Department of Justice Canada/Ministère de la Justice Canada

TECHNICAL REPORT

REVIEW OF FIREARMS REGISTRATION

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EXECUTIVE SUMMARY

Introduction

This report was prepared by RES Policy Research Inc. for the Department of Justice Canada. Its purpose is to provide the Department with information to support analysis of issues related to the registration of firearms. In particular, it describes experience with the restricted weapons registration regime presently in force in Canada and suggests how relevant conclusions drawn from that experience might be applicable to issues, which could arise from enhancement of the current system, including universal registration. It was also designed to complement a current interdepartmental initiative on firearms smuggling.

The report is based primarily upon a systematic assessment of the Firearms Registration and Administration System (FRAS) maintained by the RCMP. In the course of the assessment, consultations were held with representatives of the RCMP, Department of Justice Canada, Solicitor General Canada, Chief Provincial and Territorial Firearms Officers, provincial police forces, and municipal and regional forces. In addition, information was collected from some other countries, which have experience with universal, or near-universal, firearms registration. The study does not include direct analysis of issues of a political nature, such as the position of interest groups.

The report begins by describing and analyzing the administrative, technical, operational and financial components of FRAS, including its interface with users and other agencies. It then presents options for augmenting the efficiency of the current system to ensure that policy objectives are satisfactorily met. Information derived from the analysis of the current system and potential enhancements is used to identify and analyze major functional, administrative and technical issues pertaining to the design of a universal registration program. Finally, a number of options for steps, which would support further development, are outlined.

Firearms Registration and Administration Section (FRAS)

FRAS is established within the Identification Services Directorate of the RCMP and is responsible for maintaining a national registry of all registrable restricted weapons in Canada. Major tasks carried out by FRAS, which has a staff of 29 divided into 5 work units, include: processing restricted weapon registration applications received from local registrars and issuing certificates, issuing inter-provincial carry permits, reviewing and processing revocations of certificates and permits, maintaining a national list of firearms dealers, operating a firearms tracing program, preparing the annual Firearms Report tabled in Parliament and publishing the *National Firearms Manual*.

Primary management positions within FRAS are occupied by RCMP non-commissioned officers, who make almost all major decisions. All other staff are civilians.

Users

In addition to its own staff, FRAS users include law enforcement agencies and officers; firearms control officials and firearms dealers and owners. RCMP, provincial and municipal police officers typically require access to FRAS information when a restricted firearm has been involved in criminal activity or is subject to seizure as a result of a prohibition order. The U.S. Bureau of Alcohol, Tobacco and Firearms (BATF) also addresses queries to FRAS.

Firearms control officials who use FRAS information include Chief Provincial and Territorial Firearms Officers and their staff, and local registrars of firearms. Seven Chief Firearms Officers are current or former police officers. Local registrars, responsible under the *Criminal Code* for receiving applications to register restricted weapons, screening applicants and issuing permits to transport, temporary storage permits and permits to convey are almost all police officers. Individual owner-registrants generally deal with FRAS through the local registrars. Firearms dealers register their inventory directly with FRAS and may deal directly with FRAS personnel on issues such as inventory discrepancies.

User requests are received and routed within FRAS on an *ad hoc* basis, with no central screening or clearing point. A paper-file query log is kept, but cannot be analyzed for trends.

RWRS System

The Restricted Weapons Registration System (RWRS) was developed in 1980 and conversion of records to the computerized database was completed in 1992. The database currently contains records of approximately 1.2 million firearms and 565,000 owners although, for a variety of reasons, the number of records does not represent the number of restricted weapons in Canada or the number of persons entitled to possess or carry restricted weapons.

The system resides on an IBM-compatible mainframe, is written in Natural/COBOL and is accessed through on-line screens running under IBM's CICS monitor. ADABAS is the underlying database management system. The RWRS database occupies approximately 625 Megabytes.

Queries by owner name and number, weapon serial number and certificate number can be performed on-line. Discrete programs must be executed for all other queries, such as make, model, address, or more complex combinations. FRAS technology is focused almost exclusively on automation of staff registration activities; it has not been deployed to fully support information provision or other FRAS tasks.

RCMP informatics staff has estimated that a significant number of records in the RWRS database contain information, which is entered in non-standard form, or is stale or incorrect. There are many variations in the "make", "model", "calibre", "shots" and "barrel" fields, which were not edited at the time of data-entry. The "type" and "action" fields, which were edited, do not appear to contain intrinsic errors. The data discrepancies do not necessarily mean that a large number of registered weapons cannot be positively identified. Given all the variations, however, retrieving information from the database requires multiple queries to address the various combinations and permutations of firearms descriptors, with no real assurance that all possibilities have been included.

An August 1993 evaluation of RWRS indicated that a significant number of user complaints are legitimate and recommended rewriting the system and cleaning up the existing database. The primary purpose of the rewrite, which was scheduled to become operational in September 1994, is to provide a system incorporating on-line validation capability in order to minimize errors and accelerate the registration process. The new system will also be designed to handle more complex aspects of the registration process. However, as a result of FRAS staff reductions, there will only be a partial clean-up of the existing database before all data on the present system is loaded into the new system.

Unlike most registration systems, such as driver and motor vehicle licensing which have expiry dates, there is no effective mechanism for ensuring that RWRS data is updated.

The RWRS rewrite is based solely on an internal evaluation and was not preceded by a requirements definition identifying system users and needs. It does not address directly the needs of non-FRAS users, such as law enforcement agencies, firearms officials, dealers and owners, who will continue to access information through existing CPIC, telephone, facsimile and mail interfaces. Meeting the needs of these users is a significant workload for FRAS, which the RWRS rewrite does not alleviate.

Canadian Police Information Centre (CPIC)

Since October 1991, partial information from completed restricted weapon registration records has been downloaded to CPIC on a weekly basis. Information on transactions in progress is not downloaded. Nor are entries in the RWRS "comments" field, which may contain highly relevant information regarding the status of particular weapons. Once downloaded, the data is known within CPIC as the Registered Weapon Registered Owner (RWRO) system. CPIC users can run queries on weapons and owners; other queries must be directed to FRAS. The CPIC delivery system is not being upgraded to include other significant data from the rewritten RWRS system.

FRAS Operations

Applications relating to registration of restricted weapons may cover a variety of transactions, including registration of previously unregistered weapons, transfers of registered weapons and issue of replacement certificates. Application forms have no unique identifier and are not sequentially numbered when received by FRAS. Completeness and accuracy of data contained in the application, including information concerning the weapon and owner is manually checked. Identity of the local registrar who approved the transaction is not verified. Applications, which fail verification, are returned to the local registrar by mail. Since this is a manual process, there is no record of the rejection rate and no automated bring-forward procedure. If the verifier has access to a RWRS terminal and the application involves a weapon already registered in the system, a note may be made in the "comments" field; in all other cases, no RWRS entry is made. Once an application is successfully verified, the data is entered into RWRS and manually checked prior to printing of a registration certificate. There is no mechanism for verifying that stale certificates are destroyed.

Responding to queries is time-consuming and expensive, since the manual nature of the registration process makes it difficult to ascertain the status of applications.

Information from dealer inventory registrations is entered on RWRS as provided by the dealer, unless there are obvious descriptive errors. Dealer registrations are received less frequently than those from individuals, but usually involve multiple registrations. Since they are given a lower priority, it is not unusual for a registration application from an individual purchasing from a dealer to be in process before the preceding dealer registration is processed. Firearms officers responsible for dealer inspection described FRAS dealer inventory records as lacking currency and subject to a high rate of error.

The treatment of registration applications is highly process-oriented, rather than objective-oriented. There is presently no single entity charged with overall responsibility for data integrity and the multiple work units involved in data entry and amendment employ different techniques and processes, making it difficult to maintain data integrity. A reallocation of tasks within FRAS following implementation of the RWRS rewrite will give responsibility for data checking and entry to one unit, with a separate unit charged with maintaining data integrity.

With the exception of primary registration and information-providing activities, most tasks are performed manually. These include workflow management and routing, communications, form design and distribution, tracing, dealer listing and statistical reporting.

FRAS uses 26 different forms (not including those used in the field by other agencies). User comment was generally critical and a comprehensive review was often suggested. The RCMP is currently upgrading its design process and technology. Security and control would be improved by sequential numbering. All users interviewed also expressed the view that forms should be computerized to enable automated data capture and verification.

Importation and First Registration

Restricted weapons imported into Canada for resale are not recorded in RWRS until a dealer takes possession of them and files an acquisition report. Prior to March 1993, when FRAS began implementing a new directive, it did not require dealers to report restricted weapons imported from the U.S. or acquired from a point of manufacture within Canada. Dealer inspections are complicated by the fact that these weapons, which represent the vast majority of restricted weapons entering circulation in Canada, are not on FRAS inventory lists. Implementation of the new directive has been completed in four provinces.

Little control is exercised over the actual number of restricted weapons landed in Canada. Customs officers are primarily concerned with the total value of a shipment, not the number of weapons it contains. Shipments may be transported within Canada or warehoused for considerable periods of time before possession is taken by a dealer and an acquisition report filed. During this time, they are generally handled by persons who do not possess a Firearms Acquisition Certificate (FAC).

Tracing

FRAS conducts approximately 100 weapons traces per year. International traces, which require about two months, are conducted through BATF. Many weapons are untraceable because they either have no serial number or they were manufactured in the U.S. prior to 1968, when manufacturers were first required to keep records. Information on the owners and purchasers of weapons subject to revenue tax in the U.S. is owned by the U.S. Internal Revenue Service, which will not release it. According to FRAS personnel, most tracing requests do not produce a positive trace.

There is no mechanism for formal feedback from requesting police departments as to whether information produced by a trace was useful. No records are kept of correlation between traces and offence type. Other Canadian police agencies conduct their own traces through BATF regional offices or directly with U.S. manufacturers. The tracing program cannot currently provide national information about weapons tracing or smuggling activities. The lack of coordination, which has reduced the effectiveness of the program, appears to be encouraged by rivalry and distrust between Canadian police agencies and within BATF, whose regional offices have been undercutting its headquarters.

Annual Firearms Report

Production of the *Annual Firearms Report to the Solicitor General of Canada* is essentially a manual process, with statistics gathered in hard-copy form from CP/TFOs, transcribed and consolidated. The process is time-consuming and susceptible to error. The final report contains a large amount of raw numerical data for the current year. Inclusion of some analysis would significantly improve its informational value and assist in preventing misuse of the raw data.

Local Registration Practices

Practices with regard to restricted weapons transactions apparently vary so widely across Canada, and even within a single province, that it is impossible to describe a typical registration process. According to a September 1992, Consulting and Audit Canada study, the average time spent by police officers on each restricted weapon application ranged from one minute in some locations to 120 minutes in another. These figures would suggest that in some jurisdictions, restricted weapons applicants were essentially subject to no checks. Although practices have undoubtedly changed since 1992, the information gathered in preparing this report suggests that inconsistent and inappropriate practices continue to exist, particularly in smaller communities. In some cases, notably involving family violence, information considered sufficient by the CPFO to justify refusal of a new FAC was discounted by a local registrar dealing with a restricted weapons application.

