Lands Advisory Board Resource Centre Land Title and Survey Authority of British Columbia

First Nations Land Registry - Current State Analysis

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Prepared By:	Stewart Young, Deloitte	Reviewed By:	John Hay, Senior Program Director, LTSA
	Julia Woolsey, Deloitte		Brian Greening, Director, ParcelMap BC Products, LTSA
	Glenn Pope, LTSA		

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CHANGE RECORD

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ACRONYMS AND ABBREVIATIONS

AANDC	Aboriginal Affairs and Northern Development Canada
CIR	Crown-Indigenous Relations
CIRNAC	CIR and Northern Affairs Canada
CLS	Canada Lands Surveyor
CLSR	Canada Lands Survey Records
CLSS	Canada Lands Survey System
EOT	Evidence of Title
FN	First Nation
FNLMA	First Nations Land Management Act
FNLO	First Nations Land Office
FNLRS	First Nations Land Registry System
HQ	Headquarters
ILRM	Indian Lands Registration Manual
ILRS	Indian Lands Registry System
INAC	Indigenous and Northern Affairs Canada
ISC	Indigenous Services Canada
LAB	Lands Advisory Board
LABRC	LAB Resource Centre

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LEDS	Lands and Economic Development Centre (AANDC)
LTSA	Land Title and Survey Authority
NRCan	Natural Resources Canada
SGB	Surveyor General Branch
SGFNLRS	Self-Government First Nations Land Registry System
SME	Subject Matter Expert
TMPD	Training, Mentorship & Professional Development

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1 EXECUTIVE SUMMARY

In recognition of First Nations rights concerning the management and governance of reserve lands, the Lands Advisory Board (LAB) and First Nations Land Management Resource Centre (RC), with support from the Land Title and Survey Authority of British Columbia (LTSA) are developing and establishing a new First Nations National Land Registry for the recording of rights and interests of Operational First Nation lands under the Framework Agreement on First Nation Land Management. The new registry is proposed to replace the First Nations Land Registry System (FNLRS) and the Self Government First Nations Land Registry System (SGFNLRS) operated by Indigenous Services Canada (ISC) and will provide reliable and trustworthy service to support Operational First Nations in the governance, management, protection, and development of First Nation land. Of note, the scope of this report is not intended to address the Indian Land Registry System (ILRS) outside of key interfaces/interactions with the FNLRS and SGFNLRS.

This report provides a high-level overview of the current state of the FNLRS & SGFNLRS and the supporting Canada Lands Survey services, with specific focus on services to Operational First Nations or those under Self-Government Treaty, as well as summarizes key observations regarding current operations of the FNLRS system and related processes. Assessing and documenting the present-day state of the FNLRS is important as this information offers a baseline for the design of the First Nations National Land Registry.

Information contained in this report was collected through working sessions in February to April 2021 with a working group that included representatives from ISC, NRCan/SGB and LABRC. An Operating Model Framework approach (see section 3.2) was selected because it uses a set of structured and integrated perspectives that enable combined analysis of business and technical components and their interactions. This report was prepared by LTSA, Deloitte and MDA on behalf of LABRC.

Current state operations are presented through six perspectives, each addressing a component of the FNLRS and survey services. Leveraging the Operating Model Framework, the following observations were made regarding each of these core components of the FNLRS:

1. Regulatory

Scope: *The legislative, regulatory and policy background on which governance, processes, and procedures for the FNRLRS are based.*

Authority over the FNLRS is informed by several legislative, regulatory and policy artifacts including Canada Lands Surveys Act, the Framework Agreement on First Nations Land Management, First Nations Land Codes, FNLR regulations and others. During analysis, the observation was made that there is a lack of formal policy regarding the operation of the FNLRS, creating compliance issues and a

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disconnect between FNLR Regulations, First Nations Land Codes, NRCan survey process and the diversity of Land Codes that the FNLRS must support.

2. Governance

Scope: *The structure(s) that govern current operations and decision-making authorities over the FNLRS.*

The FNLRS is administered and maintained by the Lands and Environmental Management Branch within Indigenous Services Canada. ISC also operates two additional registries (SGFNLRS and IRLS) in conjunction with the FNLRS. Overseen by the Registrar, FNLRS and SGFNLRS are supported by ISC Headquarters in Ottawa, Ontario. The ILRS is supported by ISC Regional Offices from across Canada. SGB and CIRNAC have legislative responsibility and authority over land surveys and systems managed by ISC, respectively.

In discussions with stakeholders a lack of formal governance structure between ISC, Surveyor General Branch (SBG), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and FN Land Offices became apparent. This can contribute and perpetuate the sense of misalignment between stakeholder needs and registry services.

3. Business

Scope: *The informal structures that enable the business model including: customers, services/products, channels, organization structure, staff roles, costs and processes.*

Customers

The FNLRS has seven defined customer segments: First Nations Land Offices, Canada Lands Surveyor, lawyers, financial institutions, utility companies, ISC Regional Offices and the general public. However, FNLRS has no limitations on who can be a customer and use the publicly accessible online services.

Services

The FNLRS offers four types of services to customers through its operations including Registration Services, Search Services, Customer Support Services and Training Services. These services are dictated to the FNLRS by FNLMA Regulations.

Currently, there is no formal structure regarding the provision of customer support. When customers require assistance, they can contact the First Nations Land Office, or if it is the First Nations Land Office seeking support, email ISC with a general enquiry. ISC

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does not have a direct contact line for assistance. Often customers will informally reach out to a knowledgeable user or personal contact within ISC to resolve issues. First Nations Land Office staff may also reach out to LABRC for guidance.

ISC provides initial training for First Nation Land Offices however, access to training is limited and often does not meet customer needs. LABRC also provides ongoing support and training services.

Channels

The FNLRS delivers its services to customers through five unique channels: online – Citrix-client access to remote Microsoft Windows app, online – public web site, email and phone, mail, and in-person (training only). A few FN Land Offices and additional customers (i.e. lawyers) continue to submit registrations by mail.

Support for channels is similar to the level of customer and services support. Access to written resources is nonexistent and instead is based on prior relationships or contacts within ISC. For submissions, First Nations Land Office staff may also reach out to LABRC for guidance.

Products

The FNLRS offers reports, searches, and Registrar's certificates as products to its customers. There are four reports available to FNLRS customers: the band-reserve report, parcel abstract report, instrument report and reserve general abstract report. Through the public FNLRS website, the following search data products are available to customers:

1. Search Instruments – Instrument Details
2. Search Evidence of Title (EOT) – EOT details
3. Search Land – Land Details
4. Search Crown Land Table – Crown Land Details and Search Reserve Table – Reserve Details

*The Registrar may also issue a Registrar's Certificate and Evidence of Title to customers.

For survey plans, users must access the Canada Lands Survey Records through the NRCan Surveyor General Branch online services. There is no direct access to survey plans and survey records through the FNLRS.

Overall, current products offered by the FNLRS often do not meet the needs of end users because they do not clearly identify active versus historical interests. There is duplication across products, no joining of text and map data, and limited export capability.

ISC Organizational Structure and Staff Roles

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ISC manages and administers FNLRS in a typical land authority structure. ISC has seven team members supporting the FNLRS whose collective effort is equivalent to 4.3 full time staff. These resources split their time and capacity between the management and operation of the FNLRS, SGFNLRS and IRLS.

Support for Land Concepts

The FNLRS does not recognize the First Nation as a primary concept, nor support several First Nation land administration concepts. It does not make the current status of registered land readily evident, instead it operates much like a Deeds registry as it does not track relationships between instruments, interests, and licences. Further, it contains parcels and instruments with inaccurate or unresolved boundaries; and records may reference plans from decades ago that were not based on survey and may be inaccurate.

Processes

The two primary processes that update the FNLRS are the process to register instruments (registration) and the process to define parcels (survey-driven). Some processes involving the delivery of FNLRS services are manual and labour intensive. Stakeholders noted that this fact and a lack of formal support can create a longer and more complicated process.

4. Data

Scope: *The land register and parcel map data that are core to the land registry, critical key data and system-to-system interaction and transactions.*

The FNLRS ingests, stores and to a limited extent distributes data. The primary data holdings are the ILRS/FNLRS/SGFNLRS relational database and the eRIP parcel map. Neither FNLRS and eRIP provide fully comprehensive coverage of First Nations land: FNLRS does not track excluded lands or Yukon Lands set aside, nor can it accommodate for representing shared reserves. Lags in synchronization between the FNLRS, eRIP and their digital data sources (SG CLSS, ISC systems) causes discrepancies in information presented to customers.

5. Applications

Scope: *The software-based capabilities that enable users and autonomous processes to interact and control system features.*

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Users of the FNLRS may interact with four different types of broad applications provided by ISC and NRCan SGB. These applications are the internal ILR, external ILR and eRip provided by ISC and CLSS Map Browser, Survey Plan Search, Survey Project Search and Canada Lands in Google Earth provided by NRCan.

Accessing applications within the FNLRS is difficult or occasionally not possible, while the applications themselves have limited integration causing information delays and restrictions.

6. Technology

Scope: *The functionality and interaction of supporting software, hardware (including corresponding security) to support service delivery.*

The FNLRS internal application was not built to be accessed via the web which also contributes to information synchronization delays and interface integration issues

This document provides a comprehensive summary and understanding of how the FNLRS currently delivers value and how it works at each layer of the operating model. Understanding the current registry's customers, processes and technology will help to inform decisions, needs and recommendations for the Future State and accelerate the roadmap to implementation.

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2 INTRODUCTION

2.1 Document Purpose

This report:

- provides a **descriptive analysis** and **high-level overview** of the current state of First Nations land registry services and survey services in Canada and focuses specifically on services to First Nations operating under the Framework Agreement on First Nation Land Management or a Self-Government Agreement.
- identifies **significant issues** with current operations and establishes a baseline for recommended changes to inform the creation of an independent National First Nations Land Registry.

2.2 Report Details:

Details in this report:

- are **limited to those necessary** to inform the business case for the National First Nations Land Registry
- **vary according to each component** of the analytical framework presented
- focus on areas with s**ignificant issues or involving potentially significant cost drivers** for a new registry.

Context in the National Land Registry development process:

- the Current State Summary was initiated in the **Solution Definition Discovery Stage**
- is intended to be a **living document** that will be updated as new information on the current First Nations Land Registry becomes available.

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3 APPROACH

3.1 Overview

The Operating Model Framework:

- (explained in 3.2) provides a decomposition of all operational aspects of the FN Land Registry and is used as a tool for presenting a thorough view of the FN Land Registry in its current form.

Information gathering process:

- Information was gathered through consultations with the Discovery Stage Working Group in several sessions during February and March 2021 (with some additional targeted sessions).

- The Working Group is comprised of staff from ISC, NRCan SGB and LABRC (to offer insight from their organization and First Nations Land Offices), supported by domain experts from the LTSA and consultants from MDA Systems and Deloitte.

- Consultations identified a number of significant issues with the current operations of the FN Land Registry – these are presented with each 'layer' of the framework.

3.2 Framework

The image below outlines the six layers of the Operating Framework, with each 'layer' addressing an aspect of the FNLR in its current state.

