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A SEMI-ANNUAL MAGAZINE ABOUT THE CANADA PUBLIC SAFETY INFORMATION NETWORK

IJI@WORK

SUMMER 2003 VOL. 2 ISSUE 1

SHARING INFORMATION AND A SECURE BORDER:

AN UPDATE ON INTEGRATED JUSTICE
INFORMATION PROJECTS
ACROSS CANADA AND A LOOK AT
CANADA-U.S. INFORMATION
SHARING ACTIVITIES

PARTNERS IN PROFILE

MANITOBA'S
INTEGRATED LEGISLATIVE
RESPONSE TEAM

THE SASKATCHEWAN YOUNG
OFFENDER CASE ADMINISTRATION
MANAGEMENT SYSTEM

Canada

CONTENTS



ON THE COVER
FREE AND CLEAR:
Securing the
Canada-U.S.
Border



SEARCH—The National Consortium for Justice Information and Statistics: Mapping data exchange in the American justice system



A summing-up of the second conference on integrated justice information and counter-terrorism



INSIDE

3 Foreword
Solicitor General of Canada,
The Honourable Wayne Easter

4 A Note from the
Editor-In-Chief

5 Work in Progress: The road to
integrated justice information

43 IJI@Work Readership Survey 2003

INTERNATIONAL PROFILE



24 Integration of Scottish Criminal
Justice Information Systems (ISCJIS)

PARTNERS IN POLICY

7 Taking it to the Street: Workshopping
information management principles

9 A Working Perspective: The criminal
justice community's thoughts on IJI

PARTNERS IN PROFILE

11 Working Toward a Co-operative
Justice System: Manitoba's Integrated
Legislative Response Team

14 Building on a Network of Ideas:
The Saskatchewan Young Offender Case
Administration Management System



Securing the Skies:
Integrating justice
information at Pearson
International Airport



A Giant Leap Forward:
Launching Canada's
new Permanent
Resident Card



The Face of the Future:
Project BlueBear
makes the case for
facial-recognition
technology

PARTNERS IN TECHNOLOGY

35 Correctional Service of Canada's
Offender Management System
Renewal and InfoPol: Connecting
Police Forces as Partners

37 The National Parole Board's
Pardons E-Notification Project:
Bridging the time gap, reducing the
paper burden and increasing public
safety in Canada

40 The CPSIN Core Data Dictionary:
Major steps to help Canada's justice
partners speak a common language

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FOREWORD



Foreword from the Solicitor General of Canada, the Honourable Wayne Easter

Public safety is the essence of what we do at Solicitor General Canada. It is a key agenda item for the Government of Canada and it defines the work of the agencies within my portfolio (the Royal Canadian Mounted Police, Correctional Service of Canada, the Canadian Security Intelligence Service, and the National Parole Board).

To ensure that public safety remains paramount, I have worked with my officials to identify key departmental priorities. These include: increased information- and intelligence-sharing across criminal justice jurisdictions; combating terrorism and organized crime; developing effective measures to ensure the safe reintegration of offenders when they return to society; and enhanced justice for Aboriginal peoples through community-driven and culturally appropriate policing and corrections.

Timely and accurate information is an essential component that supports all of these priorities. Among our partners in Canada's criminal justice system, critical information must always be available to the right people at the right time and in a secure, controlled environment.

Thanks to the work underway in my department's Integrated Justice Information Secretariat—in conjunction with criminal justice partners across the country—Canada is making notable progress toward a fully interoperable and connected information-sharing environment.

Achieving this goal involves far more than just plugging-in wires or upgrading computers: there is an equally challenging human element. Canada's criminal justice system is comprised of numerous partners and stakeholders across many departments, agencies and levels of government. The need for horizontal coordination of issues can be significant at times—both among jurisdictions in this country as well as bilaterally between Canada and the United States.

During the first half of the five-year Action Plan for the Canada Public Safety Information Network (CPSIN), there have been many successes in the area of integrated criminal-justice information. Many of these have been profiled to date in *IJI@Work*.

Our attention is now turning to the second half of the five-year Action Plan. A proposed

merging of CPSIN with other public safety initiatives will no doubt refine our focus and redefine our efforts. Work is underway on a strategy to ensure long-term government-wide support for interoperability. Key elements of this strategy will include: replacing and modernizing key systems; improving technology and connectivity among front-line workers; and identifying and addressing information-sharing needs for the Canada-United States border.

I look forward to working with all of you over the coming months as we continue to engage in and explore this exciting and vital area of activity.

A handwritten signature in black ink that reads "Wayne Easter". The signature is fluid and cursive.

The Honourable Wayne Easter, P.C., MP
Solicitor General of Canada





A NOTE FROM THE EDITOR-IN-CHIEF

In this issue of *IJI@Work*—our third since the launch of this publication in April 2002—the broad range of stories reflects the dynamic scope of integrated justice information in Canada and around the world.

Canada is making important progress in how information sharing takes place among partners in the criminal justice system—many of our most recent successes are profiled in the *Partners in Profile*, *Partners in Technology*, and *Partners in Policy* sections of this publication.

The progress made by Canada's criminal justice partners is impressive, but efforts on information sharing and interoperability do not exist in a vacuum, nor do they end at Canada's borders. Other countries are also engaged in vital work in this field.

With this in mind we are featuring a new section in this issue of *IJI@Work*, entitled *International Profile*. There, you can read about the activities of SEARCH in mapping data exchanges in the American justice system, and about Scotland's important progress in developing its Integration of Scottish Criminal Justice Information Systems (ISCJIS).

You'll see for yourself that Canada's efforts are on-track with those of our counterparts in other countries—and that we often encounter similar challenges in the pursuit of our information-sharing and interoperability goals.

As always, I am interested to hear your impression about *IJI@Work*. In this issue, we have included our first-ever readership survey. Take a moment and complete the brief questionnaire. Your feedback will help shape future issues of this magazine.

Eleanor Willing

Eleanor Willing
Editor-in-Chief, *IJI@Work*

WORK IN PROGRESS: The road to integrated justice information



CANADA'S NATIONAL IJI INITIATIVE GOT ITS START IN 1999 WITH THE CREATION OF A FIVE-YEAR ACTION PLAN. SINCE THAT TIME, WORK HAS BEEN CARRIED OUT ON MANY FRONTS TO DEVELOP A CANADA PUBLIC SAFETY INFORMATION NETWORK (CPSIN)—EFFECTIVELY MAKING THE IJI VISION A REALITY. WHILE THAT VISION REMAINS UNCHANGED, TECHNOLOGICAL ADVANCEMENTS, WORLD EVENTS, AND THE ACHIEVEMENT OF PARTICULAR IJI MILESTONES HAVE ALL EXERTED THEIR INFLUENCE ON THE COURSE OF CPSIN'S DEVELOPMENT.

In 2002, the IJI Steering Committee made it a priority to conduct a mid-term review of the five-year Plan. The aim of this review was to reconsider the assumptions and strategies of 1999 in light of current realities and expectations. In the process, a number of key achievements were noted—important steps taken in the areas of technology, policy and partnerships.

MILESTONES

One of the most pressing requirements of the Integrated Justice Information Secretariat from the outset was the development of national data standards: defining the data elements common to criminal-justice information systems in Canada. A beta version of these standards was delivered in 2002, aiding interoperability efforts by providing IJI projects with a standard approach to classifying data.

Work on a Common Offence Library produced a prototype in 2002. The Common Offence Library is a structured database of federal offence statutes, eliminating the need for criminal-justice organizations to maintain their own electronic statute libraries.

A three-tiered CPSIN information architecture proof-of-concept was also developed last year. Tier 1 documented the players in Canada's federal criminal-justice system. Tier 2 identified information-sharing activities affecting federal, provincial and municipal agencies. Tier 3 illustrated how information flows between these agencies, and described the various events that trigger information exchanges.

Frameworks for managing information within CPSIN and for measuring the performance of IJI initiatives have been developed. So has a set of privacy principles clarifying the types of information that need protection within CPSIN.

All nine federal partners in CPSIN signed a Charter in 2001, signalling their resolve to see the public-safety information network

become a reality for Canadians. The wording of a similar joint statement was recently raised with deputy ministers from the provinces and territories.

In addition to these accomplishments, numerous projects, studies and workshops are ongoing, which not only contribute to the goals of IJI, but also raise the profile of integrated justice initiatives in general.

COLLABORATIVE PARTICIPATION

Work on integrated justice is taking place in countries all over the world. The fact is, no nation has achieved full-scale integration of its justice information systems. After all, realizing a comprehensive vision of integrated justice information—one in which information is shared through a fully interoperable and connected criminal justice environment—involves many steps. It requires the collaborative participation of numerous departments, agencies and levels of government, each dealing with its own set of complex issues. Consequently, there are no easy answers, no quick-fix solutions.

CONTINUED ON PAGE 16

THE IJI VISION *Enhanced Public Safety
through better, faster, criminal justice
information exchanges*

PARTNERS IN POLICY

INTRODUCTION

OUR LAST ISSUE FEATURED A SPECIAL REPORT ON SOME OF THE KEY WORK BEING DONE BY THE POLICY DIVISION OF THE IJI SECRETARIAT. WE THOUGHT READERS WOULD LIKE TO KNOW HOW THOSE EFFORTS HAVE PROGRESSED, AND WHAT'S ON THE HORIZON.

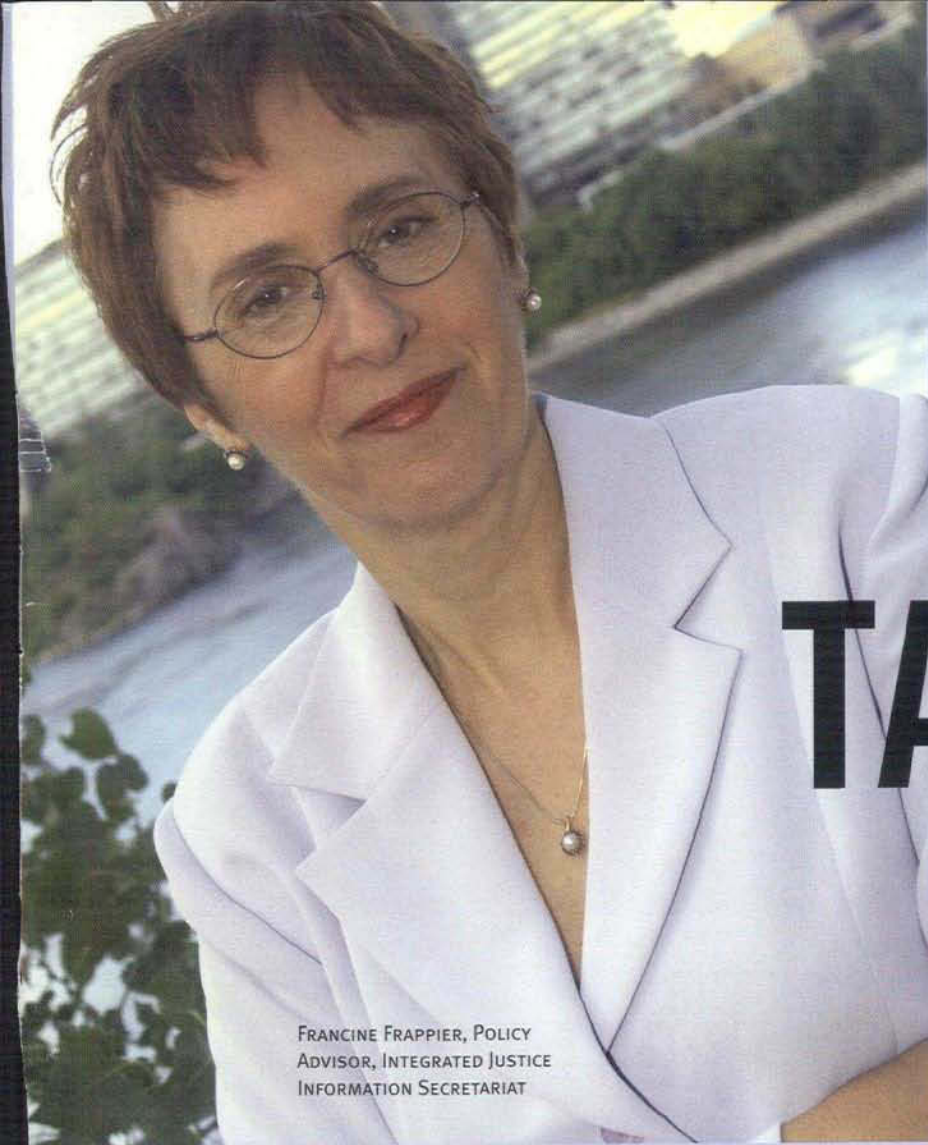
THE IJIS POLICY TEAM IS QUICK TO POINT OUT THAT ALL OF THE POLICY WORK UNDERWAY INVOLVES THE COLLECTIVE EFFORT OF NUMEROUS PARTNERS IN CPSIN—AN EFFORT THAT RELATES NOT ONLY TO SPECIFIC PROJECTS, BUT ALSO TO ACHIEVING A CULTURE SHIFT WITHIN CANADA'S CRIMINAL JUSTICE AND LAW ENFORCEMENT COMMUNITIES. THE GOAL IS TO MAKE INFORMATION SHARING SECOND NATURE.