Local registrars receive little or no training and, with the exception of Québec, do not generally occupy the position long enough to acquire any particular expertise. Those interviewed generally reported having little knowledge of FRAS services and role. The positions are often filled by junior police officers at the beginning of their careers, officers about to retire, or officers whose situation, for various reasons, precludes them from regular field operations. While the methodology of this study precludes definitive conclusions, it would appear that the objectives of the firearms control provisions of the *Criminal Code* are not necessarily understood or supported by local registrars. Where, for example, the preventive effect of safe storage regulations is not appreciated, they are not actively enforced.

Local procedures appear to have been influenced by a policy decision regarding exercise of the RCMP Commissioner's power to refuse a registration certificate, which many police agencies and local registrars believe was made in 1984. It was understood to be RCMP policy that a certificate would only be refused if a prohibition order were obtained against the applicant. This undermines the three-tier structure (prohibited/restricted/unrestricted) of firearms control. As a result, one provincial jurisdiction accords very close attention to FAC screening in order to minimize the need for later negative restricted weapons recommendations, thereby treating every FAC applicant as a potential restricted weapon applicant. Local registrars and CPFOs interviewed for this study reported that in other local jurisdictions, particularly those outside large urban areas, local registrars retain problematic applications as long as possible, in the hope

that the application will eventually be abandoned. Although RCMP policy may have changed, these local practices apparently continue, supported by two additional factors. There appears to be a general reluctance to undertake the documentation exercise which must accompany a negative recommendation, which can also be expensive. Secondly, where the local registrar is part of a small, close-knit gun-owning community, there may be reluctance to make a negative recommendation with respect to an acquaintance or fellow gun-club member.

Although firearms officers criticized FRAS dealer inventory records, some also reported that they themselves lack the resources to carry out proper inventory verification and must rely on the honesty of dealers. Although most dealers may strive to respect the *Criminal Code*, economic and business conditions can also provoke misstatements of inventory.

Although no local procedure is typical or standard, two systems studied in the course of preparing this report have noteworthy features.

Québec has the only provincially integrated process. Administration of the firearms provisions of the *Criminal Code* is the exclusive jurisdiction of the Sûreté du Québec. Registration applications relating to purchases from dealers are filled out by the dealer. The applicant also completes a separate Sûreté form, setting out the reason for acquisition. Both are forwarded to the local detachment, which adds any relevant local information concerning the applicant and forwards the application to district headquarters (Québec is divided for Sûreté policing purposes into nine districts). Local registrars attached to the district HQ process applications by performing CPIC and CRPQ (Centre de renseignements policiers du Québec) checks and, if necessary, a field investigation. They also sign routine approvals. Complex or problematic applications are handled by the CPFO's office at Sûreté provincial headquarters. All applications are forwarded to FRAS through the CPFO's office, which exercises a technical and administrative overview. FRAS personnel report that Québec applications have the highest rate of accuracy and completeness.

The Hamilton-Wentworth Regional Police has the most advanced automated system of local offices studied for this report. It maintains a fully integrated FAC/restricted weapons database as part of its information system, and information acquired through FAC and restricted weapons applications is available to officers in the field within 24 hours. Like the Sûreté, Hamilton-Wentworth uses its own supplementary application form, which requires the applicant to set out the reason for acquisition, and has a standardized process to ensure rigorous screening of applicants.

Cost

Although Consulting and Audit Canada produced a cost model for restricted weapons registration in 1992, the data it contains must be treated with caution. Some of the included FRAS expenditures do not relate directly to registration, and the total number of certificates printed is not an appropriate unit-denominator. Local unit-costs used for the model are also of doubtful currency.

Enhancement of Restricted Weapons Registration and Control

Analysis of the existing restricted weapons regime suggests that the following enhancement measures could be considered.

§ *Distinct legislation.* The present regime exists within the *Criminal Code* as an exception to offence provisions, complicating its structure and wording. Many police officers interviewed characterized the firearms provisions as a nearly impenetrable maze. Re-enactment as independent, positive legislation could enable the provisions to be more readily understood and assist in enhancing community and law enforcement support.

§ *Earlier registration.* Registration of restricted weapons at the point of entry into Canada (or point of manufacture in Canada) would improve control of legal and illegal importation; enable better tracking of warehouse theft and more effective verification of dealer inventories. Legislative change would be required.

§ *Updating records.* An effective mechanism for ensuring that changeable information associated with registration is updated on a timely basis could be created by legislation.

§ *Cost recovery.* Exempting restricted weapons control from fee-based cost recovery now constitutes a serious anomaly. Real, differentiated costs should be reflected in both a fee structure and any cost-sharing agreements. This would require creation of a current cost model and a comprehensive business case analysis.

§ *FRAS management.* Some decision-making could be moved to civilian staff and incentives created to promote initiative and additional responsibility.

§ *Database management.* Responsibility for data-entry, database clean-up and data integrity should be assigned to a single work unit with clear standards and procedures.

§ *Provincial/territorial organization.* Implementation of the Québec administrative structure in all jurisdictions could be considered. This would assist in eliminating many of the problems, which seem rooted in the present local registrar structure and greatly facilitate further automation of RWRS.

§ *Training of local registrars.* There is a clear need to improve training, particularly in identifying firearms, handling and documenting negative recommendations and understanding the objectives of restricted weapons control.

§ *Screening procedures.* Consideration should be given to establishing standard national procedures, or at least minimum standards, for screening restricted weapons applicants.

§ *LAN technology.* Local area network (LAN) technology could be used as the infrastructure for a FRAS automation system, which integrates all major elements of restricted weapons control and registration, including the database.

§ *Query processing.* Automated query processing, either through CPIC or directly to RWRS, could be enhanced and a reduction in FRAS workload achieved.

§ *Forms.* Forms associated with restricted weapons control should be comprehensively reviewed and rationalized, focusing on use of electronic forms for source data-capture. Certificates and permits could be re-engineered to incorporate FAC technology with a view to eventual use of smart-cards.

§ *Data capture.* Registration information could be captured at source (local registrar), using imaging technology to capture forms and providing graphical information to assist in weapon identification. This would reduce task duplication and opportunity for input error. It would also substantially improve the currency of data available through FRAS and assist in making available for all police operations some key information that is presently stored only in jurisdictionally discrete databases to which access is limited.

§ *Tracing.* An appropriate structure should be established to coordinate weapons tracing or ensure that comprehensive, analyzable data is collected. U.S. authorities should be asked to ensure that BATF's activities will not negatively affect Canadian law enforcement.

§ *Annual Firearms Report.* The inclusion of analytic information using time-series data, graphics and textual analysis would significantly raise overall effectiveness.

Universal Firearms Registration

A clear distinction needs to be drawn between person-based acquisition or possession certificates, and firearms registration. The former identify persons entitled to acquire or possess firearms; the latter identifies actual owners and their weapons. As is the case with driver licensing (entitlement) and motor vehicle registration (actual ownership), the two databases are complementary.

Analysis of the current restricted weapons regime suggests a number of key considerations that should be borne in mind in approaching the question of universal registration.

§ *Mixed motives.* The restricted weapons registration scheme demonstrates the difficulties generated by a regulatory regime, which is not adapted to the policy objectives motivating it. In a classic example of mixed motives, it tries to qualify *persons* by registering *weapons*, and does neither particularly well. The screening function is obscured by preoccupation with the accurate description and classification of weapons. This experience demonstrates that the motives and policy objectives of any universal registration system must be carefully defined and the legislative and regulatory implementation scheme optimally adapted to pursuing them.

§ *Implementation of objectives.* The present restricted weapons system demonstrates the operational and cost inefficiencies inherent in a regulatory scheme where implementation mechanisms, including administrative, technological, operational and financial elements, are not properly designed to pursue the defined policy objectives. Effective implementation of a universal registration system would require not only that all agencies involved be fully cognisant of and understand the policy objectives, but that there be adequate consultation at all potential implementation levels prior to selection of a particular regulatory model.

§ *Identification of users.* An obvious weakness in the present scheme is the failure to identify all users and take their needs into account in establishing administrative, technological, operational and financial parameters. Users of a universal system should be rigorously defined at the outset. A thorough business case analysis should then be undertaken to study the advantages and disadvantages of particular models for each user group, and options developed for maximizing compliance and efficiency.

§ *Operating environment.* It should not be assumed that licensing and registration schemes can only be administered effectively in a police environment, as driver licensing and motor vehicle registration demonstrate. An effort should be made to predict compliance levels in different environments, taking into account factors such as visibility, user acceptance/resentment, accessibility, cost and likelihood of sanction for non-compliance. The operating environment will also affect system costs, since these will reflect differences in operational focus, transactional methodology, management and remuneration structures.

Levels of access to information in a universal system also require careful consideration. Sophisticated control for a user community with diverse security requirements is often expensive to implement and maintain. A formal threat and risk assessment at the system, application and database levels should be undertaken to provide the information needed to define accurately the security requirements of a universal system.

§ *Technology.* The usefulness and efficiency of universal registration would be enhanced by establishment of a national database, with users able to query all records at their defined security level. Based on analysis of the FRAS experience, key system components could include:

- Use of LAN technology as the infrastructure for a system which addresses all major tasks associated with universal registration;
- Source data-capture utilizing electronic forms and a "user-friendly" computer application;
- Smart-card technology for all licensing, certification and registration;
- Automated query processing for police field operations, through CPIC or directly to the database;
- Automated report production to support management needs and policy analysis and formulation.

1.0 INTRODUCTION

1.1 Background

The best estimates suggest that there are in the order of 6,000,000 firearms in Canada. The number of weapons recorded in the Restricted Weapons Registration System maintained by the Royal Canadian Mounted Police at the end of 1993 was 1,221,179. At least 5,000,000 firearms are unrestricted and not therefore subject to registration. Approximately one-quarter of Canadian households own at least one firearm.

Recent statistics show that the use of restricted weapons has increased as a percentage of homicides involving the use of firearms. However, no comprehensive study has yet been carried out to review the operation of the current restricted weapons registration system, evaluate whether it responds satisfactorily to policy objectives and analyze options for potential enhancement, which might be considered.

1.2 Purpose

The purpose of this study is to provide certain information to support analysis by the Department of Justice Canada of some issues related to the registration of firearms. In particular, it seeks to describe experience with the restricted weapons registration regime presently in force in Canada and apply relevant conclusions drawn from that experience to potential issues arising from enhanced or universal registration.

1.3 Scope

This report is based upon the following:

§ A systematic assessment of the present Firearms Registration and Administration System (FRAS) maintained by the Royal Canadian Mounted Police (RCMP);
§ The collection of relevant information from other countries, which have experience with universal registration;

§ The identification and analysis of major functional, administrative and technical issues pertaining to the design of a universal registration program.

The study was also designed to complement a current interdepartmental initiative pertaining to the smuggling of firearms. It does not include direct analysis of issues of a political nature, such as the position of interest groups.

1.4 Participants

Representatives of the following groups and organizations were consulted in the course of preparing this report:

§ Department of Justice Canada;
§ Solicitor General Canada;
§ Royal Canadian Mounted Police;
§ Chief Provincial and Territorial Firearms Officers;
§ Ontario Provincial Police;
§ Service de Police de la Communauté urbaine de Montréal;
§ Metro Toronto Police;
§ Hamilton-Wentworth Regional Police;
§ United Kingdom government;
§ Australian government;
§ New Zealand government.

Extensive interviews were conducted with personnel in the Firearms Registration and Administration Section (FRAS) and Informatics Directorate of the RCMP. These focused on administrative, technical, operational and financial aspects of FRAS and the Restricted Weapons Registration System (RWRS), including near-term plans for enhancement, and the interface between FRAS, RWRS, the Canadian Police Information Centre (CPIC) and users.