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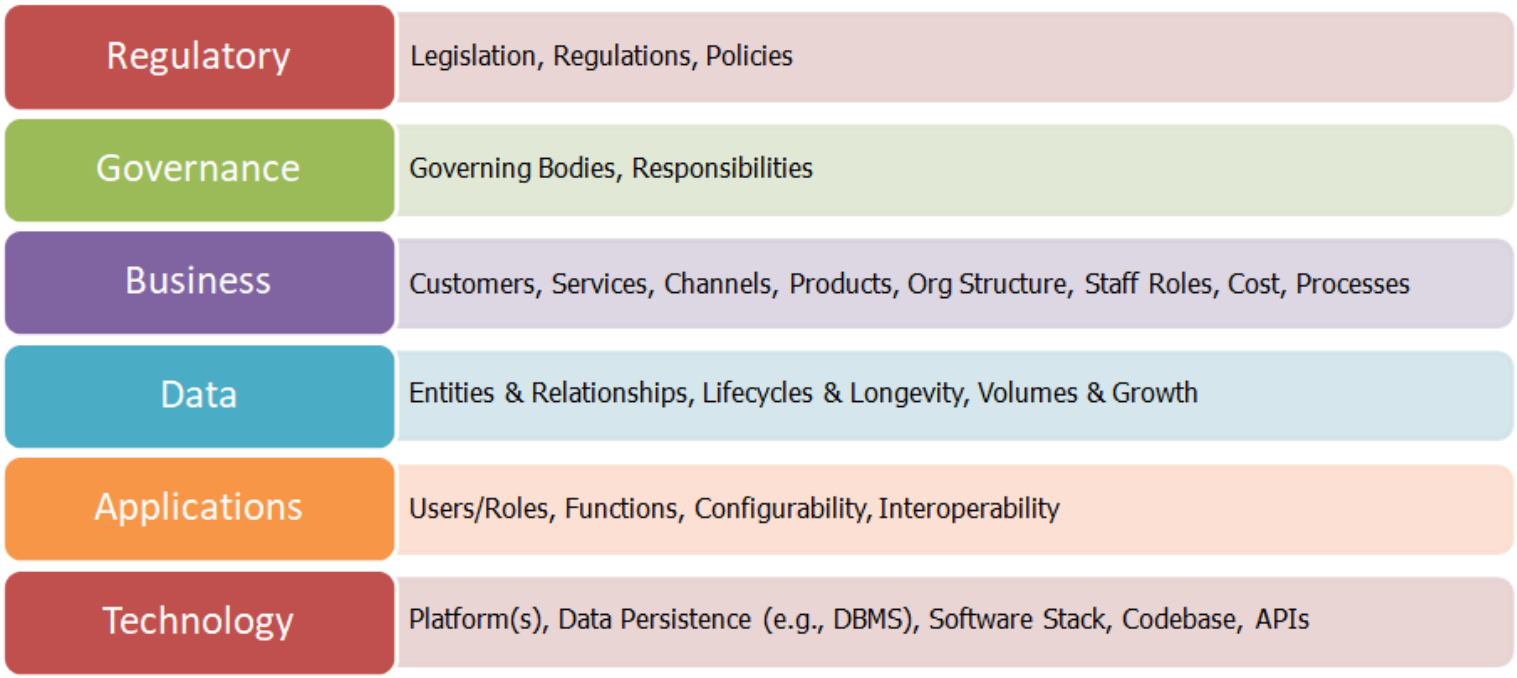

The **'layers'** of the Framework are explained at a high level below:

- **Regulatory:** The legislative, regulatory and policy background on which governance, processes and procedures are based
- **Governance:** structure(s) that govern current operations and decision-making authorities over the FNLRS
- **Business:** includes several components, including:
    - **Customers:** all relevant current end users of FNLRS, across all organizations, public individuals or groups
    - **Services/Products:** what customers receive when they interact with FNLRS and delivers value to them
    - **Channels:** the method of interaction between a consumer of a service and the provider of the service - the way in which they request, articulate, and receive the service
    - **Organization Structure:** the structure, roles, responsibilities, and reporting lines required to support FNLR
    - **Staff Roles:** the team used to provide Services/Products to FNLR customers (including operation and maintenance)

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  - **Cost:** an accounting or estimation of delivery and operational costs for the FNLRS
  - **Processes:** the procedural steps required to deliver FNLRS Services/Products (and FNLRS' enabling functions)
- **Data:** the parcel map and land register data that is core to the land registry (register records, filed documents), plus the key data flows into these data stores through system-to-system interfaces as well as through transactions.
- **Applications:** Software-based capabilities that enable users and autonomous processes to interact and control system features for capturing, manipulating, transacting, and searching data held or accessed through the system. This includes register records, filed documents as well as data obtained from external systems, e.g., parcel data, first nation and member data.
- **Technology:** the functionality and interaction of supporting software, hardware (including corresponding security) to support service delivery

Note that there are a number of aspects that cross several layers of the framework (security, privacy, integrity, service performance characteristics and core domain concepts) that will be discussed in section 11 (Cross-Cutting Aspects) below.

When applied to the FNLR, the Operating Framework offers a snapshot of the current state of the significant components of the Registry. This approach will be used in later stages of the National Land Registry project, as it will be used to gather critical information from stakeholders on the future state of the FNLRS and explain how the new Registry will function going forward.

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4 BACKGROUND ON THE FIRST NATIONS LAND REGISTRY

4.1 First Nations Land Registry

The First Nations Land Registry was established to record documents respecting First Nation land (see Regulatory section below).

The Lands Advisory Board and Minister of Crown-Indigenous and Northern Affairs developed the FNLR Regulations respecting the First Nation Lands Register, unlike the internal departmental policy for the Indian Act registry. The FNLRS and regulations are landmark achievements, providing First Nations with greater land certainty, mortgageability and title insurance, and have drastically reduced or eliminated land transaction costs.

The FNLR has three main objectives:

- give notice to the public of all documents that are registered or recorded pertaining to a legally described parcel of land
- establish priorities among competing registered interests (not recorded documents)
- an orderly listing of documents which concern the interests and rights to a First Nation's land or parcel of land

4.2 First Nations Land Registry System

The FNLRS is administered by the Indigenous Service Canada and is located in Ottawa. The system is entirely electronic and does not contain any physical documents (as all physical records are scanned for use within the system). Almost all applications are submitted to the Registry through a secure website.

FNLRS produced two main reports:

- **Reserve General** consists of instruments relating to FN reserves as a whole (e.g. establishment of the reserve, OIC's, ATR's, ROW's for public use)
- **Parcel Abstract Report** consists of instruments relating to an individual parcel of land (e.g. lease, sublease, certificate of possession)

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5 REGULATORY

5.1 Context

The regulatory layer examines legal and policy background on which FLNRS' governance, processes and procedures are based. Authority over the FNLRS has evolved over time with the development several legislative, regulatory and policy artifacts that include the Canada Lands Surveys Act, the Framework Agreement on First Nations Land Management, First Nations Land Registry Regulations, First Nation Land codes and others.

Any proposed changes to how the FNLR is administered will need to consider potential changes to the legislative and policy landscape on which the registry depends.

5.2 Land Management

5.2.1 Indian Act 1985

The Indian Act 1985:

- is the primary law the federal government uses to administer Indian status, local First Nations governments and the management of reserve land.
- provides land management provisions for most First Nation reserve lands through the Indian Lands Registration Manual, which is authored by ISC and defines the procedures for preparing, submitting, and registering documents in the ILRS.

Three sections within the Indian Act concern land registration of First Nations land, including:

- **Section 21** – explains that ISC must maintain a register of interests in First Nation Reserve lands (including Certificates of Possession, Certificates of Occupation, and other transactions).
- **Section 27** – explains that ISC may cancel, with the consent of the holder, an interest in a parcel of reserve land if issued through fraud or error. Cancellation of these interests will be carried forward in register.
- **Section 55** – prescribes the establishment and maintenance of a Surrendered and Designated Lands Register, which records all details of surrendered or designated land designations – and falls under Reserve General abstract.

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5.2.2 Framework Agreement

Framework Agreement on First Nations Land Management:

- Established in 1996, the Agreement replaces approximately 44 provisions of the Indian Act, enabling First Nations who sign on to the agreement to opt out of these provisions of the Indian Act and manage their own interest lands as well as transactions that occur on those lands.
- Provides a flexible approach under which individual First Nations decide how to govern their lands.
- Approved in Canadian legislation in 1999 by the First Nations Land Management Act.
    - Section 25(3) of the Act allows for creation of the First Nations Land Registry Regulations, which define the requirements and operations of the FNLR.
- First Nations that join the Framework Agreement are referred to as 'Signatory First Nations' and work with LABRC to establish a Land Code (or set of policies and rules over land management – see below) specific to their geography, history, language and culture.
    - Once a Signatory First Nation's Land Code approved in a community vote, a First Nation is referred to as an Operational First Nation – all registered interests on lands managed by these First Nations are maintained by ISC in the FNLR.
- Subsection 51(1) of the Framework Agreement provides for Canada to establish a Registry to record documents respecting First Nation lands or interests or land rights on reserves.
    - The FNLRS is administered by ISC. The FNLRS provides services to Signatory First Nations and provisions in the Indian Act do not apply to it.
- Amendments to the Framework Agreement require at least two thirds approval by Operational First Nations.
    - To date, six formal amendments have been negotiated and agreed upon by Canada and land code Operational First Nations.

5.2.3 First Nation Land Codes

Land Codes:

- are a comprehensive set of laws created by a First Nation under the Framework Agreement that effectively replaces the several sections of the Indian Act that relate to management of reserve lands.

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- set out how First Nations are able to exercise powers over land interests without ISC approval and manage revenue from their lands instead of ISC holding funds in trust (as occurs with non-Framework Agreement First Nations that operate the land management provisions of the Indian Act).
- are developed collectively by each Signatory First Nation typically through a Land Code Development Committee created by the First Nation.
    - The Committee drafts the Land Code, holds community meetings to develop policy and circulates the proposed Code to the community for feedback.
    - Developing the Land Code relies on intensive community involvement and is ultimately ratified by members of the Signatory First Nation (note that the Framework Agreement outlines the process for Land Code development).
    - The process is overseen by a Verifier (an independent person appointed by the First Nation and confirmed by ISC).
- are specific to each First Nation and can follow the Model Land Code provided by the LABRC.
- once Operational, First Nations Lands Offices administer the FN Land Code and make submissions to register interests or record documents to (and receive information from) ISC via the FNLRS.
- Note that once a First Nation has become Operational under the Framework Agreement, they are unable to return to operations under provisions of the Indian Act.

5.2.4 Westbank First Nation

Westbank First Nation Self-Government Agreement:

- a land management agreement also signed between the Government of Canada and the Westbank FN in 2003. This agreement is similar in nature to the Framework Agreement described above.
- ratified in 2004 with the Westbank First Nation Self-Government Act.
    - the Act establishes the Westbank First Nation Constitution, which creates the Land Rules for the Westbank First Nation.
    - Section 13 of the Act creates annexes to the Act that establish the Westbank FN Land Registry Regulations in 2007 (these define the requirements and operations of the Canada Self-Governing Land Registry).
    - As with Operational First Nations under the Framework Agreement, Land Rules under the Westbank Agreement are administered by the Westbank First Nation Land Office. Land Officers here make submissions and receive information from the Self Governing First Nations Land Registry System.