"EVERYONE SEEMS TO APPRECIATE THE NEED FOR SHARING INFORMATION," SAYS GREG KENNEY, (SENIOR POLICY ADVISOR, IJIS). "AND THERE'S LOTS OF IT GOING ON. ON A LARGE SCALE, WHAT CPSIN AIMS TO DO IS HAVE THOSE INFORMATION-SHARING CONSIDERATIONS BECOME SOME OF THE FIRST THINGS AGENCIES THINK ABOUT WHEN PLANNING NEW PROJECTS."

EVEN AS THE POLICY WORK BEGINS TO SHIFT FROM CONCEPTUALIZATION TO IMPLEMENTATION, MADELEINE BETTS, SENIOR POLICY ADVISOR AT IJIS, OBSERVES: "YOU CAN'T CLOSE THE DOOR ON DEVELOPMENT. AS THE VARIOUS POLICY PIECES COME INTO PLACE, YOU HAVE TO KEEP WORKING ON GOVERNANCE STRUCTURES TO MANAGE THEM ALL."

TAKING IT TO THE STREET:

WORKSHOPPING INFORMATION MANAGEMENT PRINCIPLES



FRANCINE FRAPPIER, POLICY
ADVISOR, INTEGRATED JUSTICE
INFORMATION SECRETARIAT

LAST FALL, THE IJI SECRETARIAT'S POLICY DIVISION INTRODUCED A FRAMEWORK FOR MANAGING INFORMATION THAT PROPOSED INFORMATION MANAGEMENT PRINCIPLES FOR CPSIN. OVER THE WINTER, FRONTLINE AND SUPERVISORY PERSONNEL FROM THE CRIMINAL JUSTICE AND LAW ENFORCEMENT COMMUNITIES PROVIDED THEIR FEEDBACK ON THAT FRAMEWORK THROUGH A SERIES OF WORKSHOPS IN TORONTO, MONTREAL, VANCOUVER AND OTTAWA. THEIR OBSERVATIONS HAVE BEEN COMPILED IN A REPORT SCHEDULED FOR RELEASE BY MID-2003.

"The workshops were very successful," says Francine Frappier, Policy Advisor. "It's important for CPSIN partners to have the opportunity to provide their input so the final product reflects their needs and meets our common objective—to enhance information use and sharing for public safety."

The needs Frappier speaks of relate to protection of personal information (privacy);

records management; safeguarding of information; and the governance of CPSIN information, including accountability and stewardship.

All of these elements are included in the Framework for Managing Information (FMI). They are dealt with through four main components: Policy, Standards, Operational Procedures, and a Technical Library.

"The aim of the workshops," Frappier explains, "was to study the FMI along with proposed Records Management Standards and Protection of Personal Information Principles—all in terms of business delivery." Participants reviewed these key policy documents in light of their own operational realities and provided comments.

THE PROCESS

Each of the Toronto, Montreal and Vancouver workshops took place over the course of one or two days. Attendees were given copies of the FMI and drafts of the associated Records Management Standards and Protection of Personal Information Principles. Next, they were asked to apply the proposed policy guidelines to three

scenarios involving information exchanges between organizations. Those scenarios were:

- law enforcement occurrence- and incident-management;
- a bail/remand hearing; and
- an inmate release.

This conceptual approach allowed participants to put the FMI and its related principles and standards into an operational context. Specifically, participants noted the various information exchanges involved in each situation, and considered how the proposed principles and standards might be modified to meet their business processes.

There were a number of reasons for focusing on business processes. One was to evaluate the flexibility of the proposed framework—which is intended to set out policies and standards for sharing information in CPSIN without dictating how partners might implement them procedurally. As well, business processes relate to the practical realities every agency deals with; examining the impact of the Framework for Managing Information in such terms helps provide an indication of its real-world viability.

NEXT STEPS

The report on the workshops will be made available to various integrated justice bodies, including the Policy Sub-Committee, the Interdepartmental Working Group on IJI, and the IJI FPT Leadership Network.



PROGRESS ON THE PRIVACY FRONT

MADELEINE BETTS, SENIOR POLICY
ADVISOR, INTEGRATED JUSTICE
INFORMATION SECRETARIAT

As part of its work developing a Framework for Information Management, last year the Policy Division introduced a set of Draft Privacy Design Principles for CPSIN relating to the protection of personal information. A round of detailed consultations on those principles wrapped up at the end of October 2002.

“We had feedback from the CPSIN federal partner agencies, plus the provinces and territories,” explains Madeleine Betts, “We used that feedback to fine-tune the principles, and issued a new round early in 2003. So far, it’s gone very smoothly; the revised principles have been well received.”

The revised privacy principles were included in the winter’s series of FMI-related workshops—beginning the important process of assessing their impact on business delivery for criminal justice agencies.

“We’ll keep going forward from here,” says Betts, “expanding on the principles, developing standards, and practical approaches for adhering to them.”

“What we want to end up with for CPSIN,” she adds, “is a system that criminal justice and law enforcement agencies and Canadian citizens alike have confidence in, from a number of perspectives, including that of protecting personal information as required by federal, provincial and territorial privacy laws.”

A Working Perspective

THE CRIMINAL JUSTICE
COMMUNITY'S THOUGHTS ON IJI



GREG KENNEY, SENIOR POLICY ADVISOR, INTEGRATED
JUSTICE INFORMATION SECRETARIAT

Since last fall, Kenney has carried out a similar survey of criminal justice practitioners, to gauge “front-line” opinions about the information available to criminal justice agencies in Canada.

A VARIETY OF VIEWPOINTS

Through the Practitioner’s Survey on IJI, Kenney and his colleagues have gained a better understanding of the perceived value of available information to criminal justice and law enforcement agencies. They have also gained a sense of how frequently—and easily—that information is put to use, and how timely it is considered to be.

“I was pleased to see how high an awareness the criminal justice community has of federal information-sharing efforts,” Kenney remarks. “With very little internal communication promoting these programs, awareness is at nearly 70 percent. That’s an excellent result to build on, in my opinion.”

The research involved telephone surveys of 309 front-line criminal justice practitioners, plus follow-up focus groups to clarify certain outcomes and identify any overlooked issues that might be included in further studies.

“We didn’t really get any suggestions for new topics,” Kenney notes, “which tells me that our planning for this first survey was sound; we covered the information-sharing issues people wanted to talk about.”

Participants included municipal, provincial and federal police; federal prosecutors; corrections officials; provincial and federal parole board officials; citizenship and immigration officials; and representatives of the Canada Customs and Revenue Agency.

SURVEY SAYS...

- Highlights of the survey include:
- Some 68% of practitioners say they are aware of federal efforts to improve information sharing among justice agencies and jurisdictions—higher than the general public’s 38% awareness.
 - 98% of all criminal justice practitioners believe information sharing is important to public safety in Canada; this is virtually identical with the findings of the public survey.
 - Roughly 79% of criminal justice practitioners believe that information sharing within the current system could—and should—be improved.
 - At the same time, 75% feel the information that is shared today is accurate; there is a high degree of confidence in the quality of information exchanged—and in the measures used to protect it.
 - Speed, accessibility, and volume of data were identified as some of the highest-priority improvements to information-exchange systems.
- Kenney says that he and his colleagues will continue to measure the opinions of both criminal justice and law enforcement practitioners and average Canadians in the years to come. “We plan to do surveys of this kind every two to three years. We’ll compare the new data to benchmarks we have established and measure the progress we are making.”

BACK IN MARCH 2002, IJIS SENIOR POLICY ADVISOR GREG KENNEY SET OUT TO DETERMINE THE CANADIAN PUBLIC’S CONFIDENCE IN INFORMATION SHARING WITHIN THE CRIMINAL JUSTICE SYSTEM, AND ITS AWARENESS OF INTEGRATED JUSTICE INFORMATION INITIATIVES. THE FINDINGS OF THAT SURVEY HAVE BEEN USED TO ESTABLISH BENCHMARKS AS PART OF THE CPSIN PERFORMANCE MEASUREMENT FRAMEWORK (PMF), ENABLING THE OBJECTIVE MEASUREMENT OF CPSIN PROGRESS.

PARTNERS IN PROFILE

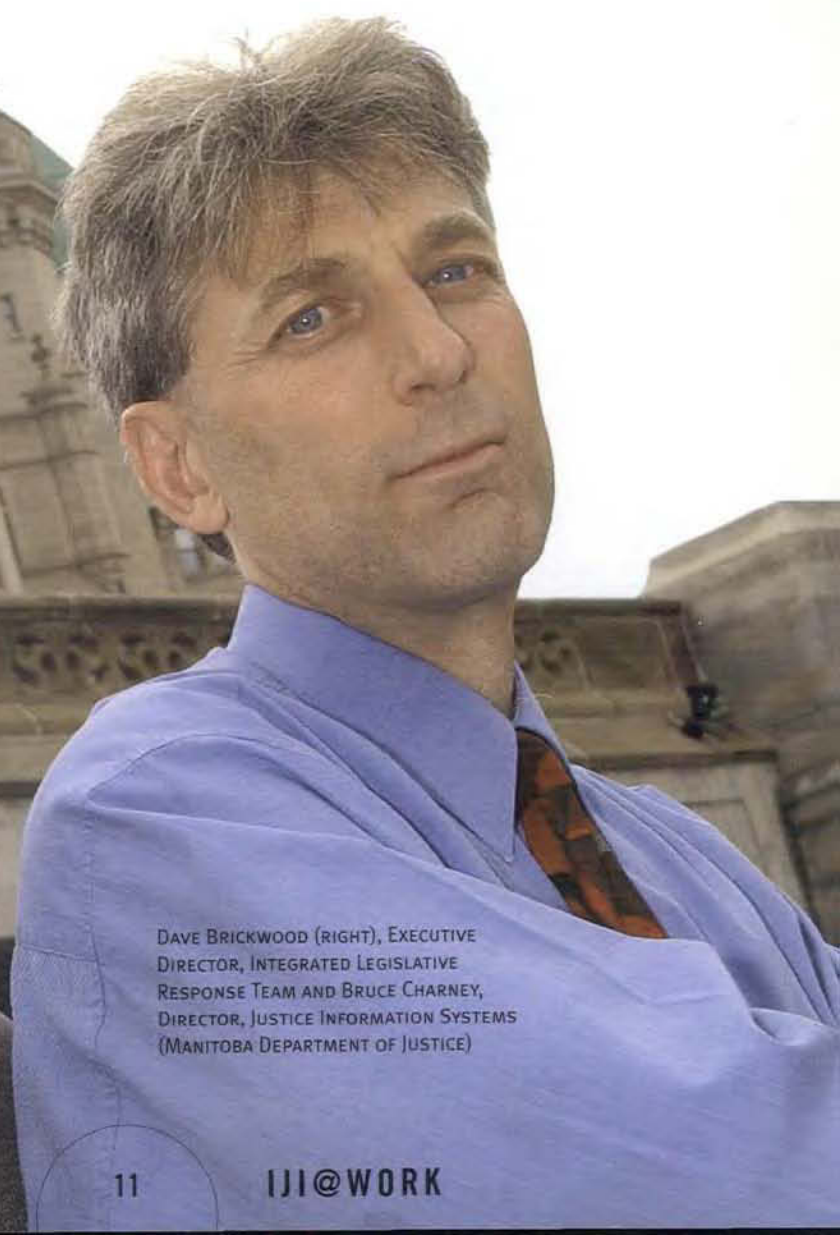
WHEN DAVE BRICKWOOD, EXECUTIVE DIRECTOR OF THE INTEGRATED LEGISLATIVE RESPONSE TEAM (MANITOBA DEPARTMENT OF JUSTICE) TALKS ABOUT EFFORTS UNDERWAY TO INTEGRATE CRIMINAL JUSTICE INFORMATION IN HIS PROVINCE, HE TALKS ABOUT IT AS A “COOPERATIVE JUSTICE SYSTEM.” HE FEELS STRONGLY ABOUT THIS CHOICE OF WORDS. IT DESCRIBES SOMETHING MORE THAN JUST THE ABILITY TO SHARE INFORMATION: “IT ALSO DEFINES OUR UNIQUE APPROACH, ONE WHICH RECOGNIZES THE IMPORTANCE OF STAND-ALONE SYSTEMS, AS WELL AS THE WAY WE’RE WORKING TOGETHER TO DEVELOP NEW PROCESSES AND PROCEDURES.”

IN MANITOBA, THE MOVE TO DEVELOP BETTER INFORMATION SYSTEMS AND IMPROVED INFORMATION-SHARING WITHIN THE PROVINCE’S DEPARTMENT OF JUSTICE WAS PRECEDED BY A SERIES OF SMALLER EFFORTS, EACH FOCUSED ON SOLVING THE NEEDS OF A PARTICULAR BRANCH. YET THESE UNDERTAKINGS LACKED A BROADER, DEPARTMENT-WIDE FOCUS. “IN THE PAST, JUSTICE IN MANITOBA TENDED TO WORK WITHIN STOVEPIPES,” EXPLAINS BRICKWOOD.

