

1. *Industry/Government Database Colloquium*

1992 (Ottawa, Ont.)

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² **Second
Industry/Government
Database Colloquium**

Department of Communications,
Canada
February 27, 1992

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*Summary Report by
InfoLink Consultants Inc.
Ottawa*

For more information on the Colloquium, the Interdepartmental Working Group on Database Industry Support or for a list of attendees, please contact:

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The organizers of the
Second Industry/Government Database Colloquium
wish to thank Peter Brandon of Sysnovators
and Jens Laursen of Inkron
for donating food and hospitality
for the event

AGENDA

SECOND INDUSTRY/GOVERNMENT DATABASE COLLOQUIUM

Lester B. Pearson (External Affairs) Auditorium, 125 Sussex Drive, Ottawa
February 27, 1992

HOSPITALITY COURTESY of SYSNOVATORS and INKRON

Registration 8:30 am

OBJECTIVE: To assist Federal Government Institutions and the database industry in understanding the benefits to be gained from working together to make Government information more readily accessible.

To provide networking opportunities for Industry and Government participants.

CHAIR: David Mulcaster, Department of Communications

9:00 Opening

9:10 Introduction to the day

Norm Cheesman, Vice-President, Public Affairs, Information Technology Association of Canada

Leslie-Ann Scott, Director, Canada Communication Group

9:45 Interdepartmental Working Group on Database Industry Support and its Documents and its New Mandate

10:15 Refreshment break

10:45 Demystification of Policies which Impact on Database Dissemination

Joanna Drewry
David Hum
Louis-Charles Sirois

Communications Policy
User Fee Policy
Implementation of Crown Copyright

12:00 Lunch

1:15 Private-Public Partnerships

CANARIE
11Corinfo
Micromedia
InfoGlobe Case Study
Teranet
Statistics Canada

Pat Sampson
Ron MacSpadyen
Frank Gagne
Doug Hobbs
Natalie Kozub
Jerry Stinson

3:30 Closing

Bob Gibson, ITAC Information Industries Committee

3:45 Coffee etc and discussions.

Introductory Remarks

Norm Cheesman

Leslie-Ann Scott

The Second Industry/Government Database Colloquium began with a presentation by Norm Cheesman, Vice-President of Public Affairs for the Information Technology Association of Canada, who stressed the role of information technology in transforming capital and knowledge into global electronic commodities. He noted that information "has become a key strategic input into almost every economic activity. It is therefore the key link in our drive toward greater competitiveness."

Canada's information technology industry generated revenues of \$36 billion in 1991, said Cheesman. But the earnings of the database/electronic information sector of the industry — \$80 million in 1991 — accounted for a mere fraction of that total.

Cheesman said ITAC had just completed a report titled *Investing in People*. "The report says we need to create a pool of the most effective knowledge workers in the world if we are to remain competitive." He suggested a connection between "our relative underinvestment in people resources and the tremendous underutilization, by Canadians, of electronic information and database services."

ITAC merged with the Canadian Association of Data and Professional Service Organizations (CADAPSO) last year, and is now the principal group speaking on behalf of the information technology sector. In collaboration with several government departments, ITAC has begun a survey of companies in the information technology sector that "will give us a clearer idea of the challenges facing the industry." Cheesman said the industry includes hardware, software and telecommunications manufacturers; telecommunications and systems

integration services; and electronic information products and services.

Concluding with a comment on public policy, Cheesman said knowledge of and access to government databases is critical to the industry. He praised the Interdepartmental Working Group, but emphasized that "we need to keep pushing against the barriers...and against inflexible policies within government departments."

Leslie-Ann Scott, Director of Publishing for the Canada Communication Group, described the far-reaching changes that had swept her organization since December, 1989, when it became a Special Operating Agency of the federal government. Scott said CCG has revenues of \$300 million per year, and runs 100 printing plants across the country. Special operating status means the agency is financially self-sufficient, and is no longer the only publishing company that government departments can use. The group has changed its name and logo, drafted a mission statement and slogan, doubled the size of its training program and formed an advisory board of public and private sector people.

Scott said the accent is on service improvements. CCG managers have learned that "employees will treat customers the same way that employers treat employees". She said the Group recently surveyed its own employees, and discovered that they feel "management does talk to us but doesn't listen".