Representatives of Chief Provincial and Territorial Firearms Officers and police forces were interviewed on the basis of a standard series of questions developed following initial interviews with FRAS personnel and two Chief Provincial Firearms Officers. Representatives of the Department of Justice Canada and Solicitor General Canada were also provided with the questions prior to being interviewed.

1.5 Report

This report contains the following elements:

Chapter 2 describes and analyzes the administrative, technical, operational and financial components of FRAS, including its interface with users and other agencies.

Chapter 3 presents options for enhancing the elements analyzed in Chapter 2 and augmenting the efficiency of the current system to ensure that policy objectives are satisfactorily met.

Chapter 4 applies the information derived from the analyses in Chapters 2 and 3 to key issues arising from potential options for universal registration of firearms.

Chapter 5 outlines options for further development.

Since the arrangement of these chapters presents a logical progression from description of the current system to potential universalization within a particular social and jurisdictional context, information regarding universal registration in a number of other countries, which is based on different geographic, social and jurisdictional considerations, has been included in a discrete appendix.

2.0 REVIEW OF FRAS

2.1 Overview

The Firearms Registration and Administration Section (FRAS) is established within the Photographic Imaging and Special Registries Branch of the Information and Identification Services Directorate of the RCMP. It is responsible for the administration and management of a national registry of all registrable restricted weapons in Canada. The Restricted Weapons Registration System (RWRS) was developed in December 1980. A major component of the system was the conversion of over 700,000 Restricted Weapons Registration Certificates from a manual card-index system to a computerized database. This conversion was completed in 1992. On December 31, 1993, the Restricted Weapons Registration System contained records of 1,221,179 firearms and, on April 18, 1994, 565,036 owners. The number of records does not, however, represent the actual number of restricted weapons or owners. Nor does the number of owner records represent the number of persons entitled to carry or possess restricted weapons. Police forces, government agencies and private security companies may have thousands of restricted weapons registered to a single owner, with carry permits issued to individual employees.

Major tasks carried out by FRAS include:

§ Reviewing and processing applications to register restricted weapons;
§ Reviewing and processing the revocation of permits;
§ Issuing inter-provincial permits to carry a restricted weapon, on behalf of the Commissioner;
§ Issuing replacement certificates to registrants who change their address;
§ Issuing certified copies of register entries and affidavits dealing with restricted and prohibited weapons and individuals for use in judicial proceedings;

§ Establishing and implementing the use of forms dealing with restricted weapons, in accordance with the *Criminal Code*;
§ Issuing permits provided for in the *Criminal Code* to police agencies, Chief Provincial and Territorial Firearms Officers;
§ Responding to inquiries on firearms and other related matters;
§ Providing advice and assistance to other police services upon request;
§ Liaising with Canadian Police Information Centre (CPIC) personnel regarding maintenance of RWRS.

Other tasks include:

§ Liaison with CPFO/CTFOs and the Department of Justice Canada;
§ Providing support for the Stolen/Lost Weapons System;
§ Providing support for the Firearms Acquisition (FAC) system, including forms supply to issuing agencies;
§ Maintaining a national list of firearms dealers, on the basis of information supplied by Chief Provincial and Territorial Firearms Officers;
§ Operating a firearms tracing program;
§ Accumulating and preparing statistical data for the annual Firearms Report tabled in Parliament by the Solicitor General;
§ Publishing and maintaining the *National Firearms Manual.*

2.1.1 FRAS Users

Users of FRAS services and information can be grouped into four categories: law enforcement agencies and officers; firearms control officials; firearms dealers and owners; FRAS staff.

2.1.1.1 Law enforcement agencies

Law enforcement agencies whose officers may require access for operational purposes to information maintained by FRAS include the RCMP, provincial and municipal forces. Typically, access will be required whenever a restricted firearm may have been stolen or used in the commission of an offence, or when firearms are subject to seizure (for example, following the making of a prohibition order). The United States Bureau of Alcohol, Tobacco and Firearms (BATF), which is responsible for enforcing U.S. federal legislation relating to firearms and provides firearms tracing services to law enforcement agencies in the United States, also addresses queries to FRAS.

2.1.1.2 Firearms Officials

Firearms control officials include Chief Provincial and Territorial Firearms Officers and their personnel, and local registrars of firearms. In Ontario and Québec, the Chief Provincial Firearms Officers are respectively officers of the Ontario Provincial Police (O.P.P.) and the Sûreté du Québec. In five other jurisdictions (Alberta, Manitoba, New Brunswick, Nova Scotia and Newfoundland), the CPFOs are former police officers.

Under section 109 of the *Criminal Code*, local registrars are responsible for receiving applications to register a restricted weapon and screening applicants. They may also issue permits to transport, temporary storage permits and permits to convey. Almost all local registrars are police officers; a small number of civilians have been appointed in a few major urban centres.

Selection and appointment of local registrars varies widely from province to province. At one end of the scale is Quebec, where administration of the firearms provisions of the Code is the exclusive province of the Sûreté and local registrars operate from central locations in each of the Sûreté's nine administrative districts. In Ontario, by way of comparison, chiefs of police in municipalities of 15,000 or more and O.P.P. detachment commanders, or in some cases their delegates are all local registrars.

2.1.1.3 Dealers and owners

Dealers and owners of firearms are both direct and indirect users of FRAS services. Individual owner-registrants generally deal with FRAS through local registrars and their perception of its services is based on information supplied by the local registrar. A small number of individual owners may have direct contact with FRAS personnel regarding their own weapons. Firearms dealers register their inventory directly with FRAS and may deal directly with FRAS personnel on issues such as inventory discrepancies. In Québec, it is firearms dealers rather than local registrars who fill out applications to register weapons in the case of transactions to which they are a party.

2.2 FRAS administration/organization

2.2.1 Description

The Firearms Registration and Administration Section consists of the following work units:

§ Correspondence Unit;
§ Legislation and Regulations Unit;
§ Firearms Registration Unit
- Clerical Unit
- Quality Control Unit.

2.2.1.1 Correspondence Unit

The Correspondence Unit has a staff of four. It performs a liaison role regarding firearms related matters with law enforcement agencies, federal and provincial departments and agencies, firearms businesses and the general public. Major tasks include:

- Preparing the Commissioner's formal notification of refusals and revocations, and inter-provincial and Canada-wide permits to carry;
- Responding to formal internal and external requests for information;
- Managing the Firearms Tracing Program for both restricted and non-restricted weapons;
- Pursuing enquiries with law enforcement agencies and the public to locate outstanding restricted weapons;
- Maintaining various statistical files.

2.2.1.2 Legislation and Regulations Unit

The Legislation and Regulations Unit has two staff positions. It deals generally with all firearms-related legislative and regulatory matters. Major tasks include:

- Designing, modifying and ordering all FRAS related forms (includes ordering of FAC forms);
- Maintaining a list of firearms dealers from information supplied by Chief Provincial and Territorial Firearms Officers;
- Producing the Commissioner's Annual Firearms Report to the Solicitor General of Canada;
- Publishing and maintaining the *National Firearms Manual*;
- Monitoring, verifying and correcting CPIC information on stolen and lost weapons and persons prohibited from possession of a weapon.

2.2.1.3 Firearms Registration Unit

The Firearms Registration Unit is subdivided into a Clerical Unit and a Quality Control Unit.

<u>Clerical Unit</u>
The Firearms Registration Clerical Unit consists of fourteen positions. Its responsibilities include:

- Receiving and routing all incoming and outgoing mail;
- Monitoring a CPIC terminal for messages from local registrars requesting forms or assistance;
- Processing applications for permits to transport a restricted weapon (C-301), including updating RWRS;
- Verifying and resolving the completeness and accuracy of information in applications to register a restricted weapon (C-300) through reference to manuals, the RWRS database, the CPIC database and in-house (paper) files;
- Creating and maintaining paper-files on registration applications that require additional information before further processing;
- When time allows, systematically reviewing the contents of the RWRS database for accuracy and completeness;
- Microfilming documents, and logging, storing and retrieving microfilms;
- Corresponding with outside agencies and individuals providing services;
- Maintaining various statistical files relating to forms processed.

Quality Control Unit

The Firearms Registration Quality Control Unit consists of nine positions. This unit is mainly responsible for the registration of restricted weapons by private individuals, police departments and other government agencies. Major tasks include:

- Verifying the accuracy of existing RWRS data against information in registration forms (C-300);
- Resolving data discrepancies immediately or, depending on the nature of the problem, through another unit;
- Executing data entry and confirming the accuracy of data entered into the system;
- Printing Restricted Weapon Registration Certificates (C-306);
- Amending information on the RWRS database, when advised to do so through correspondence from individuals and local registrars, and printing replacement certificates when required;
- Assisting the Clerical Unit to process Restricted Weapon Acquisition Reports (C-305) and Permits to Transport (C-301);
- Performing off-line searches for weapons used in the commission of offences;
- Cleaning up the database using internally created reports;
- Preparing statistical reports.

2.3 FRAS Technology

2.3.1 Description

The Restricted Weapons Registration System (RWRS) was developed in December 1980 to convert over 700,000 Restricted Weapon Registration Certificates (C-306) from a manual card-index system to computer-readable format and to provide basic query facilities against the database. The conversion was completed in 1992. The Restricted Weapons Registration System currently contains computerized records of approximately 1.2 million firearms and 565,000 owners.

The present system allows centralized access to the records from video-display devices to carry out the registration, maintenance, printing and query functions required by RWRS users within FRAS. The system resides on an IBM-compatible mainframe, is written in Natural/COBOL and is comprised mainly of on-line screens running under IBM's CICS monitor. ADABAS is the underlying database management system supporting the RWRS database, which occupies approximately 625 Megabytes. Queries by owner name and number, weapon serial number and certificate number can be performed on-line. Discrete programs, written in ADABAS Natural or Histogram, must be executed for all other queries such as make, model, address, or more sophisticated combinations.

RCMP informatics staff have estimated that a significant number of the records in the Restricted Weapons Registration System contain data which is entered in a non-standard form, is stale or, in some cases, incorrect. The unedited "MAKE" field contains 22,100 different makes, most with several variations. For example the make DRULOV (DRUZATNA LOVENA) has been entered in 31 different variants. Similarly there are many variations in the MODEL, CALIBRE, SHOTS, and BARREL fields, also unedited. These

data inconsistencies do not necessarily mean that a large number of registered weapons cannot be positively identified. Given all the variations, however, retrieving information from the database requires multiple queries to encompass the various combinations and permutations of firearms descriptors, with no real assurance that all possibilities have been included. By way of comparison, the TYPE and ACTION fields, edited at the time of data entry by the RWRS application, do not appear to contain any intrinsic errors.

Recent legislative changes have increased the workload within FRAS (FRAS workloads are detailed in Section 2.4.). Although previous backlogs have been eliminated, the increasing number and complexity of transactions may cause them to reappear.