“WHEN PROBLEMS AROSE, EACH GROUP WOULD FIND THEIR OWN SOLUTIONS, BUT SELDOM WITH CONSIDERATION TO HOW THESE MIGHT IMPACT ON THEIR PARTNERS.”

Working Toward a Co-operative Justice System

MANITOBA'S INTEGRATED
LEGISLATIVE RESPONSE
TEAM



DAVE BRICKWOOD (RIGHT), EXECUTIVE DIRECTOR, INTEGRATED LEGISLATIVE RESPONSE TEAM AND BRUCE CHARNEY, DIRECTOR, JUSTICE INFORMATION SYSTEMS (MANITOBA DEPARTMENT OF JUSTICE)

“When problems arose, each group would find their own solutions, but seldom with consideration to how these might impact on their partners.”

CATALYSTS FOR CHANGE

Two catalysts changed the course of how the Government of Manitoba was to manage information within the province's criminal justice system. The first was the province's *Victims' Bill of Rights* (VBR) legislation. This law specifies the rights of victims when dealing with police, prosecutors, the courts and corrections officials. It requires the Department of Justice to consult with victims on key issues, including bail, plea agreements, as well as on the status of an investigation and prosecution.

With the VBR requiring that information from various groups be shared quickly with a victim in a particular case, it became immediately clear to Justice officials that the “stovepipe” way of doing things within the organization would have to be undone. “We simply could not deliver the kind of services expected without making changes to our various information systems and in the way we conducted our business,” says Brickwood.

The second catalyst for change was the aftermath of a well-publicized double-murder that took place in Winnipeg in February 2000. It was as important a watershed for justice in Manitoba as the Bernardo case was in Ontario. The case involved two female victims, who, despite repeated calls to the city's 911 emergency service, were

killed by a man who had a long criminal history. During the review process, it was determined that information was available about the offender but was stored in a manner that was not readily accessible. An inquest report, released in 2002, recommended a complete review of police communications.

“The problem was that various parts of our justice system were still operating within that stovepipe model,” explains Brickwood. “Had a system been in place that could have put all the pieces together, the accused might not have been released in the first place, and his earlier sentences might have been more severe.”

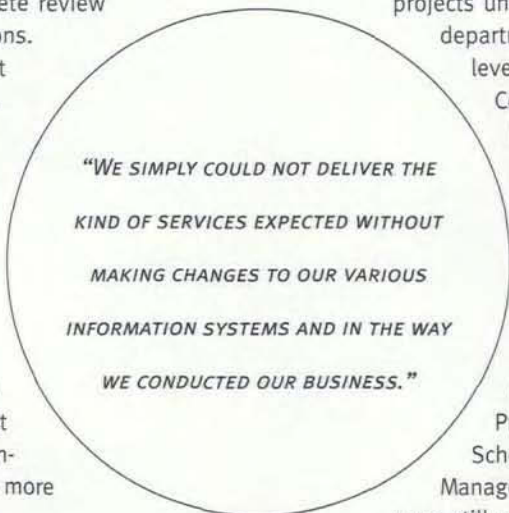
These two catalysts—the *Victims' Bill of Rights* and the internal review of the double-murder case in Winnipeg—resulted in a complete re-evaluation of how all partners in Manitoba's criminal justice system worked together, as well as how information systems were built.

THE INTEGRATED LEGISLATIVE RESPONSE TEAM

The first step was the establishment of the Integrated Legislative Response Team (ILRT) in July 2001. Members of this team began looking at the various information-sharing projects underway across the department and found varying levels of progress. The Corrections Branch had implemented the Corrections Offender Management System (COMS) in 1999. The Prosecutions Branch, meanwhile, had begun work on a separate system, called PRISM—Prosecution Information Scheduling and Management. Yet the courts were still using a system

that was predominantly paper-based.

Brickwood explains what happened next: “It became clear to us right away what we had to do, with respect to information sharing: jump-start the parts of our justice system where work hadn't begun, and correct other parts where reliability tweaks were required.”



“WE SIMPLY COULD NOT DELIVER THE KIND OF SERVICES EXPECTED WITHOUT MAKING CHANGES TO OUR VARIOUS INFORMATION SYSTEMS AND IN THE WAY WE CONDUCTED OUR BUSINESS.”

CROSSOVER POINTS ARE KEY

The ILRT does not decide how systems will be built. Rather, the team looks at the crossover points between various departmental systems (i.e., where a given procedure might involve the police, corrections and the courts). Unlike some models of integrated justice information, Manitoba's cooperative approach recognizes stand-alone systems. "This was an important decision for us," says Bruce Charney, Director of the Justice Information Systems, and partner with Brickwood on the ILRT. "We needed to leverage the existing investments in technology that had already been made within specific branches of the department. There were systems that had been developed that addressed very specific business issues."

The ILRT is examining opportunities to bring about electronic information-sharing between systems. Specifically the team is examining systems in corrections (via COMS), prosecutions (via the VBR and PRISM), and the courts (via two new systems, the Queen's Bench Registry and the Criminal Courts Automated Information Network). When the ILRT has completed its mandate, all of these systems will form part of Manitoba's Cooperative Justice System. While it was important for us to decide *how* we were going to accomplish these integration and data-sharing initiatives," adds Charney, "we also recognized that we needed to agree on exactly what we had to accomplish from the organization's perspective. To be successful, we must incorporate the department's long-term plans into our solutions."

The group conducted a systems-architecture exercise. First, they defined a cooperative justice vision, which became a nine-point reference for the ILRT. Next, they developed a list of technology guiding-principles, followed by a technology-architecture map. This map charted an approach that would keep as many existing systems intact as possible while incorporating information sharing and exchange concepts for the future. "Many of our requirements are being delivered through the use of *middleware technologies*," says Charney. "It

means that we will have the choice of storing information in a central repository, or, due to information sharing legislation, we will require systems to make real-time information request of other systems."

LESSONS FROM PARTNERS REFLECTED IN APPROACH

The ILRT's approach is the result of careful planning and consideration for the needs of its client groups and partners. But the team's approach also reflects an understanding that there are reasonable limits on what a small organization with modest funding can accomplish.

In the earliest stages of the ILRT's work, they considered many approaches, including what Brickwood calls the "big-build method," in which they would have tried to fix everything with one big system. "But we simply didn't have the resources to do this," he says. "Plus, we listened carefully to the lessons learned by other provinces who had tried—by their own admission—to do too much too soon. "We decided that we had to be creative in how we did things." With this in mind, the ILRT members opted to maximize the gains of their efforts by managing the project in small pieces.

CULTURE CHANGE AND A NEW AWARENESS

Sometimes even managing the small pieces presented the ILRT with bigger or unexpected challenges. Just getting various groups to work together—a first for an organization that was once characterized as having a stovepipe mentality—proved to be difficult at times. "Early on, we spent more time negotiating and navigating culture-change among staff than we did in designing the new system," says Brickwood, "but it's a balance that we're getting better at managing."

One solution has been to focus on productivity gains. When organizations can see for themselves the potential gains that a new system can deliver, the benefits of cooperative

justice are better appreciated, and staff tend to be less concerned about the extra time or effort required to learn a new system.

There is now a heightened sense of awareness among all groups of the overriding importance of cooperative justice—a singular objective that has helped bind together all partners within Manitoba's criminal justice system. The ILRT reports that some groups are starting to identify and solve information-sharing problems on their own—evidence that a good idea is catching on.

WHAT'S NEXT

Brickwood and Charney are very pleased with their efforts to date, and they're looking forward to the next stages of the project. Over the next two years, the ILRT will be focusing on core operational components.

Key among these will be the Criminal Courts Automated Information Network (CCAIN). It is the least developed among those in Manitoba's criminal justice system—it remains primarily paper-based—yet it has some of the most critical blocks of information required by the cooperative justice system. The schedule for completing the automation of the warrant, judicial interim release, and court disposition components are as follows: June 2003 (warrant), August 2003 (judicial interim release), and early 2004 (court disposition).

Another issue to be addressed is a Crown system, called Automated Crown Subpoenas—a system that is being considered to improve the productivity of administrative staff. "For the program areas to be able to enter new information, it is often necessary to help them free-up time to input the data," says Charney. "Looking for these productivity gains make the difference between their accepting or rejecting change." To ease the burden on this area, the ILRT is anticipating that automated production—handled by PRISM—will eliminate redundant administrative work. This project is expected to be completed by March 2004.

"WE DECIDED
THAT WE HAD TO BE
CREATIVE IN HOW WE
DID THINGS."

BUILDING ON A NETWORK OF **IDEAS**

The Saskatchewan
Young Offender
Case Administration
Management
System

IN CANADA AND AROUND THE WORLD, SUCCESSFUL EFFORTS TO INTEGRATE CRIMINAL JUSTICE INFORMATION ARE NOT ONLY DETERMINED BY THE IMPLEMENTATION OF THE RIGHT TECHNOLOGIES. OFTEN, FINDING THE RIGHT PARTNERS CAN ALSO COUNT FOR A LOT. SOMETIMES, IT CAN EVEN LEAD TO ACHIEVING AN IMPORTANT NEW PRECEDENT WITHIN THE CRIMINAL JUSTICE COMMUNITY. AS A CASE IN POINT, CONSIDER THE SASKATCHEWAN YOUNG OFFENDER CASE ADMINISTRATION MANAGEMENT SYSTEM (SYOCAMS)—A NEW SYSTEM LAUNCHED EARLIER THIS YEAR BY THE GOVERNMENT OF SASKATCHEWAN, BUILT AND IMPLEMENTED WITHIN A MATTER OF MONTHS, AND AT A FRACTION OF THE COST OF BUILDING A SYSTEM FROM THE GROUND UP.

JOHN STEVENSON, CHIEF INFORMATION
OFFICER, DEPARTMENTS OF SASKATCHEWAN
CORRECTIONS AND PUBLIC SAFETY AND
SASKATCHEWAN JUSTICE

"TO OUR KNOWLEDGE, THIS IS THE FIRST TIME THAT TWO JUSTICE SYSTEMS HAVE BEEN ABLE TO SUCCESSFULLY MOVE AN APPLICATION SYSTEM FROM ONE JURISDICTION TO ANOTHER."

Thanks to a unique exchange agreement with the Government of Nova Scotia, Saskatchewan was able to build its system quickly and efficiently. Based on Nova Scotia's Restorative Justice Information System, SYOCAMS was customized to meet the specific, unique needs of the Prairie province. "To our knowledge, this is the first time that two justice systems have been able to successfully move an application system from one jurisdiction to another," explains John Stevenson (Chief Information Officer for the Departments of Saskatchewan Corrections and Public Safety and Saskatchewan Justice).

Saskatchewan began looking at integrated justice information in late 1990s. "We began by talking to our stakeholders, to get a perspective on what they expected to see and what they needed in a justice system that was less silo-based," explains Stevenson. Significant progress was made in the initial stage of the project. And by 2001, the undertaking was reshaped by two new factors:

the introduction of the federal *Youth Criminal Justice Act* (YCJA) which went into force on April 1, 2003 and by a restructuring of services in the Government of Saskatchewan, which took effect a year earlier on April 1, 2002. Each of these events had an important impact, and both required much preparation in advance of their respective deadlines.

The YCJA introduced sweeping changes to the way the criminal justice system deals with youth in conflict with the law in Canada. Meanwhile, changes within the justice portfolio in Saskatchewan resulted in the merging of adult corrections and youth justice responsibilities under a new Department of Corrections and Public Safety.

"This new department had a clear vision of what they wanted to achieve with respect to integrated justice information," explains Stevenson. "Rather than just deal sequentially with the information challenges presented by each of these issues, we opted to view everything through the lens of integrated justice information."

This commitment was tested early on in the history of the department when it began to work on identifying options for a youth case management system—which previously had not existed in the province. "This was a major concern for us, as we needed to have a system in place to coincide with the implementation of the YCJA," says Stevenson. "In addition, we wanted a system that could leverage the expertise and business practices already in place within the province's adult justice and correctional system. We decided to place particular emphasis on investigating the business models and systems that we hoped would already be in place in other jurisdictions."

Saskatchewan officials looked at the different approaches adopted by various jurisdictions across Canada. Working with the Canadian Centre of Justice Statistics, they developed two impact-assessment reports, in particular noting Nova Scotia's Restorative Justice Information System. "Nova Scotia's system was serving a population that had a similar demographic make-up to our own, featuring prominent rural and urban populations," says Stevenson. "They also had similar crime rates and similar policing arrangements."

In early 2002, discussions began with Nova Scotia officials, including sending business experts to observe that province's Restorative Justice Information System. Once an agreement was reached, the system was made available to Saskatchewan. The SYOCAMS project moved forward at an impressive pace, with equally impressive results. They completed the project within nine months, within its \$550,000 budget, and produced a new system that was ready to serve over 250 users within Saskatchewan who are responsible for managing youth criminal justice information.

Under SYOCAMS, the key areas of the Nova Scotia system that were modified by Saskatchewan included:

- **sentence information**—modifications required to support the capture of the expanded sentence calculation and sentence management information associated with the YCJA;
- **risk/needs assessment instrument**—Nova Scotia's Youth Level of Service Inventory was replaced by the version of the Level of Service Inventory instrument in use in Saskatchewan;

"We began by talking to our stakeholders, to get a perspective on what they expected to see and what they needed in a justice system that was less silo-based."

