy their needs in nothing less than a superb fashion.

During the past year, we have been able to put in place an experienced and highly-motivated sales team that has already demonstrated a sound understanding of departmental programs and communications needs. Closer cooperation between Headquarters and regional sales personnel has resulted in major new contracts for GTA with both old and new customers. These sales successes are a testimony to the quality, dedication and professionalism of the entire GTA organization.

Our thrust in the coming year will be to maintain focus upon the needs of our customers and upon the value that we add to their organizations. In particular, we expect to see some exciting breakthroughs in such areas as network connectivity, videoconferencing and distance education. We are listening to our customers and are confident that we can continue to deliver far more than just the best prices in the business.

We have had a very productive year. We have a committed sales force, a well-defined products and services portfolio roll-out plan, a support structure and a game plan that ties it all together...a winning combination!

Roger Bason



Roger Bason,
Vice-President,
Marketing

Our Business is Our Customer

In the 1990s, the proofs of effective management in the federal government are economy and value for money. As a Special Operating Agency, GTA's role is to help departments and agencies deliver their programs effectively and efficiently through the intelligent use of enhanced telecommunications and information products and services. ◆ GTA is more than ever customer-oriented. Our job is to understand the unique requirements of individual departments for voice, data and image communications, as well as the needs of the government community at large for high-quality services and cost reduction. ◆ Our customers have been noticing some differences when they do business with GTA. The service they receive tells them very clearly that our business is really our customer.

Professionalism: Key to Success at EIC

With federal departments and agencies under continued financial pressure, the Government Telecommunications Agency is becoming the place to go for cost-saving, value-added telecommunications services and expertise. ◆ The Services Administration group at Employment and Immigration Canada (EIC), for example, looks to GTA to provide enhanced telecommunications services between its offices in all regions of

Canada. With close to 1,200 offices across the country and a budget of close to $24 million for voice communications alone, EIC has an ongoing need for a wide range of leading-edge telecommunications services — everything from regular voice networks and electronic messaging to secure telephones and videoconferencing. ◆ "With communications, you can never stand still, you always have to keep marching forward," says Jim Mallen, Director General, Services Administration. "I think GTA is walking side by side with us." ◆ GTA does a lot of business with EIC and is focusing its efforts on giving it added value. Since signing a letter of agreement with the Department in November 1991, GTA has been directly involved with EIC in a number of new telecommunications initiatives, including videoconferencing, universal cabling and professional consulting. ◆ With regional offices across Canada, EIC finds videoconferencing to be a particularly attractive service and plans to implement it at 11 locations. In April 1990 and again in October 1991, GTA, through its contacts with Bell-Northern Research and Northern Telecom, managed a six-site videoconferencing trial for EIC, exposing it to a switched 56 kilobits per second (kbps) network with state-of-the-art bridging technology. As a result, EIC is committed to videoconferencing and will be one of the first government departments to subscribe to GTA's new Government Videoconferencing Service. ◆ "If videoconferencing can increase our communications between various levels, whether they be regions or provinces, and at the same time reduce travel budgets, it will be an extremely valuable tool for us," says Mallen. ◆ Another area in which EIC and GTA have worked cooperatively is universal cabling. With anywhere from 200 to 250 office relocations every year, EIC has a requirement for cabling that allows computers to be moved and plugged in quickly, providing significant savings in cabling time and expense. GTA was able to assist EIC in this area by working closely with Public Works Canada. ◆ Professional consulting is another area where GTA responded to EIC's requirements. The Department used to spend a lot of time identifying consultants with the appropriate telecommunications expertise when it encountered technical problems. Now, GTA is doing that work for EIC by identifying qualified consultants from its own pool of in-house and outside expertise who can be called upon when required by the client. ◆ "Something as simple as that makes our job a lot easier, and it's something GTA has tackled head on." ◆ But what impresses the Director General most about GTA is its professionalism. "When you're dealing with GTA people today, they leave you with the sense that they recognize you've got a need and they have a job to do, and they seem to want to do it very well." ◆ Dependability,

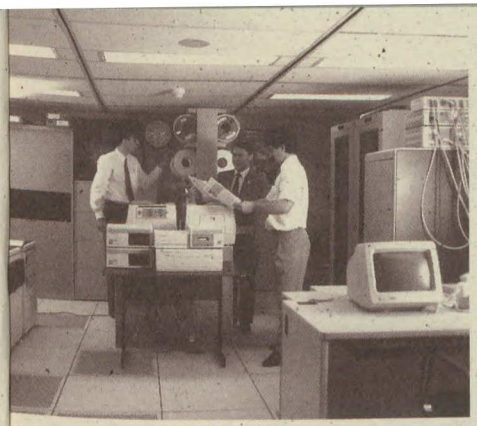
Jim Mallen, Employment and Immigration Canada and Morag Cavers, GTA

professionalism and know-how — GTA today is zeroing in on more than just the cost of telephone service. While price will always be a key advantage, the Agency is also able to deliver benefits through a complete range of value-added telecommunications and information services.

GTA Provides Big Savings to Smaller Departments

Steve Connolly, Director General of Information Management and Technical Services at the Department of Fisheries and Oceans (DFO) is a man with definite views, particularly when it comes to the effective management of taxpayers' money. ◆ He is also a staunch champion of GTA's cost-reducing services and its important role within the government as the focal point for the design and delivery of shared telecommunications networks and services. ◆ For Connolly, effective management starts in his home department, which would like to convert as many services as possible to GTA. His rationale is simple — it makes good business sense. ◆ "With a total telecommunications budget of $14 million, DFO doesn't have a large volume of business compared to some of the larger departments. If we go to the suppliers directly, we miss out on the discounts we can have if we get on the GTA bandwagon with all the major departments." ◆ Currently, DFO is looking to GTA for ways to improve service and dramatically reduce costs with radio and satellite services, digital networking opportunities and videoconferencing. ◆ "I'm convinced that, by going to GTA, we can decrease our costs by 25 to 30 per cent. So if we can reduce our $14 million telecommunications budget by even $1 million per year, we can save $5 million over the next five years. That alone is significant," he says. ◆ Sharing satellite services with other government departments such as Energy, Mines and Resources, the Department of National Defence and the Royal Canadian Mounted Police is a particularly appealing option for DFO with its requirement for ship-to-shore, inter-ship and inter-land-ship radio communications. GTA is consequently providing shared satellite service in remote locations and other areas not served by terrestrial facilities. By sharing the costs of the service, users get cost-effective access to a full range of modern telecommunications services. ◆ But lower costs are not the only motivation for going over to GTA. "Because of the highly technical nature of telecommunications, a lot of departments are not fully aware of the opportunities out there to improve their business. GTA's people are doing a much better job selling the business benefits of their services to managers who need to know."