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- note that Westbank First Nation has an agreement with NRCan concerning survey products and processes and that a portion of Westbank FN's land is dually registered with SGFNLRS and the BC Land Title Register.

5.2.5 Canada Land Surveys

Natural Resource Canada's Survey General Branch:

- officially handles surveys for all First Nations land managed under the Indian Act or the Framework Agreement (collectively considered Canada Lands).
- derives its legislative authority over surveys from the Canada Lands Surveys Act and the Indian Act.
- The Surveyor General Branch (SGB) is authorized by both federal and territorial acts and regulations to manage all surveys on Canada Lands and to maintain all the original plans, journals, field notes and other documents connected with those surveys.
- The SGB is a key participant within the current FNLRS. All surveys conducted on Canada Lands fall under the Canada Land Surveys Act (CLSA) and must adhere to SGB's instructions and procedures.
- Individually qualified Canada Land Surveyors (CLS) will conduct a survey and prepare a plan with a digital data set of survey findings according to CLSA and other requirements, including National Standards for Surveys on Canada Lands, the survey instructions, ACLS Best Practices documents. Information within the plan will vary, depending on the type of survey required but may include information such as parcel areas and geographical descriptions, correct endorsement blocks and owner attestation.
- Plan and findings are submitted to the SGB, which will process, review, validate and confirm the Plan using the Survey Document Checklist. Plan confirmation is made by Canada Land Surveyors within the SGB. The First Nation and ISC Region may also be involved in the plan approval.
- Once the Plan is recorded within the Canada Lands Survey Records, it is mapped to the greater SGB database and over laid into the fabric of existing surveyed land for a larger perspective. The SGB leverages modern processes and tools to evaluate and incorporate the survey data into the mapped cadastre.
- An updated copy of the complete survey cadastre is provided to ISC on a weekly basis. The weekly information refresh is used to support FNLRS and populate the eRIP application within the FNLRS.
- During current state assessment workshops, the following gaps involving the SGB were identified:
    - **Flow of Information**: The flow of information from SGB to ISC is based on a legacy process and is no longer efficient. The new information is shared in a data dump, leaving ISC to organize and extract requirements. The flow of information

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is further complicated by the fact that SGB and ISC are different Federal Departments with individual practices and competing priorities.

- **Timing of Information availability**: In certain instances, there is a disconnect between the survey (SGB) and interest registry (FNLRS with ISC). Most of the time, the survey Plan is completed before the interests are registered, however occasionally the interests are registered in the FNLRS before the survey and Plan process is completed within SGB. The information is not mapped into the cadastre for the weekly refresh and can create misalignment in FNLRS times.

- **Mapping of unsurveyed land**: Unsurveyed parcels of land are generally not mapped in the SGB cadastre and this creates a gap in available parcel records describing the extent of land which the FNLRS records when registering related interests.

- **Missing parcels**: In certain instances, survey parcels that do not have registered interest do not appear in the FNLR.

2015 Interdepartmental Letter of Agreement:

- NRCan SGB and CIRNAC (then known as Aboriginal Affairs and Northern Development Canada) signed an Interdepartmental Letter of Agreement in 2015, which prescribes the survey plan products to use for specific types of land transactions involving Reserve Lands.
- The agreement also sets out the basic principles on which the standards for the products and methods of describing land are based. However, the agreement does not effectively address land surveys for Operational First Nations – as the authority for surveys is derived from the Indian Act. However, Chart A of this Agreement does apply to Land Code lands, as it states the minimum survey product required for the transaction.

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5.3 Summary Observations:

1. **No policy for operation of FNLRS**
   - There exists no equivalent document to the Indian Lands Registration Manual for the FNLR.
   - The ILRM describes the procedures for preparing, submitting, and registering documents in the ILRS, in accordance with policy requirements developed in support of Indian Act land management provisions.
   - It appears that much of the ILRM still applies to the FNLR; however, there is no clear demarcation as to what components if the ILRM are applicable and what are not.
2. **Disconnect between FNLR Regulations and First Nations Land Codes**
   - There is a disconnect between FNLR Regulations and First Nations Land Codes.
   - FNLR Regulations do not require approval by a First Nation and/or certification of transactions prior to the registration or recording of information, where approval is required under First Nations Land Codes.
   - Currently, FNLR Regulations do not make provisions for accommodating FN Land Code requirements.
3. **Diversity of First Nations Land Codes not apparent in FLNRS records**
   - The language and semantics used in the First Nations Land Codes may not be apparent in FNLRS records, as the definitions of specific instrument types can vary with each First Nation Land Code. The FNLRS was developed from ILRS, which uses land management definitions based on the Indian Act.
   - Distinct definitions of land terms (especially with respect to the instruments applied to parcels of land) are very important to individual First Nations and are not being effectively captured in the FNLRS.
4. **First Nations may be challenged to comply with regulations**
   - Some First Nations may find it challenging to comply with the current regulatory scheme in several ways, as a First Nation:
     - may not carry out many transactions and may be unfamiliar with proper land registry practices
     - may not have started implementation of policies to comply with its own land code or land laws (e.g. approvals or certifications)

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- may lack Land Office staff, or continuity amongst staff due to turnover
- may not always conduct surveys of parcels (generally to avoid survey costs, or there are no proponents or individual interests on their community held lands).

5. **Regulatory lag in NRCan survey process**

- For land surveys, Operational First Nations are operating under the NRCan SGB – AANDC LEDS Interdepartmental Agreement, which is based on the principles of the Indian Act.
- However, the agreement does acknowledge the First Nations Land Management Act.
  - NRCan SGB has indicated they will be establishing an analogous Letter of Agreement for First Nations under the Framework Agreement.

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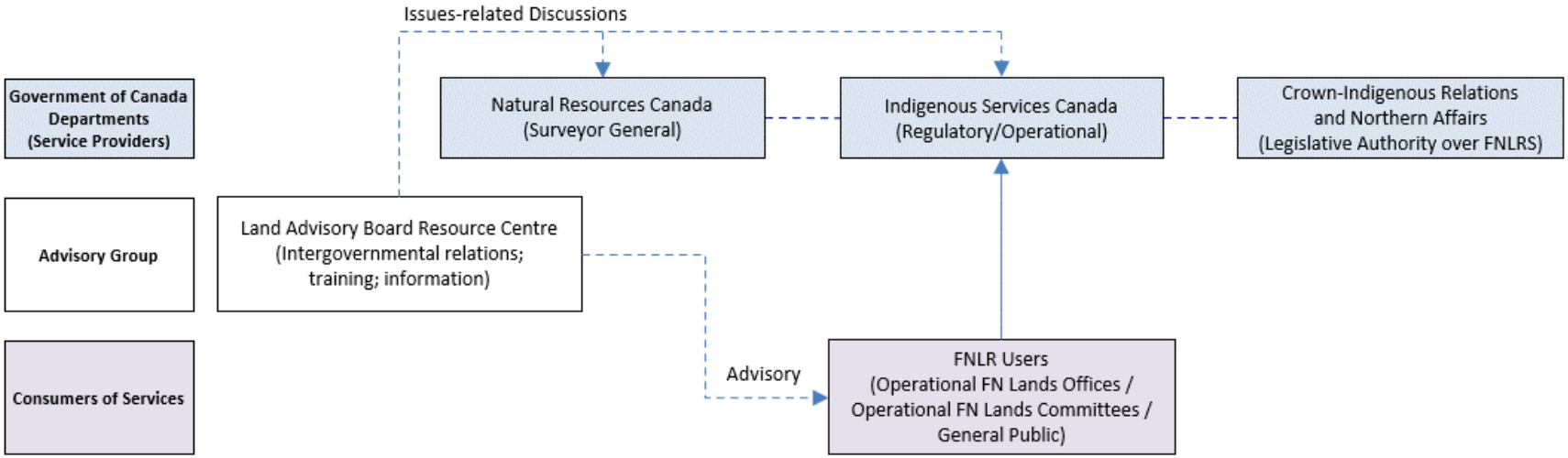
6 GOVERNANCE

6.1 Context

The governance layer of the Framework outlines the structures and roles that oversee the functioning of the FNLR, as well as decision making bodies.

Governance of the FNLRS currently resides with ISC, as the agency that provides FNLRS services to First Nations Land Offices and other customers of the registry. The diagram below outlines the governance structure of the FNLRS (and SGFNLRS) in its current form.



6.2 Government of Canada

Currently the FNLRS (along with the SGFNLRS and ILRS) is administered and maintained by ISC, with all staff and supporting infrastructure located in Ottawa, Ontario. The core FNLRS is administered by the Lands and Environmental Management Branch within the Lands and Economic Development division of ISC.

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The Registrar (within the Lands and Environmental Branch) oversees the operation of three registers and has seven employees to support their function (see Business section below for more information). ISC officials generally administer this as 'one system with three registries' (FNLRS, SGFNLRS and ILRS) and are responsible for the implementation of the FN Land Registry Regulations.

The Surveyor General Branch of Natural Resources Canada is responsible for overall land surveys and related systems for all Canada Lands. The Branch oversees surveying on First Nations reserves in order to ensure the quality of the survey system and also provides survey information on First Nations reserve lands to ISC (this information goes directly into ILRS, FNLRS and SGFNLRS).

Crown-Indigenous Relations and Northern Affairs Canada has legislative authority over the systems administered by ISC (but not operational oversight) and are involved in any legislative matters related to the land registries and their associated systems.

6.3 First Nations

Operational First Nations maintain Lands Offices that interact with ISC on behalf of First Nation members. Land Officers provide information, guidance, and submission services to members, sometimes in exchange for fees (note that LABRC provides a best practice list of fees for Lands Offices). Lands Offices are funded by ISC and liaise with ISC staff when issues and queries arise.

The LABRC is a free resource for all Operational First Nations Lands Offices and Signatory First Nations and is fully funded by ISC. This agency provides free advisory, information, and training services to First Nations, and has regular issues-related discussions with ISC staff – although no formal committees or working bodies exist between the two agencies.

6.4 Summary Observations

1. ISC owns and operates the FNLRS

- All governance currently resides with the Government of Canada, with First Nations as users and not administrators of Registry systems.
    - This is an issue because the FNLR is built based on the Indian Act, not First Nations Land Codes.
    - Also, ISC staff members who operate the FNLR do not hold a detailed knowledge of First Nations Land Codes.

2. No formal governance relationship between First Nations Land Offices and ISC

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- issues with FNLR are dealt with in a largely ad-hoc manner and there are no formal committees or bodies to deal with issues related to Land Code First Nations

3. ISC's management of the FNLR is not focused on management of First Nations land

- As the FNLR is based on rules and procedures grounded in the Indian Act, ISC's management of the FNLRS is focused on managing the information in the registry rather than integration of land management, registration, and survey functions for First Nations with land codes. However, ISC staff provide validation of applicant names, parcel types and locations for documents registered in the FNLRS.