CCG now offers distributed printing in 13 locations, has a number of electronic products and hopes to have more, and considers itself a "leader in the development of recycled papers".

A participant asked Scott how the Group

sets prices for its publishing products and services. She explained that prices are set at a weekly meeting of the Publishing Decisions Committee, which she chairs. The participant expressed some skepticism about setting prices by committee, but Scott re-

plied that the process works well. Asked by another audience member if CCG would consider cost-sharing on a publishing project, Scott replied that "if there is a market (for the material), we are prepared to cost-share".

Interdepartmental Working Group on Database Industry Support Documents and New Mandate

Mary Frances Laughton

Despite its cumbersome name, the Interdepartmental Working Group on Database Industry Support (IWGDIS) has met objectives worth bragging about, Mary Frances Laughton told delegates during the second morning session of the colloquium.

Laughton, Manager of Information Resource Management, Informatics Applications at the Communications Resource Centre, replaced the previous chair of IWGDIS, Roy Marsh, in December, 1991. She explained that the Working Group was created in December, 1988 after then-Communications Minister Marcel Masse received a series of letters from 22 industry organizations calling for bridge-building between the private and public sectors.

Laughton said the Working Group is made up of representatives from 14 departments and agencies, all of whom play a facilitation/advocacy role within their respective organizations. The group meets monthly, and "we do work," Laughton wryly assured the audience. The Working Group recently redefined its tasks, and is now pursuing two objectives:

- Promoting more effective management of marketable government information holdings;
- Increasing opportunities for partnerships in this context.

Laughton said the Working Group plans to develop practical products to help government managers "deal with information management and deal with the private sector," recognizing that electronic publishing

may seem like a big challenge for government employees. Indeed, she said, those who have done it "bear some scars," but believe that it has been an enriching experience.

So far, the Working Group has produced a primer and a practical guide to electronic publishing of government databases. Both documents will be published by Treasury Board, and have been distributed to more than 1,500 users in government and the private sector.

Ontario and Manitoba are two jurisdictions that are making use of the primer and guide. "It makes you feel that you are doing something right," said Laughton. She noted that the Working Group acts as resource to the Treasury Board's Management of Government Information Holdings (MGIH) Advisory Committee and functions as a subcommittee of the MGIH Implementation Committee.

For those seeking training in electronic publishing, Laughton recommended Eleanor Zazulak of the Treasury Board Secretariat, who developed one-hour, two-hour and half-day training programs covering everything a manager would need to know about electronic publishing.

The Working Group is also keen to promote stronger ties between government agencies and the database industry, and is now developing inventories of marketable government holdings. Determining the appropriate charges is a three-step process, said Laughton. First, a starting point must be established. That starting point may be "full cost," "full cost-plus," or "market rates". Second, managers must assess whe-

ther any departure from the starting point is justified, and if so, by how much. Factors that might justify such a departure might include a determination that full cost recovery could reduce consumption and compromise the program, concern that full recovery would have an unacceptably adverse impact on the financial position of users, or that high fixed costs might result in insufficient demand to permit full cost recovery.

In establishing how much the fee should vary from the starting point, managers must examine whether the cost of administering the charges will be excessive, and whether the charges will undercut the market if genuine competition exists.

The third step is to devise a method for recovering the fees. The method of charging must be equitable, it must promote economic efficiency and it must be administered economically. Laughton said the government spends \$750 million a year on surveys, but the information in those surveys is "used once (by the commissioning client). We believe they can be used to generate revenues for the private sector."

Ultimately, the Working Group views

itself as a linking agency in the information/electronic database sector. "There are a lot of people out there who want to do stuff with their data. We can facilitate that happening. We must consult on a regular basis." Facilitating, for the Working Group, means participating in seminars, colloquia, presentations and workshops, liaising with others in government and outside, and cooperating with other levels of government intent on exploiting their information. "We try to let people know what is going on with government databases," Laughton said. "The Information Commissioner's office is doing interesting work. We want to link up with those efforts."

Laughton wrapped up her remarks with an offer and an invitation. "We are here to help. Use us. We need to know what you know now, what you need to know and what we can do to help. Is there an advocacy role we can play? Is there a Treasury Board policy that is causing you problems? Treasury Board is very open to consultations. We need your input. We are here to help you."

