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*Industry/Government Database Colloquium  
(1990: Ottawa, Ont.)*

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REPORT

INDUSTRY/GOVERNMENT DATABASE COLLOQUIUM

FEBRUARY 28, 1990

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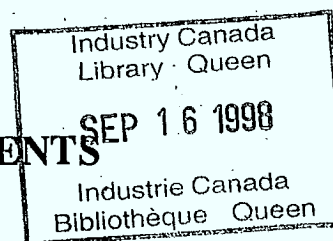
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## **Colloquium Identifies Immediate Opportunities for Government Agencies and Private Sector Partners**

The third in a series of one-day colloquia on electronic databases highlighted the potential for private sector commercialization of government information and identified a number of key issues and barriers that must be addressed through a wider partnership between the sectors.

### **David Mulcaster, Director General of Communications Planning and Development, DOC**

In brief introductory remarks, David Mulcaster identified this spirit of collaboration as one of the most important aspects of the colloquium, which was co-sponsored this year by the Department and the Canadian Association of Data and Professional Service Organizations (CADAPSO). "I hope we will be able to achieve the objective of the day, which is to assist both Federal Government institutions and the database industry to understand the benefits and mechanisms for working together to make government information more accessible to the industry."

### **Patricia M. Horner, Director, Canadian Government Publishing Centre, (CGPC) Supply & Services Canada**

Patricia Horner launched her presentation on Special Operating Agencies (SOAs) by introducing the stuffed dinosaur that decorates her office. The toy serves as a reminder "of the possibility of becoming complacent and shows that what was once a

very viable animal is no longer with us," she told participants. "I want to pay attention to my world and the way my partnerships in the world are changing."

The tone of the times was reflected in Ministers' December 15, 1989 announcement of the SOA model, which Ms. Horner described as a mechanism to provide "some operating freedoms" for activities taking place within Federal departments. Negotiations with Treasury Board are under way, but "we hope to be relieved of some administrative and reporting requirements. In return, we will be held accountable and will be expected to deliver some bottom line results," she said. "It provides us an opportunity to work better and more closely with our colleagues in departments and the private sector and allows us to be more creative in getting things done in a shorter period of time."

CGPC had already been looking at more flexible ways of working, including the possibility of acting as an optional service for Federal departments involved in different forms of publishing. Emphasis is placed on addressing key issues at an early stage, so that departments can integrate options like licensing or electronic publishing in their planning for a publication. The Centre is developing technical expertise that it hopes to put at departments' disposal, "to help us help them flag those products that should migrate to an electronic format."

One initiative involves the development of a standard questionnaire to help client departments identify the strengths and market potential of their products. At present, clients might have an idea that they want to distribute their material in a particular electronic format, but may lack a clear sense of the market or of other electronic publishing options. "We want to streamline, so that when we work with the private sector we've thought that out," Ms. Horner said. Some clients have more technical background than others, but "it's better to address the learning curve rather than punishing people after the fact."

As well, the Centre recently took all 21,000 priced titles produced by Federal departments and agencies and broke them down into 10 commodity segments. This product segmentation will allow staff to identify a number of opportunities for departments with a common interest to develop joint publishing initiatives aimed at a broader readership base. SOAs support this process, by providing "authority to do what we've been doing for a long time anyway." Within this new regulatory framework, CGPC hopes to "streamline our operation, reduce our operating cost, look a lot more closely at return on investment and be able to invest in our operation from our own profits."

Echoing speakers from earlier colloquia, Ms. Horner underscored the importance of crediting Federal departments with the revenue they generate through entrepreneurial activities, rather than having it accrue to the Consolidated Revenue Fund: "To some extent, there has been a disincentive for people who work in the Publishing Centre to be really effective, because we saw no

benefit back into our own operation." She also identified a number of outstanding issues that must still be addressed by public sector participants in the electronic database industry:

- Federal officials must understand that licensing of electronic information "is not a program of last resort, nor is it an alternative when Ministers refuse to approve funds." Departments that decide to follow this route must be prepared to be businesslike, even if this implies a "fundamental change of attitude about how we hold and manage information". The tradition of taking a proprietary approach to government information is not wrong, but "the question we have to ask is whether it is still right."
- There may be creative ways of providing access to government information. "I work on the theory that people have filing cabinets. If that cabinet has files in it with some kind of labels, then it's a database." If a department can't afford to convert this material to machine-readable form, an electronic index might represent a service to potential users and an opportunity for the agency.
- There is a need to recognize that products have a life cycle in the marketplace and consumers are fickle. One way of addressing this challenge is to be sensitive to opportunities as they arise: Access to Information requests, for example, can be seen as "a publishing opportunity, rather than someone being negative."