PARTNERS IN PROFILE

- **case events**—custody and community case management and the YCJA presented an increased range of case events, interventions and interactions that needed to be tracked and managed;
- **reporting enhancements and modifications**—required to support the management and operational requirements associated with the modifications, in addition to supporting performance measures; and
- **visual identity**—minor modifications were required to change the visual identity of screens and reports to adhere to Saskatchewan's own standards and identity.

Stevenson sees this project as a first step in transforming criminal justice information in Saskatchewan “from a charge-based to a people-based system.” The province’s existing legacy systems handling adult justice and corrections were originally designed to manage information based on a given charge that was before the courts or the sentencing decision of the court. “But the Nova Scotia system,” he points out, “was designed to give a much clearer picture of an offender without having to query multiple systems, and for us, that’s a key element of what our integrated justice information strives to achieve.” As a result, the new system will mean that decisions within the youth portion of the province’s criminal justice system will be reinforced by having the most up-to-date information on offenders as possible.

A key part of the success of SYOCAMS was that it was relatively easy to implement for all users and stakeholders across the province. It is a web-browser application that resides on the client-side of the Government of Saskatchewan’s broadband, province-wide network, called *CommunityNet*. Moreover, SYOCAMS features strict controls on who can access and use its information. “This approach meant that there was no need to install software on each and every one of the 200-plus workstations that comprise our youth portion of the network,” says Stevenson. “Instead, our users connect to the new system without having to upgrade their computer hardware: all they need is a computer that can support a browser.”

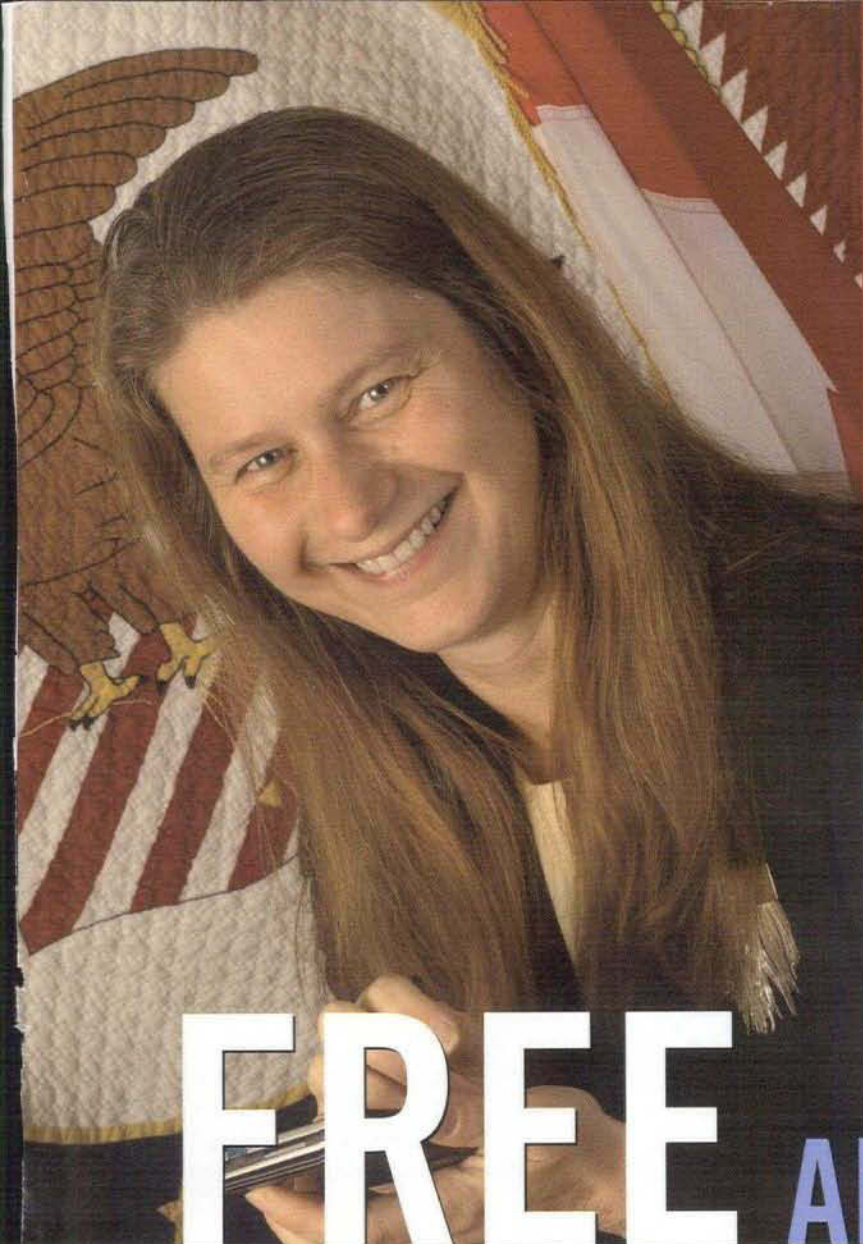
Working with another jurisdiction to help develop this component of Saskatchewan’s integrated justice information initiative was a valuable learning experience, concludes Stevenson. “There’s no way we could have finished SYOCAMS as quickly and as seamlessly without the assistance and expertise that Nova Scotia brought to the table.” But Stevenson contends that the success of SYOCAMS is not so much a product of technology, rather, it is testimony to what partners can do. “This shows what you can do when two jurisdictions share excellent communications, a common vision and a common commitment to integrating justice information across Canada.”

CONTINUED FROM PAGE 5

Much has been achieved in the past three years on the road to IJI. Many projects have been launched, for example: Canadian Police Information Centre Renewal (CPIC-R), National Criminal Justice Index (NCJI), RCMP’s Police Reporting & Occurrence System (PROS), Correctional Service of Canada’s Offender Management System Renewal (OMSR), National Parole Board’s Conditional Release System (CRS), Citizenship and Immigration Canada’s Global Case Management System (GCMS), Department of Justice’s Federal Prosecution Connectivity (FPC). Unexpected opportunities have emerged. New and stronger bonds have formed between Canada’s criminal justice organizations. Perhaps most significantly, the value of integrated justice information has been recognized, and the commitment to achieve it has moved to the forefront of the public safety agenda.

There is little doubt that the coming years will yield more accomplishments, signalling the dawn of a new era—one in which a free and seamless exchange of criminal justice information is standard business practice.

Stevenson sees this project as a first step in transforming criminal justice information in Saskatchewan “from a charge-based to a people-based system.”



LUIGINA BARATTO, DIRECTOR,
PARTNERSHIPS DIVISION,
INTEGRATED JUSTICE
INFORMATION SECRETARIAT

FREE AND CLEAR

Securing the
Canada-U.S.
Border

THE RELATIONSHIP BETWEEN CANADA AND THE U.S. HAS ALWAYS BEEN ONE OF PARTNERSHIP AND COLLABORATION, OF TWO NATIONS WORKING CLOSELY TOGETHER TO ACHIEVE COMMON OBJECTIVES. IN THE NEARLY TWO YEARS SINCE SEPTEMBER 11, 2001, THIS COOPERATIVE RELATIONSHIP HAS BEEN STRENGTHENED AND INVIGORATED: CANADIAN AND AMERICAN AGENCIES HAVE WORKED CONTINUOUSLY TO SECURE THEIR HOMELANDS—AN EFFORT THAT INCLUDES IMPROVING THEIR MUTUAL CAPACITY FOR SHARING INFORMATION.

While doing so, they've worked hard to maintain a balance between individual rights to privacy and society's right to safety and security, and to preserve the open border necessary for the economic vitality of both countries.

The need for greater integration of border security—involving law-enforcement, customs and immigration agencies—was recognized publicly in December 2001, when the Honourable John Manley, then Minister of Foreign Affairs, and the then U.S. Homeland Security Director Tom Ridge signed the Canada-U.S. Smart Border Declaration, which was accompanied by a 30-step action plan.

The Declaration outlined four key principles of border security:

- to ensure a **secure flow of people** by proactively identifying security risks and expediting the passage of low-risk travelers;
- to ensure a **secure flow of goods** by adopting compatible security standards;
- to maintain and enhance a **secure border infrastructure**; and
- to **coordinate and share information** in the enforcement of these objectives.

In support of these principles, many of the items in the 30-point action plan focus on achieving greater interoperability of

“The Canada-U.S. Cross-border Crime Forum is fundamentally about managing risk,” says Baratto. “If we can share information in advance about crime and criminal risks, front-line personnel can focus their efforts on those risks.”

Canadian and U.S.-based systems: from establishing an Integrated Border Enforcement Team (IBET) to arriving at biometric standards and implementing common radio frequencies.

“Both Canada and the U.S. have moved forward on many of these points,” says Luigina Baratto, Director of the IJIS Partnerships division. “One of the key initiatives in the U.S. was to centralize responsibility through the creation of the Department of Homeland Security. In Canada, we have strengthened our existing horizontal, shared-responsibility framework.”

While the links between Canada and the United States have always been—and continue to be—very close, their approaches to achieving the common goals of the Smart Border Declaration differ, understandably, due to differences in each nation's governmental structures.

“We're dealing with the same question: what does it mean to have an interoperable border?” explains Baratto. “Many issues come into play. Privacy; the protection of information; technology; vision; funding; and time frames, to name a few. Each country has to arrive at a solution that works internally as well as externally.”

AN ESTABLISHED FRAMEWORK

A major vehicle for propelling the joint border-security effort is the Canada-U.S. Cross-Border Crime Forum. Created in 1997, the Forum provides an established framework for addressing issues related to law-enforcement cooperation and maintaining momentum at the government-to-government level.

Through the Forum, Canada and the U.S. have reached agreements about how to approach border-security challenges and work on them together. The two countries are identifying and discussing types of information necessary for exchange, the existing mechanisms for exchanging it, gaps between the two, and the operational realities at play.

Many working groups support the work of this Forum. In particular, one working group was established this year to explore ways of achieving greater interoperability of criminal justice information between the two countries. Initially this group will focus on technical standards and best practices to facilitate exchanges among law enforcement agencies and justice communities.

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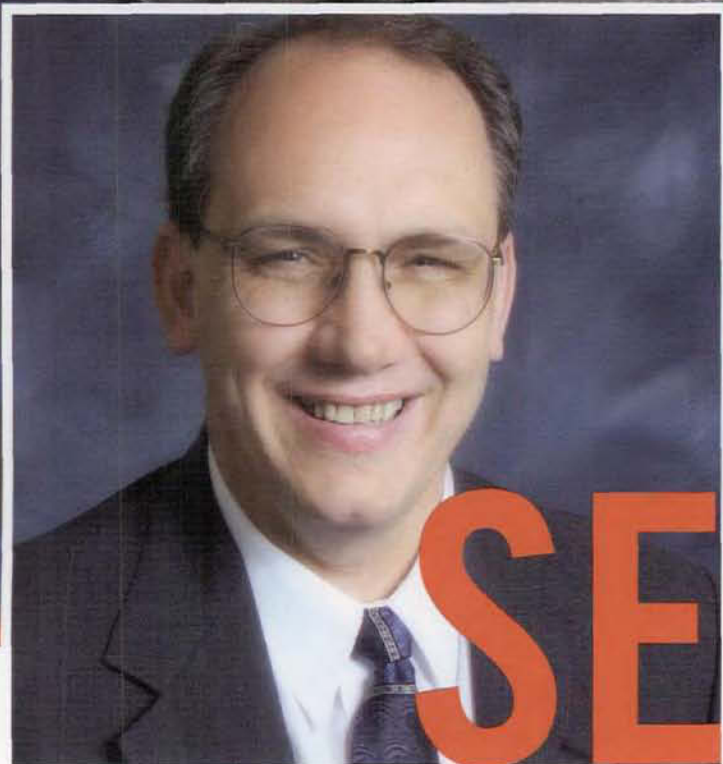
risks, front-line personnel can focus their efforts on those risks.”

She goes on to observe that information sharing between Canada and the U.S. has gone on for many years.

“There's a lot of information being shared today. It's just that some of the mechanisms are aging. In the last few years, we've signed memoranda of cooperation about the electronic exchange of information—but the information in question has been exchanged by other means for decades. Technology is changing, which enables us not only to do more and do it faster, but to approach the information-sharing process in a new way.”

INTERNATIONAL PROFILE

A LOOK AT INFORMATION
SHARING ACTIVITIES IN THE
GLOBAL COMMUNITY



LARRY WEBSTER,
PROJECT MANAGER,
JUSTICE INFORMATION
EXCHANGE MODEL

SEARCH

THE NATIONAL CONSORTIUM FOR JUSTICE INFORMATION AND STATISTICS: MAPPING DATA EXCHANGE IN THE AMERICAN JUSTICE SYSTEM

WHEN IT COMES TO MANAGING INFORMATION IN A CRIMINAL JUSTICE SYSTEM, ALL COUNTRIES THAT ENGAGE IN THIS EXERCISE HAVE TO CONTEND WITH UNIQUE AND COMPLEX CHALLENGES. THE UNITED STATES IS NO EXCEPTION. FIRST, AMONG MANY CHALLENGES FOR THEM, IS THE MATTER OF SCOPE AND SIZE. THERE ARE OVER 55,000 JUSTICE ORGANIZATIONS ACROSS THE COUNTRY—AND THAT SUM NEARLY DOUBLES TO 100,000, WHEN JUSTICE-RELATED ORGANIZATIONS ARE INCLUDED. EACH OF THESE GROUPS HAS A ROLE TO PLAY AND EACH CONTRIBUTES TO THE BODY OF CRIMINAL JUSTICE INFORMATION.