4. The existing Parcel Abstract Report does not show anywhere the First Nations Land Code that is in effect

1. The Report only indicates that the parcel resides in the FNLRS and the Reserve to which it belongs.

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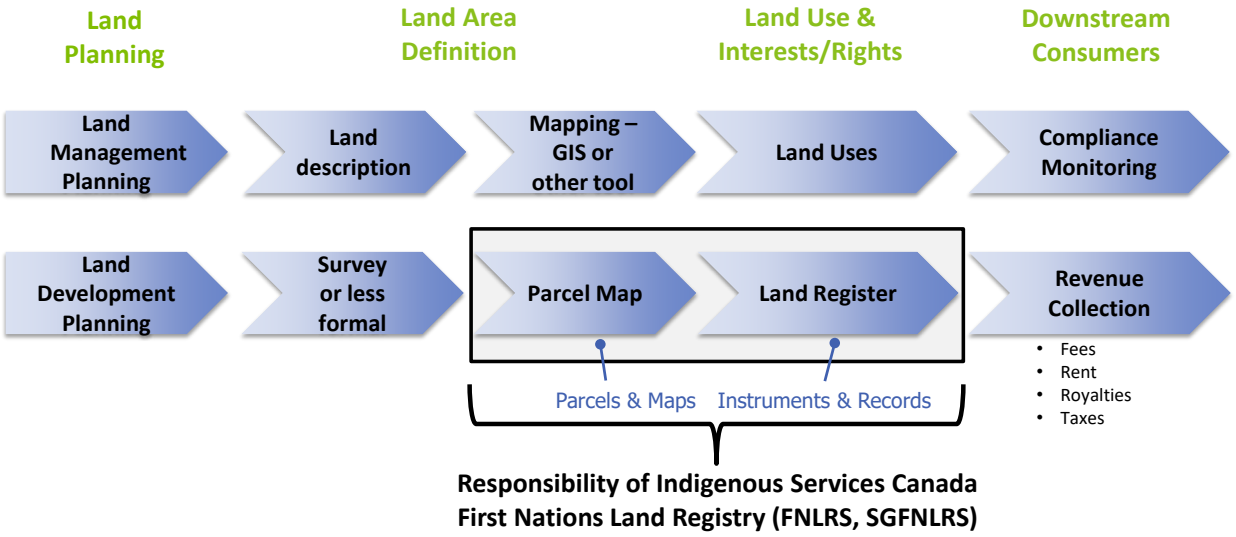
7 BUSINESS

7.1 Context

The Business Layer has been the primary focus of the Current State Analysis, as it encompasses the interactions between the key players involved with the FN Land Registry: the ISC Registrar, First Nations, Canada Lands Surveyors, NRCan Surveyor General Branch (SGB) and others. This layer is comprised of a number of components including Customers, Channels, Services/Products, Organizational Structure, Staff Roles, Land Domain Concepts, Processes and Primary Register Entity Lifecycles.

7.1.1 Within Land Administration Value Chain

There are fundamentally **two related but distinct value chains** functioning **within** the realm of **land administration** in the context of Operational and Self-Government First Nation under the Framework Agreement as shown below – **land management** (top value chain) and **land development** (bottom value chain).



Land Management: Concerns the definition and management of land for the purpose of land use planning by First Nations.

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Land Development: Concerns improvements to land and the associated establishment of assets and interests on land that typically have monetary value.

Responsibilities

The FN Land Registry only addresses the Land Development value chain, and specifically the Parcel Map and Land Register. Survey involves Canada Land Surveyors and NRCan SGB. Otherwise, the remainder of the Land Development value chain and all of the Land Management value chain are the responsibility of the individual First Nations.

Currently, ISC (Headquarters, a.k.a., HQ) acts as the Registrar of the FN Land Registry, the custodian of the Land Register, providing Land Registry services to Operational First Nations under the Framework Agreement, and self-governing First Nations.

Land Development Value Chain

The value generated through each step in the Land Development chain is as follows:

1. **Land development planning**: Determines whether to undertake a land development project and what it will entail in terms of buildings and other improvements. This is conducted by First Nation members. The four steps that follow are the realization of that plan.
2. **Survey**: Defines new parcels, their boundaries, and the location of buildings (if specifically requested[1]) with respect to them through surveying and the creation of survey plans. This is conducted by Canada Lands Surveyors under the instructions of NRCan SGB.
3. **Parcel Map**: The Parcel Map is a visualization of the Canada Land Survey System (CLSS) parcel data, provided through the eRIP application provisioned by ISC. The parcel map is primarily made up of surveyed parcels, but also includes markers (approximate centroid points) for some un-surveyed parcels that have been mapped. Parcel Map is formed by the automated joining of CLSS parcel data with Land Register data.
4. **Land Register**: The Land Register registers and records interests and licences in land. The FNLRS is the land register system used for Operational First Nations under the Framework Agreement. The SGFNLRS is the land register system used for Self-Government First Nations. Both are provided by ISC and operated by ISC HQ, who provide the land registry service for registering interests and licences in land.
5. **Revenue collection**: Revenue collection is performed by and left to the discretion of the individual First Nations and the parties holding interests and licences in land. Revenue may be obtained from registration fees, licence fees, lease rents, land exploitation royalties (e.g., timber sales), and property taxes.

[1] If it is not specifically requested that buildings to be located on a survey plan, the land surveyor is only required to show improvements where they may be close to or over the boundary of the parcel.

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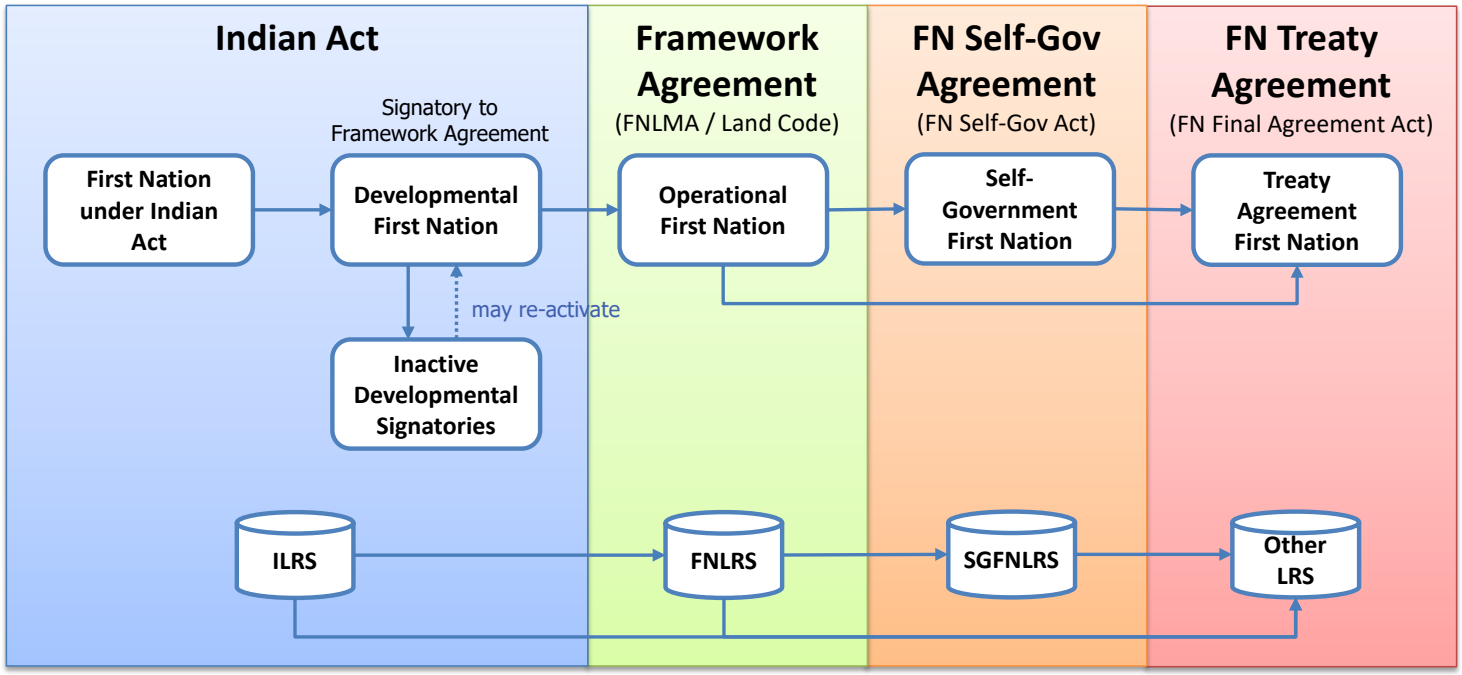
7.1.2 First Nation Land Management Regimes / Agreement Stages

The following diagram shows the stages a First Nation may progress in terms of land management from the Indian Act to greater degrees of self-government.



For each land management regime there is a distinct legal land registry system (LRS), although the ILRS, FNLRS and SGFNLRS all are based on one information system, database, and technology implementation. The primary focus of this Current State Analysis is the First Nations operating under the Framework Agreement and Self-Government Agreements.

The two legal registers/systems (FNLRS, SGFNLRS) take data from the ILRS when a First Nation becomes operational under the Framework Agreement – this is simply a matter of setting a configuration flag appropriately in the database. When a First Nation enters a full Treaty Agreement, control of the data is handed off to another 'external' land registry. The historical data is retained and flagged as being supplanted by an external registry.

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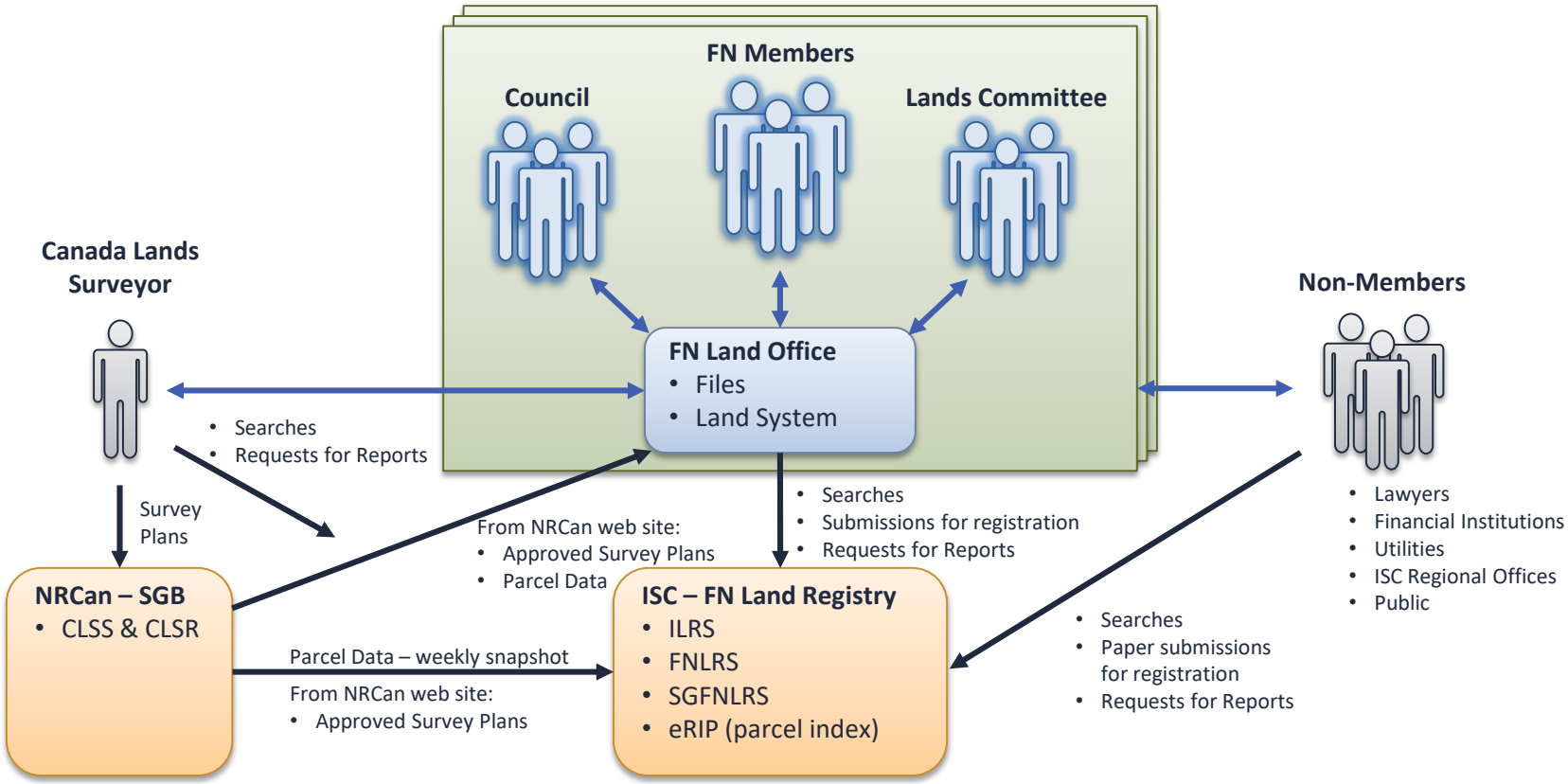
7.1.3 Current State Systems and Services Context