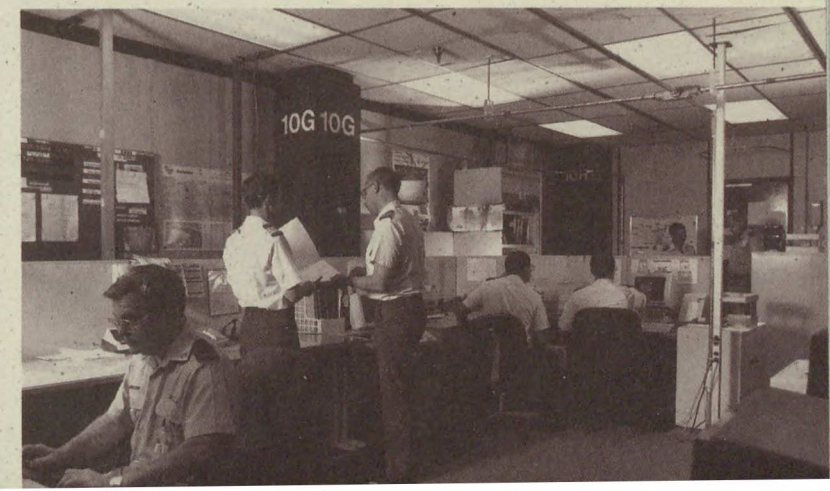
Steve Connolly, Department of Fisheries and Oceans, and Joyce Girard, GTA



◆ GTA's savings are not only limited to partnerships that save millions: GTA is looking after the details too. One example is a recent technical change that electronically denies access to the 8 + 1 dialling sequence on government telephones. Callers can no longer inadvertently use the public network to make long-distance calls, but must go through the Government Intercity Calling Service. That change alone translates into savings of approximately $250,000 every year in the Ottawa-Hull area. ◆ Connolly's perspective on GTA's advantages is not limited to DFO. As a senior manager in the federal government and a TAP member, he is interested in cheaper telecommunications for everyone in the government community, and GTA is providing just that. ◆ "GTA and customer departments and agencies have recently saved millions of dollars per year across the government," he says. That's not all. According to Connolly, GTA today is more service-oriented, more accountable for what it does and is getting results.

Flexibility Meets Canadian Forces' Needs

When it comes to telecommunications, the Department of National Defence (DND) has very special needs. Within DND, Communication Command has responsibility for operating, managing and acquiring all Canada's military communications systems, including everything from secure telephones for Canadian soldiers on manoeuvres in the Arctic to high-powered HF radio for Air Transport aircraft flying across the ocean. ◆ But one thing Communication Command has in common with other federal government organizations is the need to cut costs without diminishing the quality of its services. That's where the Government Telecommunications Agency helps out the Canadian Forces. By negotiating with network service suppliers on behalf of DND, GTA is able to offer the leading-edge telecommunications services at a fraction of commercial rates. ◆ By subscribing to GTA's Local Shared Services and thus sharing Centrex facilities with other government departments, for instance, DND has access to the most modern services and features of a large Private Branch Exchange for less than it would cost if it leased the service on its own. It also gains access to the GTA Government Intercity Calling Service, which offers significant savings on long-distance calls. ◆ "The main benefit is that it keeps costs down," says Lt.-Col. Tony Brown, Deputy Chief of Staff for Telecommunications. "In the Ottawa-Hull area, for example, DND has about 14,000 telephones and they have to be connected somehow — GTA Centrex offers the cheapest way of being able to do it." ◆ GTA also provides savings on services which DND, for reasons of security and control, orders directly from its suppliers, such as the Government Digital Channel Service (GDCS), a dedicated digital network for data, image and integrated applications. ◆ DND's long-distance computer network, for instance, must meet strict security requirements.



Lt.-Col. Tony Brown, Department of National Defence and Lorraine Pacowski, GTA

While most departments don't need to worry about the actual physical routing of the network across the country, DND cares very much about the architecture of its network facilities. ◆ GTA meets DND's requirement by tailoring its service to this department's needs. In this context, the Agency has made special arrangements with its facilities suppliers for DND to order services directly from them, and still realize the cost savings that GTA negotiates for the government. That's exactly the kind of flexibility needed by Communication Command. ◆ "It satisfies us because we can take advantage of the GTA rates but, at the same time, we have the autonomy to deal directly with the carriers for the design criteria of our network," says Lt.-Col. Brown. ◆ GTA's flexibility is also the reason DND is migrating all of its services to the Defence Integrated Services Digital Network, known as DISDN. This leading-edge facility will serve as the primary transmission medium for all DND's voice and data communications requirements while providing millions of dollars in annual savings on long-line costs. It will also provide network monitoring and control as well as the capability to order up bandwidth for services such as secure videoconferencing. GTA is DND's partner in the DISDN project, evaluating the suppliers' bids and providing guidance on pricing and on network optimization when required. ◆ The Deputy Chief of Staff also appreciates the educational aspect of GTA's customer service. "I've attended four presentations over the last ten months on various subjects, and I have gained a lot of understanding of what GTA offers," he adds. ◆ Two areas DND is particularly interested in learning more about are GTA's Government Satellite Network (GSN) service for isolated locations and its future MSAT (mobile satellite) service, which will provide mobile communications to trucks and other vehicles. ◆ "After all," says Lt.-Col. Brown, "the Canadian Forces deploy in some pretty remote locations, and we can't always find a phone booth around the corner." ◆ DND's reliance on GTA for its special needs is largely a result of the Agency's effective customer relations. ◆ "They do a very good job," says Lt.-Col. Brown. "They set up presentations and demonstrations, and they're constantly making themselves available. GTA has been very proactive in seeking information from us on what we need and in offering us real solutions." ◆ Our customers have come to expect a comprehensive variety of value-added, state-of-the-art telecommunications and information products and services from GTA. What they are discovering is that they are getting more than this: we are providing first-rate *customer service*, because, for us, our business is our customer.

Message from the GTA Director, Québec Region

The Government Telecommunications Agency has quickly reached a pace appropriate to the environment in which it will operate from now on. Its status as a Special Operating Agency has given it the powers it needs, and it has done everything possible to deliver its customers value-added services at considerable savings. For every dollar they spend on communications and information technology, GTA's customers can optimize their initial investment and be guaranteed quality, dependability and outstanding service.

Having offices in every region of the country not only places GTA within closer reach of its customers, but also enables the Agency to be more closely attuned to their needs. Services suited to specific user requirements are possible, as well as a rate structure that is competitive in regional markets.

Both in the regions and at Headquarters, we are firmly committed to a continued enhancement of our services through network optimization and efforts to secure strategic alliances.

The Agency plans to pursue this objective by continuing its expansion program and by offering new options that will broaden the current portfolio of products and services available to its customers. Moreover, customers will benefit from a whole range of services developed in response to their recommendations and delivered according to priorities that they themselves have set.

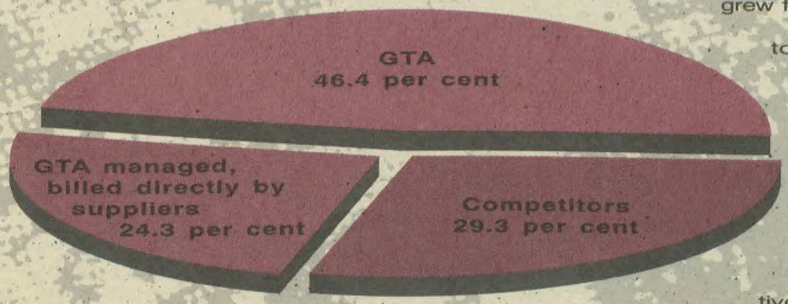
Ginette Leclerc

Ginette Leclerc,
GTA Director,
Québec Region

GTA: A PLUS VALUE

GTA is pleased to report that in the last year, its share of the $450 million government telecommunications services market grew from about 67 per cent to approximately 71 per cent. This tells us that our customers are relying increasingly on the Agency's cost-effective and state-of-the-art products and services to help them make their program dollars go farther, in a time of limited resources when every public expenditure has to be carefully scrutinized. ◆ As a government insider, we know well the financial environment in which our customers operate. We understand their needs, and work cooperatively with them to design and develop products and services that provide savings and meet their requirements. Last year, through the volume discounts we were able to secure by doing business collectively, we estimate that our customers were able to save *over $90 million* by choosing GTA's products and services. This in itself is an *increase in savings of some $30 million* over the figures cited in our last *Annual Report*. GTA's commitment to driving costs down and optimizing technological breakthroughs is clearly demonstrated in the following brief overview of our value-added products and services.

GTA Market Share



GTA's total share of the telecommunications services market for 1991/92 was almost 71 per cent.