- Federal officials need to understand that it costs money to do business, learn the difference between gross and net profit and recognize that "we may have to work very, very hard to make even a little bit of money."
- Departments must develop a better understanding of access and retrieval issues. "I'm not sure I want a standard, but it would be nice if we had some common understanding of how we design our databases." Federal officials should consider whether confidentiality issues can be addressed by making sensitive information available in generic or aggregate form, or by structuring databases so that confidential material is held separate from marketable data.
- Treasury Board should clarify the rules pertaining to incentives and revenue sharing.
- Members of the Interdepartmental Working Group on Database Industry Support should explore ways of formalizing and distributing an implementation schedule for the licensing of government data.
- A regular forum should be established to ensure continuing dialogue between the public and private sectors. The Industry/Government Database Colloquium is a good start, but people need to talk more than once a year.

To private sector participants, Ms. Horner emphasized that Federal departments are eager to build new partnerships, but will be looking for financial or other benefits to the Crown. They don't see licensing agreements as a form of subsidy, but will have to learn about the costs that companies incur when they do business with the government. "For that, we can and should be held accountable."

"For all of us, I guess we've got to come and understand that we're in a learning cycle," she said. "From time to time we're going to have harsh words...but for the most part, people are going to get along pretty well." Ms. Horner concluded her presentation by suggesting steps that different participants could take to make this "unique opportunity" a reality:

In response to a participant's question, Ms. Horner said clients are involved from the beginning in negotiating publication or licensing agreements. It would be "inappropriate to think we could sit and cut a deal for a department." Asked whether CGPC is developing a "template" for cost-benefit analysis, she said the thrust so far has been "to impress upon the financial people the importance of developing a cost-benefit model." She also noted that officials from many provinces are prepared to reduce duplication by taking part in any Federal requests for proposals that are produced.

## **Government Overview:** **Panellists Trace New Policy Developments**

Representatives of the Department of Communications, Treasury Board and Consumer & Corporate Affairs Canada described recent initiatives that demonstrate the pace at which new opportunities for public-private collaboration are emerging.

### **Roy Marsh, Director, Informatics Applications, DOC**

Roy Marsh noted that government information is a valuable national resource. It is an important tool for managing government operations, ensuring accountability, sustaining economic performance and reflecting Canada's cultural identity. In this light, it is essential to obtain the greatest possible value from Federal information -- not only for Federal departments, but for the industry and other institutions.

Over the last decade, Canadians have seen an enormous increase in the availability of computers and in the ensuing demand for electronic data. At the same time, governments have placed greater emphasis on user-pay principles and cost recovery, with the result that departments "now view their information resources strategically and are starting to manage them accordingly."

The Interdepartmental Working Group on Database Industry Support (IWGDIS) was formed following the 1988 Database Colloquium in Laval, Quebec, with a dual mandate to foster the growth of the industry by making government data more easily

available, while improving government operations through increased use of electronic information. A central challenge in achieving both these objectives has been to increase Federal officials' awareness of the advantages of building closer links with the database industry. Government and industry representatives have also called for a more consistent approach to licensing among Federal agencies.

The Working Group's future plans include an initiative to produce a database of licensed databases within the Federal system; a joint effort with CADAPSO to study the size and scope of the Canadian database industry; and ongoing efforts to look at the most effective ways of releasing government data for the benefit of participating departments and companies. A detailed listing of the IWGDIS plans which was formulated following this colloquium is found in Annex A of this document.

### **Dan Bresnahan, Senior Advisor, Information Management Division, Administrative Policy Branch, Treasury Board Secretariat**

Dan Bresnahan traced the development of the Federal Government's framework for information management and of a set of principles to guide the dissemination of electronic information.



In the past decade, the government has completely revamped a set of policies that had been rendered obsolete by advancing technology. The Copyright Act, the Access to Information Act and the Privacy Act were enacted by Parliament and Treasury Board developed a new communication policy that:

- Establishes departments' responsibility to provide essential information to the public;
- Enshrines the user pay principle for information that falls outside the mandate to inform;
- Updates the system for classifying and designating sensitive information; and
- Provides a framework for the management of government information holdings in all forms and at all stages of their life cycle.

The new policy starts out from the assumption that information must be managed as a valuable corporate resource, regardless of its form and that managers need to know what information they have at their disposal. Information must be accessible to decision-makers and more readily available to the public where appropriate. Outside of the duty to inform, government documents are to be made available for purchase wherever significant demand exists.

In the same announcement that provided a framework for SOAs, Ministers stated that users and other direct beneficiaries should pay their fair share of the cost of information and that Federal managers should take the initiative in pursuing opportunities for cost

recovery. Treasury Board is prepared to provide incentives such as the allocation of start-up funds or performance bonuses; permitting reallocation of all or part of the savings achieved through efficiency gains; or allowing a program to spend a portion of any increase in user fees to improve service to its clientele.