A high-level view of the services, people, and systems surrounding and involved with the ISC operated First Nations Land Registry is shown below:



ISC provides the First Nation land registry services. The ILRS, FNLRS and SGFNLRS are technically all one system; however, legally they are distinct land registers; and operationally ISC HQ provides the registry services for FNLRS and SGFNLRS while the ISC Regional Offices provide the registry services to First Nations under the Indian Act, whose land register is the ILRS. ISC relies on survey and parcel data from the SGB within NRCan. Survey plans are accessed using the NRCan Canada Lands Survey Plan Search tool on the NRCan web site. A snapshot of First Nations parcels (mostly just surveyed parcels) is forwarded weekly to feed the eRIP parcel map.

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FN Land Office (FNLO) has a unique role in that they are the primary conduit through which First Nations submission for registration flow. They are the only party outside of ISC HQ to have access rights to the FNLRS/SGFNLRS to electronically initiate applications for registration of instruments. All other submissions must be by mail (paper) to ISC HQ.

7.2 Customers

There are no limitations on who can be a customer of the FN Land Registry and access its services.

The notable groups of FN Land Registry customers are as follows:

Customer Group	Services Typically Used
First Nations Land Offices	Have CITRIX access to FNLRS/SGFNLRS application to perform electronic submissions for registration, and with this level of access have a different search and reporting user interface than provided through web user interface.
Canada Lands Surveyor	Have CITRIX access and can access documents; however, some have not taken up this option and only use the public web site and have public access rights. Public access rights enable them to conduct searches and retrieve reports through the web user interface. Instruments (documents) can only be obtained by emailing a request to ISC, who will forward a redacted copy, in accordance with the Privacy Act. Land surveyors need to obtain Parcel Abstract Reports and Reserve General Reports to obtain legal descriptions, PINs, and identify Survey Plans.
Lawyers	Generally just have public access rights, as described above. However, some First Nations have granted allowed some lawyers to have CITRIX access so that they are able to view registered instruments (documents). Lawyers need to search instruments, land and reports when advising their clients and preparing instruments for registration.
Financial Institutions	Have public access rights, as described above. Financial Institutions primarily perform registering and relinquishing of mortgages through submissions for registration. Search functions may be used in support of that.
Utility Companies	Have public access rights, as described above. Utilities provide services to First Nations, or may have infrastructure (e.g., pipelines, transmission lines) that cross First Nations land. They require search access and may make submissions for registration.

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Customer Group	Services Typically Used
ISC Regional Offices	Have CITRIX access to FNLRS/SGFNLRS application to request instrument registration, search, and report functions. ISC Regional Offices are not able to register instruments, only ISC HQ has that right.
General Public	Have public access rights, as described above. The public may make submissions for registration but must do so either through a FN Land Office or directly by mail to ISC HQ.

7.3 Services

ISC provides First Nation Land Registry services to First Nations under three distinct land management regimes:

1. **Indian Act**: Services fulfill Indian Act requirements and are performed in accordance with the Indian Lands Registration Manual with respect to records held in the ILRS. These services are provided by ISC Regional Offices.
2. **Framework Agreement / Land Code**: Services fulfill First Nations Land Management Act (FNLMA) in accordance with the First Nations Land Registry Regulations with respect to records held in the FNLRS.
3. **First Nations Self Governing Agreement**: Services fulfill the Self-Government Act of the corresponding First Nation (as of April 2021 this is only the Westbank First Nation) in accordance with the Land Registry Regulations for that First Nation with respect to records held in the SGFNLRS. These services are provided by ISC HQ.

ISC HQ offers four types of services through its FNLR operations:

1. **Registration Services**: Entails the receiving of applications, capture from paper (if a mailed-in submission), checking, registration of instruments to update land register records, issuing subsequent notification of registration, and redaction of instruments/documents in accordance with the Privacy Act prior to making them available publicly.
2. **Search Services**: Searching of Instruments, Evidence of Title, Land (i.e., parcels), Tables (i.e., reserves) and Reports (i.e., Parcel Abstract Report, Reserve General Report, Band-Reserve, Instrument).
3. **Customer Support Services**: To handle general enquiries received either by email, phone calls to Land Registry staff (no official customer support number), or possibly mail.
4. **Training Services**: Training provided by ISC is limited to simple functions of the system. LABRC provides proactive training and knowledge transfer to increase the skills and capabilities of FN Land Offices.

Fees: no fees are charged for any of the services.

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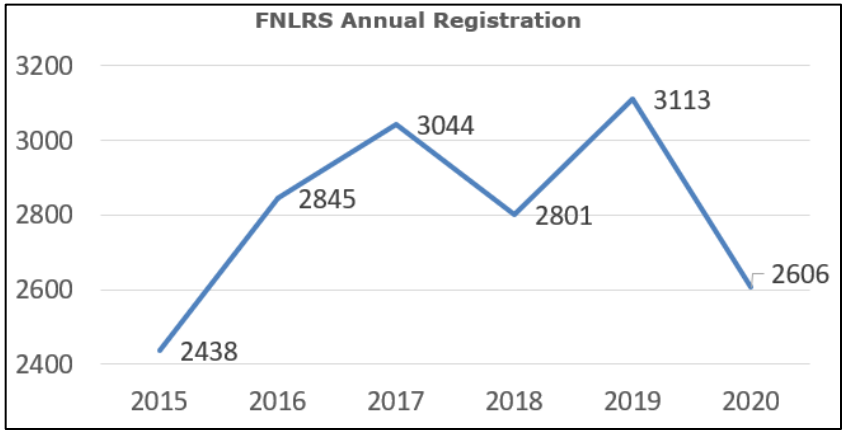
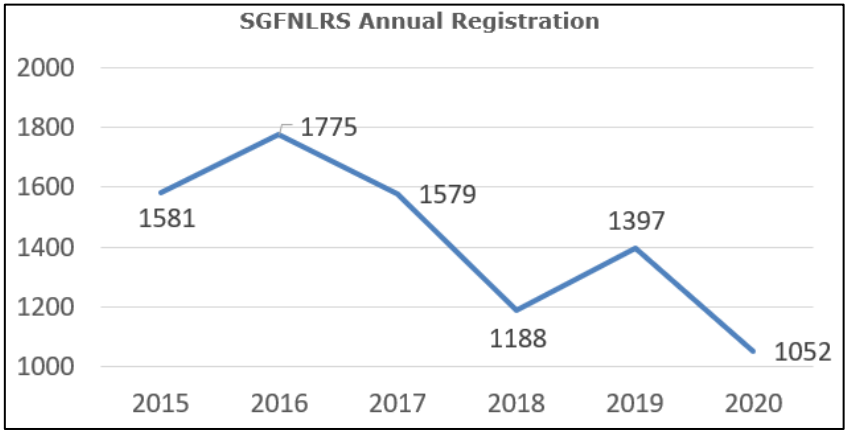
7.3.1 FNLRS and SGFNLRS Transaction Volumes

FNLRS has seen an overall 6.8% increase in registrations between 2015 and 2020, although annual volumes have fluctuated during this period. Note that over this time, the number of First Nations becoming signatories to the Framework Agreement has increased from 57 to 99 (many of which transitioned to Operating First Nations), which may have had a positive impact on registrations. Registrations for the SGFNLRS have fluctuated as well over this period, reaching 1,052 in 2020 – down from 1,581 five years earlier. SGFNLRS registrations are comprised of transactions from the Westbank First Nation.





Over the five year period, the top five registration types processed by the FNLRS are assignments, mortgages, discharges, transfers and leases, which combined make up 48% of all registrations and are distributed as follows:

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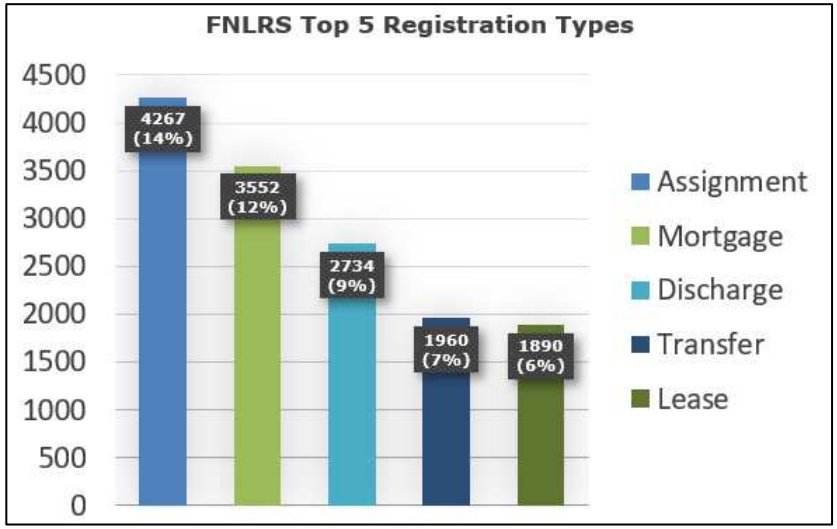
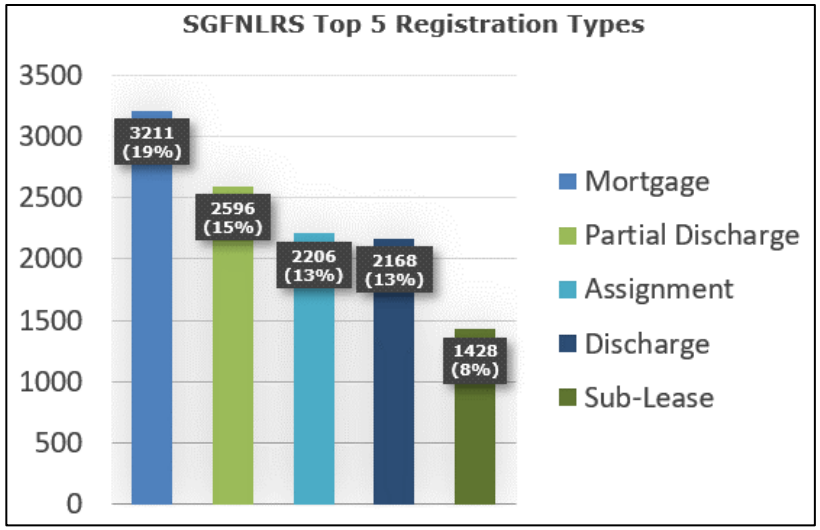


SGFNLRS registrations during the same period are displayed below, with mortgages, partial discharges, assignments, discharges, and subleases making up 68% of all registrations.