Local Shared Services

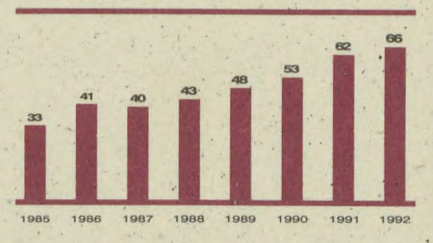
With almost a quarter million subscribers, Local Shared Services (LSS) are the Agency's most widely-used services. Through arrangements with local telephone companies across the country, GTA provides its LSS customers with enhanced features and the benefits of the latest advances in digital technology. LSS service also includes government telephone directories, government operators and technical advice on telephone service configurations. ◆ Clients in the Ottawa-Hull area have recently seen improvements in their Enhanced Exchange Wide Dial (EEWD) Service such as Network Call Number and Call Reason displays. ◆ As an SOA, GTA has made customer satisfaction its number one priority. Our increased responsiveness to user concerns has led to the development of the Government Consolidation Management System. It is a comprehensive, easy-to-use system which provides electronic service order entry, automated inventory, EEWD and Centrex billing reconciliation and management support capabilities. Evaluated during trials in Vancouver, Toronto, Montréal and Halifax, and fully endorsed by customers in those cities, the system will be phased in nationally beginning in 1992. ◆ In the future, LSS will be enhanced by additional features, further reductions in costs and electronic directories.

Government Intercity Calling Service

Another strong performer is the Government Intercity Calling Service (GICS), which provides long-distance telephone, facsimile and voiceband data services. The conversion of the GICS to digital facilities, which began last year, has continued across the country. More than 100 routes have already been digitized, resulting in improved service and lower costs. ◆ While there were more than 253 million minutes of usage for this service in 1991/92, an increase of *6 per cent* over the previous year's figures, customer billing for GICS was reduced by *10 per cent*. The average cost of calling on GICS is now about 27 cents per minute, down by more than 15 per cent over last year's costs, and over 40 per cent less than the standard commercial equivalent service. The growth in the use of GICS indicates that departments continue to depend on GTA's services to assist them in delivering their programs and to help conserve their scarce resources. ◆ As for the first phase of the Overseas Calling Service, it was implemented in the Ottawa-Hull area, permitting customers to place international calls through GICS, obtaining savings in the range of 25 per cent. Overseas calling will be available in major locations across Canada within the next year. ◆ For public servants travelling on government business, access to GICS has been streamlined by the introduction of the TeleCanada card. Each of six major Canadian metropolitan locations now has its own dedicated access number, while all locations in Canada and the United States (excluding Alaska and Hawaii) can be reached by calling a special 1-800 number. However, regional access numbers are still available for those who wish to use them. ◆ Billing procedures have also been improved by the introduction of a new monthly invoice for GICS, based on the actual calling data for the previous month. This modification in the Agency's billing system was a direct response to customer feedback and greatly simplifies customers' management of their telecommunications budgets. ◆ Future enhancements will include a switched high-speed data capability, a store-and-forward facsimile facility, and the addition of intelligent features.

The trend in increased usage of the network continued, with total calls up 6 per cent over the previous year. A total of 66 million calls were carried on the network during 1991/92.

Total Intercity (IX) Network Calls 1984/85 — 1991/92 (millions)



GTA Network Coverage

Intercity Network

The GTA Intercity Network is shown in black.

Consolidations and Direct Access Intercity (DAIX) sites are shown as squares.

Trunk groups and foreign exchanges are represented as lines.

Access to the U.S. (including Alaska and Hawaii), Bermuda and the Caribbean (excluding Cuba) is provided by four WATS groups, represented as black arrows, which originate in Vancouver, Toronto, Ottawa and Montréal.

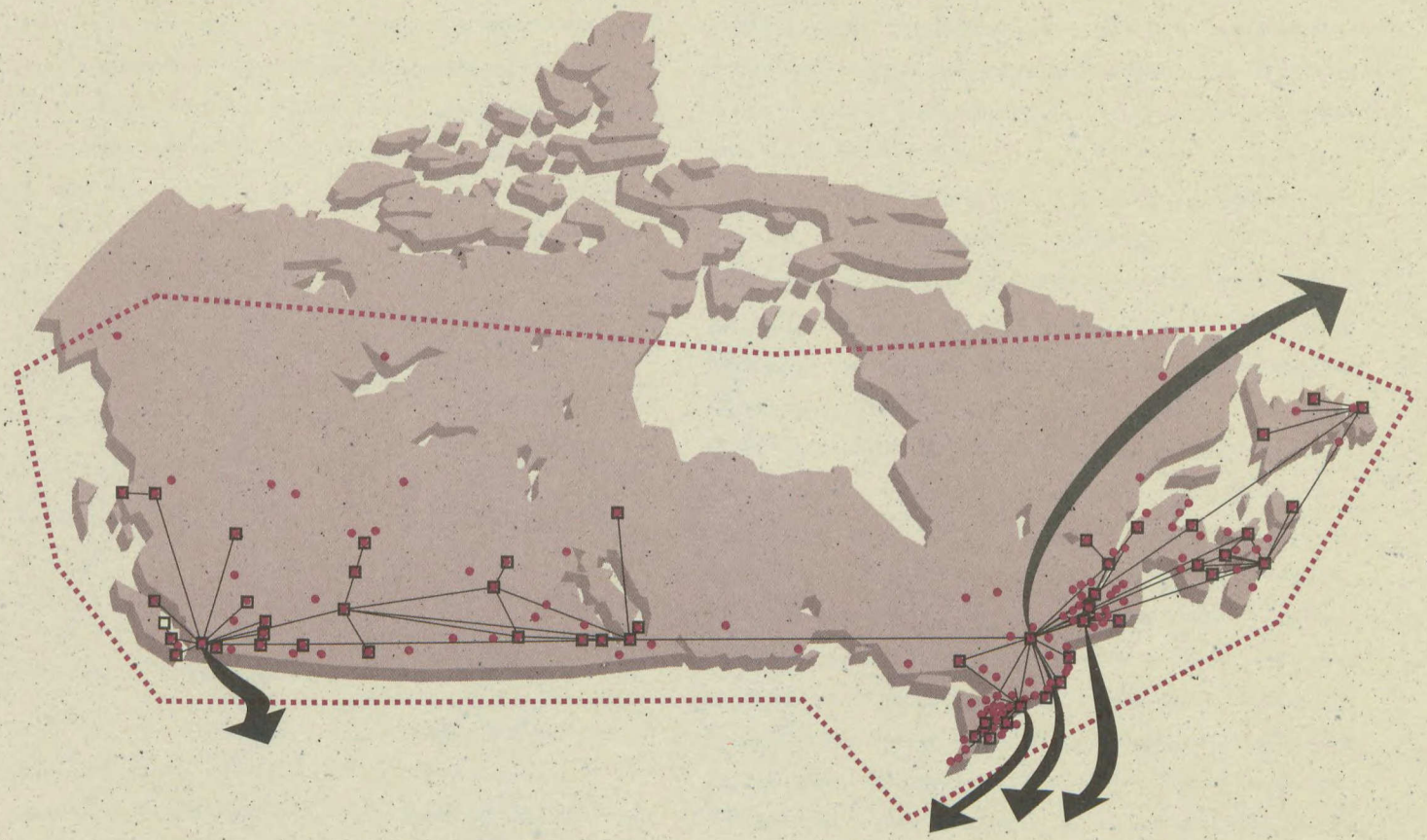
The first phase of GTA's new Overseas Calling Service is represented by the grey arrow emanating from Ottawa.

Government Packet Network

Serving areas are shown as burgundy dots.

Government Satellite Network

The outlined area represents the broadcast footprint of the Ku band, while the rest of northern and Arctic Canada is served by the C band.