The policy also emphasizes the duty to inform in situations where individuals need program or service information; where safety, health or environmental concerns must be communicated; or where the public requires explanation of a new government initiative.

Procedures for releasing electronic information are general because of the diversity of the databases involved. Treasury Board is in no position to dictate arrangements between departments and private firms, Mr. Bresnahan said, particularly at a time when departments' authority and accountability are increasing.

**Lyn Elliot Sherwood, Executive Manager,  
Senior Executive Network, (SEN) DOC**

Lyn Elliot Sherwood traced the development of SEN, an electronic information network designed to help Federal departments share information of common interest.

"The long-range goal for the project is to link all members of the management category across the government," she said. The project will begin with deputy ministers, assistant deputy ministers, their outer office staff and some regional directors general, "so we're under the gun here to make it work."



Ms. Sherwood emphasized that "we're not a project about technology. We're a project about communication among individuals and about efficient use of information." In that sense, SEN is most analogous to electronic networks established by the Canadian Bar Association and the Canadian Medical Association, where "the focus is communication among their members and access to information of general interest to the profession."

The three most important challenges for SEN will be to identify the key content for the target audience and present information in the most user-friendly format possible, while working with the informatics infrastructure that already exists within government.

"We're going to have to focus on how easy the services are to use," Ms. Sherwood said. "Our client group is not computer literate and they don't want to spend a lot of time becoming so. It's up to the services to become Senior Executive literate, not the other way around."

As far as content, the challenge will be "to funnel the information from a range of services into a comprehensive package for our clients," she said. "These are busy people. They don't spend a lot of time in their offices. It has to be focused and relevant and it has to be comprehensive in spite of its being focused."

**Eleanor Zazulak, Informatics Coordinator,  
Bureau of Corporate Affairs, Consumer &  
Corporate Affairs Canada**

Consumer & Corporate Affairs developed an overall framework for information dissemination in conjunction with a 1986 policy review, which was undertaken in response to private sector interest in the department's information holdings. Eleanor Zazulak said CCA was in the "rather unique position" of holding a large volume of public information on intellectual property, Federally incorporated companies and bankruptcies, so that "changing our process from manual to electronic and making this information available to the public has been a relatively easy transition."

She described the framework as a "practical compendium" of targets, criteria and directions for action, aimed at ensuring benefits to the department, enhanced public access, improved information services and a stronger Canadian information industry as the result of any dissemination initiative.

From an in-house perspective, the process of developing a comprehensive approach to electronic information provided an opportunity "to look beyond satisfying only the statutory disclosure requirements". Today, a streamlined system provides better service to the public and greater productivity, has reduced the cost of managing CCA's extensive information holdings and has paved the way for increased cooperation among program areas.

Easier access to specific information has also served the government objective of stimulating innovation. "We've seen concrete examples of preventing the waste of R & D money by disseminating information to our small and medium businesses across the country and even our large businesses, about emerging technologies."

Modernization of departmental holdings has already improved access to documents held in CCA's national capital offices; now, the department is offering direct access to on-line databases through local search rooms.

Cooperation with the information industry has also been extremely important. "We see our role as one of facilitating the industry to have access to our information and allowing them to provide the added value and increase the commercial viability of the information," Ms. Zazulak said. "We have a responsibility to develop and link the various products and databases that we have in-house, to facilitate the development of new and enriched products by the private sector."

CCA sees great potential for the development of joint products, such as search software and is prepared to share its knowledge of the market with private sector partners. So far, the department's working relationship with industry has been "very rewarding," Ms. Zazulak noted: Over a 10-year period, it has led to the creation of 2,000 new service delivery jobs and has generated about \$3 million in revenues to the Crown.

In response to a question on user fees, Mr. Bresnahan said Treasury Board recognizes the need to provide incentives for revenue generation within federal programs. Details have yet to be worked out, but the move toward cost recovery will lead to an "infusion of some funds".

## **Industry Overview:** **Speakers Highlight Opportunities for Cooperation**

Participants in the private sector panel underscored the importance of strategic alliances between government departments and the electronic information industry.

### **Andrea Holland, Information Industries Committee, CADAPSO**

Andrea Holland said Canada's information industry has achieved a very high technical standard and offers excellent resources in many areas. But she warned that certain gaps will have to be filled as the industry matures and attempts to serve a wider segment of the domestic market.