Another important challenge in the United States is that its constitutional and statutory boundaries mean that every state—and to a lesser extent, each jurisdiction within a state—is free to conduct its own business practices as it sees fit. As a result, important differences in the way that criminal justice information is managed often surface between states.

ABOUT SEARCH

In the United States, SEARCH—The National Consortium for Justice Information and Statistics is one of the leading groups

responsible for integrating justice information. It is a non-profit membership organization created by and for state governments, and is funded through federal-level grants by the Bureau of Justice Assistance in the U.S. Department of Justice. SEARCH plays a key role by providing no-cost training and technical assistance, other resources to state and local governments to support integration initiatives, as well as assistance to national-standards development efforts.

When SEARCH and other justice leaders began planning ways to improve integrated information and data exchange within the criminal justice system, they recognized the unique challenges faced by the United States. They decided that they first needed a better understanding of the business practices that governed information flow, out of which new business processes and technology solutions could be developed.

A CONCEPTUAL FRAMEWORK

With these needs in mind, SEARCH developed the Justice Information Exchange Model (JIEM). This model has three components. First, it provides a conceptual framework that defines the universal dimensions of information exchange. Second, it offers a methodology for analyzing business processes. Third, it provides a web-based software application, called the JIEM Modelling Tool, which collects data for analysis and reporting by users and researchers.

The foundation of an integrated justice framework is built on developing a better understanding of how, what, when, where and between whom data is exchanged is the foundation of an integrated justice framework. In keeping with this, the JIEM model consists of five dimensions of data exchange that, when combined, constitute the *business rules* that govern information sharing in the American criminal justice system. The five dimensions are:

- the **event** that triggers the information exchange (e.g., an arrest or the issuance of a warrant);

- the **process** in which the exchange occurs (e.g., an investigation, detention, or incarceration);
- the **agency** involved in sending or receiving the information exchange (e.g., local police, trial court or the prosecuting attorney);
- the **information** that is actually exchanged between agencies (ranging from documents to data sets and specific data elements); and
- the **conditions** associated with the case, person, or event that governs the exchange of information and defines the data flow between agencies (e.g., whether a case is a felony or misdemeanour, or whether the defendant is an adult or a juvenile).

To gain a more thorough understanding about data exchange in the United States and the Justice Information Exchange Model, Larry Webster (Project Manager, JIEM) spoke with us from his office in Syracuse, Utah. What we learned is that there are big plans in store for JIEM over the coming years.

IJI@Work: How did the conceptual model of data exchange come about, and how did it lead the way to the development of a JIEM application?

Larry Webster: The conceptual model lays out the five dimensions of data exchange. When SEARCH first began collecting information from various states to define data exchanges in terms of that model, they didn't get far before realizing they needed some kind of software tool. They started with a simple Microsoft Access application, but their needs quickly outpaced this tool. So with the next block of funding, SEARCH created a more robust software application and then invited five states—referred to in the project as “sites”—to test it as a pilot project. That's where the JIEM project really got started. Throughout the pilot, the participating sites found all kinds of ways to improve the software. This was reflected in the report that we tabled in May 2002

entitled, *Planning the Integration of Justice Information Systems: Developing the Justice Information Exchange Model*.

IJI@Work: What has happened since that report was tabled?

Larry Webster: Almost a year has passed and since then, we have nearly completed Phase III of the JIEM project. Building on what we learned from the pilot, we added 18 additional sites (13 state and five local governments) to the project. At these new sites, we're replicating what we did with those first five states, and in doing so, we're developing a much more robust model of information exchange. In the original pilot, five sites identified and entered between 85 and 470 unique data exchanges. Now, with the new sites, that total has grown to over 2,400 exchanges. Our next task is to go back and re-evaluate the results previously published, based on data from the additional sites.

IJI@Work: What have you learned from the re-evaluation so far?

Larry Webster: It's looking like there are approximately 60 events, or exchange points, that trigger information exchanges between organizations. These trigger points can produce different exchanges, depending on a unique combination of conditions (For example, is the offender a juvenile or an adult? Is the offence a felony or a minor misdemeanour?). The conditions determine which exchange will occur. And that's the whole point of this model—to map out all of these combinations of triggering events and conditions.

IJI@Work: What about the variations in the work functions between states and jurisdictions? Are these taken into account in your modelling?

Larry Webster: In the United States, there are, at times, variations in the work functions

INTERNATIONAL PROFILE

between states and jurisdictions. Each can adopt its own approach to accomplish a particular task and this can sometimes have an impact on the way we map the data exchanges. For example, consider the way that states manage the preparation of presentence investigation—or PSI reports—these reports contain facts on a particular case that a judge will consider when imposing a sentence. In Minnesota, the PSI is prepared by an organization called Community Corrections, which is under the executive branch of government. In other states, such as Delaware, the reports are handled internally by court staff. In Delaware, the judge's request for a PSI report is an internal matter, not a data exchange. In Minnesota, on the other hand, the request moves from the judicial to the executive branch, so that's considered an exchange. Therefore, from state to state, there are differences and exceptions to where exchanges occur, based on organization and assignment of these kinds of functions.

IJI@Work: What's next for the JIEM project?

Larry Webster: Within the current phase of the project, Phase III, there are some additional activities underway right now, including the development of a certification program. This has been designed so that the private sector can help us support more sites than we would otherwise have been able to do

on our own. We're also preparing our funding application for Phase IV, which will start in July 2003.

In addition, we're working on the development of the third-generation of the software. This will be a more sophisticated tool that will allow sites to design their integrated systems and re-engineer their business processes.

IJI@Work: What kinds of improvements?

Larry Webster: We're looking at adding the ability for sites to indicate how often each data exchange occurs, how quickly it has to occur and how important a particular exchange is within a given system. All of this makes sense because if we define integration as the automation of exchange between organizations, then finding answers to these three points will be helpful in determining our integration priorities. This work will be done based on the feedback we've received to date from users who have worked with the existing software. In addition, we'll be moving our applications from Linux to a Microsoft Windows platform running a SQL server database.

We're still at the design stage and we haven't started writing the code, but there's something really exciting about this next step in our development. We're being helped by the Georgia Technology Research Institute

(GTRI)—one of our country's top research universities. This is the same organization that is developing the Justice Data Dictionary for the U.S. Federal Department of Justice, which will be an XML-based repository of justice standards and specifications.

IJI@Work: How will XML affect the JIEM project?

Larry Webster: By working with the GTRI, we will enhance the JIEM tool to become a *client* of the XML registry that it is developing. Once in place, when someone at a site wants to implement a particular kind of electronic document, they will simply download the required reference document from the Justice XML Registry-Repository. Therefore, JIEM will become more than a tool that helps analyze and redesign an organization's business practices, it will help implement *national standards*. That will help bring the justice system closer to having a common way of moving information around.

There's another important benefit, too. As these standards become available, the software vendor community will move in with compatible products. Users and sites will be able to pick from a variety of standards-compliant products. This will help make electronic information exchange a reality and will bring it about faster than we ever could by working with individual organizations.

“(In the future) we will enhance the JIEM tool to become a client of the XML registry...(It) will become more than a tool that helps analyze and redesign an organization's business practices, it will help implement national standards.”

A SUMMING-UP OF THE SECOND CONFERENCE ON INTEGRATED JUSTICE INFORMATION AND COUNTER-TERRORISM

The second in a series of conferences on integrated justice information and counter-terrorism was held March 10–11, 2003 in Bal Harbour, Florida. Sponsored in part by Solicitor General Canada, this gathering—entitled Strategies for Public Safety Transformation: Counter-Terrorism and Technology—was a follow-up to an earlier, well-attended conference held in April 2002 in Whistler, British Columbia.

The focus of the Bal Harbour gathering was to examine how technology can assist law enforcement agencies and government organizations in their counter-terrorism efforts. Participants from Canada, United States, England and France benefited from plenary sessions on a wide range of topics, including new technology, cyber-terrorism and cyber-security, law-enforcement information sharing, integrated justice systems, biometrics, bio-terrorism response, interoperability, as well as an overview of the U.S. Department of Homeland Security.

Guest presenters included John Malcolm, Deputy Assistant Attorney General (United States Department of Justice), who discussed how the U.S. federal government's counter-terrorism efforts are making better use of technology today, thanks to interoperability and new laws that allow for better dissemination of information between organizations.

In addition, delegates heard from John Walsh, host of the television series America's Most Wanted, Sarah Hart (Director, U.S. National Institute of Justice), Dr. Donald Ponikvar (Vice President, Crisis Response and Analysis, Defense Group Inc.), Raj Nanavati (Partner, International Biometric Group), and many other distinguished speakers from both Canada and the United States.

Speaking on behalf of Solicitor General of Canada Wayne Easter, Peter Boehm of the Canadian Embassy in Washington highlighted how the 2003 federal budget invested \$7.7 billion in public safety in Canada. He

also emphasized the importance of a smart border between Canada and the United States, saying that collaboration between the two countries has helped to ensure public safety and has been the key to ensuring that inter-border commerce remains healthy.


The conference was a valuable information sharing opportunity for all participants and demonstrated that much progress has been made over the past couple of years with respect to using technology as a counter-terrorism tool. It also demonstrated that much work has yet to be done. With this in mind, consideration is being given to hosting a third conference on this subject, tentatively scheduled for May 2004 in Ottawa, Ontario.

INTEGRATION OF
Scottish
Criminal Justice
Information Systems (ISCJIS)
TOWARD A
UNIFIED NETWORK
OF INFORMATION

IT'S ALMOST WITHIN THEIR GRASP. SCOTLAND IS WITHIN REACH OF A LANDMARK ACHIEVEMENT FOR INTEGRATED JUSTICE INFORMATION—THE IMPLEMENTATION OF A UNIFIED NETWORK OF CRIMINAL JUSTICE INFORMATION. THIS EFFORT IS BEING DRIVEN BY A WORLD-LEADING PROGRAM, CALLED INTEGRATION OF SCOTTISH CRIMINAL JUSTICE INFORMATION SYSTEMS (ISCJIS). UNDER THE GOVERNANCE OF AN INTER-DEPARTMENTAL PROGRAMME BOARD, ISCJIS IS COMPRISED OF SEVERAL INITIATIVES. AMONG THESE IS THE DEVELOPMENT AND PROMOTION OF ELECTRONIC TRANSFER OF INFORMATION BETWEEN CRIMINAL JUSTICE ORGANIZATIONS.

THE PRIMARY LOOP

In January 2002, Scotland completed a key component of ISCJIS—a major link between police, prosecutors, Sheriff and District Courts, and the Scottish Criminal Records Office (SCRO). This link is referred to by Scottish officials as the *Primary Loop*—and for good reason. It has resulted in the connection of all major components of the Scottish criminal justice system, which is a distinct and separate jurisdiction in the United Kingdom.



“ISCJIS is not an integrated system: we are a series of independent systems that are integrated through data standards.”

Here's a thumbnail sketch of how data is shared among partners in Scotland within the Primary Loop. When a crime is committed and the police make an arrest, an arrest record is created on the SCRO database. At the same time, police will email an offence report to the Procurator Fiscal—the public prosecutor in Scotland (cases where the accused is a juvenile—under 16 years old—are handled by the Scottish Children's Reporter Administration). When the Procurator Fiscal has made a prosecution decision, the details are generated into a “true” pending record for the case, which is updated automatically on SCRO. In doing

so, there is a central, dynamic record for all of Scotland that shows the progress of individual cases. Later, when a case is before the courts, the case record is updated at SCRO, right up until sentencing.

EXTENDING THE PRIMARY LOOP

The next step for the ISCJIS program will be a complete extension of the Primary Loop to include electronic exchanges of information with other agencies that contribute to the Scottish criminal justice system. Key among these will be: the Scottish Children's Reporters Administration; Local Authorities (including District Courts and social workers); specialist reporting-agencies (there are over 50 of these), including Environmental Health and Trading Standards (there are 50 such agencies); and the Scottish Prison Service.

Once this step has been completed, tentatively by 2006, the entire ISCJIS community will be communicating electronically.

That's not to say that there haven't been challenges along the way. Len Higson, the Area Procurator Fiscal, Glasgow (Crown Office and Procurator Fiscal Service), who has been a member of the ISCJIS Programme Board since it was established in 1994, talks about some of these obstacles, and shares some insights into what's in store for ISCJIS in the future.

IJI@Work: Can you tell us about some of the challenges that the ISCJIS has faced along the way to completing the Primary Loop?

Len Higson: While we started the Primary Loop in 1999 and completed it in 2002, we might have otherwise finished this work sooner, but we were constrained by the readiness of Scotland's eight police forces, who had not historically used the same information systems. We had to take this into account in our planning and implementation.

But there was an even bigger challenge prior to 1999—the very structure of our criminal justice system. In Scotland, there is a constitutional separation between

organizations that comprise this system. ISCJIS is not an integrated system: we are a series of independent systems that are integrated through data standards.