Demystification of Policies that Affect Database Dissemination

Joanna Drewry

David Hum

Louis-Charles Sirois

Three speakers shared the podium for a session devoted to unravelling the mysteries of federal communications policy, user fees and Crown copyright.

"Policies are not supposed to be barriers but bridges," Joanna Drewry told the audience before she waded into the depths of the federal government's Communications Policy. Drewry, Manager of Communications and Strategic Information Policies for the Treasury Board Secretariat, said the policy guides government departments on communicating with the public. It ensures "that the government is visible, accessible and answerable to the public that it serves."

The policy includes provisions regarding the information in electronic databases. The most useful guide available for the dissemination of electronic information, said Drewry, is the *Practical Guide for Government Managers* that was published last fall under the sponsorship of the IWGDIS. The guide "outlines the steps to take to put in place an electronic dissemination initiative," she said, and is "useful for both the government manager and the private sector contractor."

The policy also ensures that the public receives information about government policies, programs and services, and that public concerns and interests are taken into account in the formulation of government policies and programs. Information must be available, said Drewry, and the government recognizes it has a "duty to inform".

The Communications Policy obliges departments to:

- Maintain an index of published material;
- Ensure the published material is available in reading rooms;
- Make information available for purchase, where appropriate;
- Reduce or waive fees where there is a duty to inform.

Four separate pieces of legislation and two policies provide a framework for government communications and information dissemination. The Access to Information and Privacy Acts provide formal access to government records and personal information. Drewry said these should be the last recourse in obtaining information from the government, stressing that "departments are encouraged to respond to public enquiries as fully as possible without unnecessary recourse to the formal access routes."

The Copyright Act, parts of which are currently being revised, is the guide for licensing of databases. The Policy on Management of Government Information Holdings (MGIH) obliges departments to "make the widest possible use of information within government by ensuring that it is organized to facilitate access by those who require it." The Policy on External User Fees also has a direct bearing on information dissemination; Drewry said the next speaker, David Hum, would outline the user fee policy.

The Financial Administration Act is the authority under which the Communica-

tions Policy and MGIH were issued. Finally, Drewry said Crown copyright covers government publications, software, video recordings, speeches, consultants' reports and other material.

Under the new intellectual property ownership policy related to research and development contracts in science and technology, the Crown can divest itself of ownership and the contractor can obtain exclusive rights to the intellectual property. This provision is reflected in Section 12 of the Copyright Act. Drewry said the government could also licence the private sector to copy, provide online access, reproduce, add value to and sell databases, and could "reproduce copies of databases for distribution, free of charge or for sale."

She said the Treasury Board Secretariat is currently exploring how to include more complete information on departmental databases within INFOSOURCE, "so that there will be an easily identifiable inventory of marketable government information holdings". Treasury Board is also looking at setting up a "clearinghouse service" that would act as a matchmaker for companies and government departments with an interest in marketing databases.

David Hum, Senior Program Analyst in Treasury Board's Expenditure Analysis Division discussed the changing role and perception of user fees for government information. "User fee policy is misunderstood both inside and outside government," he said. Although user fees are not new, "the scope is broadening. There has been a change in attitude toward user fees in government. The pressure to implement user fees is driven by fiscal concerns, but it is also good business."

In FY 1984, which Hum identified as the point of departure for the new approach, the federal government's annual revenue from user fees was \$1.6 billion. For FY 1992, user

fee revenue is expected to be about \$3.2 billion. "User fees are now charged by almost every government department," he said, and are one of a number of management initiatives that reflect the government's interest in reorganizing the way it does business.

Under the policy, the application of user fees or taxes is based on which method is most equitable, which best promotes an efficient economy and allocation of government resources, and which is the easiest and cheapest to administer. Managers must also ask whether user charges would compromise program objectives or public benefits, or if there would be unacceptable consequences for users.

The critical issue is who pays, said Hum. If a government service or good benefits all Canadians, then it is a "pure public good". However, "Our working assumption is that there are few pure public goods." If the service or good benefits an identifiable subset of Canadians, then "those who benefit should be asked to pay". Most regulatory services, including those related to health and safety, are not public goods. While broad public benefits often exist, direct economic benefits usually accrue to specific users and other prime beneficiaries, such as consumers of users' products. On the other hand, said Hum, the policy is explicitly structured to ensure that charges will not compromise regulatory objectives or broader public benefits, or impose undue financial hardships on users. He stressed that the government cannot afford to "reject user fees without doing an analysis first". Overall, the objectives of the user fee policy are:

- Good management;
- Equity to the taxpayer;
- Deficit reduction.