A key competitive challenge will be to develop a greater breadth of content in areas like economics, social policy, industrial development, international development and trade, she said. At present, a review of the Espial Directory shows that "there are more sports databases than there are for labour," even though labour is an "extremely crucial aspect of industry in this country." Domestic suppliers should also be able to provide timely, easy access to scientific information, particularly in areas where Canada has a strong R&D community.

While the wider electronic information industry accounts for \$40 billion in annual economic activity, database publishing is only expected to total about \$70 million in 1990, compared to \$4.5 billion in the United States and \$5.7 billion in domestic revenues in the U.K. Even allowing for the "10% rule" in comparing the U.S. and Canadian

markets, Ms. Holland said, "it's clear that we have a critical need for growth." Two important factors impeding this growth are the cost of producing database products for a small market and the concentration of information in the hands of a very few companies and the government. But a strong, domestic database industry will be a crucial resource to Canadian companies intent on improving their productivity in order to compete in global markets.

To meet this requirement, the industry is working hard to develop innovative products and build a stronger infrastructure and taking a unified approach to marketing Canadian expertise in international markets. As well, in autumn, 1989, CADAPSO took part in a conference co-sponsored by 11 national information associations, representing 1,800 companies. Participants agreed to form a global alliance to address issues of common concern, including intellectual property rights, partnerships between the public and private sectors and the role of information in assisting less developed countries.

On the domestic scene, CADAPSO is working hard to represent industry interests on issues like licensing and Crown copyright. Members see many opportunities to repack-age government information and add value, but greater cooperation is required to improve private sector access to information.



**Marcia Olmsted, Business Development Manager, InfoGlobe**

Marcia Olmsted acknowledged that a number of communication barriers have built up between government and industry, but noted that certain "preconceptions and misconceptions" were already changing as a result of this colloquium.

"When I think of government, I usually think of paperwork and large, somewhat cumbersome organizations with faceless, bureaucratic processes," she said. By the same token, she speculated that government officials might see the industry as "money-grubbing, overpriced and inaccessible." But these caricatures simply dramatize the need for better communication between government and an industry that is "very bottom line oriented, very lean and mean and very, very competitive -- much more so in the last few years."

The database industry can be defined in a number of ways, but its real strength "comes from the expertise of the people involved in information services," Ms. Olmsted said. "We're a collection of individuals with a lot of different experience and expertise." For governments, the biggest advantage in working with the industry is the opportunity to draw on certified, trained professionals, who have marketed a variety of information products through a range of distribution channels. A small industry, where everyone does a bit of everything, builds a special kind of expertise, she stressed: "This holistic structure can lead to very cost-effective and unique approaches to information product creation."

The industry can also act as an important source of information for departments that are venturing into new territory.

Development is expensive and paybacks can take a long time to materialize, "but things look very different after you've launched the tenth or twentieth information product. Government can gain a lot from the mistakes that the information industry has made in the past. We have a lot of them under our belt already and we can probably smell some bombs coming that you might miss if it's your first or second time around."

Database companies can offer economies of scale in data storage, back-up and distribution, add value to data or new data to a document, or combine information from different sources to give "enormously increased exposure to your products." The industry also provides a range of ancillary services, including training, client service and support and spin-off print products.

Companies have no desire to reinvent the wheel for departments like Statistics Canada or Energy, Mines and Resources, nor have they any wish to compete against government-funded databases. "Government subsidies set unrealistic expectations in terms of the marketplace and also the people who are setting up the products."

Ms. Olmsted recommended that government departments involve information specialists at an early stage in database collection and share product ideas directly with commercial vendors. "Don't spend a fortune to pay consultants who are outside the information industry to go and talk to the industry and then synthesize the results and bring it back to you."

**Judy Carrie, President, IGW Information Group West Corp., Calgary**

Judy Carrie told participants she was excited about the discussion that had taken place so far and about the potential for closer links between private firms and government managers. "I'm really pleased to hear that people like Pat Horner are putting out challenges to both government and industry," she said. "Everyone this morning said things that, I must admit, surprised me...I'm glad to hear that this kind of forum is ongoing and that there will be more."

The market for electronic information products is extremely diverse. But DOC studies show that the growth in the market will be in the non-user company, companies that could increase their productivity and competitiveness if only they were aware of the services available to them. In linking public sector users with private vendors, the dual challenge is for government departments to tell the industry about new policies on the management of information as a corporate resource and for the industry to work with government to promote that resource.

Overall, recent changes in the industry have been dramatic. Many of the early, off-the-shelf databases were established with little if any market research, but the scene has shifted. A study in the mid-1980s showed a major shift in the staffing of U.S. database producers, from 11% customer support and marketing to 40% over a five-year period. In that same period, indexing and abstracting staff decreased from 80% to 40%. These figures reflect the number of companies that are "diligently trying to orient their product to the market," with the Information

Industries Committee of CADAPSO serving as a focal point for discussion of emerging problems and opportunities.