IJI@Work: What role have data standards played in helping overcome these obstacles?

Len Higson: In fact, data standards are what bind our integrated system together. In Scotland, we've had data standards in place since 1994, and since then, all CJ information systems have had to comply with them. Therefore, for us, what delivers the connectivity between various systems is the fact that each is compliant with these standards and therefore with each other. All parties are now accustomed and comfortable with the requirements that all data must comply with the standards, and that has helped make everyone's job easier to do.

IJI@Work: Given what it has accomplished so far, what lies ahead for ISCJIS?

Len Higson: What we have accomplished so far is just the beginning. We are developing a series of new initiatives based on the improvements that have been made to the Primary Loop. Here are four examples, for your consideration.

First, we have developed a connection with the UK Driver and Vehicle Licensing Authority (DVLA), so that drivers' road traffic convictions are added and updated electronically within the system. Within the last year, we've also introduced a new feature in which courts can access the DVLA database. Therefore, in cases that are before the courts, judges can access DVLA information before the hearing takes place, avoiding the need to defer sentence.

Second, we have developed and completed a pilot project that involves providing social enquiry reports (i.e., pre-sentencing reports) on an exclusively electronic basis. Third, we have developed LINETS, a legal information network. It is, in effect, an information portal

for government lawyers in Scotland. LINETS is based on a powerful search engine that can scour the Internet or any government database for information in relation to criminal justice matters. Last but not least, we are about to give Procurators Fiscal direct access to SCRO, to assist them in targeting persistent offenders and allow for better information for victims and bail purposes.

IJI@Work: What has been the secret of ISCJIS's success?

Len Higson: In my view, much of the credit for success to date comes from the composition of the Programme Board. It has always been a high-level group where everyone has had decision-making authority. That was crucial. There was genuine commitment and co-operation at the senior level in each

organization. That said, it was still hard work and research suggests that we should have done more to ensure the same attitude and understanding in our regional implementation group. Secondly, seed-funding from central government was very important in encouraging change and supporting 'champions'.

ISCJIS PARTNERS

The Scottish criminal justice system is comprised of a host of partners who work together to ensure the safety and security of citizens. The following list highlights the functions and responsibilities of the partners who play a role in Scotland's ISCJIS:

Crown Office and Procurator Fiscal Service—responsible for the prosecution of all crimes in Scotland, the investigation of all sudden and suspicious deaths, as well as the investigation of complaints against police.

Scottish Executive—the administration of justice in Scotland is the responsibility of the Deputy First Minister and Minister for Justice.

Association of Chief Police Officers in Scotland—there are eight local police forces in Scotland: Strathclyde, Tayside, Northern Constabulary, Lothian and borders, Dumfries and Galloway, Central Scotland, Fife and Northern.

Scottish Court Service—responsible for the 49 Sheriff Courts throughout Scotland, as well as the Supreme Courts (i.e., Court of Session, the High Court of Justiciary, and the Accountant of Court's Office), based in Edinburgh.

Scottish Local Authorities—responsible for the administration of the District Courts in Scotland, and are also responsible for social-work departments, who prepare pre-sentence reports and input in community service and probation disposals.

Scottish Prison Service—an agency of the Scottish Executive, with responsibility for all public prisons in Scotland.

Scottish Criminal Record Office (SCRO)—their key function is to provide a centralized criminal history service, as well as records of previous convictions and fingerprint information.

Scottish Children's Reporter Administration—a non-departmental public body, established under the Local Government (Scotland) Act 1994, which facilitates the work of the Principal Reporter in relation to care and justice for children.

Driver and Vehicle Licensing Agency (DVLA)—provides information to agencies of the criminal justice system in Scotland regarding driver records.

Scottish Legal Aid Board—in the majority of cases that are processed in the criminal courts in Scotland, legal representation for the accused is paid for by this state-funded board.

Other agencies—these include: Her Majesty's Customs and Excise; Benefits Agency; Ministry of Defence; Vehicle Inspectorate; Scottish Fisheries Protection Agency; and British Transport Police. Of these, the Scottish Fisheries Protection and the Vehicle Inspectorate are the first non-police reporting agencies to participate in the ISCJIS programme.

PARTNERS

IN TECHNOLOGY

THROUGH TECHNOLOGY, INFORMATION SHARING IN CANADA'S CRIMINAL JUSTICE SYSTEM COMES TO LIFE. WHAT FOLLOWS ARE EXAMPLES OF SOME OF THE MANY TECHNOLOGY-BASED INITIATIVES UNDERWAY ACROSS CANADA BY CPSIN PARTNERS. THESE, AMONG OTHERS, HAVE BEEN UNDERTAKEN WITH A COMMON AIM IN MIND: ENHANCED PUBLIC SAFETY AND BETTER INTEROPERABILITY WITH PARTNERS.



JACKIE WATCHER, TECHNICAL POLICY OFFICER, AND TOM LOCKETT, SENIOR TECHNICAL POLICY ANALYST (INTEGRATED JUSTICE INFORMATION SECRETARIAT)

Securing THE Skies

INTEGRATING JUSTICE INFORMATION AT PEARSON INTERNATIONAL AIRPORT

IF YOU WANT TO MAKE INTEGRATED JUSTICE INFORMATION A REALITY, YOU FIRST HAVE TO UNDERSTAND THE WAYS CRIMINAL-JUSTICE ORGANIZATIONS SHARE AND EXCHANGE INFORMATION TODAY. AND THERE'S ONLY ONE WAY TO BRING ABOUT THAT UNDERSTANDING: BY GOING WHERE THE ACTION IS. THAT'S EXACTLY WHAT TOM LOCKETT, JACKIE WATCHER AND A FEW OF THEIR IJIS COLLEAGUES DID LAST MARCH WHEN THEY TRAVELED TO CANADA'S LARGEST AIRPORT, PEARSON INTERNATIONAL, TO HOST A TWO-DAY INTEROPERABILITY WORKSHOP.

PARTNERS IN TECHNOLOGY

IJI IN MINIATURE

"For us, Pearson was the perfect microcosm for this kind of study," says Tom Lockett, Senior Technical Policy Analyst at the IJI Secretariat. "It's like a city unto itself: an extremely complex environment. And the need for real-time information sharing is absolutely critical, especially in the post 9/11 environment."

Comparing Pearson to a city is perfectly apt. The facility's entire staff numbers 45,000. At any given time, there are roughly 17,000 workers on site. Hundreds of flights transporting passengers and cargo land every day; of those, 280 need immigration and customs services. In total, some 16,000,000 passengers travel through the airport each year.

The airport's wide range of security responsibilities is shared among more than 25 agencies—from federal and municipal police to private security forces. More than 13 special task forces, made up of members of various organizations, deal with such issues as narcotics smuggling, tracking the proceeds of crime, and identifying and dealing with repeat offenders. Canada-U.S. collaborative bodies including the Joint Passenger Analysis Unit and the Integrated Border Enforcement Team also operate at Pearson.

"It's a unique environment," says Jackie Watcher (Technical Policy Officer, IJIS). "Nowhere else in Canada can you find as many agencies operating in the same space, charged with similar mandates. And when situations come up, there's very little warning. Decisions have to be made on the spot—which means it's essential for agencies to have access to accurate, up-to-date information."

LEVERAGING STRENGTHS

Watcher and Lockett are members of the IJIS team developing an information architecture for CPSIN. It's their job to identify how information flows between organizations in a given set of circumstances, and how to exchange that information most efficiently.



PHOTO COURTESY OF GREATER TORONTO AIRPORTS AUTHORITY

Their study of Pearson International Airport culminated with a two-day workshop last March. Attendance was excellent: 16 key agencies were represented at the sessions.

"What we did was not a security assessment," Lockett is careful to explain. "It wasn't a critique of the airport. It was an information-gathering exercise to help us better understand what an effective IJI architecture has to achieve."

Using the scenario of a diverted flight forced to land at Pearson due to mechanical problems, Lockett's team divided participants into three groups—representing a mixture of all the agencies present. The groups were tasked with developing a response to the scenario—which they did, successfully.

"When risks arise," says Lockett, "agencies need to talk to each other. They need to know they can depend on each other. And that takes an understanding of how to leverage each others' strengths."

Business processes play a key role. Every organization has its own ways of doing things; true interoperability depends on the degree to which these processes can be integrated with those of other agencies.

Some organizations have already begun to act in this regard. Citizenship and Immigration Canada and the Canada Customs and Revenue Agency have jointly

developed an effective advanced passenger screening system. And many Canadian agencies have established closer working relationships with their U.S. counterparts.

THE WILL AND THE WAY

A report on the outcomes of the workshop was prepared and distributed to all participants in the Spring of 2003. Lockett and his team plan to hold follow-up discussions with the agencies to determine how to move forward. The next steps will include more detailed architectural work, and a closer look at the technologies in use to support information sharing.

Lockett and Watcher conducted a roundtable discussion at the end of the March workshop. They found the participating agencies enthusiastic about having had the opportunity to network, to learn more about the roles of their fellow organizations—and to be reminded that they're not alone in working to ensure public safety.

"We discovered two things in this first study, really. One is that when it comes to sharing information and responding to crises, the agencies at Pearson do an excellent job with the resources available," Lockett concludes. "And the other is that there's a shared will among them to do even better."

A GIANT LEAP FORWARD:

EVEN THOUGH ITS OFFICIAL 'GO-LIVE' DATE IS STILL HALF A YEAR AWAY—DECEMBER 31, 2003, TO BE PRECISE—CANADA'S NEW PERMANENT RESIDENT CARD (PRC) HAS GARNERED A GOOD DEAL OF POSITIVE ATTENTION. DEVELOPED BY CITIZENSHIP AND IMMIGRATION CANADA (CIC), THE PRC HAS ALREADY WON TWO INTERNATIONAL AWARDS FOR THE QUALITY OF ITS DESIGN, AND HAS MET WITH AN EXTREMELY FAVOURABLE RESPONSE FROM BOTH CIC OFFICERS AND THE COUNTRY'S PERMANENT-RESIDENT COMMUNITY.

"It's a win-win advancement for everyone involved," says Brian Torrie (Director, Permanent Resident Card Project, CIC Enforcement Branch). "With this card, we've jumped from 1950's technology to that of the 21st century." And by doing so, CIC has opened the door to a world of public-safety benefits.

THE TURNING POINT

The concept of a Permanent Resident Card has been in circulation for decades. Over the years there have even been a few pilot projects to explore the idea. But for a long time, the costs of implementation were considered prohibitive.

Of course, CIC recognized that relying on the *status quo* would not suffice. Canada's legacy permanent-resident document, the IMM 1000 *Record of Landing*, had a number of vulnerabilities. As a large-format paper document with no photographic component, it was unwieldy, subject to wear and tear, and forgeable.

Launching Canada's **NEW** Permanent Resident Card



PARTNERS IN TECHNOLOGY

The back of the card is equipped with an optical stripe that makes it possible for a significant quantity of data to be encoded directly onto the PRC.

In the summer of 2000, after surveying the marketplace and identifying the most advanced card features available, the CIC PRC team issued a request for proposals from manufacturers. The Canadian Banknote Company won the bid, heading up a consortium of industry leaders with the right mix of capabilities. All that remained for CIC was to secure the necessary funding.

As with so many matters relating to public safety, September 11, 2001 marked a turning point. Priorities shifted, funding became available, and the PRC project found itself on the fast track.

FULL SPEED AHEAD

Within six months of funding approval, CIC and its PRC development partners produced a card for distribution; just in time to support the introduction of new legislation: the *Immigration and Refugee Protection Act*.

"Credit goes to everyone involved that CIC and its partners were able to accomplish such a significant project in such a short space of time," says Torrie. "There was tremendous collaboration among different groups within CIC and among our contracted external partners."

"EVERYTHING THAT
APPEARS ON THE CARD APPEARED
PREVIOUSLY ON THE IMM 1000. BUT
ON THE PRC, PERSONAL INFORMATION
IS PROTECTED THROUGH
ENCRYPTION."

Since June 2002, all new immigrants to Canada have been provided with a PRC. Specialized equipment capable of reading the information encoded on the card is currently being finalized for deployment at CIC locations in Canada and abroad. By the end of December 2003, the system will be fully up and running; after that time, any of Canada's 1.5 million permanent residents returning to the country on a commercial carrier will be required to present the card as their official identification.

"Through focus groups involving permanent residents, CIC found there was high acceptance of the idea of the card," explains Torrie. "It's very convenient, unlike the IMM 1000. It fits easily in a wallet or purse. It's durable. It's secure."

Because the PRC is tamper-proof and electronically verifiable, it may also afford permanent residents with a greater sense of confidence when being processed at an airport. Cardholders will know their identification is reliable.

These advantages are appreciated by CIC officials, for whom the task of confirming an individual's identification is now much easier.



A PRODUCT OF PARTNERSHIP

CIC consulted with a number of partners on many issues throughout the process of developing the PRC. The department participated in the Treasury Board Secretariat's Advanced Card Group, and coordinated with the Canada Customs and Revenue Agency (CCRA) to ensure that the new cards would be interoperable with CCRA's existing card-reading technology.