In August 1993, an evaluation of the existing Restricted Weapons Registration System was prepared by the RCMP Informatics Directorate and accepted by FRAS representatives. The *Restricted Weapons Registration System Preliminary Evaluation Report* identified the need to re-write the system. The report recommended that the re-write use PACLAN, a Computer-Aided Software Engineering (CASE) tool, and IBM's relational database management system, DB2, as the primary technologies. It also recommended cleaning up the existing database, as a parallel activity.
The primary purpose of the rewritten RWRS is to provide FRAS with a system that incorporates an on-line validation capability in order to minimize errors and accelerate the registration process. Where possible, the RWRS re-write will use information stored in tables to reduce repetitive manual entry of identical data, and will retrieve information, which has been previously verified as, input to the system. However, there will only be a partial clean-up of the existing database. As a result of FRAS staff reductions (11 employees) on April 1, 1994; only data relating to the description of weapons will be corrected before all data stored on the present system is loaded into the new system.

In general, the new system will use menus to provide access to specific system functions. There will be a "FastPath" method of switching between functions by which a user can enter a code identifying the specific function he or she wishes to use and have the system move directly to that function without navigating through a hierarchical menu structure.

The replacement system has been designed to handle more complex aspects of the registration process, including those where the owner name or weapon is not unique, or there is no hit on the owner name or weapon. In addition, the RWRS re-write will accommodate compound-type registrations including:

- Multiple owners;
- Multiple previous owners;
- Multiple barrels;
- Multiple owners with multiple barrels;
- Multiple owner addresses.

The new system will be bilingual (no accents supported) with colour screens and will provide for common screen layouts and function-key support where possible. Updates must combine two actions, an action code and a function key. This should avoid most unintentional changes. The RWRS re-write was scheduled to become operational in September 1994.

Access to the information stored in the database will be provided through on-line queries, partial on-line queries, batch and open queries. A subset of the RWRS database will continue to be downloaded to CPIC on a weekly basis. Other users (non-CPIC) requiring information regarding registered restricted weapons will continue to communicate with FRAS by telephone, facsimile and mail.

2.3.2 RWRS-CPIC Delivery Technology

Access to some restricted weapons registration information has been available through CPIC since October 1991.

A subset of the RWRS database is downloaded to CPIC on a weekly basis. The subset consists of partial information from each *completed* registration record. Information on transactions in progress is not part of

the download. Nor is all the information from RWRS downloaded to CPIC. RWRS contains a comments field in which non-structured (textual) information may be entered. This might typically be a note regarding the need to verify why an owner who has applied for a change of address has listed only six of his or her ten registered weapons on the application. The owner may have forgotten to list them or they may have been sold, stolen or incorrectly registered in the first place. This information is not downloaded to CPIC.

Once downloaded to CPIC, the system is known as the Registered Weapon Registered Owner System (RWRO). It is supported on an IBM-compatible mainframe system using an in-house database management system. Queries on weapons and owners may be carried out through CPIC terminals. Queries initiated by CPIC users check by default both the Stolen Weapons System and RWRO, unless an RWRO only option is selected.

The Clerical Unit in FRAS monitors a CPIC terminal for messages from users requesting information, assistance or forms.

2.4 FRAS Operations

2.4.1 Description

This section focuses on three significant activities of FRAS: the registration process; the Firearms Tracing Program; and the production of the *Annual Firearms Report to the Solicitor General of Canada by the Commissioner of the R.C.M.P.*

2.4.1.1 Registration

Applications to register a restricted weapon (form C-300) are received by the Clerical Unit and manually separated into five-day increments. There is no unique identifier on the C-300 form nor is any sequence number given to an application at this time. There are a wide variety of transaction types, including:

- Registration of new previously unregistered weapons;
- Transfer of a previously registered weapon to a new owner;
- Issue of replacement certificates (error correction, change of address).

The applications are sent to verifiers within the Clerical Unit. The verifiers manually check the completeness and accuracy of the data by referring to the RWRS database, reference manuals, the CPIC database and in-house files. The information concerning the weapon and the owner is verified. The identity and confirmation of the local registrar are not verified. If the application passes verification, it is sent to the Quality Control Unit for further processing.

If the application fails verification, it is sent back to the local registrar by mail. Rejected applications are back-filed for two months, and if not returned to FRAS by the local registrar, a memo is sent. This is a manual process. As a result there are no records of the rejection rate and no automated bring-forward procedures for rejected applications. If the verifier has access to a RWRS terminal and the application involves a previously registered weapon, a note may be entered in the "comments" field of the relevant RWRS record; in all other cases (first registration of weapon, no terminal), no RWRS entry is made.

The information entered on RWRS from dealer registrations (form C-305, Firearms Acquisition Report) is entered as provided by the dealer, unless there are obvious descriptive errors. These registrations are assigned a lower priority for processing than C-300 forms. C-305 forms are received less frequently than C-300s, but usually involve multiple registrations. Given the different priorities, it is not unusual for a C-300 for an individual purchasing a restricted weapon from a dealer to be in process before the C-305 first registering the weapon is processed. Firearms officers responsible for dealer inspection consistently identified FRAS dealer inventory records as their greatest source of problems; they were described as lacking currency and subject to a high rate of error.
Once an application is successfully verified, the Quality Control Unit enters the data into the RWRS system and manually checks and verifies the information prior to printing a Registration Certificate (form C-306).

These are printed locally in sequence and the certificate and application then returned to the Clerical Unit. Here the C-306 certificates are decollated, matched with the applications, microfilmed and mailed.

Very few stale registration certificates are returned to FRAS. In the case of amended certificates, current registrants are advised to destroy previous certificates. In other cases, it is assumed that local registrars destroy them. There is no verification mechanism.

Changes of address also require printing of a new C-306 certificate. The clean-up of the RWRS database associated with the system re-write will require new certificates to be sent to all owners whose weapons records are amended. The magnitude of the contemplated database clean-up highlights the fact that there is presently no mechanism to ensure that the variable data captured by RWRS is updated on an ongoing basis.

FRAS uses 26 different forms for the registration, management and control of restricted firearms. This number does not include forms used in the field by other agencies.

2.4.1.2 Firearms Tracing Program

The Correspondence Unit conducts approximately 100 weapons traces per year on both restricted and non-restricted weapons. Most traces are on restricted weapons and associated with a criminal investigation. Traces can be conducted entirely within Canada for weapons manufactured in Canada and legally imported weapons. International traces are accomplished through the headquarters of the United States Bureau of Alcohol, Tobacco and Firearms. A BATF trace usually takes about two months. Many weapons are untraceable. Either they have no serial number, or records were not kept by the manufacturer; before 1968, United States manufacturers were not required to keep records. Some weapons are subject to revenue tax in the United States and the information regarding these weapons is owned by the United States Internal Revenue Service, which will not release information on owners or purchasers. BATF will not trace a weapon manufactured before 1985, unless it is specifically informed that the investigation concerns a major crime. According to FRAS personnel, most tracing requests do not produce a positive trace.

Information from completed traces is sent back to the requesting police department. However, there is no mechanism for formal feedback from the local police department to FRAS as to whether the information was useful. No records are kept of correlation between traces and offence type.

In addition to traces conducted by FRAS, other Canadian police agencies conduct their own traces through regional BATF offices, and sometimes directly with manufacturers in the United States. There is no coordination of these tracing activities.

2.4.1.3 Annual Firearms Report

The production of the *Annual Firearms Report to the Solicitor General of Canada by the Commissioner of the R.C.M.P.* is, for the most part, a manual process. Statistics are gathered in hard-copy form from the CPFOs and handwritten onto a consolidation sheet, where calculations are performed. This data is then entered into a WordPerfect word-processing package for production of the report. The manual process employed is time-consuming for both FRAS and the CPFO offices and prone to inconsistency and inaccuracy. The final report consists of a large number of tables containing numerical data regarding firearms for the current year. No analysis is presented.

2.4.1.4 Workload Statistics

FRAS keeps internal statistical records on significant work and processing activities of the section. For the purposes of this study, these paper records were captured in electronic form, consolidated, and selected items charted graphically. Some of the statistics were not used, as they did not appear to clearly relate to or reflect FRAS operations. The statistics presented are intended to be staff and system load indicators. A complete record of the statistics captured may be found in Appendix C.

2.4.2 Local Registration Practices

2.4.2.1 General

Practices with regard to restricted weapons transactions apparently vary so widely across Canada that it is impossible to describe a typical registration process. In September, 1992, for example, Consulting and Audit Canada produced a cost analysis model for the registration of restricted weapons in which it was reported that police officers in Winnipeg, Brandon and representative RCMP units in Manitoba spent only one minute on each restricted weapon application, while Toronto officers spent 10 minutes, Baie Comeau officers 50 minutes and Montreal officers 120 minutes. Even within a single province, wide differences were reported; according to the study, Halton (Ontario) officers spent only one minute per application, while officers of the neighboring force in Guelph spent 30 minutes.

Practices have apparently been influenced by a policy decision regarding exercise of the Commissioner's powers, which many police agencies and local registrars believe was made in 1984. They understood RCMP policy to be that the Commissioner would only refuse a registration certificate if a prohibition order against the applicant were obtained. As a result, in Québec, where the Sûreté administers both FAC and restricted weapons applications, particular attention is accorded FAC checks in order to minimize the need for later negative restricted weapons recommendations; every FAC applicant is thus treated as a potential restricted weapon applicant. Local registrars and CPFOs interviewed for this study reported that in many other local jurisdictions, particularly those outside large urban areas, local registrars retain problematic applications as long as possible, in the hope that the application will eventually be abandoned.

Some elements of field operations relating to the registration and control of restricted weapons deserve particular attention.

2.4.2.2 Local registrars

Local registrars receive little or no training and, with the exception of Québec, do not generally occupy the position long enough to acquire any particular expertise. FRAS and CPFO offices are frequently called upon to respond to rudimentary queries ("How do I measure a barrel length?"). The positions are often filled by junior police officers at the beginning of their careers, officers about to retire, or officers whose situation, for various reasons, precludes them from regular field operations.

2.4.2.3 First Record

Restricted weapons imported into Canada for resale are first recorded in RWRS only when a dealer takes possession of them and files a Restricted Weapon Acquisition Report (form C-305). Until 1993, dealers were not required by FRAS to report restricted weapons imported from the United States or acquired from a point of manufacture within Canada. Although some dealers voluntarily filed C-305 forms for these weapons, no record of the unreported firearms was entered in RWRS. In March 1993, FRAS began implementing a new directive requiring dealers to file C-305 forms for these weapons, which represent the vast majority of restricted firearms entering Canada. Implementation has been completed in four provinces and is ongoing.

Little control is exercised over the actual number of weapons landed in Canada. Provided a shipment does not contain prohibited weapons, customs officers are primarily concerned with its total value, not the number of weapons. Shipments may be transported within Canada or warehoused for considerable periods of time before possession is taken by a dealer and a C-305 form filed. During this time, they are generally handled by persons who do not possess a Firearms Acquisition Certificate.

2.4.2.4 Registration to Individuals

The process of completing applications for registration and screening applicants varies from jurisdiction to jurisdiction. Although no procedure is typical or standard, two local systems have noteworthy features.

Québec

Québec has the only provincially integrated process. It has a number of distinctive features. Unlike every other jurisdiction, applications to register a restricted weapon are available at the premises of firearms dealers and are filled out by the dealer. The applicant also fills out a separate form, designed by the Sûreté, setting out his or her reasons for wanting to acquire the weapon and forwards both forms to the local Sûreté detachment. Detachment officers attach any local information concerning the applicant that they consider relevant and forward the application to District Headquarters. (Québec is divided for Sûreté policing purposes into nine districts.) Local registrars attached to the District HQ process the applications; CPIC and CRPQ (Centre de renseignements policier du Québec) checks are performed and a field investigation carried out if necessary. If approval is routine, the local registrar signs the C-300 recommendation. Complex or problematic applications are handled by the CPFO's office at Sûreté provincial headquarters. All applications are forwarded to FRAS through the CPFO's office, which exercises a technical and administrative overview. All restricted weapon procedures are manual. Queries are addressed to FRAS through a CRPQ-CPIC interface or by telephoning a francophone member of FRAS staff.