A growing number of database firms are interested in cooperative ventures with government, where the private partner develops products that can "filter information and provide the funnelled services...that Lyn Elliot Sherwood mentioned," Ms. Carrie said. "There is the expertise and the willingness within the industry to work together to make it happen and to look at the need for the added-value aspect...It is with help from people like Lyn that industry can identify the content required in those 'funnels.'" However, she took exception to earlier suggestions that government managers have the best sense of the market for their information. Industry can help, not only in the development of technologies, but also in market analysis and the preparation of cost-benefit analyses and return on investment studies for production of information products.

On the issue of user fees and licensing, "I think some people in the business community have been deluded too long into thinking information is free, that there's no value or cost to producing information," she said. "The longer we try to delude especially the business and industrial user of information, the more difficult it's going to be to promote the use of databases and the information industry as a whole."

Ms. Carrie acknowledged that the provision of user-friendly systems will be an important factor in bridging this gap. "It's something the industry is struggling with at the moment, trying to make databases accessible and user-

friendly so that more people will be able to use them." In a similar vein, she stressed that industry experts are ready, willing and able to field questions from government departments: "Although they don't have time to write a paper on it, they'd be happy (especially through CADAPSO as a forum) to provide information and perhaps to consult, to you."



## **Laursen Presents Case Study Results**

The morning concluded with a presentation by Jens Laursen, President of InfoGen of Gloucester, Ont. Mr. Laursen summarized the findings of the Electronic Publishing Case Studies Project undertaken by InfoGen for the Jean Talon Project at the Secretary of State, in cooperation with the IWGDIS and the Canadian Workplace Automation Research Centre (CWARC).

The principal objective of the study was to identify the most effective ways of facilitating electronic publishing of government information, with particular reference to the promotion of government/private sector cooperation. The three case studies for the project were the CCINFODisk CD-ROM service from the Canadian Centre for Occupational Health and Safety (CCOHS), the CANSIM MINI Base from Statistics Canada and the Revised Statutes of Canada offered on-line by QL Systems.

Based on interviews and discussions with about 100 industry representatives, users and government officials, the study identified key issues which are hindering the effective use and distribution of government information in electronic form. Mr. Laursen stated that the major impediment is the disincentive imposed on government managers by the fiscal system under which their departments must operate. "Except for a very few cases, the potential revenues resulting from information distribution initiatives do not flow back to the departments to offset their efforts," he told participants.

Other barriers include the lack of established practices and procedures for joint development; copyright and licensing issues; government's inability to adapt to rapid changes in technology and business environment; and a lack of in-house expertise in electronic publishing within government.

During the study, the private sector stated that their biggest challenge was to identify what government information is available and then find the people responsible for it. "The Access Register is not as helpful as it could be," Mr. Laursen said and the lack of incentives within government means that officials "are not really that interested in negotiating access" with industry representatives. Private firms are also concerned that new government information distribution strategies may become more complex and time consuming. As well, the Federal Government's tendering practices reduce the incentive for bidders to propose innovative ideas: "You may find that a competitor has been awarded the contract which was inspired by your own proposal."

The industry is concerned that in-house databases will be distributed to the market in competition with the private sector. "Government should take greater advantage of the experience, products and services offered by the Canadian information industry, in order to improve the effectiveness and quality of their information collections and services to the public," Mr. Laursen said.

Ownership and copyright of added-value products remains a contentious issue. "In some cases, the added value may be significantly higher than the data or information obtained from the government," he noted. "We have to address the issue of when ownership changes hands."

Mr. Laursen suggested several options for addressing these issues, including provision of more effective incentives to government managers, enhancement of the Access Register and establishment of a unit within government which would actively promote electronic publishing of government information in cooperation with the private sector.

In the course of the presentation, participants were invited to complete a questionnaire and express their opinions on the issues raised and the options for addressing them. The report of the Electronic Publishing Case Studies Project will be distributed by the Jean Talon Project Secretariat, Secretary of State, Ottawa, Ont. K1A 0M5, (819) 994-3250.

## **Industry/Government Panel Identifies Emerging Issues**

In a lively afternoon panel discussion, representatives of private firms, the Federal Department of Justice, Statistics Canada and the National Research Council focused on emerging issues to be addressed by the IWGDIS.

### **Bob Gibson, Micromedia Ltd., Toronto**

Bob Gibson said private database producers have had many successes and experienced much frustration in their efforts to publish government data. He expressed the hope that government and industry are moving toward his vision of an ideal situation, where he could "walk down the aisle with my shopping basket, say that I want one of those, one of those and one of those, go through the checkout counter at DSS and then go home and make something out of it."