CIC also worked closely with the Privacy Commissioner's Office to assess the impact and implications of the cards.

"The PRC represents a major improvement in terms of privacy," says Barry Jackson, Deputy Director of the PRC Project.

"Everything that appears on the card appeared previously on the IMM 1000. But on the PRC, personal information is protected through encryption." The cards cannot be used to monitor the activities of an individual, nor to track his or her movements, further upholding each person's right to privacy.

At an early stage of development, CIC also collaborated with Canada's Passport Office. It used the passport-application process as a model for the new PRC.

THE CARD UP CLOSE: HOW IT WORKS

The PRC has numerous security features that make it an extremely safe proof-of-status document. These include a laser-engraved photograph of the cardholder, a laser-engraved signature, and a description of the cardholder's physical traits (such as height, eye colour and gender).

The back of the card is equipped with an optical stripe produced by Drexler Lasercard (the company that produces the card stock itself). This stripe—the same as that used on Green Cards in the United States—makes it possible for a significant quantity of data to be encoded directly onto the PRC. That data includes all of the details recorded on the cardholder's Confirmation of Permanent Residence form. Because the information on the PRC is encrypted, it can be read only by authorized personnel using the appropriate technology.

More sophisticated than the magnetic strips used on bank cards, credit cards and the like, the PRC's optical stripe is

impervious to tampering; the information recorded on it cannot be altered or erased. To ensure interoperability, the machine-readable zones on the card conform to international standards.

While there are no current plans to include a biometric identifier on the PRC, the card has the capability to incorporate one.

These features—just a few of many—help simplify the screening process for Immigration officers, contributing to greater border security and improving the integrity of Canada's immigration process.

IMPLEMENTATION

The total cost of the PRC project is \$139.6 million over five years. This includes design and development, card production and distribution, and the acquisition and deployment of card-reading equipment.

Once the system is up and running regularly—after the initial mass-distribution of cards to existing permanent residents and new arrivals—CIC expects to process

applications for approximately 225,000 PRCs per year. Each card is valid for five years. According to CIC, some 85 percent of permanent residents seek Canadian citizenship within a five-year period.

Reflecting on the project's rapid progress, Brian Torrie is very satisfied.

"CIC and its partners had a bunch of people working on this: in-house forensics staff, intelligence personnel and card designers, plus our departmental distribution network, regional offices, and information technology branch—and our team of manufacturing partners. Everyone got on the same page very quickly, not only producing a working card within six months, but also doing so on time and on budget."

"Credit goes to everyone involved that CIC and its partners were able to accomplish such a significant project in such a short space of time."

PARTNERS
IN TECHNOLOGY



JOHN ARNOLD, CHIEF SCIENTIST,
CANADIAN POLICE RESEARCH CENTRE

THE FACE OF THE FUTURE

Project BlueBear makes
the case for facial-recognition technology

IN RECENT YEARS, TECHNOLOGICAL ADVANCEMENTS HAVE MADE IT POSSIBLE FOR CRIMINAL-JUSTICE ORGANIZATIONS TO ADOPT SOME TRULY SOPHISTICATED BIOMETRIC IDENTIFICATION SYSTEMS—EVERYTHING FROM ELECTRONIC FINGERPRINT READERS TO RETINAL SCANNERS.

YET JOHN ARNOLD, CHIEF SCIENTIST OF THE CANADIAN POLICE RESEARCH CENTRE (CPRC) AT THE NATIONAL RESEARCH COUNCIL (NRC), SUGGESTS THAT FOR POLICE IDENTIFICATION WORK, THE BEST BIOMETRIC MAY BE RIGHT UNDER OUR NOSES. OR MORE PRECISELY, ALL AROUND OUR NOSES: THE HUMAN FACE.

THE ROAD TO RECOGNITION

“I’ve been involved in police research for 30 years,” Arnold explains. “For a long time, I’ve wanted to explore this idea of using the face as a biometric. One of the chief advantages is that anyone can recognize a face: it doesn’t take specialized training. As information, pictures of faces are easy to share. And the technologies involved are actually very cost effective.”

An opportunity arose for Arnold to investigate the potential of face-recognition technology in 2001 when he struck up a conversation with Sal Kahn.

Kahn is the CEO of VisionSphere Technologies (VST)—a private-sector tenant of the Information and Telecommunications Technologies’ Industry Partnership Facility at the National Research Council’s Montreal Road campus in Ottawa. VST specializes in the development of biometric face-recognition hardware and software.

The initial conversation between Arnold and Kahn led to a technology showcase at the NRC in February 2002. Invitations went out to the police community, and everyone who came was treated to a demonstration of VisionSphere’s face-recognition technology.

At the same time, CPRC and VisionSphere pitched the idea of involving interested police departments in a pilot project—dubbed ‘BlueBear’—to test the technology in a real-world setting.

BLUEBEAR IN THE FIELD

One of the first organizations on board for the project was the Chatham-Kent police service, based in southwestern Ontario. Word of mouth spread quickly, and soon the Windsor police force also signed up.

In June 2002, the BlueBear project team hosted a meeting at NRC to demonstrate how the mug-shot systems of different police departments could be linked together to

facilitate information sharing. For the pilot project, a third participant was needed; in the Fall of 2002, York Regional Police volunteered.

“The proponents of the system were the ID officers,” John Arnold explains. “Not IT, not criminal investigators—but the people in Ident who do the bookings. If you look at the pattern of how technology is adopted by police, this is it: at the grassroots level, by word of mouth, in little bits at a time.”

While designing the BlueBear pilot project, Arnold and his collaborators were keenly aware of this pattern. In the late 1990s, CPRC proposed a methodology for introducing information technology into the police community. It was called PS3 and, essentially, its approach was to initiate technology adoption via small pilot projects on the front lines.

The elements of PS3 were as follows:

1. To carry out pilot projects within the police community over a research network rather than a police operational network.
2. To deliver working products operationally, once pilot testing was finished, via a pay-per-use application service provider (ASP) model to keep costs down.
3. To provide e-learning on the police research network.

CONTINUED ON PAGE 34

“The proponents of the system were the ID officers,” John Arnold explains. “Not IT, not criminal investigators—but the people in Ident who do the bookings.”

CONTINUED FROM PAGE 33

The BlueBear project was modeled on the PS3 approach. Ontario was chosen as the testing ground due to VST's presence there. There is also a high concentration of police. Of the 57,000 police officers in Canada, one-third are in Ontario, excluding the RCMP.

Now that Chatham-Kent, Windsor and York Region have their own stand-alone face-recognition systems, the next step for project BlueBear will be to connect them, enabling

each department to search the others' electronic mugbooks securely and remotely. This is expected to occur by Summer 2003.

"The advantages of this technology are phenomenal," concludes Arnold, "because it allows police services to easily share important identification information electronically at a relatively low cost. And the way we've set up this pilot project allows smaller police departments to be part of the process, testing the technology for themselves."

Looking to the future, Arnold considers the potential demand for a proven face-recognition solution on the border—and south of it. "The market is huge for something like this in the U.S. So in addition to all of the public safety benefits we'd experience here in Canada if it were to be widely adopted, there's also the real possibility of some economic gain."

Project BlueBear

THE TECHNOLOGY AND HOW IT WORKS

Project BlueBear is based on VisionSphere Technologies' face-recognition solution. That solution embeds a secure, distributed search technology within a face-recognition engine, enabling police departments to search their own—and their partners'—mugshot databases simultaneously over a network. Results are available within minutes, helping police identify suspects.

John Arnold describes a typical scenario in which a system like this would be valuable: "Say you're a police detachment in a small community. You pick up a suspect and bring him in for booking. You don't have him in your files. So you take his picture, and VST's facial recognition system, VSIdent, translates it into a number—or biometric—then feeds that metric into your system for an online search. Because you're connected to other departments' mugshot databases, you have access to a broader range of records. Maybe your partners have seen this suspect before. If his picture is in one of their systems, you'll be able to ID him."

Security is obviously critical for an application like this. VisionSphere's technology allows linked computers to interoperate in a highly flexible manner; the information they share is shared securely, and access to each department's internal systems is restricted.

What makes this solution so flexible is that it does not require the use of a centralized database. Every participating organization maintains its own internal database and its own IT infrastructure. For the BlueBear pilot, information is shared from a variety of departmental mugshot systems; those files are then searched and shared easily and seamlessly.

"Because this system doesn't demand any major IT overhaul or expensive capital investment," says Arnold, "it's a truly cost-effective information-sharing tool for police services. This is something that even a small municipal department can use and afford."



PARTNERS IN TECHNOLOGY

(FOREGROUND) STEVEN OHH; (SEATED ON SOFA, FRONT ROW, L-R) NANCIE PROULX, NATASHA LEVESQUE, GUYLAINE MONTPLAISIR, DENIS SANCHE, GEORGES PINATEL; (SECOND ROW, L-R) PIERRE TREMBLAY, NANCY JOLY, TOMMY L'ÉCUYER; (BACK ROW, L-R) BILLIE-JO STUART, ROBIN BRAY, REJANNE SAUNOIS

ENHANCING PUBLIC SAFETY IS THE OVERARCHING GOAL OF THE CORRECTIONAL SERVICE OF CANADA'S (CSC) OFFENDER MANAGEMENT SYSTEM (OMS), WHICH GATHERS, STORES AND RETRIEVES INFORMATION ON OFFENDERS IN CANADA'S FEDERAL CORRECTIONAL SYSTEM. SINCE EARLY 2001, WORK HAS BEEN UNDERWAY TO RENEW THE OMS IN SUPPORT OF THIS GOAL. TO ACHIEVE THIS, THE OMS RENEWAL TEAM HAS IDENTIFIED FIVE CLEAR OBJECTIVES: ELECTRONIC CONNECTIVITY WITH PARTNERS; IMPROVED SECURITY; A USER-FRIENDLY INTERFACE AND A SIMPLIFIED SCREEN NAVIGATION; EASIER MANAGEABILITY; AND BETTER FAULT TOLERANCE. "WHEN WE'RE FINISHED," EXPLAINS GEORGES PINATEL (MANAGER, INFORMATION SHARING AND COMMUNICATIONS, OMS RENEWAL PROJECT), "WE'LL HAVE A RENEWED SYSTEM THAT WILL SIGNIFICANTLY IMPROVE THE WAY WE MANAGE INFORMATION WITHIN THE FEDERAL CORRECTIONAL SYSTEM AND IN THE WAY WE SHARE IT WITH OUR PARTNERS."

CORRECTIONAL SERVICE OF CANADA'S Offender Management System Renewal AND InfoPol

CONNECTING POLICE FORCES AS PARTNERS

PARTNERS IN TECHNOLOGY

Expanding the base of users who can connect and exchange information with the CSC's system is a key component of the OMS Renewal Project. By 2005, over 2,000 new external users will have been connected to the renewed system.

Police services across Canada are among the groups in this expanded base of users. They are being connected thanks to a new software tool, developed by the OMS Renewal Team, called InfoPol. "This is an information tool designed specifically for police services in Canada," explains Pinatel. "Police will be able to obtain information, in a format tailored to their needs, about federal offenders under supervision in their respective provinces and about offenders who are unlawfully at-large in Canada."

While select OMS information has been available electronically to police forces for many years via the RCMP's Canadian Police Information Centre (CPIC), the majority of the information provided was in paper format. InfoPol offers this group an array of information which enables CSC to fulfil its legal obligations by providing information sharing on an electronic basis. Provincial teams provide user support by telephone to the various criminal justice system partners connected to OMS.

In 2002, CSC implemented and completed a successful pilot project of InfoPol with the Montreal Police Service. Now, CSC is in the process of expanding the InfoPol connection to other major police services in Quebec, and is proposing to extend the project to the Atlantic provinces, British Columbia and the Yukon this year. In 2004 and 2005, other police forces across Canada who are interested in participating in this project will be connected.

InfoPol enhances existing information sharing that already occurs between CSC and police. As an example, Pinatel points to the management of standard profiles—reports that are issued routinely to police whenever an offender is released from a federal institution. These are currently distributed to police through a paper-based system. "InfoPol will handle this task electronically and automatically," he explains.

The software application extracts data from the OMS, organizes the information to be shared in the way that police users want it and transfers it to a user-friendly interface that can be accessed by officers. Gradually, as InfoPol is implemented, this service will be replacing hard copies of standard profiles with the new electronic application—for use exclusively by police in a controlled, secure environment.

The application offers a host of important enhancements to help police do their jobs, including a digital photograph and last known address of the offender, as well as contact information on the offender's parole officer. Other information will include security alerts about offenders, as well as the ability to track their movements throughout the sentencing process.

"WHEN WE'RE FINISHED, WE'LL HAVE A
RENEWED SYSTEM THAT WILL SIGNIFICANTLY
IMPROVE THE WAY WE MANAGE INFORMATION
WITHIN THE FEDERAL CORRECTIONAL
SYSTEM AND IN THE WAY WE SHARE IT
WITH OUR PARTNERS."

InfoPol offers a key new feature that was previously unavailable to police—a dynamic online search capacity. From conducting queries on an offender's name or age, to their fingerprint system number or hair colour, police officers will be able to perform a host of sophisticated searches using various criteria. It simplifies research during an investigation when looking for individuals by physical characteristics.