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7.3.2 Summary Observations

1. **FNLMA First Nation Land Registry Regulations dictates nature of services**: FN Land Registry services to Framework Agreement Nations are not governed under or specific to First Nations Land Codes. ISC HQ has no specific knowledge of any Land Code, and only operates in accordance with the FNLMA and accompanying regulations.
2. **Limited Training for system users provide by ISC:** The breadth of ISC HQ training is limited to simple functions of the system. LABRC provide to First Nations proactive training and knowledge transfer to increase the skills and capabilities of FN Land Offices.

7.4 Channels

The FNLRS (along with the ILRS and SGFNLRS) supports several types of channels:

1. **Online –Thick client-based Citrix access** to Microsoft Windows application, i.e., the FNLRS, SGFNLRS. This is used internally and externally for initiating submissions for registration, search by FN Land Offices and ISC Regional Offices.
2. **Online – Public Web Site**: Only Search Services are available.
3. **Email, Phone**: To access Customer Support Services.
4. **Mail**: For submissions for registrations apart from FN Land Offices and ISC Regional Offices.
5. **In-Person**: For training services (possibly virtually).

The relationship between services, channels and customer groups is explained in the following table.

Services	Channels & Customer Groups
Registration Services	1. Electronic - CITRIX to Microsoft Windows App a. FN Land Offices b. ISC Regional Offices 2. Mail – Paper: everyone else, plus three FNLOs
Search Services	1. Electronic – CITRIX

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Services	Channels & Customer Groups
	a. FN Land Offices b. ISC Regional Offices 2. Public Web Site 3. Mail, e.g., to request a Parcel Abstract Report
Customer Support Services	Email (primarily), phone, mail.
Training Services	In-person, e.g., web conferencing.

7.4.1 Summary Observations

1. **Three FNLOs submitting registrations by mail**: One Arrow First Nation, Dokis First Nation, Opaskwayak First Nation cumulatively submit just over 100 applications for registration annually in FY 2019/2020 and FY 2020/2021. The first two have been contacted and have indicated that they are able to go digital and drop paper submissions – issues were lack of scanning equipment and no reason to change previous practice.
2. **Access to Customer Support**
    - There is no published telephone number for either Land Registry enquiries or technical support. ISC official says, "people just know who to call."
    - There is a published email address for Land Registry enquiries (Headquarters).

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7.5 Products

The FN Land Registry has a reporting capability. Four of the reports are made available to customers (FN Land Office, on public web site) and therefore are in essence "products". These products and the descriptions given on the public web site[2] are as follows:

1. **Band-Reserve Report**: Information on Bands and Reserves.
2. **Parcel Abstract Report**: Provides detailed chain of title[3] information pertaining to a specified parcel of land.
3. **Instrument Report**: Detailed information on Instruments.
4. **Reserve General Abstract Report**: List of historical/current Instruments by Reserve.

Further details and examples of these are provided in the following subsections.

The public web site also provides some other data products:

5. **Search Instruments – Instrument Details**: Contains slightly more information than the Instrument Report but is delivered as a web page instead of PDF.
6. **Search Evidence of Title – EOT Details**: Information concerning a specific EOT. Under the Framework Agreement there is no notion of EOT; however, some First Nations have continued the practice of issuing EOTs for continuity, i.e., it is the First Nation that issues it, not the FNLR. The First Nation may issue its own unique EOT (Allotment) number while others may opt for the FNLRS to issue the number. This is communicated within the application process or direct instruction from FN to Registrar. The system includes a capability to track issued EOTs. Some Framework Agreement First Nations use this feature, and there may be a historical record of EOTs issued for a First Nation prior to it becoming operational under the Framework Agreement.
7. **Search Land – Land Details**: Contains less information than the Parcel Abstract Report but does provide a succinct listing of instruments in reverse chronological order.
8. **Search Crown Land Table – Crown Land Details**: Shows Crown Land coding and associated names. This is only relevant to the Indian Act (ILRS), not the FN Land Registry.
9. **Search Reserve Table – Reserve Details**: This duplicates the information presented in the Band-Reserve Report with the addition of three more fields: 53/60, External Registry, and MRP Law. '53/60' refers to the Indian Act Sections and these no longer apply under the Framework Agreement as per FNLMA s. 38 (1) (a). 'External Registry' is used in the FNLRS – currently

[2] See https://services.aadnc-aandc.gc.ca/ILRS_Public/Reports-Rapports/Reports.aspx
[3] Title is the term used on the public web site. The interests being tracked are less than fee simple, e.g., allotment, lease, etc. The use of the term 'title' may be indicative of the intent of the land registry designers/builders that a Parcel Abstract Report be considered analogous to a title.

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only to search for historical records of the Tsawwassen Reserve (see Internal ILRS User Guide, Finding a Reserve, p. 56). 'MRP Law', which refers to whether the First Nation has their own Matrimonial Real Property Law, may be used by First Nations in the FNLRS.

These search products can be exported into a spreadsheet compatible format.

The Registrar may also issue the following products:

10. **Registrar's Certificate**: To certify that an attached item (e.g., Parcel Abstract Report) is a true copy from the register. This is only available internally to the Registrar. Certification of a Product must be requested through email, phone, or mail.
11. **Evidence of Title (EOTs)**

    An Evidence of Title (EOT) is a document issued from the ILRS/FNLRS/SGFNLRS attesting as to a Band or First Nation member's entitlement to a parcel of Reserve land[4]. There are six types, e.g., certificate of possession, certificate of occupation.

    In practice, EOTs are only issued by the Registrar for Indian Act (ILRS) records. However operational First Nations may still be tracking EOTs using the FNLRS.

For survey plans and other survey products, users must access the Canada Land Survey Records through the NRCan Surveyor General Branch online services. There is no direct access to survey plans and survey records through the FNLRS.

[4] Verbatim from internal ILRS User Guide.

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7.5.1 Band-Reserve Report

The Band-Reserve Report lists the reserves held by each selected band. Each reserve is described in terms of its identity (number and name), number of bands associated with the reserve, reserve location (textual, lat/long), area, and last update.

Example shown below is for the Musqueam First Nation generated from the public site:

Indigenous Services Canada / Services aux Autochtones Canada

FIRST NATIONS LAND REGISTRY

Band-Reserve Report

Sorted By: Reserve

Selected Criteria:
Registry: FNLRS
Band: 550 - Musqueam

Printed on: 2021/05/03 01:02 pm — UNCLASSIFIED

Province: BRITISH COLUMBIA — Reserves(3) Bands(1)

Reserve: 08358 - MUSQUEAM 2 — Bands(1)

Band: Musqueam - 550
Location: NEW WESTMINSTER DISTRICT AT MOUTH OF FRASER RIVER NORTH OF SEA ISLAND, WEST OF VANCOUVER
Latitude: 49° 14' 00" Longitude: 123° 13' 00" Hectares: 209.210
Reserve Last Updated: 2017/06/15

Reserve: 07927 - MUSQUEAM 4 — Bands(1)

Band: Musqueam - 550
Location: LOT 27, GROUP 2, PARCEL B
Latitude: 49° 04' 00" Longitude: 123° 07' 30" Hectares: 57.300
Reserve Last Updated: 2017/06/15

Reserve: 08359 - SEA ISLAND 3 — Bands(1)

Band: Musqueam - 550
Location: NEW WESTMINISTER DIST. IN BLK 5,N.RGE.7,W.SEC.8&9. AT NW CORNER OF SEA ISLAND AT THE OUTLET OF N ARM OF FRASER RIVER
Latitude: 49° 12' 00" Longitude: 123° 12' 00" Hectares: 6.500
Reserve Last Updated: 2017/06/15

Total Bands: **1**
Total Reserves: **3**
Total Reserve Surface Area: **273.010** Hectares

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7.5.2 Parcel Abstract Report

The Parcel Abstract Report consists of instruments relating to an individual parcel/lot of land, e.g., Lease or Sublease, certificate of possession (CP). Example shown below is for the first pages of a 7 page report for the parcel for the Musqueam First Nation.

Indigenous Services Canada / Services aux Autochtones Canada

FIRST NATIONS LAND REGISTRY
Parcel Abstract Report
Sorted by: Legal Description / Instrument Date - Ascending
Selected Criteria:
Registry: FNLRS
Reserve: 07927 - MUSQUEAM NO. 4
Include Sub-surface Parcels: No

Printed on: 2021/05/03 3:59 PM — UNCLASSIFIED

Legal Description:	Parcel Type:	PIN:
LOT 1 RSBC 1851	Surface	902002721

Reserve: 07927 MUSQUEAM NO. 4
Previous Legal Description:
External Registry:
Plan Type & No: RSBC 1851
PIN Status: Active
Province: BRITISH COLUMBIA
Retired Reason:
Retired by Registration No:
Band: 550 - Musqueam

PIN Hierarchy :

FIRST NATIONS LAND REGISTRY
Parcel Abstract Report
Sorted by: Legal Description / Instrument Date - Ascending
Printed on: 2021/05/03 3:59 PM

Legal Description:	Parcel Type:	PIN:
LOT 1 RSBC 1851	Surface	902002

INSTRUMENTS REGISTERED AGAINST PIN: 902002721

Registration Number:	Reference Registration Number:	Instrument Date
113162		1987/05/26

Registration Date:	Effective Date:	Expiry Date:	Actual Expiry Da
1987/08/19 12:00:00AM	1987/04/01	1988/03/31	1988/03/31

Instrument Type:	Purpose:
Lease	AGRICULTURE

OCPC:	IOGC:	Area:	Term:	FN La

Land Affected: LOT 1 RSBC 1851
Remarks: BCR ATTACHED
Grantor(s): CROWN CANADA
Grantee(s): EDWARD D MCKIM

At the end of the report, easements/permits and related instruments are listed:

EASEMENTS/PERMITS AND RELATED INSTRUMENTS AFFECTING PIN: 902002721
(Blanket permits for utilities distribution are found in the Reserve General Report)
No Easements/Permits

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7.5.3 Instrument Report

The Instrument Report lists instruments meeting specified criteria. For each matching instrument summary data is presented including its tombstone data, purpose, land affected, area, grantor, grantee, and remarks. Example shown below is for the Musqueam First Nation reserve no. 4.