Hum said the government believes that "those who are asked to pay should have a say," and that users should view the policy as a "catalyst for change". From the government's perspective, the fees can be a "tool for gauging the underlying demand for a service". As well, user fees allow the government to finance services that it might not otherwise be able to afford. And users who finance all or part of a program "have greater influence over that program".

The payment of fees also gives users the right to "expect quality products delivered on time," and means that "departments have much more reason to be service-oriented."

Consultation and dialogue are critical to the policy, Hum said. "Users, under the policy, are to be given an opportunity to provide feedback." He emphasized that the policy does not mean that "public servants have a licence to dream up and impose user fees". The process is designed to ensure that "users can say 'That's too much.' The department must listen. The process is interactive."

Pricing is a key element of the policy, said Hum, and there is no requirement that a department must charge full cost. "Full cost is a starting point. Departments must determine what full cost is," and there may be circumstances where it is appropriate to charge less or more than full cost for an information product.

As an example of the latter, Hum discussed the fee charged for drilling on Crown land. "The cost is just issuing the licence. But there are benefits. There can be royalties." By the same token, in circumstances where a department is involved in a competitive environment, "prices should be at competitive rates and not undercut the private sector".

Hum said federal departments need authority to implement user fees. He re-

ferred to the Supply and Services Act and the Financial Administration Act, noting that "every Minister has the authority to enter into contracts". But regardless of the process by which user fees are set, "if you are being charged fees, you always have the opportunity to comment. There is a formal process in place for you to comment."

In closing, Hum stressed that user fees are "here to stay. Revenue generation is only one objective. The real issue is better management, better service. The government is committed to an open process." He invited participants to call him at (613) 957-2560 if they had any questions about the policy.

Later, during the question period, Carl Sonnen of Informetrica Ltd. suggested that user fees constitute a form of indirect taxation. "What review process is in place to look at that policy?" he asked. "Is there a review process?" Hum said the most formal review process is the regulatory system, noting that "when regulations go through they are scrutinized by a committee of Cabinet."

Sonnen said a review by Cabinet members is not the same as a public review. Hum responded with an invitation to Sonnen to submit his views to Cabinet. Chair David Mulcaster concluded the exchange by noting that "Cabinet is interested in a more open review process. You could get a very sympathetic hearing."

Tim Denton of T.M. Denton Consultants Ltd. asked Hum about the pricing process, suggesting that the policy sounded like "a brave and adventurous bureaucrat in Russia a few years ago saying 'we've got to move to a market system.' Cost, as defined bureaucratically, has very little to do with the cost of producing in a market." Denton asked how the policy reconciles cost recovery with the realities of the market.

Hum replied that government has overhead costs that are not found in the private

sector, and "one would expect that in setting fees it would not be appropriate to factor in those overhead charges." He said departments have flexibility in setting user fees, and stressed that "cost is only one input considered".

Roddy Duchesne of the Canada Communication Group asked Hum who he should see about marketing a database. "Can I come to Treasury Board with an individual project?" he asked. "I've heard that Treasury Board wants department-wide policy rather than individual projects." Hum said the Treasury Board believes that "departments are best situated to assess the merits of individual proposals. If Treasury Board entertained individual proposals, we would be overwhelmed."

Louis-Charles Sirois, an attorney with the Department of Justice, offered audience members what he described as a "quick and dirty course on Crown copyright." He noted that copyright law dates from the final years of the last century, and was originally intended to protect the output of writers.

Copyright applies to anything written or recorded, Sirois said, but copyright law "does not protect ideas. Patent law protects ideas." While "no literary merit is implied" under the law, there is recognition that "coincidence is possible", and that more than one person may have a claim to the same line or phrase.

In the case of software, Sirois said, it is the "content that is protected, not the diskette". He stressed that copyright is automatic in Canada, so that no formal registration is required. As soon as an individual has written or otherwise created a work, copyright applies "whether we like it or not".