"In addition to all the features and enhancements, there are two more important benefits that InfoPol will offer," explains Pinatel, "and these are *timeliness* and *ease of use* of information." When an offender is released from a federal facility, police will be able to count on having the information they need without delay and in a format they could search. Waiting for paperwork will be a thing of the past, because the information will be presented in an all-electronic rather than paper format. "That's a benefit that will not only serve the police, it will also make our jobs easier within the Correctional Service of Canada," concludes Pinatel. "And that's an important contribution that will no doubt serve to enhance public safety within our criminal justice system."

PARTNERS
IN TECHNOLOGY

THE NATIONAL PAROLE BOARD'S

Pardons E-Notification Project

Bridging the time gap,
reducing the paper
burden and increasing
**PUBLIC SAFETY IN
CANADA**



THE NATIONAL PAROLE BOARD'S
PARDON E-NOTIFICATION PROJECT
TEAM (LEFT TO RIGHT) KATHERINE
GALLIGAN-SPICER, YVES BELLEFEUILLE,
TERRY REMPEL-MROZ, COLETTE
GALISPEAU (ABSENT FROM PHOTO:
GREG EDWARDS)

PARTNERS IN TECHNOLOGY

THE PARDONS PROGRAM IS A FUNDAMENTAL COMPONENT OF THE NATIONAL PAROLE BOARD (NPB), AS WELL AS CANADA'S CRIMINAL JUSTICE SYSTEM. WHEN AWARDED BY NPB, A PARDON MEANS THAT A RECIPIENT'S CRIMINAL RECORD IS KEPT SEPARATE AND APART FROM OTHER CRIMINAL RECORDS. THEY ARE AWARDED ONLY TO THOSE WHO HAVE SERVED THEIR SENTENCE, WHO (IN CASES INVOLVING AN INDICTABLE OFFENCE) HAVE WAITED FIVE YEARS AND HAVE BEEN OF GOOD CONDUCT (I.E., NO SUSPICION OR ALLEGATION OF CRIMINAL ACTIVITY), OR IN CASES OF A SUMMARY OFFENCE, TO THOSE WHO HAVE WAITED THREE YEARS.

"Pardons are an important part of ensuring that previously convicted (but now law-abiding) citizens can be an asset to a community," explains Dr. Yves Bellefeuille (Director, Clemency and Pardons). "But the success of this practice, of removing the stigma associated with having a criminal record, will always hinge on *public confidence* in the system that makes these decisions."

In all cases, a pardon means that information pertaining to the conviction of a pardoned offender will be taken out of the Canadian Police Information Centre (CPIC). However, prohibitions remain active and on file, for example, when an individual is barred from using firearms, or from operating a motor vehicle. Moreover, in cases involving sex offenders, a flag always remains to protect children and vulnerable persons.

Currently, the Pardons Program at NPB is managed by a system called PADS (Pardons Application Decision System), in which all notifications are printed on paper and mailed out. Staff within the agency must handle over 700,000 pieces of paper annually for notifications.

Consider the following figures: according to the National Parole Board's Performance Measurements Report (2001-2002), an average of 22,000 pardon applications are received every year, of which about 1,000 are ineligible and about 5,000 are incomplete. On its own,

this is an impressive number of case files for a small agency to manage. Yet the challenge is made even more daunting by the fact that each pardon application received requires special, unique attention to ensure adherence to the *Criminal Records Act* (CRA), the legislation that drives this process. Over the last decade, the National Parole Board awarded over 150,000 pardons, of which less than three percent were revoked or ceased to be in effect (i.e., when a pardon becomes null and void and the criminal record is reactivated).

In the case of revocations and cessations, it is essential that all agencies be notified as soon as possible. The affected agencies

consist of 1,400 criminal justice system partners, including police. "We have to keep track of every one of these case files," explains Bellefeuille, "and we have to aim to be flawless in our approach. After all, when it comes to pardon revocations and cessations, we aim for zero-tolerance with regards to jeopardizing public safety."

Paper-based systems have inherent limitations. Even under optimum conditions, information does not get shared with all partners as quickly and as efficiently as most stakeholders would wish in Canada's criminal justice system. That's why Bellefeuille's group is pursuing the advancement of the **Pardons E-Notification Project**, an electronic, information-sharing initiative that will drastically reduce the paper-based system currently in use. "For us, Pardons E-Notification will make it possible for real-time notification with our partners," he explains. "Following a decision on a revocation or after being informed of a cessation, justice partners who need to know will be informed in minutes rather than days." Therefore, the improvements will enhance public safety and confidence in Canada's criminal justice system.

The Pardons E-Notification Project offers the potential to change the role played by

"We have to keep track of every one of these case files... and we have to aim to be flawless in our approach. After all, when it comes to pardon revocations and cessations, we aim for zero-tolerance with regards to jeopardizing public safety."

the National Parole Board, as far as the Pardons Program is concerned. Currently, the program is much more of a *user* than *contributor* of information within the Canada Public Safety Information Network (CPSIN). Bellefeuille explains that the NPB relies on various tools for evaluating pardon applications, such as the RCMP's CPIC and PIRS (Police Information Retrieval System).

"Our contributions, especially in the area of pardon revocations and cessations, will be quite valuable to CPSIN."

Consider a scenario in which a police officer pulls over a driver for a speeding infraction. With real-time notification, an information flag on CPIC could alert the officer indirectly of a pardon revocation that had taken place just hours or days earlier (CPIC would have reactivated all previously pardoned offences). Bridging this gap in time could make the difference between whether or not an arrest is made, or allow the police officer to take appropriate safety measures.

Another issue that the Pardons E-Notification Project will address is the amount of paper that the system currently has to manage. According to the NPB's Performance Measurement Report (2001-2002), the average processing time for pardon applications last year had reached 20 months, up sharply from six months in 1997-1998. While the report noted that this was caused, in part, by resource issues within the agency during that span of time, it nevertheless pointed to the need for a better, faster way to process and manage the growing volume of paperwork associated with pardons.

"OUR CONTRIBUTIONS, ESPECIALLY
IN THE AREA OF PARDON REVOCATIONS
AND CESSATIONS, WILL BE QUITE
VALUABLE TO CPSIN."

"I am challenging my staff," says Bellefeuille, "to constantly try to find ways to improve the PADS system and the pardons process for improved service delivery. Not at the expense of quality, but so that NPB's Pardons Program is more efficient, effective, economical, and most important, in line with the *Criminal Records Act* in enhancing public safety in Canada."

The Pardons E-Notification Project is still in the early stage of development. The Integrated Justice Information Secretariat (IJIS) funded the initial assessment of the issue and the development of a business case. Next steps will include developing a project plan for a proof-of-concept, followed by a pilot stage and possible implementation. There remain a number of ways that faster and more efficient pardon updates can be accomplished. Since the National Parole Board uses the RCMP's CPIC system to investigate pardon applications, consideration is being given to electronic notification using the CPIC Messaging Server (a proprietary email system). Alternatively, XML or secure-fax messaging could be used.

Says Bellefeuille: "We also need to think about other ideas available, such as NCJI (National Criminal Justice Index) and PRIME BC (Police Records Information Management Environment British Columbia)" (*for more information on PRIME BC, see IJI@Work Vol. 1, Issue 2*). "These could assist us in the sharing of pardon electronic notifications with the other justice partners."

However, since there are mitigating security and budgetary issues to be addressed, a

final decision on this matter will not be made for some time. "We have to be realistic about what we can achieve," says Bellefeuille. "And we're unlikely going to be able to find a way overnight to share information electronically with all 1,400 agencies who need to be notified on pardon cases that pertain to them."

With this in mind, the focus of the project is on getting the system to work, and then build on the NPB's successes. "But no matter which approach we settle with," he concludes, "the bottom-line for us is public safety. If we can install an almost paperless pardons notification environment, we will move the Pardons Program forward. It's an ambitious goal, but one that I'm certain will help contribute to Canada's pardons program... already one of the best in the world."

THE CPSIN Core Data Dictionary

Major steps to help
Canada's justice partners
speak a common language

dic·tion·ar·y

n.

A book listing words or other linguistic items in a particular category or subject with specialized information about them.

SOURCE: THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE, FOURTH EDITION, 2000.

D ICTIONARIES HELP PEOPLE COMMUNICATE BETTER. WHETHER THEY ARE USED FOR SPOKEN LANGUAGES OR FOR INFORMATION SHARING, THEY ARE INDISPENSABLE TOOLS. WORKING WITH FEDERAL CRIMINAL JUSTICE PARTNERS, SOLICITOR GENERAL CANADA'S DATA STANDARDS SECRETARIAT (DSS) IS HELPING TO BUILD A WORLD-CLASS DATA DICTIONARY FOR THE CANADA PUBLIC SAFETY INFORMATION NETWORK (CPSIN). A FULL ENGLISH VERSION OF THIS DICTIONARY, AVAILABLE ON A CD ROM, WAS LAUNCHED IN THE FALL OF 2002.

Adhering to accepted data principles and international conventions, the CPSIN core data dictionary is helping justice partners in Canada speak a common language. It is serving as a compendium of all data elements shared between two or more CPSIN organizations. From hair colour, to name structure, to common terminologies for describing offences, the dictionary is comprised of over 450 elements whose complete data descriptions are approved by representatives from partner agencies.

"The success of our work depends on our partners agreeing to common terminology and data exchange standards," explains Alistair Rondeau (Manager, Data Standards Secretariat). "To be reliable and useful, criminal justice data has to have the same meaning for those people who receive it as it does for those who send it."

“To be reliable and useful, criminal justice data has to have the same meaning for those people who receive it as it does for those who send it.”

In March 2004, Canada will take another important step forward in helping its justice partners share information. The Data Standards Secretariat will release a *bilingual* edition (Gold-version 1.2) of the CPSIN Data Standard. Making this compendium available in Canada's two official languages will mean that users will have definitions of common data elements, a visual representation of the relationships between the elements, and the values for coded data elements—all for use in data exchanges between criminal justice information systems. These standards will also be useful in modernizing partner information systems.

Canada is not alone in implementing criminal justice data standards. Work is underway in several countries, including the United States and the United Kingdom. But the Canadian approach to the development of the data dictionary is unique among its counterparts. In addition to preparing the

bilingual compendium, the Data Standards Secretariat and its partners have worked hard to provide in-depth background support for users. “Our data dictionary includes a 50-page introduction for users,” explains Rondeau. “It provides users with important context for the data dictionary, including an explanation on how the dictionary was developed and an overview of data modeling.”

Today, the CPSIN Data Standard includes the data dictionary, code values, and a logical-data model. “Together, these three components comprise what we're doing on metadata, Rondeau explains, “which in turn, is part of our three-pronged approach to developing a complete line of data standards.”

Transaction data is another component of the DSS work on data standards. Building on the information-architecture work of Solicitor General Canada's Integrated Justice Information Secretariat, the DSS will work to standardize the required and optional data

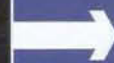
that comprises a CPSIN exchange. In addition to the transaction data component, an XML (extensible markup language) master schematic based on Version 1.2 of the data dictionary will be included in the March 2004 release of the CPSIN Data Standard. The DSS is looking to build a metalanguage registry that will contain XML schemas based on the standardized CPSIN transactions.

“We're quite pleased with our progress to date,” says Rondeau. “The dedication of our partners has enabled us to achieve so much.” Indeed, the hard work of the Data Standards Secretariat and its partners is being well recognized. The Federal, Provincial and Territorial Ministers responsible for Justice and the Canadian Association of Chiefs of Police (CACP) have recognized the CPSIN Data Standards as the national criminal justice data standard of Canada.

CPSIN Data Standard

DATA STANDARDS LAYER

TRANSACTION DATA
Mandatory and Optional Data Elements



METALANGUAGE
XML Schemas



METADATA
Data Dictionary, Code Values, Logical Data Models

TECHNICAL INFRASTRUCTURE LAYER

LEGAL AND POLICY LAYER

Word games

THE ROLE OF THE TERMINOLOGIST IN THE CPSIN DATA DICTIONARY



BERTHE DUNLEVIE,
TERMINOLOGIST

Terminologists operate on the front lines of the debate over nomenclature, scouring dictionaries and specialized resources to determine the right word for every occasion.

Berthe Dunlevie has been a terminologist since 1976. She's worked on a great many projects over the years, but admits, "I didn't know what a 'data dictionary' was before I started this." Now it's another term firmly embedded in her lexicon.

The most challenging aspect of her contribution to the data standards project, she thinks, is making sure that definitions reflect concepts accurately, no matter how those concepts vary from user to user. Those variations can, Dunlevie remarks, sometimes seem peculiar to someone outside the world of criminal justice. She cites the example of the term 'body part'.

"There was quite a long discussion about whether body parts should be classified as persons or objects," she recalls. "People's outlook on these issues depends on the roles they play." Dunlevie says she's enjoyed her participation in the development of the data dictionary. "There have been a lot of interesting discussions. A lot of debates."

Dunlevie continues to act as a resource for the data standards process. She recently helped to finalize the French translation of the dictionary and the coded exchange values. Her work will be featured front-and-centre in March 2004, when the Data Standards Secretariat publishes the bilingual edition of the CPSIN data dictionary (Version 1.2).

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