Indigenous Services Canada / Services aux Autochtones Canada

FIRST NATIONS LAND REGISTRY

Instrument Report

Sorted by: Instrument Date

Selected Criteria:
Registry: FNLRS
Registration Start Date: 2018/01/01
Registration End Date: 2019/01/01
Instrument: Effective/Expired
Reserve: 07927 - MUSQUEAM NO. 4
Pertains To: Both
Include Sub-surface Parcels: No

Printed on: 2021/05/03 05:54 pm — UNCLASSIFIED

Region/Province: British Columbia/BRITISH COLUMBIA
Reserve: 07927 - MUSQUEAM 4
Band: 550 - Musqueam

Permit

PIN: 902002724 LOT 4 RSBC 1970

Instrument Date:	2018/01/01	Term:	1y 0m 0d
Registration Number	4029626	Effective Date:	2018/01/01
Registration Date:	2018/08/06 12:11:03PM	Expiry Date:	2018/12/31
		Actual Expiry Date:	
Purpose:	AGRICULTURE	Area:	6.07 Hectares
IOGC #:			
Land Affected:	LOT 4 RSBC 1970		
Grantor(s):	550 - Musqueam		
Grantee(s):	PETER GUICHON, FELIX FARMS LTD.		
Remarks:	First Agricultural Permit to be registered under the Land Code		

PIN: 902002722 LOT 2 RSBC 1851

Instrument Date:	2018/01/01	Term:	1y 0m 0d
Registration Number	4029626	Effective Date:	2018/01/01
Registration Date:	2018/08/06 12:11:03PM	Expiry Date:	2018/12/31
		Actual Expiry Date:	
Purpose:	AGRICULTURE	Area:	7.03 Hectares
IOGC #:			
Land Affected:	LOT 2 RSBC 1851		
Grantor(s):	550 - Musqueam		
Grantee(s):	PETER GUICHON, FELIX FARMS LTD.		
Remarks:	First Agricultural Permit to be registered under the Land Code		

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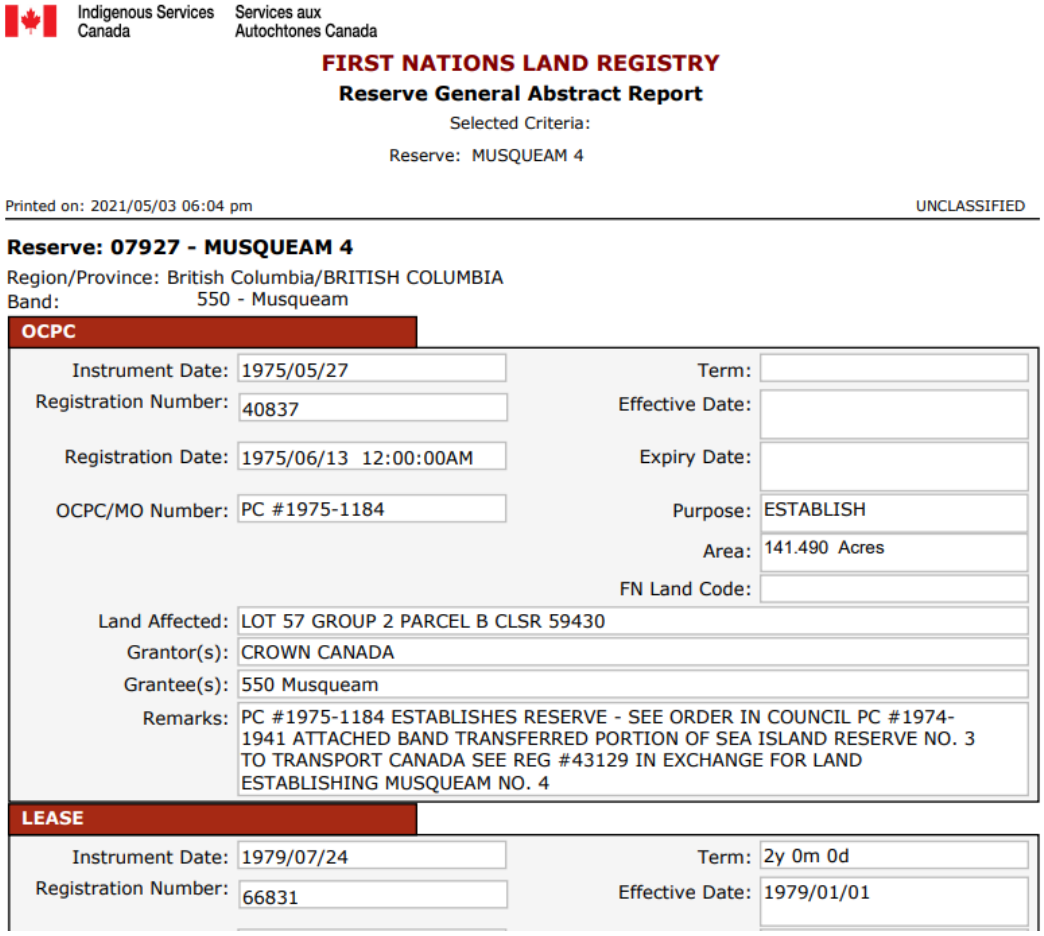
7.5.4 Reserve General Abstract Report

The Reserve General Abstract Report consists of instruments relating to Band/FN Land as a whole, e.g., land code, establishment of reserves, orders in council (OICs), additions to reserves (ATRs), right-of-ways (ROWs) for public use, additions or changes to reserve boundaries. Example shown below is for the Musqueam First Nation reserve no. 4.



Indigenous Services Canada / Services aux Autochtones Canada

FIRST NATIONS LAND REGISTRY

Reserve General Abstract Report

Selected Criteria:

Reserve: MUSQUEAM 4

Printed on: 2021/05/03 06:04 pm — UNCLASSIFIED

Reserve: 07927 - MUSQUEAM 4

Region/Province: British Columbia/BRITISH COLUMBIA
Band: 550 - Musqueam

OCPC

Instrument Date:	1975/05/27	Term:	
Registration Number:	40837	Effective Date:	
Registration Date:	1975/06/13 12:00:00AM	Expiry Date:	
OCPC/MO Number:	PC #1975-1184	Purpose:	ESTABLISH
		Area:	141.490 Acres
		FN Land Code:	
Land Affected:	LOT 57 GROUP 2 PARCEL B CLSR 59430		
Grantor(s):	CROWN CANADA		
Grantee(s):	550 Musqueam		
Remarks:	PC #1975-1184 ESTABLISHES RESERVE - SEE ORDER IN COUNCIL PC #1974-1941 ATTACHED BAND TRANSFERRED PORTION OF SEA ISLAND RESERVE NO. 3 TO TRANSPORT CANADA SEE REG #43129 IN EXCHANGE FOR LAND ESTABLISHING MUSQUEAM NO. 4		

LEASE

Instrument Date:	1979/07/24	Term:	2y 0m 0d
Registration Number:	66831	Effective Date:	1979/01/01

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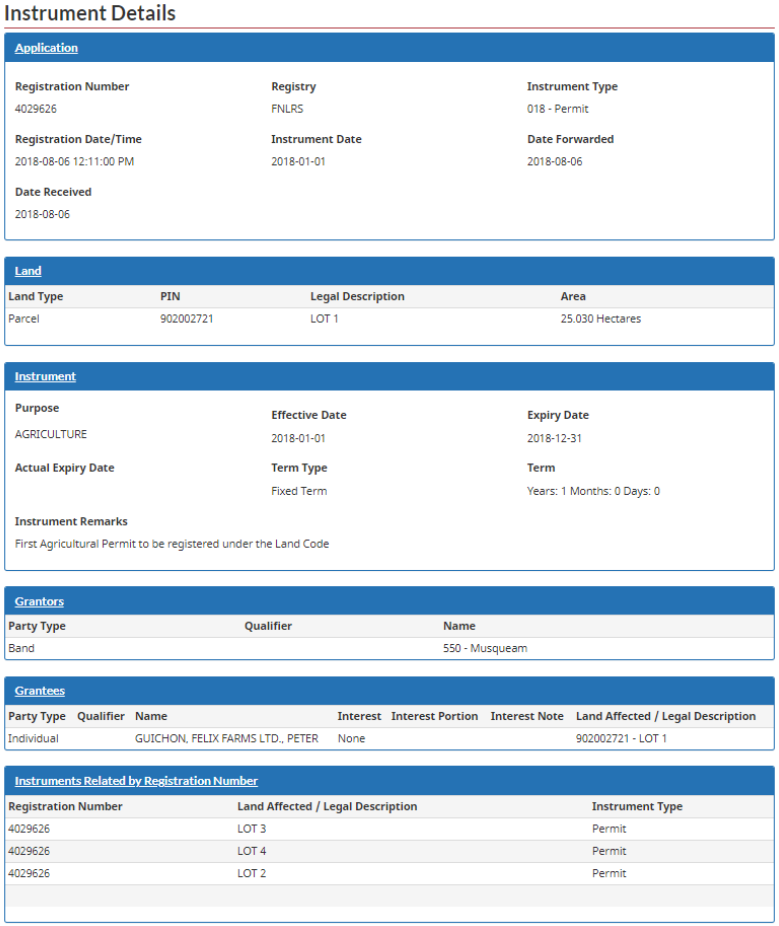
7.5.5 Instrument Details – Search Product

The Instrument search returns a web page listing the details of a registered instrument with respect a particular parcel or reserve, although the instrument may be registered against more than one. The details include: application, land, fundamental instrument terms, grantors, grantees, other lands affected, associated instruments. Example shown below is from the Musqueam First Nation.