Government Packet Network

The Government Packet Network (GPN) provides reliable, high-speed digital data communications and supports a range of protocols such as X.25, X.28 and Synchronous Data Link Control. Its built-in alternate routing capability provides superior system performance and network availability. The network's access capacity has now been enhanced to a speed of 56 kbps per second on a dedicated basis, thereby giving users in many locations more options for their high-speed data communications applications. Providing interconnection to over 100 international networks, GPN's rates are consistently lower than commercial rates for equivalent services. ◆ Over the past year, there has been a

concerted drive to extend the network to remote and smaller communities and to expand the coverage of existing areas of service. As a result, GPN is now available in nearly 150 serving areas.

Government Electronic Messaging and Document Exchange Service

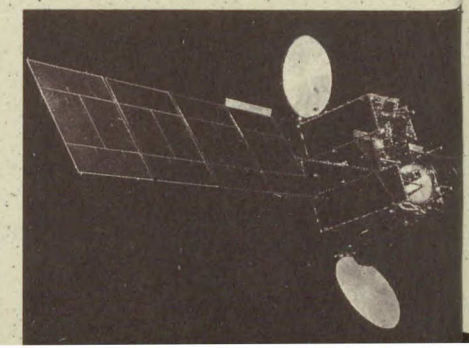
To meet the special messaging requirements of its federal customers, the Agency has enhanced commercially-available services to offer the Government Electronic Messaging and Document Exchange Service (GEMDES). There are now over 9,800 users of this bilingual, computer-based service, which provides text messaging, notice and bulletin boards, document conversion, French character support, binary file transfer capabilities and facsimile delivery. ◆ GEMDES subscribers currently have access to other messaging systems within the federal government, the private sector and around the world. The Agency is also developing specifications for the possible acquisition of a government Message Handling System which will offer both the complete range of X.400 applications and that portion of Electronic Data Interchange (EDI) supported by X.400 technology. ◆ There continue to be improvements in the GEMDES billing system. The rate structure is now based upon a combination of use and time, resulting in additional annual savings of *more than $500,000*, which have been passed on to our customers in the form of reduced rates. In addition, standard reports identifying no activity, low activity and storage costs are now available to users, therefore allowing them to manage their GEMDES service more efficiently. ◆ Future enhancements will include the introduction of access from the United States on a collect-charge basis.

Government Digital Channel Service

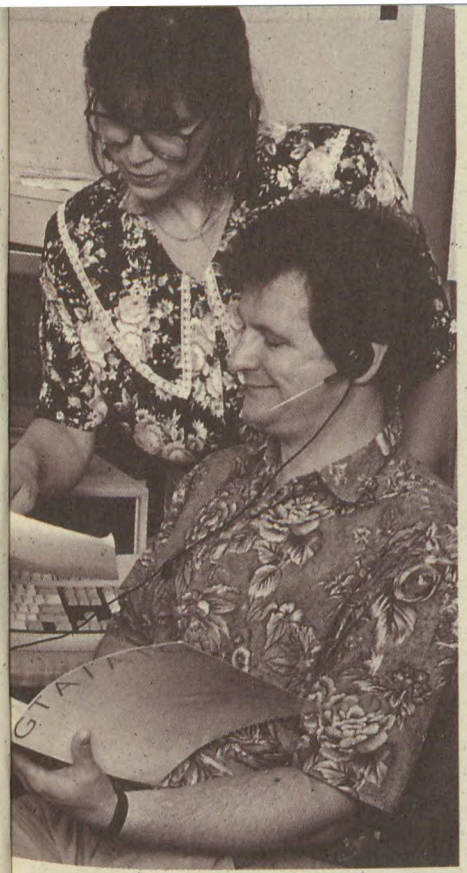
There were great expectations of the Government Digital Channel Service (GDCS) when it was first introduced last year, and the service has more than lived up to its early promise. In fact, customers have embraced GDCS enthusiastically and migrated to it overwhelmingly. GDCS now has over 500,000 miles of circuits in place. Available between major Canadian cities, this dedicated, end-to-end service for data, image and integrated applications also provides the platform for the development of new network services and applications. Employing state-of-the-art technologies and the high bandwidth efficiency of modern digital systems, GDCS can offer savings of up to *80 per cent* over current intercity telecommunications costs, and clearly demonstrates the advantage of doing business with GTA. Customers therefore can receive the benefits of the latest breakthroughs in telecommunications technology at the most cost-effective price.

Government Satellite Network

Subscribers to the Government Satellite Network (GSN) can easily maintain data and image communications between their offices in major urban centres and those in remote locations. GSN is a full end-to-end service based on Very Small Aperture Terminal (VSAT) technology which allows small satellite antennae to be used at isolated sites. The network offers national coverage, integration with terrestrial-based telecommunications services, high reliability and optimum performance while combining the flexibility of modern data networks with the versatility of satellite communications. ◆ There are now nearly 30 GSN sites in locations as far-flung as Goose Bay and Inuvik. GTA has introduced a VSAT service, which allows users to share remote satellite installations with other departments, resulting in



Courtesy of Telesat Canada



Line Champagne and Robert St-Laurent of the Customer Assistance Centre.

savings of *30 per cent* over the rates for dedicated VSATs. As an extra value-added service for its customers, GTA actively brings together prospective partners for the sharing of terminals, arranges their installation and manages sharing on behalf of its customers.

Cellular Service

Recognizing the increasing importance of mobile communications in the federal government, the Agency has negotiated discounts for cellular services from both Canadian cellular service suppliers. Now mobile users who must remain in constant contact with their offices are able to benefit from the most advantageous rates negotiated by GTA for cellular telephones. Discounts of up to *25 per cent* can now be realized, depending upon the service provider chosen by the client. Future plans call for the interconnection of cellular services with the Agency's Government Intercity Calling Service, so that our customers can achieve even greater economies.

Customer Assistance Centre

In order to provide better service to its customers, GTA has established a Customer Assistance Centre, which is designed to act as a contact point for receiving and responding promptly and effectively to comments, suggestions or questions about its products and services. A study is currently under way to ensure that the Centre is equipped with the personnel and facilities necessary to guarantee that our customers receive the best service.

Blue Pages Enhancement

In North Bay and Halifax, GTA has improved the government input in the blue pages section of the public telephone directories in order to facilitate access to the government services our clients provide. The new blue pages index features commonly-used words to simplify locating information, bigger typeface, accented upper-case characters in French and display advertisements which provide quick references to the programs and services of various government departments. The public's early response to these blue pages has been extremely positive. Based on our customers' feedback in these two locations, the Agency plans to introduce the improvements nationally.

As an SOA, GTA operates like a business, where customer satisfaction is vital. GTA's growing share of the government telecommunications market is proof that our strategy of providing value-added, client-driven products and services is working. Success, however, has not made us complacent. Our commitment to designing, developing and offering state-of-the-art, cost-effective products and services remains undiminished. The first beneficiaries of that commitment have been, and will continue to be, our customers.

Message from the Vice-President, Architecture and Development

In addition to engineering and developing common service solutions to satisfy departmental requirements, the Architecture and Development Branch oversees coordination of the planning of an architected approach for a seamless government enterprise network.

This kind of network is a somewhat futuristic concept. The challenge will be to achieve a consensus throughout the federal community on the telecommunications approach as the answer to the government's enduring quest for streamlined and efficient service to the public at the lowest cost. The direction of the network architecture, aimed at supporting departments in the planning of telecommunications for program delivery, promises an infrastructure that provides interoperability and flexibility of communications between departments, and between the government and the public.

The Architect Program provides the context for translating departmental network requirements into technical specifications for common GTA services. The cooperation we are receiving from our government colleagues is enormous and has allowed significant achievements to be made in Architect Program operations. With this support, through exclusive arrangements with industry and other centres of expertise for specialized assistance and resources, the infrastructure is growing and taking shape.