In describing the government's current approach to electronic information, he took aim at "the misguided notion that seems to prevail around the publishing of government data and I think in a word I can summarize it as a preoccupation with control. There's a sense of paranoia in government circles about data being used in an inappropriate way and I think that's the source of a lot of our problems."

Although industry takes exception to the Federal interpretation of Crown copyright, there is no suggestion that the government should lose the right to protect its own data, Mr. Gibson explained. The problem is with "this negative mindset that everything has to

be controlled and protected from exploitation." And if government determines that licensing agreements represent an appropriate mechanism for distributing electronic information, he said, it isn't appropriate for government to have the final say on issues of pricing, format, technical standards, marketing approaches, or definition of client needs.

Responding to Eleanor Zazulak's presentation, he acknowledged CCA's leadership in making its products public, but questioned the department's ability to assess market demand for those products. This assumption denies the possibility "that somebody else knows about a client the government has never heard of, who has a use the government never thought of." It is not appropriate for the department to question the judgment of a private sector partner and control his marketing decisions. "Just let him take his risk and pay the cost or earn the rewards. That's what it's all about."

It's understandable to be concerned about control when there is a constituency to be served, he noted. But the present framework has led to some situations where a database is available free to the public, but for a price to commercial producers. The concern with systems like the BOSS database operated by Industry, Science and Technology Canada seems to be that a private firm will damage the data in some way, Mr. Gibson said.



"If I can acquire 12,000 Ontario companies for free through the Made in Ontario database, I can basically duplicate half of BOSS," he said, so that "all the apparatus that has been set up to protect BOSS is nonsensical." There is also the risk that further delays will result in a loss of sovereign control of Canadian data: "The longer we drag our feet, the more all of this is just going to disappear."

**Louis Charles Sirois, Counsel, Department of Justice**

Louis Charles Sirois explained that five types of intellectual property are defined under Canadian law. Patents, copyright, industrial designs and trade marks are protected by law. The fifth type, "the basket case, which unfortunately is extremely valuable and is not protected, is know-how," in the form of trade secrets and proprietary information.

Canada's copyright laws were first established around the turn of the century to protect authors from plagiarism. The basic principle is that copyright applies to the form of a text, but not the content: "Nobody can steal the way it's written, but they can steal the thought." Copyright now applies to computer programs and has always covered tables, graphs and charts.

The two exceptions to copyright law are original works prepared under a contract of employment and Crown copyright, which applies to any documents produced under the care and control of the government. "If the issue of copyright is not dealt with in any documents of your business relationship," Mr. Sirois warned, "if it goes unmentioned,

then the law applies, like it or not." A lack of direct government funding for a text or product is not sufficient grounds to circumvent Crown copyright.

A 1986 Treasury Board circular establishes criteria for departments interested in licensing government documents. There is an internal debate as to the relevance of this circular to electronic information, but "it's a moot point right now." A revised circular will be ready in the near future.

Mr. Sirois noted that any move to abolish Crown copyright would have to go beyond Section 12 of the Copyright Act, which pertains specifically to government documents. Even in the absence of this special provision, government information would still be protected by the rest of the Act. To remove Crown ownership, "you would have to add a new section, as the Americans have," to specify that the government has no ownership of the information it produces.

**Ernie Boyko, Director of Electronic Data Dissemination, Statistics Canada**

Crown copyright is often on trial because it has no counterpart in the United States, Ernie Boyko said. "And since it's assumed that all is well in the U.S. database industry, then Crown copyright must be guilty." But in presenting "a few words in defence" of Canadian practice, he questioned whether the lack of Crown copyright had ever led to the development of a new U.S. database and suggested the private sector has been unable to meet the full range of needs that exist in the U.S. market.

Mr. Boyko recalled an agricultural economics forum several years ago, where Canadian speakers described the economic data available to them through CANSIM and their American counterparts lamented the fact that nothing similar existed in their country. More recently, as part of its omnibus trade bill, the U.S. Congress mandated the establishment of a database to support export promotion activities.

"It's obvious that the lack of government copyright in the U.S., notwithstanding the existence of a lot of private companies that distribute government information, is not sufficient for the policy-makers to meet their objectives," he said. Statistics Canada has had recent visitors from Australia, Egypt, Italy and Sweden, among many others and the model for the U.S. database on export opportunities "is an awful lot like the one that was developed in Canada" as a result of an early visit from the project director.

"There's no case to be made against Crown copyright and I move for a dismissal right now on grounds of mistaken identity," Mr. Boyko said. Cost recovery "has a much more important bearing on the availability of the information in the databases."