For material generated for or by govern-

ment employees, Sirois said the copyright belongs to the Crown. The exceptions are legislation, regulations and judicial decisions, which are "protected by common law tradition". Treasury Board policy is to give printers and publishers royalty-free permission to reproduce legislation, regulations and judicial decisions. The law does not require owners to place the copyright symbol on their work, he said, but "if it (the work) has any value, then it is safer to tell users that it is protected."

Sirois's comments provoked a sharp exchange during the question period. The first question came from Stuart Morrison, Vice-President of Marketing and Sales at Canadian Law Book Inc., who asked Sirois for a written opinion "on the position you've outlined" on Crown copyright of judicial decisions. "We've been attempting to get a written opinion from the Department of Justice," he said, but no formal reply has been received. Sirois replied the position he had outlined was a departmental opinion. Morrison pressed the point, repeating his request for a written opinion, stressing that the whole area of Crown copyright of judicial decisions is "a hotly disputed area".

Sirois expressed the view that a publisher's annotations accompanying published judicial decisions add value to a work. Aside from the issue of copyright, he said, "I insist that legal publishers continue to publish legal judgements". He acknowledged that the published judgements along with the annotations are a valuable resource. At this point in the exchange, David Mulcaster intervened and asked Sirois if he could "transmit the request to your department". Sirois said he was aware that the issue of Crown copyright of judicial decisions is "a legal debate right now".

Private-Public Partnerships

Pat Sampson
Frank Gagné
Ron McSpadyen

Pat Sampson of Industry, Science & Technology Canada (ISTC) described the development of CANARIE, an electronic information development project involving a number of federal departments, provincial and territorial governments, and industry. "We're trying to establish a genuine partnership," he said, and "trying to take into account all the interests of these various diverse groups." The specific objectives of the project are to develop key enabling technology for research and education, encourage the formation and use of national science and technology databases, and provide a test bed for advanced information products and services.

"What we're trying to do is establish not just an electronic network, but also a human network of people who are interested in this form of technology and can make it happen at arm's length from government," Sampson said. The project is run by an executive committee chaired by Bill Hutchison of Ernst & Young, and has formed four working groups to deal with network architecture and technology, governance and regulatory issues, business planning, and marketing and applications.

Sampson identified electronic information networks spanning the United States, Japan and Europe as "a very significant way of doing business," and stressed CANARIE's role in enabling Canadian companies to test new network products before putting them out into the market. "This will give an opportunity for us as a government to provide an infrastructure, which is where there is a value added to companies in generating markets," he said. Linkages with other in-

Douglas Hobbs
Natalie Kozub
Jerry Stinson

formation networks represent another important benefit to industry. Key characteristics of CANARIE include:

- Digital connectivity across Canada, based on the 10 regional networks that already exist;
- Development of applications and services that suit customers' specific needs;
- Conformity to open systems architecture standards;
- Maximum use of Canadian technology. While it would be considered "rather short-sighted" to specify Canadian technology exclusively, Sampson said project participants wanted to "encourage people to use Canadian technology wherever possible."

The project is expected to spend \$60 million over the next five years, and generate \$1 billion in GNP over a 20-year period. Funding includes a \$15 million direct contribution and an additional \$15 million in user fees and in-kind support from ISTC, \$15 million from provincial, territorial and regional governments, and \$15 million from industry. Sampson said the executive committee had just issued a business planning framework, and an implementation plan was to be finalized with working groups' input by April, 1992.

Frank Gagné of Micromedia Ltd. reviewed the growth and development of the Microlog database over the past 12 months. "Some of you are already partners with us

to a large extent, and I'm going to show you what we're doing with some of your products," he told participants. He stressed Microlog's role as a control and distribution system for publications that are "often called 'grey literature'. It's unique literature, it's often difficult to identify, and it's difficult for researchers to access." Micromedia has working relationships with hundreds of government departments and agencies, research institutes and universities to acquire their publications, convert them to microfiche, and advertise them in a monthly publication. The company has about 75,000 documents on file, and its collection is growing at a rate of 8,000 titles per year.

Micromedia also produces a machine-readable catalogue, which is indexed according to subject area and corporate and personal authors.

Gagné said Microlog has been available through CAN/OLE for the past five years, and can also be obtained under site licences. Many institutions hold the entire collection on fiche; others select segments by subject. Each document is also abstracted, and the entire database is now available on CD-ROM.