It is clear that with the continued help of our colleagues, made possible by the open dialogue that is pervasive in this new era of government telecommunications, we can look forward to continued success in achieving our mutual goals.

Dan Sum

Dan Sum,
Vice-President,
Architecture and Development

Bridging the Gap

Architect Program

This was the first year of full operation of the Government Architect Program. GTA, working closely with its colleagues in other government departments, made tremendous strides in achieving the central objective of this program — bridging the gap between the existing vendor-proprietary architectures now in place and the common and integrated telecommunications network architecture envisaged for the government.

Working Groups and Activities

Because of the government-wide dimension of this Program, GTA successfully coordinated the related activities with various interdepartmental committees to ensure that equally wide-ranging support was present within the government community. ◆ To deal with network architecture issues, two working groups were particularly active. The Core OSI Working Group addressed the logical framework of the government enterprise network. The Physical Network Working Group dealt with network topology and network management issues. ◆ To help the working groups handle the vast array of tasks before them, they created special focus groups to deal with selected tasks. For example, within the Core OSI Working Group, one such focus group addressed the issues related to Message Handling Services, while a second group worked on developing the Internet Architecture.

Government Enterprise Network Architecture

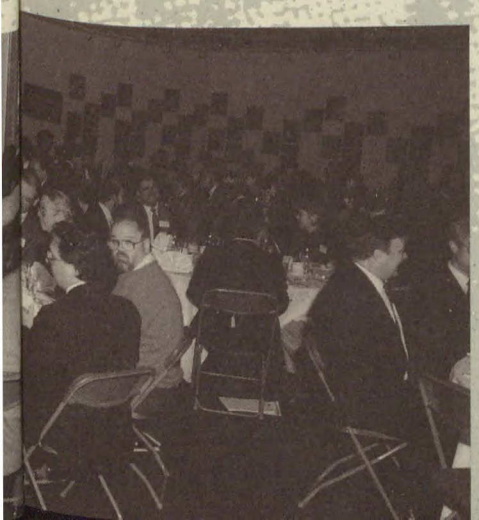
The first major achievement under the Architect Program was the development of the Government Enterprise Network Architecture (GENA), the architectural model that will serve the government's networking needs of the future. ◆ The approach that GTA chose, in consultation with departments, was to define and implement an interoperable set of protocols conforming to the Open Systems Interconnection (OSI) model and associated interface standards. The implementation of these protocols would also provide a basis for the effective use of common telecommunications facilities and the management of related assets. ◆ The primary consideration in developing the architectural model was for data communications, since voice-band services are already highly integrated. But, as the model evolves, the intention is to incorporate voice, image and other types of information exchange. ◆ One feature of the model is that it recognizes existing departmental data networks, which operate with one of a number of proprietary network architectures (e.g., SNA, DECnet, Unisys, etc.). Each such architecture defines a particular support infrastructure and set of protocols, such as naming and addressing conventions. The communications facilities needed to support these architectures are reflected in the physical network component of the model. An OSI Core Communications component, identified in the model, will enable the migration of departmental networks to an OSI environment and will support interworking among OSI and non-OSI networks and applications. This capability is required for communications inside a department and between departments; it is also vital for interworking between government and external networks.

Logical Network Development

In the area of logical network development, the Core OSI Working Group focused on interworking among dissimilar networks and made considerable progress in defining and implementing standard approaches for various applications. The following were some of its achievements:

- The working group initiated a study to identify the types of names and addresses that must be registered, and the procedures for registration, in order to implement Open Systems Interconnection in the government. The final step will be to generate the specifications for the naming and addressing system.

Participants at GTA's Forum on Open Architectures, held last November. This event was the first-ever opportunity for federal departments and agencies to discuss the common integrated network architecture planned for the government.



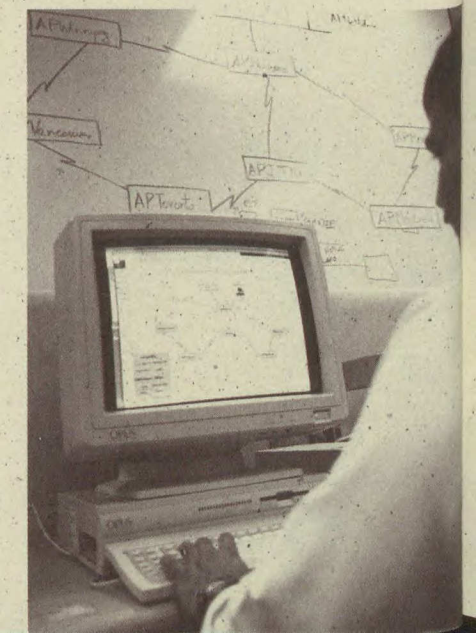
- The working group also completed the plan for conducting the Router Network Operational Pilot Project. The purpose of this project is to help identify, define and resolve architectural issues related to the design of an interdepartmental network based on the use of routers. Router technology provides the means for interconnecting networks that use different protocols (e.g., OSI CLNP, TCP/IP, Novell IPX, Banyan Vines and Decnet). Participating departments will have access to the backbone network at several locations across Canada.
- Considerable progress was made in dealing with the issues of the Message Handling System (MHS). As a result of these discussions, GTA has put into operation a gateway, based on X.400 and TCP/IP protocols, enabling departmental E-mail systems to interconnect with the Government Electronic Messaging and Document Exchange Service (GEMDES). It has also developed implementation guidelines to assist departments in interconnecting with other E-mail systems. To further enhance electronic messaging, the working group is investigating the feasibility of introducing an electronic directory of E-mail subscribers, based on the X.500 standard. The working group has identified security, which is gaining increasing attention in the field of information management within the government, as a high priority in further developing government messaging systems.
- The Core OSI Working Group also explored the options for various Electronic Data Interchange (EDI) communication architectures and service components. Key participants in the consultations have been our colleagues at Supply and Services Canada, where a sizeable potential for this service exists in the areas of procurement, payment and interdepartmental settlement.

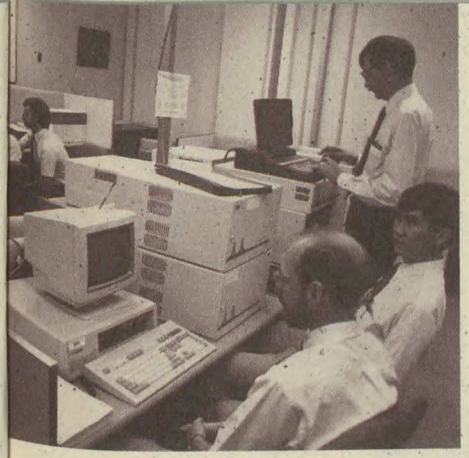
Physical Network Development

The work of the Physical Network Working Group has been especially critical because it defined the precise steps that were necessary for transition to the target physical network architecture. The overriding challenge was to adopt the latest technology in a manner that would protect existing contractual and plant investments across the government, while yielding net efficiencies. The following were some of the activities that were notable in the development of the physical network:

- GTA completed the digitization of the intercity network and the implementation of its wideband digital channel service, which were logical steps consistent with the target physical network architecture. In addition, these initiatives provided significant cost savings to the government while improving functionality to client departments.
- Simultaneously, the working group promoted the establishment of a network management infrastructure which would effectively support the evolving architecture. It undertook to define the approach for addressing facility management requirements, which was important for the management of the backbone network as well as for departments which needed to configure their own network facilities within the consolidated digital network.
- As a start, the working group initiated a study to determine the feasibility of developing a telecommunications assets database to allow for more effective utilization of telecommunications resources and facilitate planning.
- The working group also tackled the issue of in-house communications wiring for buildings occupied by the federal government, both from the technical and organizational perspectives. This was

A close look at a network management work station.