FRAS personnel report that applications from Québec have the highest rate of accuracy and completeness.

Hamilton-Wentworth

The Hamilton-Wentworth Regional Police has the most advanced automated system of the few local offices studied for this report. The force maintains as part of "Constable", its computer system, a fully integrated FAC/restricted weapons database. Information acquired through FAC and restricted weapon applications is input and available to officers in the field within 24 hours. So far as local information is concerned, the force can operate independently of CPIC and FRAS.

Like the S.Q., Hamilton-Wentworth uses its own application form, which requires the applicant to set out his or her reasons for acquisition, in conjunction with the C-300. The applicant is screened by checking Constable (individual/incident database), CPIC, and conducting a local field investigation when appropriate. Processing of an application is halted whenever an out-of-jurisdiction address (previous residence, etc.) is encountered and additional checks are run with CPIC and the corresponding police force. FRAS queries are generally made through CPIC. Telephone calls for clarification are directed first to the Ontario CPFO's office before contacting FRAS directly.

The transport-permit workload associated with target-shooting, which is relatively substantial, has been organized by batching each club's membership, on a staggered basis. This has ensured the co-operation of club officials, who use the annual permit renewal as an occasion to obtain payment of club membership fees.

The Hamilton-Wentworth firearms office staff, including the local registrar, are civilians. The office operates within the force's Records Section, which is directed by a staff sergeant. There is strong support for electronic data capture at source, using imaging technology where possible, rather than remote hard-copy transcription.

2.5 Financial Aspects

In 1992, a cost model for the registration of restricted weapons was created for the Department of Justice Canada. Table-1 is reproduced from the model. It details overall costs for FRAS operations and calculates a unit cost to produce a C-306 Restricted Weapon Registration Certificate. Table-2 is also reproduced from the model. It calculates an estimated national cost for registering restricted weapons, based on a survey of sites in three provinces.

Table-1 RRW RCMP Cost Summary

1991-1992 COSTS	
Salaries	$ 1,455,000
Benefits	$ 291,000
Furniture & Equipment	$ 40,000
Accommodation	$ 112,500
Gun Control Audit	$ 94,000
Stationary	$ 23,600
Distribution	$ 2,000
Computer Costs	$ 150,000
- rental	$ 7,800
- maintenance	$ 10,800
1990-1991 COSTS	
Forms (design etc.)	$ 20,000
SUB-TOTAL	$ 2,206,700
Overhead (15%)	$ 331,005
TOTAL	$ 2,537,705
No. of Certificates Issued	65,812
Unit Cost per Certificate	$ 38.56

Table-2 National Cost Summary of Registration of Restricted Weapons

	Manitoba	Ontario	Quebec	Sub-total for three Provinces	RCMP HQ
PROCESSING					
Sample Volume	3,717	4,358	5,702	13,777	65,812
Cost	$ 27,901	$ 206,835	$ 373,276	$ 608,012	$ 2,537,705
Average Unit Cost	$ 7.51	$ 47.46	$ 65.46	$ 44.13	$ 38.56
				$ 38.56	
			Total Cost per RRW	$ 82.69	
			Total National Cost of RRW's	$ 5,442,145	

2.6 Analysis

2.6.1 Administration and Task Organization

The four primary management positions within FRAS are filled by RCMP non-commissioned officers. All other staff are civilian employees. Although the i/c Clerical Unit and i/c Quality Control Unit are CR-05s and have some supervisory responsibilities, major decisions within the Section are made almost exclusively by the RCMP officers. Standard management theory suggests that it may be difficult to instill initiative, empowerment and accountability into a workforce where the possibility of promotion to a senior management position is essentially non-existent.

The treatment of an application to register a restricted weapon is highly process-oriented (as opposed to data- or objective-oriented). FRAS staff describe registration solely in terms of what happens to the application *form*, from the time it comes into FRAS through the Clerical Unit and is routed through the other units on its way to completion. The routing of an application through the organization, from initial receipt to final mailing, is a completely manual process.

Data is entered into the RWRS database by the Clerical Unit when a C-301 Permit to Transport is being processed and by the Quality Control Unit when a C-300 Application to Register is being processed. The Correspondence Unit deals with antiques and conversions. Review, amendment and cleaning-up of the RWRS database is shared by the Quality Control Unit and the Clerical Unit. There is no single entity or individual charged with overall responsibility for data integrity. The multiple units and individuals involved in this activity employ different techniques, processes and files. In the absence of standard approaches and procedures, maintaining the integrity of the data is difficult.

The implementation of the RWRS re-write in September 1994 was accompanied by a reallocation of tasks within FRAS. A single unit will carry out data checking and entry. A separate unit will be responsible for maintaining data integrity.

Interfacing with users of FRAS information is a time-consuming task. Requests for information are handled by both the Correspondence Unit and the Clerical Unit. While more formal requests are to be handled by the Correspondence Unit, these are not defined. Requests are received and routed within the organization on an *ad hoc* basis. There is no central clearing point for all queries; requests for information are not centrally screened and routed to an appropriate resource. A paper-file query log is kept, but it cannot be analyzed for trends.

2.6.2 Technology

In general terms, FRAS technology is focused almost exclusively on automation of the registration activities carried out by FRAS staff. Technology has not been deployed to fully support FRAS information-providing activities. Other tasks performed by FRAS remain manual.

The *RWRS Preliminary Evaluation Report* indicated that a significant number of user complaints about the Restricted Weapons Registration System and FRAS are legitimate and made substantive recommendations to address many of the shortcomings of the system. The partial clean-up of the database prior to conversion, together with the new, comprehensive verification functions of the RWRS re-write should yield some improvement, particularly with regard to new records, in the form of a more accurate, useable and maintainable system for FRAS staff. This will increase the quality of the information FRAS provides to its users and permit faster service.

The CPIC delivery system is not being updated to include significant data included in the rewritten RWRS system. This may be evaluated in the course of a "CPIC 2001" review and modernization initiative, although the number and diversity of CPIC stakeholders does not allow its future orientation to be readily identified.

The RWRS re-write is based solely on an internal evaluation and was not preceded by a requirements definition identifying system users and their needs. As a result, it does not address directly the needs of non-FRAS users of services and information. Law enforcement agencies and officers, firearms control officials and firearms dealers and owners will variously continue to access FRAS/RWRS information through existing CPIC, telephone, facsimile and mail interfaces. Meeting the needs of these users constitutes the largest use of FRAS/RWRS information and represents a significant workload for FRAS staff. The RWRS re-write does not alleviate this workload, which will continue to reflect increasing numbers of weapons, owners, transactions and queries.

Apart from the primary registration and information-providing activities of FRAS, most tasks continue to be performed manually. These include:

- Workflow management and routing;
- Inter and intra-office communications;
- Form design;
- Form ordering and distribution;
- The Firearms Tracing Program;
- Firearms dealer listings;
- Accumulating and preparing statistical data for the annual Firearms Report tabled in Parliament by the Solicitor General;
- Internal management and statistical reporting.

These types of activity can generally be characterized as "office administration" functions and are usually automated using local area network (LAN) technology. This technology is also capable of supporting an application such as RWRS. The installation of LAN hardware by FRAS in April 1994, will allow for future automation and integration of administrative functions. Although the LAN hardware was acquired in

conjunction with the installation of new terminals to enhance access to the rewritten RWRS, the system itself will continue to reside on the RCMP mainframe and there are currently no plans to consider moving it to the newly installed LAN.

User comment on the 26 forms used by FRAS was generally critical and it was often suggested that they could benefit from a comprehensive review. The forms design process and associated technology used by the RCMP is currently being upgraded. Security and control would be enhanced by sequential numbering of forms, particularly registration applications (form C-300). This control has been successfully implemented in the FAC system. All users interviewed were also of the opinion that the forms should be computerized to enable automated data capture and verification. Hard copy transmission and remote data capture is considered anachronistic by most users.

2.6.3 Operations

From an examination of Figures 1-8 it can be seen that the workload of FRAS is increasing. This is partly related to the overall increase in the number of restricted weapons registered. However, FRAS' workload is far more sensitive to procedural changes and legislative initiatives than to the total number of weapons registered. It is also clear that cleaning up the RWRS database will significantly increase FRAS workloads, as it will require issuance of a very large number of replacement C-306 certificates (perhaps as many as 800,000). FRAS is presently able to issue approximately 500 certificates per day. Sufficient resources, including trained staff, must be available to handle this increase.

Unlike most registration systems, such as driver's licences and motor vehicle registrations, which have an expiry date, there is no mechanism to ensure that RWRS data is updated. Attempts to contact owners of certain classes of weapons affected by the 1991 amendments to the firearms provisions of the *Criminal Code* have revealed a high rate of incorrect address data in RWRS. Although the Code requires owners to update addresses, the low likelihood of non-compliance being detected means the motivation for doing so is not high. Permits to carry and permits to transport a restricted weapon do have expiry dates and require renewal. They are not, however, effective mechanisms for keeping the RWRS database current, since only ten percent of owners apply for them and there are many issue points. Legislative change may be required to establish an effective update mechanism.

Within the registration activities, there are varying levels of complexity of transaction types. Registering a new weapon to a new owner is more complex than transferring a weapon from one registered owner to another, or processing a change of address. In all cases, it is clear that FRAS takes great care to ensure that the data on application forms is as correct as possible. The manual checking and rechecking of data is at least partly a result of transposing source data from local registrars to RWRS.

The routing of applications from local registrars through FRAS and back eventually to registrants is a manual process. Applications are not electronically date-stamped upon reception, logged into the system and automatically routed through the process. This, combined with the lack of an automated bring-forward file for applications rejected for incompleteness or inaccuracy, makes it difficult to ascertain the status of an application at any point during processing. Responding to queries regarding the status of applications is therefore time-consuming and expensive.

Firearms officers responsible for dealer inspection consistently identified FRAS dealer inventory records, created through the processing of C-305 forms, as their greatest source of problems; they were described as lacking currency and subject to a high rate of error. In particular, they noted that weapons registered in RWRS to other owners also appeared on dealer inventory lists provided by FRAS; this would appear to be a result of C-305 forms in some cases being processed after C-300 applications dealing with the same weapons. They also noted that many weapons in the possession of dealers were not on FRAS inventory records. This appears to be a consequence of dealers not being required until recently to submit acquisition reports (form C-305) for weapons imported from the United States or acquired from a point of manufacture in Canada.

Police officers and Chief Provincial Firearms Officers interviewed for this report also stressed the lack of control and accountability surrounding even the legal importation of firearms, as a consequence both of the gap between importation and first registration and the lack of clear responsibility for border control.

The Firearms Tracing Program as it currently operates cannot provide national information about weapons tracing or smuggling activities. The lack of coordination which has reduced the effectiveness of the program appears to be encouraged by rivalry and distrust both between Canadian police agencies and within the United States Bureau of Alcohol, Tobacco and Firearms, whose regional offices have been approaching Canadian police forces and undercutting the service assurances provided by BATF headquarters. Comprehensive information provision would be facilitated by the establishment of a single national data-gathering point for weapons traces.