Recently, Micromedia entered into a strategic relationship with the National Technical Information Service in the U.S. Micromedia selects and abstracts key Canadian documents in the field of science and technology; NTIS provides a worldwide distribution network, and makes some of its own materials available for Canadian distribution. "The net result is that Canadian scientific and technical report literature now has quick worldwide access," Gagné said. When a user calls upon NTIS anywhere in the world, "lo and behold, the Canadian report comes up, and it's exactly what they want....The world is our market for Canadian information." He said Microlog has experienced "tremendous growth" in 1991,

and "we've just started to walk with this particular market".

Gagné described Microlog's international experience as a "win, win, win, win" for everyone involved. Canadian technology receives broader international exposure, end users receive access to "a recognized clearinghouse", and Micromedia's product comes to be seen as a valuable commodity.

Ron McSpadyen, a consultant with 11CORINFO Research and Information services in North Bay, Ont., described the challenges involved in bringing electronic information resources to a relatively isolated, mid-northern market in the area of Sudbury, North Bay and Timmins. User training and education are particularly important, but the project has also depended on the involvement of a wide range of partners: McSpadyen said key funders and participants include DOC, the Ontario Ministry of Mines, Nipissing and Canadore Colleges, municipal governments along the Highway 11 corridor, and about 60 private firms.

The North Bay Centre for Entrepreneurship launched 11CORINFO in 1989 with a survey of private companies, municipalities and local development offices, designed to assess the market for electronic information. A subsequent needs assessment determined that:

- Access to electronic databases might be too costly for all but a handful of mid-northern companies unless some form of support were made available;
- Relatively few companies were prepared to involve themselves in training;
- Respondents' ability to identify key electronic information sources was quite limited;
- Any electronic information service for

the area would have to be able to link clients with research projects on a confidential basis;

- The idea of one-stop shopping for information products was extremely attractive.

Since business was the primary target audience for the service, pricing strategies and competitive intelligence were among the first types of information that 11CORINFO proposed to provide. While international competitiveness is an ongoing concern, the service also focusses on domestic competitiveness and the importance of "exporting outside the Highway 11 Corridor". In promotional seminars, McSpadyen and his colleagues stress the availability of electronic information to support product design, market development, productivity improvements, and cost reduction initiatives.

The sessions generate revenue for the project, but also serve an important educational function for principals of northern businesses — many of whom presume that science and technology is a matter for somebody else's balance sheet. "We try to open their minds to the idea that there's all kinds of information that isn't available in the public library," McSpadyen said. The key challenge is to work effectively "at the local level, at the grassroots, on the front line, with people who know nothing about what you're talking about." With support from the provincial Ministry of Education, 11CORINFO also offers an online research service that is used primarily by academic and institutional partners.

"The future, of course, is just to expand on where we are now," he concluded. The project's three-year mandate means private sector support will be required from the beginning of the fourth year.

Douglas Hobbs, Manager of Marketing and Business Development at InfoGlobe, presented a case study of a Canadian firm that had used his firm's electronic information and consulting services to construct a successful small business plan. He said the company "used information to fundamentally change the way they do business." InfoGlobe is part of a news organization that has been in the information business since 1844, and was originally launched in the 1970s to provide better electronic information to editors and reporters. The database was first commercialized in 1980.

The case study concerned a Canadian software company that had hired a new manager of business development to help it expand into the United States market. With two weeks to develop a set of financial recommendations, the manager called on InfoGlobe for advice. A consulting team consisting of a *Report on Business* analyst and a staff member with U.S. working experience quickly assembled a background package, searched the database for relevant news items, and identified serious flaws in the company's expansion plans. Within days, the team was able to recommend a more appropriate strategy; days later, the client received an executive summary, complete with key facts and recommendations, to serve as a guide to about 300 pages of raw information.

Compared to standard online services, Hobbs said, "we're packaging the information in a totally different way." The client in the case study used InfoGlobe on a demand basis as a source of information on technology, sales strategies and competitors. "It's an example of a competitive company which recognizes the strategic power of information," he noted. "It's not really who owns it, but how you use it. For us, the world is our information source, and we will package that and present it to a client in

whatever way they wish.”