GTA's technical staff test the router network, which is designed for the high-speed interconnection of departmental Local Area Networks.

an issue that needed government-wide resolution. The Telecommunications Advisory Panel endorsed a functional specification, which was based on standards approved by Treasury Board and which could be used by departments for requisition of in-house wiring systems.

Other activities related to the physical network architecture included the development of a Request for Information for a fibre-optic network for the Ottawa-Hull area, and the evaluation of new technologies, such as Frame Relay for a new government packet network and "bandwidth on demand" for the government digital intercity network.

GTA AND R&D

The question of funding R&D activities related to the development of government-wide telecommunications under the Telecommunications Architect Program was addressed by the Government Telecommunications Council. The Council supported the use of the operating surplus derived from the common service program. ◆ Extensive R&D activities of the past year were embedded in the development of the target network architecture and the implementation of the required infrastructure. In most cases, their objective was to assess the performance of technology and systems in meeting government needs. ◆ The Router Network Operational Pilot Project is just one example of a multitude of technology applications within a government-specific environment that will be tested before a major commitment is made to apply those technologies as part of a government-wide operational network. ◆ The PBX/Centrex study, while part of physical network planning, was an activity to define the parameters for employing PBX and Centrex solutions for given scenarios. As such, it has application outside the enterprise network development project. ◆ Similar examples of embedded R&D pertain in the TCP/IP Gateway, X.500, Frame Relay, and other studies and projects discussed in this report.

COMMUNICATIONS

The Telecommunications Architect Program placed a great deal of importance on the interaction required between GTA and its customers to achieve success. While this very effective interaction with represented departments took place inside the consultative committees and the working groups, GTA developed additional communications tools to ensure that all departments had an opportunity to participate. ◆ One of these was the organization of the Forum on Open Architectures for Government Enterprise Networking and Information Management, held in Ottawa in November 1991. This was a very successful two-day study session at which experts from GTA, other central agencies, client departments, and the private sector reported on the results of the Architect activities, addressed special issues that were relevant to the development and management of an enterprise network, and evoked the views of the participants. This event brought together some 350 members of the telecommunications and information technology community of the government, as well as users of products in finance, personnel and program planning. ◆ Moreover, to provide periodic updates on the progress being made under the Architect Program and to generate a continuing dialogue with colleagues on associated issues, GTA launched a bulletin, called *Focal Point*, which is to be published three times a year.

Message from the Vice-President, Operations

The office of the future will, no doubt, have an address. However, as a result of advancing technology, it will not necessarily be confined to a precise physical location. Even as this *Report* is being finalized, technology continues its inexorable progress. The new, miniaturized, personal telephone will soon take its place at the user end of the ever-expanding telecommunications network, bringing true personal communications one step closer.

However, while technology itself can stimulate both interest and passion among those involved in its development, the increasing demands for more and better networks are coming from the most important area — the end users, the consumers of the service — the customers.

Customers of the networks are demanding more and better quality access — both to the networks, as service platforms, as well as to information. The information required may be resident in a hard file or a virtual file. The customer only knows that the information is wanted and, therefore, access is needed. And in the middle of all of this activity, there are ever-increasing requests for higher quality, as defined by the customers.

And therein lies the challenge offered to the telecommunications professional: to allow customers to gain access to and to use information through a seamless, transparent and error-resistant network.

Robert Gervais
Vice-President
Operations

The network of the future will enable all government employees to better serve the public.

Robert Gervais

Network of the Future

GTA's vision of government telecommunications is a transparent, seamless internetwork architecture which will allow the connection of dissimilar systems throughout the federal community — a high-speed electronic highway carrying data, voice, image and video. To ensure that the network of the future really evolves in the right direction, a commitment was made to involve our customers and colleagues in the challenge of realizing GTA's vision. We are excited by the opportunities the network will offer, some of which are highlighted below.

Improved Access to the Public

The government provides an enormous number of economic and social services to Canadians through thousands of different access points across the country. Federal departments acquire, maintain and distribute information for and about these services in a multitude of ways, using a variety of procedures. Access to government programs may therefore prove difficult. For example, businesses may need as many as six different registration numbers in order to deal with the government. ◆ As part of the initiative to direct scarce resources away from overhead and toward better, more responsive and more client-oriented services, departments are actively pursuing systems innovations and modifications which will improve the public's access to their programs. The Agency is a helpful partner in supporting efforts to establish a single business registration number for those businesses where such a development would be beneficial.

Working closely with its customers, GTA is designing systems which will assist departments to integrate information and communications resources. Such integration will reduce duplication and costs and will make it easier for the public to obtain government services.

Metropolitan Area Network

Fibre-optic technology, with its ability to carry enormous amounts of information, will play a key role in the network of the future. Commercial systems currently available operate at 2.4 Gigabits per second (Gbps) and are able to carry over 32,000 voice channels on a single pair of wires. The growing demand for higher bandwidths within the federal government, and the related increase in transmission costs, have underlined the strategic importance of utilizing the full capacity of fibre optics. ◆ GTA is working with partners such as the Department of National Defence in developing fibre-optic network facilities in the Ottawa-Hull area. This project will provide practical experience which can then be applied across the government, and will be one of the first steps in GTA's implementation of a Metropolitan Area Network—a high-speed, city-wide network carrying both voice and data.

Router Network

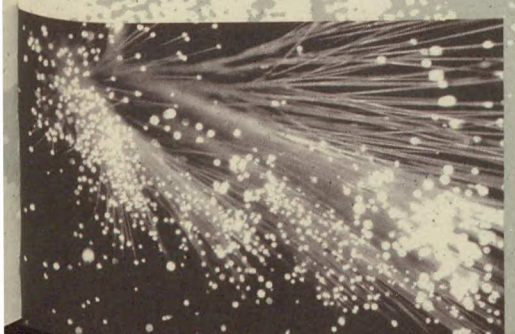
Dissimilar systems throughout the government impede communications both within and between departments. To facilitate system interconnection, GTA has embarked on an ambitious plan to introduce router technology across the government. The first phase of this process is an 18-month router service internetworking trial undertaken in conjunction with Supply and Services Canada (SSC). Initially, routers will be used for internal SSC applications, connecting its regional systems. They will subsequently interconnect SSC's common services with other departments and transmit interdepartmental traffic. GDCS, overlaid with the router service, will provide the basic infrastructure for the trial. The experience gained in this pilot will be useful for the anticipated government-wide implementation of router technology.

Canadian Network for the Advancement of Research, Industry and Education (CANARIE)

In partnership with Industry, Science and Technology Canada, GTA has been working to establish a high-speed digital communications network linking computer users in business, federal and provincial governments and institutions of higher learning. Based on OSI technology, the CANARIE concept has been developed in collaboration with industry and research communities to enhance Canada's industrial competitiveness, improve its research and education capabilities and accelerate the development of next-generation technologies. The network will serve as a conduit for information and communications, connecting urban centres across the country. ◆ GTA's goal of using OSI technology in the network of the future will be furthered by our involvement in CANARIE, which will not only demonstrate the effectiveness of the technology, but will act to increase the demand for OSI products and services.

Videoconferencing and Distance Learning Applications

Within the next year, GTA will be introducing both its videoconferencing service, offering two-way interactive video and audio, and a business television service. These innovations will permit the development of a distance learning capacity within the public service. ◆ The need for a highly-skilled workforce, the



changing nature of work, and the growth in the use of technology have resulted in an increased requirement for training within the federal government. GTA has accordingly entered into an agreement with Training and Development Canada and the Canadian Centre for Management Development to establish the Public Service Learning and Communications Network (PSLCN). Another partner is Public Works Canada, which has accepted an invitation to become a member of the PSLCN Executive Steering Committee. ◆ The basic network platforms and expertise for a distance learning service are in place, and several trial applications have been undertaken. During the next year, the PSLCN will be involved in a nation-wide link-up promoting the government's Prosperity Initiative. ◆ Users of the network will benefit not only from the increased availability of training opportunities across Canada, elimination of duplication, improved communications and consultation as well as reduced travel costs.