The *Annual Firearms Report to the Solicitor General of Canada by the Commissioner of the R.C.M.P.* is comprised of a large number of numerical tables. It presents a considerable amount of raw data. The inclusion of some analysis, however, would both significantly improve its informational value and assist in preventing misuse of the raw data.

2.6.4 Local Registration Practices

The figures contained in the *Cost Model, Restricted Weapons Registration* (see 2.4.2.1) would, if accurate, suggest that in some jurisdictions restricted weapons applicants were essentially subject to no checks. Practices have undoubtedly changed since 1992. In Toronto, for example, police officers now carry out a home visit and interview for every first-time applicant to register a restricted weapon. In those cases where a negative recommendation is indicated, it may cost as much as $2,000 in police time to establish an investigative file which will withstand judicial scrutiny of the refusal.

It seems clear, however, on the basis of the information gathered in preparing this report, that inconsistent and inappropriate verification and recommendation practices continue to exist, particularly in smaller communities. In some cases, information which the Chief Provincial Firearms Office considered sufficient justification for refusing a new Firearms Acquisition Certificate was discounted by a local registrar dealing with a restricted weapon application, even when specifically brought to his attention. This seemed particularly prevalent with regard to family violence.

The RCMP Commissioner's perceived policy of issuing restrictive weapons certificates unless a prohibition order against the applicant had been obtained has had the practical effect of undermining the three-tier structure (prohibited/restricted/unrestricted) of firearms control by making an applicant's access to restricted weapons dependent on his or her access to unrestricted weapons, since prohibition orders extend to both categories. Although the current *National Firearms Manual* only suggests that the desirability of obtaining an order be considered, particularly where revocation is sought, practices at the local level continue to be conditioned by the earlier policy decision.

Although local registrars' reluctance to forward negative recommendations may have commenced with the policy decision, the continuation of this practice is supported by two additional factors. First, there appears to be a general reticence to undertake the documentation exercise, which must accompany a negative recommendation. Secondly, in areas where the local registrar is part of a small, close-knit gun-owning community, there may be reluctance to actually make a negative recommendation with respect to an acquaintance or fellow gun-club member.

While the methodology used for this study precludes any definitive conclusions about police behaviour and attitudes, it would appear that the objectives of the firearms control provisions of the *Criminal Code* are not necessarily understood, or subscribed to, by local registrars. For example, despite recent efforts to promote preventive or community policing as a general approach, it seems that the prophylactic effect of firearms storage regulations is not appreciated and police officers are generally reluctant to take active enforcement measures. With some institutional exceptions (Metro Toronto, for example), it also seems that enforcing safe storage tends to be perceived in the police community as akin to by-law enforcement, unrelated to the "real" task of catching criminals.

Local registrars and firearms officers interviewed generally reported having little knowledge of the services provided by FRAS and its potential role. Even among CPFOs, there was no consistent view of FRAS' role, other than the fact that it operates RWRS.

The recording and operational availability of information regarding applications for restricted weapons certificates and associated permits remains almost completely uncoordinated. If information is recorded at the time of application, it is entered in a discrete system, such as Constable (Hamilton-Wentworth Regional Police) or PIRS (RCMP), to which only members of the same police force as the local registrar have ready access. The fact that an individual has applied for a restricted weapon certificate or been the object of a negative recommendation with regard to a restricted weapon transaction, which may be of considerable operational significance for police officers, will only become known to FRAS, and potentially available to users who query FRAS directly, once documentation has been forwarded from the local registrar and processing has begun. This information will not be available through regular CPIC (RWRO) queries, since only completed registrations are downloaded from RWRS.

Although firearms officers responsible for dealer inspection consistently identified FRAS dealer inventory records as their greatest source of problems, most also acknowledged that they themselves lack the resources to carry out proper inventory verification and must rely on the honesty and good faith of dealers. Although most dealers may strive to comply with the requirements of the *Criminal Code*, economic and business conditions unrelated to the criminal law can also create incentives to misstate inventory.

2.6.5 Financial Aspects

Information contained in the Consulting and Audit Canada cost model for restricted weapon registration must be approached with caution. The data concerning the overall cost of operating FRAS can generally be accepted as valid estimates. However, some of the expenditures set out do not relate directly to the registration process and should not be included in a unit-cost calculation. Further, certificates are printed for a number of transaction types. It is the differentiated effort required to generate C-306 registration certificates, rather than the simple fact they are printed, which should be the key unit-denominator for cost calculation. The effort/cost of registering a new weapon to a new owner is much higher than processing a change of address.

The average unit-costs for a restricted weapon registration presented in the model for the three surveyed provinces are also of doubtful current validity (see 2.4.2.1). The total national costs of restricted weapons registration relied upon in the model are therefore very likely incorrect. A new cost model using current, differentiated data would be necessary to calculate accurately RCMP, provincial, and national costs for restricted weapons registration.

3.0 ENHANCEMENT OF RESTRICTED WEAPONS CONTROL

Analysis of the information gathered in the course of reviewing the structure and operations of the current restricted weapons control regime suggests a number of directions for enhancement. Potential measures, which might be considered, have been divided into four groups: legislative, administrative, technological and operational. Re-engineering of registration business processes to implement administrative, technological and operational enhancements should be carried out in consultation with all users and stakeholders.

3.1 Legislative Measures

3.1.1 Distinct Firearms Control Legislation

Some interviewees suggested that the firearms control regime currently in effect would be much simpler to understand and apply if it were removed from the *Criminal Code* and re-enacted as independent legislation. It was pointed out that the control "scheme" can only exist within the Code as an exception to offence provisions, and that this complicates considerably the actual wording and structure of its provisions. Many

of the police officers interviewed for this study characterized the firearms provisions of the Code as a nearly impenetrable maze.

The contrary view was expressed by some CPFOs, who argued that the importance and gravity of the provisions is emphasized by their placement in the Code, from which they derive much of their perceived force. These CPFOs did, however, acknowledge that the gravity of narcotics offences did not seem diminished by their enactment outside the Code.

The constitutional, administrative and operational implications of a separately enacted scheme could be explored.

3.1.2 Earlier Registration of Restricted Weapons

All participants in this study were firmly of the view that restricted weapons should be registered at the point of entry into Canada (or point of manufacture, for those few weapons manufactured in Canada). This would improve control of legal and illegal importation; enable better tracking of thefts from warehouses and more effective verification of dealer inventories. This measure, which would require legislative changes, should also be examined in light of the findings of the current task force studying the smuggling of weapons.

3.1.3 Updating Records

Legislation could be considered to create an effective mechanism for ensuring that the changeable information associated with restricted weapons registration is updated on a timely basis, since change of address and transport-permit processing is not likely to provide the level of update required to maintain database integrity. The increased workload and cost to FRAS of maintaining a more accurate and current database should be taken into account, both with respect to choice of mechanism and the question of cost recovery and cost-sharing.

3.1.4 Cost Recovery

Although there may historically have been reasons for exempting restricted weapons control from fee-based cost recovery, this now constitutes a serious anomaly. Restricted weapons are, by definition, inherently more dangerous than unrestricted weapons and there are fewer legitimate reasons for their possession. Screening of applicants should be rigorous; rigour, however, is costly.

Real, differentiated costs should be reflected in both a fee structure and any associated cost-sharing agreements. This would require the creation of a new cost model, using current data, and a comprehensive business case analysis which would take into account potential savings from automation and other administrative and operational improvements in the restricted weapons control regime. For example, a mechanism to ensure that updated database information is provided on a timely basis by owners, dealers and other users would increase FRAS data-entry workload and related costs, but the enhanced currency and accuracy of RWRS information should reduce secondary enquiries and verification, resulting in lower associated costs for both users and FRAS.

3.2 Administrative Measures

3.2.1 FRAS Decision-Making

Consideration could be given to moving some decision-making to FRAS civilian staff and rewarding them for successfully taking on additional responsibilities. One or more of the management positions currently filled by RCMP non-commissioned officers could also be designated as civilian, in order to create promotion possibilities. Those FRAS activities, which are facilitated by an understanding of police, field operations and criminal investigations, should remain within the exclusive responsibility of RCMP officers.

3.2.2 Database Management

All responsibility for data entry, database clean-up and data integrity should be assigned to a single work unit. This should be accompanied by the establishment of clear standards and procedures for these activities.

3.2.3 Provincial and Local Organization

Consideration could be given to implementing the Québec administrative model in all jurisdictions. This would promote consistency, accuracy and acquisition of a level of expertise in firearms-related matters and assist in eliminating many of the problems, which seem rooted in the present local registrar structure. It would also greatly facilitate further automation of RWRS by, for example, reducing the number of points for source data capture. Hardware costs would be substantially lower. (The Ontario Provincial Police have established a re-engineering task force, which is already examining adoption of the Québec model in the context of a fundamental study of O.P.P. structure and operations.)

3.2.4 Training Local Registrars

There is a clear need to improve the training of local registrars. Adoption of the Québec administrative model would assist by establishing a structure in which expertise would more readily be acquired and retained. In particular, training is needed in identifying firearms, handling and documenting negative recommendations, and the objectives of controlling restricted weapons. Responsibility for enforcing safe storage and handling regulations also needs to be clearly assigned and the importance of community (preventive) policing in this area promoted.

3.2.5 Screening Procedures

Consideration should be given to establishing standard national procedures for screening restricted weapons applicants, or at least minimum standards. This could be accomplished administratively by including check-offs on FRAS application forms and establishing acceptability requirements.

3.3 Technological Measures

3.3.1 Local Area Network

Consideration should be given to using local area network (LAN) technology to provide the infrastructure for a FRAS automation system, which integrates all the major tasks, including, housing and maintaining the database itself, associated with restricted weapons control and registration. LAN data could still be made accessible through CPIC (and vice versa). Linkages to provincially based FAC systems and other CPFO/CTFO systems could be established as required.

3.3.2 Automated Query Processing

Automated query processing, either through CPIC or directly to RWRS, could be enhanced. A significant reduction in FRAS' query workload resulted from the establishment of an automated interface to RWRS data within the CPIC delivery system. Additional improvements should yield further workload reductions. Access to all completed transactions, transactions in process and text fields would be useful in police field operations.

3.4 Operational Measures

3.4.1 Forms

The forms used for registration, management and control of restricted weapons should be comprehensively reviewed with a view to rationalization. This review should be carried out by a professional forms designer and focus on the use of electronic forms for source data-capture. In addition, certificates and permits could

be re-engineered to incorporate technology utilized for the FAC. It may eventually be possible to move both these systems to use of smart-cards. A single card could carry information from both systems.

3.4.2 Data capture

Consideration should be given to capturing registration information at source (local registrar) through a "user-friendly" computer application. This would reduce the task duplication of transcribing source data and the opportunity for input error. The application could incorporate easy to use "help" screens and imaging technology to capture forms signed by applicants. It could also display graphical information to aid in identifying weapons. Information captured at source should be routed electronically to FRAS.

Source data capture would also substantially improve the currency of restricted weapons data available through FRAS (and to CPIC, users if automated query processing is enhanced as recommended in 3.3.2), since a record would be created at the time of application for a restricted weapon certificate or related permit. This would make available for all police operations some key information regarding restricted weapon applicants, which is presently stored only in jurisdictionally discrete databases to which access is limited.