Another important issue is the "hidden subsidy" available for printed editions of electronic databases, which are distributed at no cost to libraries and depositories. "If you're looking at creating an electronic database and that same information is published in hard copy, be forewarned that there may be anywhere from 500 to 11,000 copies of that information already placed in distribution centres across the country." Mr.

Boyko said the impact of the depository program will have to be addressed if electronic information is to become more widely available.

**Sean McCafferty, District Manager, STM Systems Corp.**

Sean McCafferty identified timeliness, accuracy, ease of use and cost as the four key considerations that should come into play in the commercialization of government databases. He said Canadian vendors are still recovering from some problems with accuracy dating back to the initial introduction of government information in 1983, but suggested the industry has made great strides in making databases more accessible to non-professional searchers and providing cost-effective services.

Mr. McCafferty identified six key issues that government and industry must address in building a wider partnership to distribute electronic information:

- All interested parties must have access to government information. LOIs and RFPs may not be the best approach to providing non-exclusive distribution rights, but at least they make the process simple, understandable and quick.
- Streamlined licensing agreements information should state the supplier's commitment to continuity and allow the vendor to add value to the database.

- The quality of sources will gradually improve with the advent of office automation, but distribution to outside vendors should be built into new systems as they are introduced.
- The debate over the relative merits of licence fees and royalties should address the degree to which cost recovery is feasible. At present, Canadian fees may exceed the charges for larger U.S. databases in the same area of interest. "My own belief is that the licensing costs or royalties should be based on the direct cost of copying the data onto the media."
- The most marketable electronic information is mission critical, unique and available in large volume. Much of the material available from the Federal government is valuable, but only to a small audience. If it is determined that this latter information is best delivered on-line, it should be assumed that the Federal department involved will incur some costs in the process.
- Federal departments should make use of private sector expertise, rather than competing with the electronic information industry through databases like BOSS and CAN/OLE.

**Peter Brandon, Partner, Sysnovators Ltd.**

Peter Brandon addressed the perceptions and communication barriers that will have to be overcome in building a productive partnership between government and industry.

From a private sector perspective, the Federal Government is seen "as having a fairly unclear policy in information dissemination," he said, with the result that "the process of publishing electronically seems to be dependent on the same visionaries: The process has not been institutionalized." Government managers' tendency to overrate the value of their data and to see a conflict between core program functions and information dissemination, suggests the need for a "finger's length relationship" between government and industry, "where the private sector becomes more integrated, perhaps, into the operating cycle of the government organization."

Government, meanwhile, tends to see the industry as profit hungry, self-serving and anxious to strip off the profitable components of a database and leave the rest. Joint publishing is generally seen as a glamorous pursuit when "it can actually be downright grubby," and there is a perception that money is widely available for electronic dissemination.

This view is in sharp contrast to the perspective of an investment banker, who would see most electronic publishing ventures as having little collateral, an unreliable supplier, no tangible assets and perishable goods. In this light, it is not surprising that most database companies start out as "opportunity vendors" attached to print publishers, rather than start-up businesses in the conventional sense.



Mr. Brandon described the new Treasury Board directive on the management of government information holdings as a positive development, which "will force departments to actually look at what they have in the way of information and organize their holdings." User fees may provide some incentives for program staff and the opportunity to form a SOA "may provide a framework or a model for that finger's length relationship, for strategic partnerships."

The question is whether Canada could be closer to an "informatized society" and whether the country has missed the boat in leveraging its advantage in telecommunications technology. Mr. Brandon suggested that a public-private Minitel project based on the French model would have enhanced Canada's lead in telecommunications, built infrastructure, created significant consumer markets for electronic information, prevented the disappearance of Telidon and possibly NABU and stimulated the development of new Canadian technology.

**Michael Brandreth, Head of Policy,  
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(CISTI), National Research Council**

Most scientific information is published in paper form, so CISTI's main function is still to distribute paper wherever it needs to go. But Michael Brandreth said the Institute has been involved for many years in compiling and disseminating electronic information and in a number of specialized database services which assist the document delivery service.

CISTI's mandate to "promote and provide for the use of scientific and technical information for the purpose of economic, regional and social development" is "a developmental activity and it's consistent with some of the other activities of the National Research Council," Mr. Brandreth explained. A key sub-objective is to develop and maintain a national resource for scientific and technical information and to ensure that the resource is available across the country. In an environment where Canada generates 3% of the world's scientific information, but needs access to the remaining 97%, CISTI is funded by the taxpayer to make this information available through a unique and consistent service.