Later, in response to a participant's question, he said InfoGlobe's consulting service had cost the client about \$5,000, noting that “he couldn't get that anywhere else. The key point is the process we went through. This person was at a level in the organization where \$5,000 was absolutely nothing....It's a high-level information product for a high-level decision-maker.”

Natalie Kozub of Teranet Information Services discussed a four-year process leading to the conversion and electronic distribution of Ontario's land registration database. The process is now largely complete, and staff are in the process of developing an information distribution strategy. “Getting here hasn't been easy,” she said. “It's been very exciting, it's been awfully stressful...but none of us in the company questions the value of the exercise.”

Teranet is a strategic alliance between the Ontario government and the private sector, leading to the delivery of electronic services and products to users. “There's nothing radical about it, and I think it's only one of the methodologies available to achieve this end,” Kozub said. After provincial officials had explored the options of forming a Crown agency or privatizing the entire database, “we felt this model best addressed the concerns, goals and objectives of both parties involved.” She said the development of a strategic alliance represented a “radical shift” for a provincial government that had previously been more active in a regulatory role.

The actual corporate structure of Teranet is a 50-50 joint venture between the Ministry of Consumer and Commercial Relations and Real Data Ontario, a company that brings together a number of private investors. While the partners are still working out “significant cultural differences”, Kozub stressed that “everybody brought something

to the table”. The province contributed technology, equity investment, and the image of reliability associated with the public sector; industrial partners brought technical resources, business skills, equity investment, a global marketing network, and valuable business experience.

The benefits are also shared. For the province, Teranet represents an opportunity to create jobs in a growth industry, to promote the transfer of skills and resources, and demonstrate a model for future partnerships with the private sector. Industry is looking for long-term business leads and opportunities to transfer skills. The company holds a 10-year exclusive licence to the Crown lands database, with the province retaining ownership of the data and control of all land registry services. The implementation period for the project has been scaled back from 15 years to eight, even though the land registry system has been in place since 1795. It currently tracks 3.8 million parcels of land and 750 million documents.

Teranet is working to organize the system in two ways. A title index will show ownership and encumbrances, while a separate map database will present survey details and plans. Each site will receive a unique property identification number (PIN), which will be “retired” and replaced every time a sale takes place. “To put it quite simply,” Kozub said, “this is a large undertaking.”

More broadly, Teranet is looking at developing an internationally recognized geographic information system (GIS) that will bring Canada into the world market in this area. In the short term, the company will be offering real-time remote access to its databases, as well as online archives and bulk services through licencees or the company itself. Eventually, the logical extension of this service will be to market Teranet's expertise in large-scale data conversion and

geographic information systems.

"We're acutely sensitive to the nature of the business that we are involved in," Kozub said. "As such, we've articulated a commitment" to ensuring the highest ethical standard of operation. She stressed that the provincial government is not delegating its responsibility for land registration by participating in Teranet; the company recognizes that the quality, integrity and accessibility of the data are of paramount importance.

At the same time, revenue generation is a key objective of the exercise. Economic restraint creates demand for operational efficiency, "and I don't think this is particularly unique to government," Kozub said. She described Teranet as a promising model for future joint ventures, noting that the provincial government "will ultimately be held accountable for the quality of the decisions that it makes in entering into partnerships like ours. Stewardship is the operative term."

Jerry Stinson, Deputy Director of the Electronic Data Dissemination Unit at Statistics Canada, said his agency has been involved with information products and services since 1666, when it conducted the first census in what later became Canada. Its longest-running project involving outside partners is the CANSIM database, which dates back to the late 1960s. The service first became available to the public in the mid-1970s, and Statistics Canada has been working with commercial distributors since that time. While "the names change weekly," the agency has worked closely with as many as a dozen commercial distributors for this product.

Statistics Canada has oriented toward a distribution system built on contracts, licences and conditions of trade because it has always wanted to support this type of joint activity, Stinson said. In 1985, budgetary restraint and a mandate for cost recovery

motivated the agency to broaden its involvement in commercial relationships. "After consolidation, we concluded that we needed to find an effective way to tariff and rate our data." A royalty framework was established, and different divisions of StatsCan have since been scrambling to keep up with the demand for a growing range of electronic information products.