3.4.3 Tracing

An appropriate structure should be established to coordinate weapons tracing, or at least ensure that comprehensive data on tracing is collated in a form, which allows it to be analyzed. Requirements identified by the current federal task force on smuggling should be taken into account. Coordinating bodies should have diverse membership in order to address inter-force rivalry. Appropriate representations should be made to United States authorities to seek assurances that BATF's internal administration will not negatively affect efforts to coordinate Canadian law enforcement activities.

3.4.4 National Firearms Report

The *Annual Firearms Report to the Solicitor General of Canada by the Commissioner of the R.C.M.P.* should present information derived from analysis of the raw data collected. The use of time-series data, graphics and textual analysis would significantly raise its overall effectiveness.

4.0 UNIVERSAL FIREARMS REGISTRATION

Unrestricted weapons used in criminal activity cannot generally be traced back to their owner without time-consuming searches of dealer records and field-tracing of transfers between individuals. Nor can police readily determine if unrestricted weapons found in the course of law enforcement activities are stolen. Although information regarding a stolen firearm should be entered into the Canadian Police Information Centre (CPIC) database by the force investigating the theft, some thefts are never reported and scarce resources and conflicting priorities can lead to a significant time-lapse before information on reported thefts is actually entered on CPIC. Similarly, officers intervening in domestic violence situations, attempting to enforce prohibition orders, or even simply enforcing safe storage regulations, do not have access to information regarding possession, number and types of firearms. This has led to calls for the registration of all firearms. Potential options relating to universal registration have not, however, yet been the subject of comprehensive analysis.

Analysis of the current regime for controlling restricted weapons in Canada suggests a number of key lessons and considerations should be born in mind when approaching the question of universal registration. Answers to the issues these raise will in large part be determined by a careful delineation of the policy objectives to which enhancement of firearms control is directed.

A clear distinction should be drawn at the outset between firearms acquisition certificates, firearms possession certificates and firearms registration. An acquisition certificate (FAC) identifies those individuals entitled to acquire a firearm; a firearms possession certificate would identify those entitled to possess a firearm, or a particular class of firearm. Neither serves to identify persons actually in possession

of a firearm, or the number of weapons owned. This can only be accomplished by weapons registration. The difference is analogous to that between driver licensing (entitlement to drive) and motor vehicle registration (vehicle ownership); the two databases are complementary.

4.1 Mixed Motives

In some respects, the present registration scheme for restricted weapons demonstrates the difficulties, which arise when a regulatory regime is not adapted to the policy objectives, which motivated it. The apparent motivation for controlling restricted weapons is that they are inherently more dangerous than weapons that remain "unrestricted". Control over firearms considered to require restriction could be exercised in two ways: by limiting the number of weapons in circulation, or by controlling the persons who have access to them. The first method of control focuses on the weapons themselves; the second is directed at qualifying the persons who own or possess them. In a classic example of mixed motives, the present restricted weapons system seeks to qualify *persons* by registering *weapons*. It should not be surprising that it does neither particularly well. FRAS and local registrars are preoccupied with the difficulties of ensuring that registered weapons are accurately described and classified. The screening function is easily obscured.

The experience with restricted weapons demonstrates clearly that the motives and policy objectives of any universal registration system should be carefully defined and the legislative and regulatory scheme by which they are implemented must be optimally adapted to those specific objectives and motives.

4.2 Implementation of Objectives

Operational and cost efficiency of any regulatory scheme require that implementation mechanisms, including administrative, technological, operational and financial elements, be designed to pursue the defined policy objectives. Clearly, this is not the case with the present restricted weapons registration system, where different elements are frequently counteractive.

Effective implementation of a universal registration system would require not only that all agencies involved be fully cognisant of and understand the policy objectives, but that there be adequate consultation at all potential implementation levels before a particular regulatory model is selected.

Although it was beyond the scope of this review to examine the possible objectives of a universal registration scheme, they could draw on the following themes:

§ Principle.
Some Canadians believe that all firearms should be registered as a matter of principle. Comparisons are often made with universal registration of less dangerous objects, such as cars, aircraft and dogs.

§ Policy and operational needs
Accurate information on the number of gunowners and number and type of firearms could be useful in formulating legislative policy, predicting workloads for firearms officers and registrars, establishing fees and administrative procedures and evaluating the impact of regulatory changes. Some advocates of firearms control feel strongly that national statistics constitute basic information that should be readily available.

§ Law enforcement and public safety
Comprehensive information on individual gun ownership could assist in the investigation of criminal incidents and help law enforcement officers better prepare to make arrests and respond to calls, particularly high-risk domestic situations. Prohibition orders and safe storage requirements could be better enforced. Knowledge that a certificate must be produced for every firearm in an individual's possession might ultimately have some deterrent effect on theft, smuggling and black-market trading.

4.3 Identification of Users

One of the more obvious weaknesses in the administration of the present restricted weapons regime is the failure to identify all users and take their needs into account in establishing administrative, technological, operational and financial parameters.

In part as a result of failure to clearly establish motives and objectives, a *de facto* user hierarchy has developed within the restricted weapons system:

¨ FRAS staff
¨ RCMP HQ staff (primarily informatics)
¨ Firearms control officers
¨ Law enforcement agencies
¨ Firearms dealers
¨ Individual owners/registrants.

It is far from clear that this hierarchy is consonant with the objectives of the regulatory scheme. As a result, it tends to promote inefficiency and dysfunctional operations.

Users of a universal registration system should be rigorously defined at the outset. A thorough business case analysis should then be developed to study the advantages and disadvantages of particular models for each user group, and options prepared for the maximization of efficiency and compliance.

4.4 Operating Environment

Careful consideration should be given to the level of access to information stored in a universal registration system. Access controls may be required at the system, application and database levels. Sophisticated control for a user community with diverse security requirements is often expensive to implement and maintain, although in some instances, the need for multi-level security cannot be avoided. A formal threat and risk assessment at the system, application and database levels should be undertaken. This analysis would provide the information required to understand and define accurately the security requirements of a universal registration system.

4.5 Police / Non-police System

It should not be assumed that licensing and registration schemes can only be administered effectively in a police environment. Driver licensing and motor vehicle registration are both administered in a non-police environment, which does not preclude their effective use in law enforcement activities.

Some effort and study will be required to predict compliance levels in different environments. This can be affected by many factors, including visibility, user acceptance/resentment, accessibility, cost and likelihood of sanction for non-compliance. Opinion was divided among participants in this report. Some considered that a higher compliance level could be expected in a non-police environment, in which registrants were not required to present themselves at a police station to undertake transactions. Others considered that a police environment serves to underline the importance of firearms control. Given the substantial difference in cost provoked by different operational focus, transactional methodology, management and remuneration structures, this issue deserves further study.

4.6 Technological Considerations

The usefulness and efficiency of a universal registration system would be enhanced by the establishment of a national database. Users would be able to query all records at their defined security level. This would avoid many of the difficulties encountered with query processing across a series of provincial systems.

Much of what has been learned from FRAS could be applied to a universal registration system. In particular, key components of the system could include:

¨ Use of local area network (LAN) technology to provide the infrastructure for a system, which addresses all the major tasks, associated with universal registration. The substantially larger database requirements and transaction volumes of a universal registration system can be satisfied by computer servers currently available from a number of manufacturers.

¨ Source data capture utilizing electronic forms and a "user-friendly" computer application would streamline operations and reduce data input errors. This information would be sent by communications link to the central universal registration system for final processing.

¨ Smart-card technology could be used for all licensing, certification and registration. One card could be used to contain the information from all these activities.

¨ Automated query processing for police field operations, through CPIC or directly to the universal registration system. Access to all completed transactions, transactions in process and text fields should be provided.

¨ Automated report production to support management needs and policy analysis and formulation.

5.0 NEXT PHASES

Consideration of the recommendations in sections 3 and 4 of this report, with a view to determining and refining options for eventual implementation, could be supported by the following work.

5.1 Restricted Weapons

An analysis could be prepared of options for implementing the recommendations in section 3 relating to restricted weapons registration. The analysis should be based on consultation with all FRAS and RWRS users, as set out in this report, including CPIC users and costed in accordance with Treasury Board project management guidelines.

5.2 Cost Model and Business Case Analysis

A new, current cost model for restricted weapons transactions could be prepared. The model should reflect real costs, differentiated both on the basis of transaction type and typical differences in transaction practices between, for example, urban and rural environments.

A comprehensive business case analysis could then be prepared based on the new cost data, the analysis of implementation options (5.1), user effort/cost, and potential savings from automation and other administrative and operational improvements, to develop projections for maximizing compliance and efficiency.

5.3 Universal Registry Options

Options could be prepared for a national registry of all firearms. If pursued, this phase should be based on an analysis of policy options, the analysis of the existing registry in this report, implementation strategies and revenue dependence. Major elements of each option should be sufficiently developed to allow for consistent evaluation against selection criteria and preparation of a complete business case analysis. The interests of stakeholders, including all user groups, could be cross-classified in order to allow a comprehensive assessment of constraints and the likelihood of achieving policy objectives.

APPENDIX "A"

LIST of INTERVIEWEES

Department of Justice Canada

Tony Dittenhoffer
Senior Research Officer
Criminal Law Research Unit

James Hayes
Co-ordinator
Firearms Control Task Group

Robert Holmes
Senior Program Analyst
Firearms Control Task Group

Robert Sonier
Senior Program Analyst
Firearms Control Task Group

Solicitor General Canada

Scott Burbidge
Ministry Secretariat
Police Policy and Research Division

Royal Canadian Mounted Police

Inspector J.A.J Buisson
O i/c Photographic Imaging and Special Registries Branch
Identification Services Directorate

Staff Sergeant William Gidley
NCO i/c Firearms Registration and Administration Section (FRAS)

Sergeant Michael F. Foran
NCO i/c Firearms Registration Unit
FRAS

Sergeant Vic Rambaut
NCO i/c Legislation and Regulations Unit
FRAS

Corporal D.J.A. Deveau
NCO i/c Correspondence Unit
FRAS

Mitch Lalumiere
Senior Planning Analyst
Systems Planning Section
Informatics Directorate

Jacques Menard
Senior Planning Analyst

Systems Planning Section
Informatics Directorate

Joan Issacs
Senior Analyst (CPIC/RWRS)
Systems Maintenance Section
Informatics Directorate

William Thornton
Project Manager
RWRS Re-write
Informatics Directorate

John de Long
Senior Analyst
RWRS Re-write
Informatics Directorate

Chief Provincial/Territorial Firearms Officers

Inspector Henry T. Vanwyk
Ontario Provincial Police
Chief Provincial Firearms Officer
Province of Ontario

Sergeant George Ramm
Ontario Provincial Police
Chief Provincial Firearms Office
Firearms Business Unit
Province of Ontario

Helen Pedneault
Chief Provincial Firearms Officer
Province of British Columbia
Inspecteur Pierre Vincent
Sûreté du Québec
Chief Provincial Firearms Officer
Province of Quebec
Ontario Provincial Police

John A. Hicks
Firearms Business Control Inspector
Constable Morgan R. Hill
Community Services Officer

Service de Police de la Communauté urbaine de Montréal
Bernard Thériault
Service à la clientèle
Division de l'information policière

Metro Toronto Police

Detective Paul Mullin
Major Crime Unit - Firearms

Hamilton-Wentworth Regional Police

Staff Sergeant Michael C. Pearson
Records Section

Mrs. Jenny Ball
Local Registrar of Firearms

New Zealand

Chief Inspector T. Jones
Firearms Directorate
Crimes and Operations
New Zealand Police

Australia

Chris Whyte
Executive Director
Commonwealth Law Enforcement Board

United Kingdom

Chris Potter
Police Department, F-8 Division
Home Office

APPENDIX "B"
STANDARD FIELD INTERVIEW QUESTIONS

INTRODUCTION

RES Inc. has been contracted by the Department of Justice to produce background information that will support the Department's analysis of universal firearms registration.