Access is provided on a user pay basis, regardless of language or geography, through four main mechanisms:

- CAN/OLE, CISTI's on-line inquiry system, which provides bibliographic references through database searching;
- CAN/SDI, which provides similar information in batch mode;
- CAN/DOC, which allows on-line ordering of documents identified through CAN/OLE; and
- CAN/SND, which provides access to scientific numeric databases and manipulation of the data retrieved.

For databases intended for public audiences, an important challenge is to ensure ease of access and continuity, Mr. Brandreth said. For specialized services, some kind of funding support will be essential. He cited the recent agreement between CISTI and NASA providing access to the Aerospace Database on DIALOG in return for input of Canadian material.

## **Concluding Discussion:** **What Does the Industry Need?**

The closing discussion proceeded from two questions posed by David Mulcaster in his role as chair of the afternoon panel:

- Does the industry require government stimulation and if so, what form should it take?
- What impediments must be addressed?

Michael Brandreth led off the discussion by suggesting that the key question is not whether to stimulate the industry, but how. In some specialized areas, it is extremely difficult to demonstrate the market for electronic information, despite anecdotal evidence of "tremendous benefits" to the research community and the nation as a whole. In these settings, he said, it is "extremely unlikely that a database of that nature would begin in the private sector without any sort of government support at all."

Peter Brandon said the industry needs "caring attention," not direct grants. Government can assist vendors by acting as a secure partner and establishing an "enlightened and clear policy" on electronic information. Federal policy "should be not a statement of the obvious, but a statement of the opportunity in this domain."

Sean McCafferty said Federal departments can assist the industry by purchasing services when the economics make sense. "What that really does is generate a revenue stream for

our organizations," and encourage continual improvements in electronic information products. In a free market, excessive emphasis on standards for pricing, methodology or marketing can become a major impediment.

Louis Charles Sirois said industry and government need each other as much as any other participants in a commercial contract. Government's haphazard treatment of the issue is one of the main impediments to progress. "Maybe if government people were educated on this subject, we could all have a common language and negotiations would be a lot quicker," he suggested.

Bob Gibson said government should spend money on education and market awareness, not studies and sponsor trade shows to promote database producers.

Ernie Boyko agreed with Mr. Brandreth that the question is what kind of stimulation the industry needs. A major problem is the size and sophistication of the Canadian market for electronic information products. "The basic fact is that there's not a large percentage of our population who are numerate and if you can't get people using the information there's no market." It has been demonstrated that an appropriate graphics package makes it easier for high school students to access a numeric database, learn to use technology, learn to use information and learn about their country. This suggests that market education is an important priority.

The Alex program is one good example of direct support to the industry, Mr. Boyko said. But he speculated that a program similar to Minitel might raise concerns about unfair competition or subsidization on the part of industry.

Mr. Mulcaster suggested seven areas of concern that could be brought forward from the colloquium:

- Crown copyright;
- The role of the Canadian Government Publishing Centre and of the industry, in the structuring of licensing agreements involving Federal departments;
- Initiatives that departments must take to make information available for licensing and to let the industry know that it is available;
- Issues around the processing and structuring of licensing agreements;
- The role that CISTI plays within the industry;
- The need to overcome the disincentives that exist for government managers and develop positive incentives; and
- The need to increase awareness within government of the opportunities that exist to commercialize databases and of the benefits involved.

In her concluding statement, Fruji Bull of CADAPSO thanked DOC for inviting the industry to co-sponsor the colloquium and described the event as a good example of a win-win situation for all participants. "These sessions go a long way toward closing the communication gap," she said.

Roy Marsh identified education and awareness as one of the most important tasks facing the Interdepartmental Working Group. "Days like this are very healthy in this regard," he said, but it's important to deliver a clear message about the value of electronic information to the population at large.



## **ANNEX A**

### **INTERDEPARTMENTAL WORKING GROUP on DATABASE INDUSTRY SUPPORT**

#### **1990-91 Plans**

Following the February 28 Industry/Government Colloquium, the IWGDIS met to set its work plan for 1990-91. The basis of this development were the comments and discussion heard at the colloquium together with government priorities.

The Group has set up a structure by which it will examine in detail a number of issues surrounding the Government information fora. The issues in the 1990-91 plan are:

1. Intellectual property as it relates to Government data and databases.
2. Revenue retention, costing and user pay
3. Value of information and educational awareness.
4. Policies - practices
5. The Depository Services Program
6. Continued industry consultation

Each of these issues has a workplan associated with it and it is the hope of the IWGDIS that progress reports will be made in journals such as Database Canada, in mailings from the Group and in presentations at Colloquia. If people have contributions to make to these issues, they may be sent to the Working Group Secretariat.

It is the hope of the IWGDIS to host/hold more industry/government colloquia through the year. Planning for these will be done in conjunction with the CADAPSO Information Industries Committee.

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