In addition to formal data distribution agreements, Statistics Canada established contractual relationships with 40 or 50 post-secondary institutions in Canada and the U.S., and began working with a separate purchasing consortium of about 35 other Canadian universities. Recognizing that the process of negotiation and service was becoming "something like the pregnancy of an elephant," Stinson said, "our Deputy Minister, the Chief Statistician, instructed our Director General that we should clean this business up, or at least coordinate it."

The resulting review of licencing practices stressed that StatsCan must continue to manage its information holdings in a businesslike way, and ensure equitable and consistent treatment of commercial partners. A policy document has been prepared, and Stinson said a new set of procedures and guidelines would soon be issued.

Stinson identified four types of licences that StatsCan offers:

- An end user agreement, usually provided in standard form unless the special needs of an individual user must be addressed;
- A non-disclosure agreement, designed to protect the commercial interests of software developers;
- A reseller agreement, pertaining specifically to some of the agency's more packaged products;

- A licence for a value-added reseller, based largely on the current relationship with commercial distributors.

The general approach to licencing varies according to the data and the business environment involved, but Stinson said Stats-Can has a standard retail price for most of its products. The agency generally expects to collect revenue from its partners, either on a fixed basis or as an annual royalty. Time-limited agreements are also available, with fee schedules fixed according to the time period involved.

Mary Frances Laughton launched the discussion period by asking Frank Gagné whether Microlog was planning to establish a full-text distribution service for government information. Gagné responded that "in two years' time we'll probably be doing it," noting that products derived from CD-ROM are already available.

A participant asked Jerry Stinson how Statistics Canada goes about setting its user fees. Stinson stated that the process involves "a bit of trial and error", and reflects continuous feedback from users. For printed products, the process is somewhat more straightforward. "Our publishing costs from a print-ready copy are the start of the chain for establishing costs," with the objective of recovering costs from the anticipated market for the product.

In response to a question about IICORINFO's tangible impact on business growth and retention in the Highway 11 Corridor, Ron McSpadyen said the service had only begun January 3 and no statistics were available as yet. But he stressed the importance of providing cost-effective services to support mid-northern clients, noting that "\$5,000 could bankrupt some of the people I deal with". Although market intelligence is an important commodity in any community, he said it's important to

ensure that "the price is attached to the information before we start... That's one of the problems with marketing information nationally: It's great to go ahead and answer the question while the meter is ticking, but that doesn't sell very well to the private sector."

A participant asked Pat Sampson whether CANARIE would be available to carry commercial business traffic. Sampson said the service would probably be limited to research, education and standard business data, to avoid "all kinds of complaints" from a variety of sources. "We really don't want to compete with the private sector," he said.

Closing comments for the day were delivered by Bob Gibson. In the course of a capsule review of the panel presentations, he expressed concern that senior government officials were attempting to assess or predetermine the demand for electronic information in Canada. "That's not good news," he said. "There's got to be a sense of confidence in this...we're all experiencing pain, but we've got to get this thing off the ground."

Gibson also called for greater emphasis on five-year licences to produce electronic products "so that we can find out what the size of the market is", and suggested a streamlined approach to public-private partnerships. The notion of partnership "is maybe a bit misleading," he said, because "it suggests a one-to-one relationship". Industry is in favour of non-exclusive relationships as a means of bringing a variety of electronic information products to market.

Citing a 25-page Statistics Canada contract for a simple commercial distribution deal, Gibson urged governments to simplify their approach to electronic data distribution. "Government has to see itself as a supermarket, where it puts the products it has on a shelf and gives the private sector standard terms," he said. "Just put them on

the shelf and let us try for a while." He noted that the Government Telecommunications Agency had limited its contract for electronic copies of the government telephone directory to eight pages.

David Mulcaster closed the colloquium by calling for a quick head count of public servants in the audience who had had dealings with an information or database companies, and those who had worked with transfer or licencing agreements of less than 20 to 25 pages. He then asked how many private sector participants had licenced a government database, and acknowledged

that governments "have got a long way to go" in building links to private database developers.

At the same time, Mulcaster cited an eight-page agreement that had transferred \$10 million in data and other materials to a private firm in 1990; the company has since made \$80 million, and employs several dozen people. He stressed that the presence of Crown copyright "should not present a barrier to a company that is seeking information or data, nor should it be used as an excuse for civil servants in not working more creatively with the private sector."