The questions, which follow, are intended to assist in a general way in focusing interviews with CPFO's, firearms registrars, current system users and other field personnel, which will be undertaken to meet the research objectives of this contract. It is understood that the relevance of each question may vary according to the interviewee.

RESTRICTED WEAPONS

With regard to FRAS:

1) What is your perception of the functions and responsibilities of FRAS?

2) What new authorities (legislative, regulatory, administrative), if any, might facilitate the operation of FRAS?

3) What do you think of the forms currently in use for firearms registration? Quality? Quantity?

4) How often and why do you query FRAS? How do you conduct your queries (telephone, fax, addressee, etc.)?

5) How do you use the information maintained by FRAS in law enforcement activity? How often do you conduct gun traces (and how do you coordinate these with U.S data)? How frequently do you require affidavits/certificates/testimony regarding gun registration?

6) What are the perceptions of FRAS among users of the system in your organization?

7) What is the routing of a C-300 form from a local registrar? What are the typical time constraints involved with this routing? Are any statistics collected to support the time constraint information?

8) What has been your experience with the accuracy of data from the RWRS system?

Regarding CPIC usage:

9) How often and why do you query CPIC for data related to weapons registration?

10) Is there a CPIC check at any time during processing of a
C-300? If so, at what point? What other checks are carried out (systematically or on an ad hoc basis)?

11) What is useful (or not) about current CPIC queries? What capabilities would you like to see available?

12) Does the fact that RWRS data is downloaded to CPIC weekly raise any significant problems regarding currency of data for field personnel?

Other:

13) What advantages/disadvantages do you see to a person-based licensing system vs. a weapons-based registration system?

14) What are your costs related to the registration of a restricted weapon?

15) What advantages/disadvantages do you see to decentralized data-capture for the registration of restricted weapons?

16) What advantages/disadvantages do you see to use of registration-based unique serial numbering system (i.e. stamped/engraved on weapon) for restricted weapons?
17) What difficulties are encountered in the identification of restricted firearms?

18) At what point in the manufacturing, importation or sale process should guns first be registered? What procedures would facilitate the identification process?

19) What are the advantages/disadvantages (i.e., administrative, technical, functional) of a national vs. provincial system? What is your experience of the practical implications of split federal/provincial jurisdiction over firearms, policing, etc?

20) What procedures would minimize the burden on gun owners, firearms officers, etc. with regard to registration of restricted weapons?

UNIVERSAL REGISTRATION

With regard to FRAS:

1) Generally, what can be learned from FRAS and the current restricted weapons registration system that would apply to the development of a universal registration system for firearms?

2) What features of the FRAS system would <u>not</u> apply to a universal registration system (e.g., permits to carry), and what new requirements would be created by a universal system?
Other:

3) What are the key issues that must be considered in the design of a universal registration system?

4) What are the preliminary requirements of a universal registration system (e.g., registry of all gun owners)?

5) What linkages should be made between a universal registration system and other information systems, in order to maximize the utility of universal registration (e.g., provincial FAC systems, CPIC, U.S. Bureau of Alcohol, Tobacco and Firearms)?

6) What advantages/disadvantages do you see to transaction-point data capture (e.g. dealer site) for the registration of unrestricted weapons?
7) What would be the advantages/disadvantages of a police system vs. a non-police system (such as the motor vehicle registry model) for universal weapons registration?

8) What advantages/disadvantages do you see to a person-based vs. a weapons-based registration system for unrestricted weapons?

9) Should a universal registration system utilize a national or provincial database?

10) What difficulties are presently encountered in the identification of unrestricted firearms?

11) What advantages/disadvantages do you see to use of a registration-based unique serial numbering system for unrestricted weapons?

12) At what points in the manufacturing, importation or sale process should guns first be registered? What procedures would facilitate the identification process?

13) What procedures would minimize the burden on gun owners, firearms officers, etc. with regard to registration of unrestricted weapons?

GENERAL

1) What is the general level of computer automation within your organization?

2) What training is provided to firearms officers/registrars?

APPENDIX "C"

FRAS WORKLOAD

Appendix not available

APPENDIX "D"
LIST of FORMS (FRAS)

C-300* Application to Register a Restricted Weapon
C-301* Permit to Transport a Restricted Weapon
C-302* Permit to Carry a Restricted Weapon
C-303* Permit for a Minor to Possess a Firearm other than a Restricted Weapon
C-304* Firearms and Ammunition Business/Museum Permit
C-305 Restricted Weapon Acquisition Report
C-306 Restricted Weapon Registration Certificate
C-85 Disposition of RCMP Handguns
1400* Application for Firearms Acquisition Certificate
1401* Firearms Acquisition Certificate
1402 Application for Permit to Carry Restricted Weapon and Application for a Minor to Possess a Firearm other than a Restricted Weapon

1403* Firearms and Ammunition Business/Museum Permit Application
1595 Action Request
1726 Request for Tracing Firearms
2356 Request for Information on the Transfer of a Restricted Weapon
2372 Registration Certificate Registry Update
2654 Reply to Request for Firearms Tracing
2679 Correspondence Request
2680 Discrepancy Report
2912 Restricted Weapon Record Check
2965 Restricted Weapon Enquiry - Deceased Registrant
3259 Firearms and Ammunition Business/Museum Permit Inspection Report
3273* Permit to Temporarily Store a Restricted Weapon
3287 Firearms Acquisition Certificate Investigation Report
3306 Window Envelope for Permits
3344* Application for Firearms Acquisition Certificate for a Corporation

Samples of the C-300, C-301, 1402, C-302, C-305 and C-306 follow. It should be noted that the copies of the forms herein are not actual size. (Sample forms not available)

APPENDIX "E"
LIST OF LOCAL APPLICATION FORMS

The following table lists a sample of restricted weapons registration forms from three police forces.

Metropolitan Toronto Police	Application to Register a Restricted Weapon
Hamilton-Wentworth Regional Police	Application to Purchase a Restricted Weapon
Surete du Quebec	Details of the Alleged Reason for Application to Register a Restricted Weapon

Samples of these forms follow. It should be noted that the copies of the forms herein are actual size. (Sample forms not available)

APPENDIX "F"

Annual Firearms Report to the Solicitor General by the Commissioner of the R.C.M.P., 1992
Appendix not available

APPENDIX "G"
INTERNATIONAL PERSPECTIVES

New Zealand

Firearms control in New Zealand is carried out under legislation independent of the general criminal law statute. Prior to 1983, the control scheme required every firearm to be registered. Manual records were maintained for each police district. There is considerable evidence to suggest that these contained a significant rate of incorrect and stale information.

In 1983, the focus of the scheme was fundamentally reoriented towards personal licensing and screening of applicants. Four classes of licence were initially established:

- Class 'A' : shotguns, bolt-action and semi-automatic rifles
- Class 'B' : pistols

- Class 'C' : collectors
- Class 'D' : dealers.

An additional class 'E' endorsement was subsequently created for possessors of military style semi-automatics, including weapons with magazines containing more than 7 rounds. The legislation also provides for a class of "restricted weapons", possession of which is essentially prohibited except for military and law enforcement use that includes fully-automatic firearms. All licence applicants are screened; additional qualifying conditions and more rigorous screening are applied to applicants seeking class B, C, D and E endorsements. Class B applicants, for example, must be members of an approved pistol shooting club.

Licence application fees are based on differentiated processing effort and designed to achieve cost recovery. They are subject to regular review. The current fee for class A applications is $NZ65, and $NZ200 for class C, D and E endorsements.

All weapons associated with class B, C and E endorsements must also be registered to individual licence holders. At the time the licensing system was introduced in 1983, it was decided not to continue requiring universal registration of class A weapons. The decision was based on a comprehensive cost-benefit analysis, which came to the conclusion that the level of criminal activity involving these firearms did not justify the effort necessary to maintain an accurate, up-to-date register. The rate of firearms-related crime is significantly lower in New Zealand than in Canada and the social environment and attitude to firearms is such that police officers do not regularly carry arms.

The decision not to require registration of class A weapons was also supported by the existence of stringent controls on the importation of firearms. All imports require a police permit. New Zealand's geographic situation also facilitates border control. In addition, there are fewer than 40 importing dealers in the entire country, all well known to the New Zealand Police.

Licence and registration records have been computerized since 1983. A single national database is maintained on a central computer. All data is captured on-line, at source. System audits have indicated that the error rate is low and there have been no significant operational incidents involving data error since the system was established.

Arms officers are appointed for each police district. In the last several years, these positions have increasingly been staffed by civilian appointees. New Zealand Police management is of the opinion that this has resulted in better motivated staff who are prepared to invest effort in developing their own expertise. Training seminars are offered to promote uniform application of standards and procedures. Civilians also carry out screening of licence applicants. Although this initially met with some opposition from the firearms community, the New Zealand police report that no significant operational problems have arisen.

United Kingdom

Firearms control in the United Kingdom is based on parallel licensing of individuals and universal registration of guns. Since 1968, licensing has been based on two classes of certificate: one class authorizes holders to possess smoothbore arms, essentially shotguns; the other encompasses all other non-prohibited weapons, including both rifles and handguns. Fully-automatic arms and semi-automatic rifles are prohibited except where specifically authorized for military or law enforcement purposes. Only one in 50 British households possesses a firearm, compared to one in four in Canada. In addition, shotgun certificates outnumber all other firearm certificates by a factor of 4.5 to 1. In a population of approximately 56 million, less than 200,000 individuals are authorized to possess rifles or handguns.

License applicants are screened for character and to ensure that they have a sufficient reason to acquire a firearm. In the case of firearm (non-shotgun) certificates, the burden of proof lies on the applicant. Although the Home Office establishes national guidelines, the issue of licences lies within the jurisdiction of local police forces. Licences are valid for three years. Fees are set on a national basis and are based on

cost recovery. The current fee for a shotgun certificate is £UK17 (£11 for a renewal) and £46 for a firearms certificate. A variation fee is charged for each weapon added to a firearms certificate.

With the exception of a national database for prohibited weapons, each local police force maintains its own licence and registration records. Automation and administrative structures vary widely. (Any assessment of the accuracy and operational efficiency of these record systems would require interviews with representatives of individual forces.) However, the Home Office reports that procedures exist for ensuring that records follow licence-holders from one jurisdiction to another and there do not appear to have been any significant operational incidents arising from the maintenance of localized databases. This may also be in part attributable to the relatively small number of licence-holders.

Australia

Under the Australian constitution, jurisdiction over firearms lies almost exclusively with the states. The only direct authority of the Commonwealth government is with regard to customs controls, although it does promote common standards through the Australasian Police Ministers Council.

The tables that follow, which set out the current situation in the various Australian states with regard to firearms issues, including licensing and registration, were provided by the Commonwealth Law Enforcement Board. The Board reports that no comprehensive and methodologically reliable studies have yet been carried out comparing the situations in states with universal firearms registration and states with less stringent regimes.