Teleconferencing

GTA's premium digital-based teleconference service will be introduced in the coming year. This sophisticated service will offer users improved voice quality and the opportunity to increase both the number of participants per conference and the number of simultaneous conferences. Extremely flexible, the service will provide a variety of enhanced features and a broadcast mode which will permit one-way broadcasting for presentations or briefings. Our premium teleconference service will also allow customers to make reservations up to one year in advance. In addition, a tape and playback option will be available. ◆ Invoices will be distributed on a monthly basis, and usage statistics and customized reports will be available, permitting customers to manage their use of the system more effectively. Our usual low prices will be in effect, with operator-handled calls costing up to 35 per cent less than commercially-available services.

Electronic Directories

Having experienced the advantages of telecommunications technology in other applications, customers are now asking to see these benefits incorporated in an electronic directory. Such a directory is not only an important resource for customers; it is a critical element in the success of OSI networks and the applications they support. The database of the electronic directory will contain information on people, applications and network resources, and facilities. GTA has therefore initiated a study with Fisheries and Oceans to determine the extent of information to be included in an electronic directory and the method of collecting and updating it. Based on the results of that study, a prototype electronic directory will be developed and tested initially at Employment and Immigration Canada.

The Future: Here and Now

Transparent to users, the network of the future will be based on fibre, cable, wireless, satellite and other technologies. The network will offer both new and enhanced services and applications, and will allow dissimilar systems to communicate with each other. Elements of the electronic highway have already been implemented, and other components will be in place shortly. Far from being an unattainable dream, GTA's network of the future is progressively becoming a reality, which is of benefit to our partners and customers and, ultimately, the Canadian people.

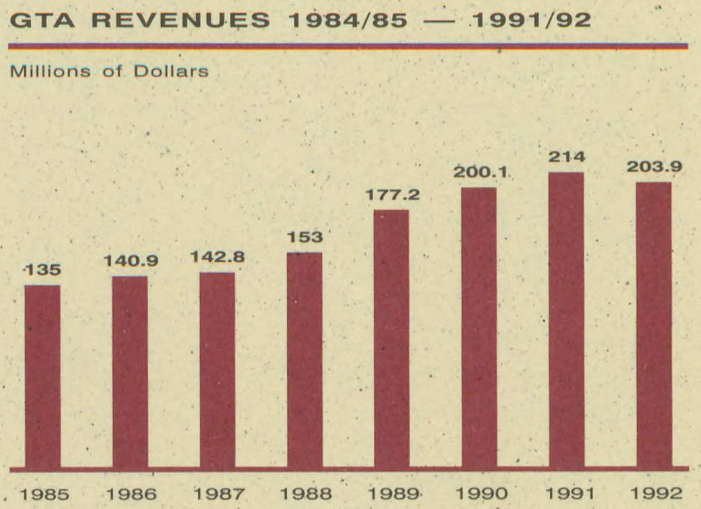
Videoconferencing facilities at the Department of Communications. GTA's videoconferencing service will help develop a distance learning capacity within the public service.

Management Report

The Directorate of Finance and Administration has prepared the financial statements given below in accordance with Treasury Board's policy and procedures for revolving funds, the relevant requirements and standards of the Receiver General for Canada and the accounting policies given in Note 2 (see page 29).

They include estimates based on the experience and judgement of GTA's management team. Certain previous year's figures have had to be revised due to the format selected for the statements this year.

GTA maintains accounting, financial, and management and information control systems as well as management practices developed to provide reasonable assurance that reliable and accurate information is available when required. These systems and practices also permit economical and efficient management of public funds and guarantee that transactions follow the prescribed regulations, respect parliamentary authorities and are properly recorded. Finally, they form the basis of an integrated financial information system for reporting on the operations of the Revolving Fund.



GTA was very successful in achieving its main objectives this year: it *increased* its overall market share by some 4 per cent, yet it continued to *drive down* the costs of its products and services, as shown in the lower overall revenues reported for 1991/92 versus the previous year.

Michel Lafleur
Director
Finance and Administration

BALANCE SHEET AS AT 31 MARCH 1992 (Preliminary Statement)

Government Telecommunications Agency Revolving Fund

	1991/92 ($000)	1990/91 ($000)
ASSETS		
Current		
Accounts receivable		
Government of Canada	34,472	38,760
Outside parties	2,200	2,566
Prepaid expenses	—	24
	36,672	**41,350**
Fixed at cost (Note 3)	6,811	5,850
Less: accumulated depreciation	4,026	3,188
	2,785	**2,662**
Other		
Deferred charges	63	5
Accrued revenue	—	1
	63	**6**
	39,520	**44,018**
LIABILITIES		
Current		
Accounts payable		
Government of Canada	300	299
Outside parties	14,873	17,410
Current portion of the provision for employee termination benefits	42	79
Deferred revenue	1,960	—
	17,175	**17,788**
Long-term		
Provision for employee termination benefits	1,528	1,473
Deferred revenue	147	198
	1,675	**1,671**
EQUITY OF CANADA		
Accumulated net charge against the Fund's authority	7,697	17,392
Accumulated surplus	12,973	7,167
	20,670	**24,559**
	39,520	**44,018**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE FINANCIAL STATEMENTS.

Government Telecommunications Agency Revolving Fund

STATEMENT OF OPERATIONS FOR THE YEAR ENDED 31 MARCH 1992

(Preliminary Statement)

	1991/92 ($000)	1990/91 ($000)
REVENUE		
Telecommunications services:		
Customized voice and data	105,854	115,775
Intercity network	67,425	77,827
Shared data	12,499	11,006
Government digital channel	8,098	—
Local shared	7,942	7,780
Pass-through	1,171	775
Directory	768	793
Other network	84	13
Telecommunications architecture	25	30
Other revenue	2	3
Total revenue	**203,868**	**214,002**
EXPENSES		
Operating services:		
Customized voice and data	104,412	114,947
Intercity network	47,871	64,914
Shared data	11,898	10,745
Local shared	7,560	4,664
Government digital channel	5,691	—
Directory	1,302	1,340
Pass-through	1,171	1,504
Other network	76	5
	179,981	**198,119**
Management services:		
Salaries	7,400	6,174
Termination benefits	180	266
Professional services	4,680	3,670
Rental, building and equipment	1,483	1,473
Telephone and freight	758	766
Repairs	565	269
Travel	561	461
Depreciation	434	312
Office materials and supplies	319	282
Information	225	108
Loss on disposal of fixed assets	12	38
Other	11	2
	16,628	**13,821**
Telecommunications architecture:		
Salaries	124	61
Professional services	584	202
Telecommunications and freight	71	—
Travel	38	2
Other	26	—
	843	**265**
Interest charges on the Revolving Fund	610	1,048
Total expenses	**198,062**	**213,253**
NET SURPLUS	**5,806**	**749**

STATEMENT OF ACCUMULATED SURPLUS FOR THE YEAR ENDED 31 MARCH 1992 (Preliminary Statement)

	1991/92 ($000)	1990/91 ($000)
Balance, beginning of year	7,167	6,418
Net surplus for the year	5,806	749
Balance, end of year	**12,973**	**7,167**

STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE YEAR ENDED 31 MARCH 1992 (Preliminary Statement)

	1991/92 ($000)	1990/91 ($000)
Operating activities		
Net surplus for the year	5,806	749
Add: Provision for termination benefits	180	266
Depreciation	982	727
Loss on disposal of fixed assets	12	38
Amortization of deferred charges	10	3
Less: Amortization of deferred revenue	(170)	(110)
	6,820	**1,673**
Changes in current assets and liabilities	4,065	(7,775)
Changes in other assets and liabilities		
Payments on and change in provision for employee termination benefits	(125)	(84)
Deferred revenue	51	—
Accrued revenue	1	8
	(73)	**(76)**
Net financial resources (used) provided by operating activities	**10,812**	**(6,178)**
Investing activities		
Fixed assets		
Purchased	(1,117)	(950)
Net financial resources used by investing activities	**(1,117)**	**(950)**
Net financial resources (used) provided and change in the accumulated net charge against the Fund's authority account, during the year	**9,695**	**(7,128)**
Accumulated net charge against the Fund's authority account, beginning of year	(17,392)	(10,264)
Accumulated net charge against the Fund's authority account, end of year	**(7,697)**	**(17,392)**

NOTES TO FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 1992
(Preliminary Notes)

1. Purpose and authority

The Government Telecommunications Agency Revolving Fund was originally established in 1963 to plan and provide telecommunications facilities and services at the request of federal departments and agencies. Section 4 of the *Revolving Funds Act* authorized the Minister to make payments out of the Consolidated Revenue Fund for working capital, capital equipment and temporary financing of operating requirements, the total of which was not to exceed $8,000,000 at any time. This authority was increased over time to $64,000,000 under Section 3(3), 1991/92.

2. Significant accounting policies

(a) *Prepaid expenses*

Some payments are made to suppliers for activity in the next fiscal year and are recorded as prepaid expenses on the balance sheet.

(b) *Fixed assets*

Fixed assets are carried at cost. In most cases, depreciation is calculated using the diminishing balance method at the following rates: automobiles (30%), office equipment (20%), furniture and fixtures (10%). Telecommunications equipment constitutes a special category of assets, depreciated on a straight-line basis, over the first three to seven years of utilization of the equipment.

(c) *Deferred charges*

Deferred charges are linked to acquisitions of telecommunications equipment by GTA and are amortized on a straight-line basis on the same life expectancy as the asset to which they relate. In 1991/92, the amortization relating to deferred charges amounted to $10,436.

(d) *Deferred revenue*

Advance payments from client departments and agencies for future telecommunications services are recorded as deferred revenue and are included in revenue on an equal basis over a three-to seven-year period. In 1991/92, $169,965 was recognized as revenue.

(e) *Accrued revenue — Long-term*

Monthly payment plans are offered to departments and agencies to cover implementation costs of telecommunications services. In 1991/92, the amount amortized is equal to $1,388.

(f) *Employee termination benefits*

Termination benefits accrue to employees over their years of service with the Government of Canada as provided for under collective agreements. The cost of these benefits is recorded in the accounts as the benefits accrue to the employees.

3. Fixed assets and accumulated depreciation ($000)

	1991/92			1990/91
Asset Class	**Cost**	**Accumulated Depreciation**	**Net**	**Net**
Office equipment	3,019	(1,470)	1,549	1,121
Furniture and fixtures	549	(211)	338	167
Automobiles	119	(97)	22	32
Telecommunications equipment	3,124	(2,248)	876	1,342
	6,811	**(4,026)**	**2,785**	**2,662**

4. Restatement of prior year's figures

For comparative purposes, some 1990/91 figures have been restated to conform with the 1991/92 presentation.

NUMBER OF CLIENTS USING SPECIFIC GTA SERVICES

SERVICES	1991/92	1990/91	1989/90	1988/89	1987/88
Customized voice and data	124	110	100	102	92
Intercity network	150	145	142	135	133
Government digital channel	37	—	—	—	—
Shared data	90	89	66	65	67
Local shared	152	145	142	135	133
Directory	137	137	135	128	125
Other network	54	41	47	45	43

FIVE YEARS IN REVIEW — STATEMENT OF OPERATIONS

	1991/92 ($000)	1990/91 ($000)	1989/90 ($000)	1988/89 ($000)	1987/88 ($000)
REVENUE					
Telecommunications services:					
Customized voice and data	105,854	115,775	100,531	85,083	70,747
Intercity network	67,425	77,827	81,882	77,133	69,577
Shared data	12,499	11,006	8,847	7,128	5,108
Government digital channel	8,098	—	—	—	—
Local shared	7,942	7,780	8,186	7,517	7,059
Pass-through	1,171	775	—	—	—
Directory	768	793	661	283	458
Other network	84	13	24	15	10
Telecommunications architecture	25	30	—	—	—
Other revenue	2	3	3	3	3
Total revenue	**203,868**	**214,002**	**200,134**	**177,162**	**152,962**
EXPENSES					
Operating services:					
Customized voice and data	104,412	114,947	99,645	84,281	70,006
Intercity network	47,871	64,914	67,938	64,991	59,548
Shared data	11,898	10,745	10,103	7,433	5,524
Local shared	7,560	4,664	6,420	6,666	5,789
Government digital channel	5,691	—	—	—	—
Directory	1,302	1,340	1,311	830	1,014
Pass-through	1,171	1,504	—	—	—
Other network	76	5	57	9	26
	179,981	**198,119**	**185,474**	**164,210**	**141,907**
Management services	16,628	13,821	11,766	10,143	9,663
Telecommunications architecture	843	265	—	—	—
Interest charges on the Revolving Fund	610	1,048	1,092	408	685
Total expenses	**198,062**	**213,253**	**198,332**	**174,761**	**152,255**
NET SURPLUS	**5,806**	**749**	**1,802**	**2,401**	**707**

Government Telecommunications Agency Revolving Fund

NOTE: THE 1991/92 FIGURES ARE PRELIMINARY.

Government Telecommunications Agency Revolving Fund

FIVE YEARS IN REVIEW — BALANCE SHEET

	1991/92 ($000)	1990/91 ($000)	1989/90 ($000)	1988/89 ($000)	1987/88 ($000)
ASSETS					
Current					
Accounts receivable	36,672	41,326	30,331	25,975	27,203
Prepaid expenses	—	24	—	29	—
	36,672	**41,350**	**30,331**	**26,004**	**27,203**
Fixed (net)	2,785	2,662	2,476	2,514	2,526
Other	63	6	18	48	247
	39,520	**44,018**	**32,825**	**28,566**	**29,976**
LIABILITIES					
Current					
Accounts payable	15,173	17,709	14,326	15,506	15,466
Other	2,002	79	218	80	216
	17,175	**17,788**	**14,544**	**15,586**	**15,682**
Long-term	1,675	1,671	1,599	1,335	1,644
	18,850	**19,459**	**16,143**	**16,921**	**17,326**
EQUITY OF CANADA					
Accumulated net charge against the Fund's authority	7,697	17,392	10,264	7,029	10,436
Accumulated surplus	12,973	7,167	6,418	4,616	2,214
	20,670	**24,559**	**16,682**	**11,645**	**12,650**
	39,520	**44,018**	**32,825**	**28,566**	**29,976**

NOTE: THE 1991/92 FIGURES ARE PRELIMINARY.

PROJECTED USE OF GTA REVOLVING FUND AUTHORITY

		($000)
Authority, 1 April 1992		30,000
Add:	Increase in authority 1991/92	34,000
Drawdown:		
Add:	Balance 1 April 1992	9,784
Add:	Projected net credits to appropriation authority for 1992/93	1,200
Projected Balance 31 March 1993		**74,984**

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* Regional Office

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e désignation au masculin

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L'arrière-plan, représentant une planète Terre in
suggère les idées de globalisation, de communau
et d'interdépendance.

Pendant que les lignes fines, qui symbolisent les t
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Rapport.

L'appellation même, enfin, montre l'ATG comm
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