Instrument Details

Application

Registration Number	Registry	Instrument Type
4029626	FNLRS	018 - Permit
Registration Date/Time	**Instrument Date**	**Date Forwarded**
2018-08-06 12:11:00 PM	2018-01-01	2018-08-06
Date Received		
2018-08-06		

Land

Land Type	PIN	Legal Description	Area
Parcel	902002721	LOT 1	25.030 Hectares

Instrument

Purpose	Effective Date	Expiry Date
AGRICULTURE	2018-01-01	2018-12-31
Actual Expiry Date	**Term Type**	**Term**
	Fixed Term	Years: 1 Months: 0 Days: 0

Instrument Remarks

First Agricultural Permit to be registered under the Land Code

Grantors

Party Type	Qualifier	Name
Band		550 - Musqueam

Grantees

Party Type	Qualifier	Name	Interest	Interest Portion	Interest Note	Land Affected / Legal Description
Individual		GUICHON, FELIX FARMS LTD., PETER	None			902002721 - LOT 1

Instruments Related by Registration Number

Registration Number	Land Affected / Legal Description	Instrument Type
4029626	LOT 3	Permit
4029626	LOT 4	Permit
4029626	LOT 2	Permit

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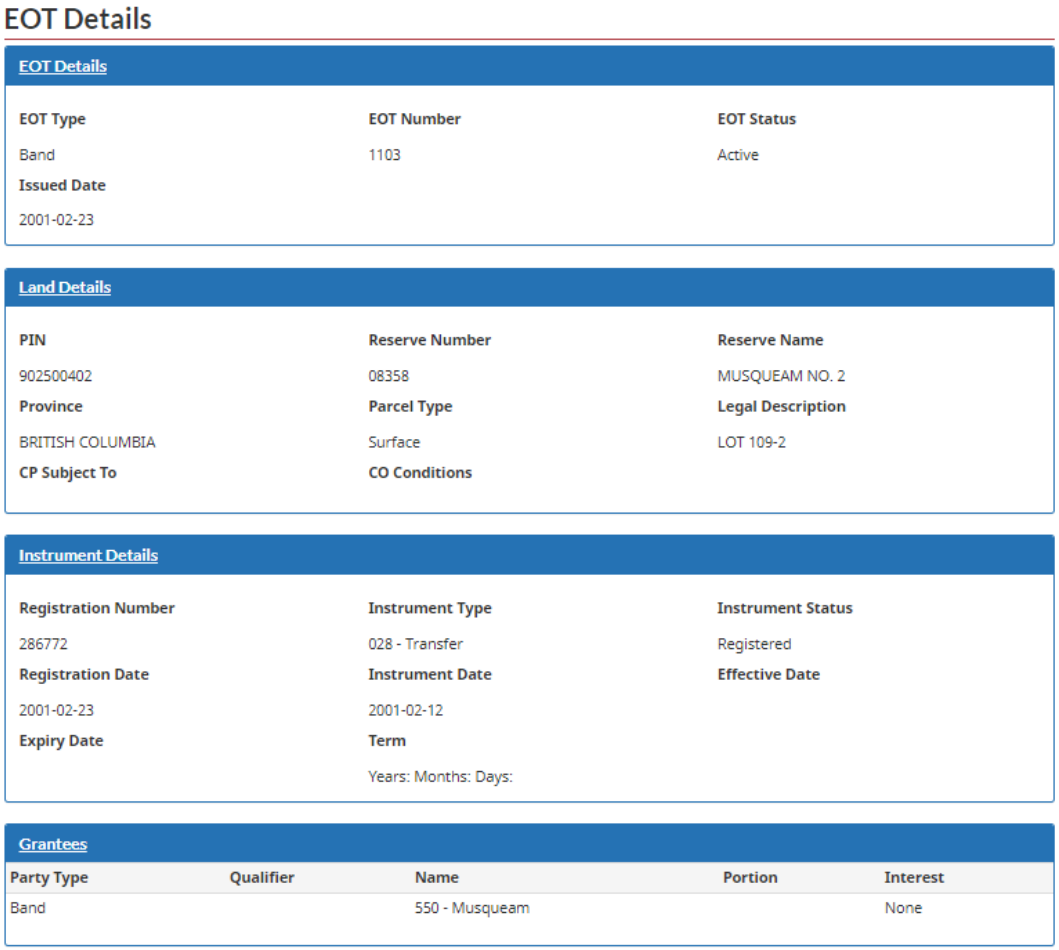
7.5.6 Evidence of Title Details – Search Product

The Evidence of Title search returns a web page that identifies the EOT and the land, instrument and grantees it pertains to. Example shown below is from the Musqueam First Nation.



EOT Details

EOT Details

EOT Type	EOT Number	EOT Status
Band	1103	Active
Issued Date		
2001-02-23		

Land Details

PIN	Reserve Number	Reserve Name
902500402	08358	MUSQUEAM NO. 2
Province	**Parcel Type**	**Legal Description**
BRITISH COLUMBIA	Surface	LOT 109-2
CP Subject To	**CO Conditions**	

Instrument Details

Registration Number	Instrument Type	Instrument Status
286772	028 - Transfer	Registered
Registration Date	**Instrument Date**	**Effective Date**
2001-02-23	2001-02-12	
Expiry Date	**Term**	
	Years: Months: Days:	

Grantees

Party Type	Qualifier	Name	Portion	Interest
Band		550 - Musqueam		None

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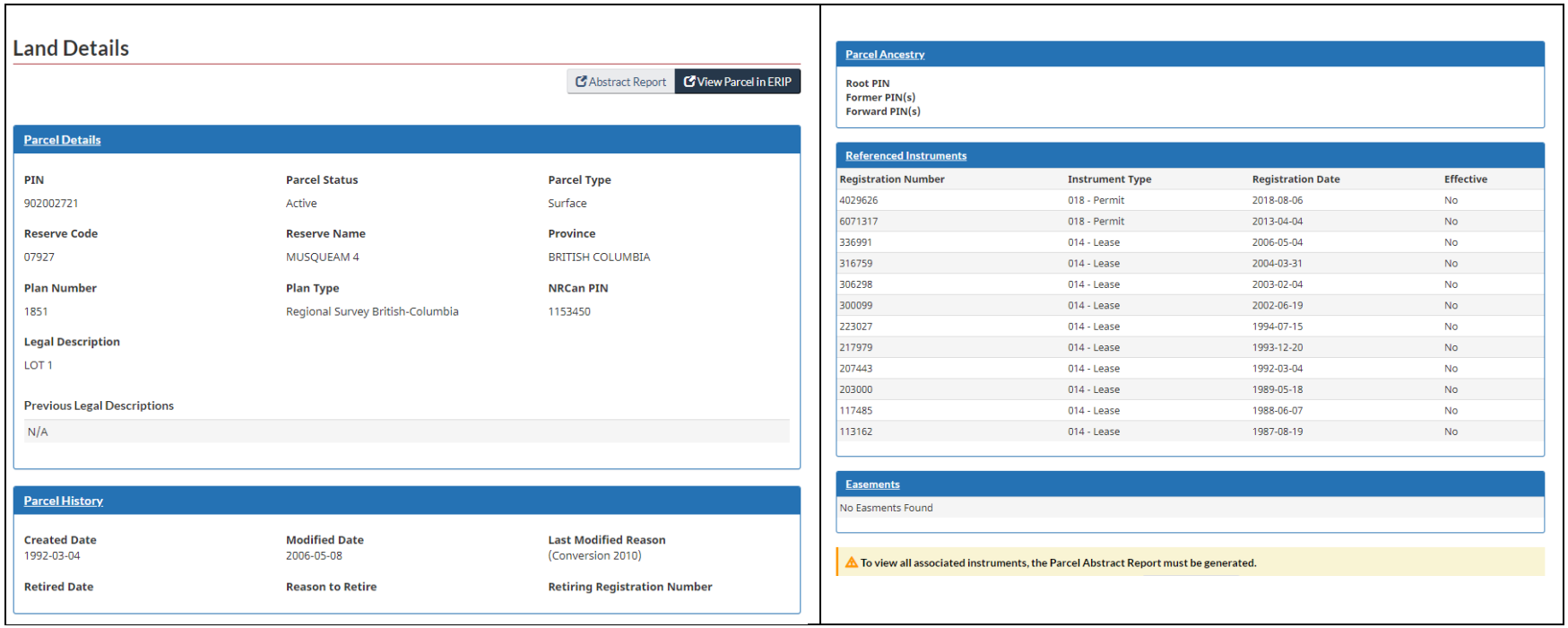
7.5.7 Land Details – Search Product

The Land search returns a web page that presents a more succinct view than what is in the Parcel Abstract Report. Notably, the NRCan PIN is shown in the Land Details product but does not appear in the Parcel Abstract Report. Instruments are listed but most details are not included, e.g., remarks, grantor, grantee. "Effective" column indicates if the instrument has expired; however, does not indicate if an instrument has been relinquished or cancelled, e.g., a mortgage and its discharge will be listed as in effect. Example shown below is from the Musqueam First Nation. Not all associated Instruments are listed: the Parcel Abstract Report provides the full list.



Land Details

Abstract Report | View Parcel in ERIP

Parcel Details

PIN	Parcel Status	Parcel Type
902002721	Active	Surface
Reserve Code	**Reserve Name**	**Province**
07927	MUSQUEAM 4	BRITISH COLUMBIA
Plan Number	**Plan Type**	**NRCan PIN**
1851	Regional Survey British-Columbia	1153450

Legal Description
LOT 1

Previous Legal Descriptions
N/A

Parcel History

Created Date	Modified Date	Last Modified Reason
1992-03-04	2006-05-08	(Conversion 2010)
Retired Date	**Reason to Retire**	**Retiring Registration Number**

Parcel Ancestry

Root PIN
Former PIN(s)
Forward PIN(s)

Referenced Instruments

Registration Number	Instrument Type	Registration Date	Effective
4029626	018 - Permit	2018-08-06	No
6071317	018 - Permit	2013-04-04	No
336991	014 - Lease	2006-05-04	No
316759	014 - Lease	2004-03-31	No
306298	014 - Lease	2003-02-04	No
300099	014 - Lease	2002-06-19	No
223027	014 - Lease	1994-07-15	No
217979	014 - Lease	1993-12-20	No
207443	014 - Lease	1992-03-04	No
203000	014 - Lease	1989-05-18	No
117485	014 - Lease	1988-06-07	No
113162	014 - Lease	1987-08-19	No

Easements

No Easments Found

⚠ To view all associated instruments, the Parcel Abstract Report must be generated.

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7.5.8 Reserve Details – Search Product

Reserve Details duplicates the information presented in the Band-Reserve Report with the addition of three more fields: 53/60, External Registry, and MRP Law. Example shown below is from the Musqueam First Nation.

Reserve Details

07927 - MUSQUEAM 4

Reserve Code	Registry	Reserve Type	Creation Date
07927	FNLRS	Reserve	

English Short Name	French Short Name
MUSQUEAM 4	MUSQUEAM NO. 4

English Legal Name	French Legal Name
MUSQUEAM NO. 4	MUSQUEAM NO 4

English Legal Name History	French Legal Name History
MUSQUEAM NO. 4	MUSQUEAM NO. 4
MUSQUEAM NO. 4	MUSQUEAM NO. 4
MUSQUEAM NO. 4	MUSQUEAM NO 4

Unit of Measure	Surface Area	Reserve Location	
Hectares	57.3	LOT 27, GROUP 2, PARCEL B	
Latitude	**Longitude**	**Region**	**Province**
490400	1230730	British Columbia	BRITISH COLUMBIA
53/60	**External Registry**	**MRP Law**	
Yes	No	No	

Band Number	Band Name
550	Musqueam

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7.5.9 Summary Observations

1. **Duplication across some products**: Two pairs of products are almost identical:
   a. Band-Reserve Report and the Reserve Details;
   b. Instrument Report and the Instrument Details.

   The Land Details high level summary of Instruments distinguishes it from the more detailed and lengthy Parcel Abstract Report. Interestingly, there is no search product equivalent to the Reserve General Abstract Report. The Reports are all PDF Format, with a consistent and distinct presentation styling. The search products are all web (html) format, with their own consistent and distinct styling.
2. **No product shows just the active interests on land**: All three products that present interests on land – Reserve General Abstract Report, Parcel Abstract Report and Land Details search product – show both active and historic interests. There is no way to get a view of just the active interests, nor total of surveyed or registered parcels per reserve.
3. **Certifications are not available electronically**: The FN Land Registry is only able to provide certified products on paper.
4. **Export formats for products is limited**: Public web site export format is for Microsoft Excel format circa 1997 and is not readily consumable by other systems without manipulation.
5. **Products do not join spatial and textual land register data together**.
6. **Products do not meet the needs of users**: Information such as "state of property", "land status" and "historical activities on land" are not available and/or streamlined in the current products.

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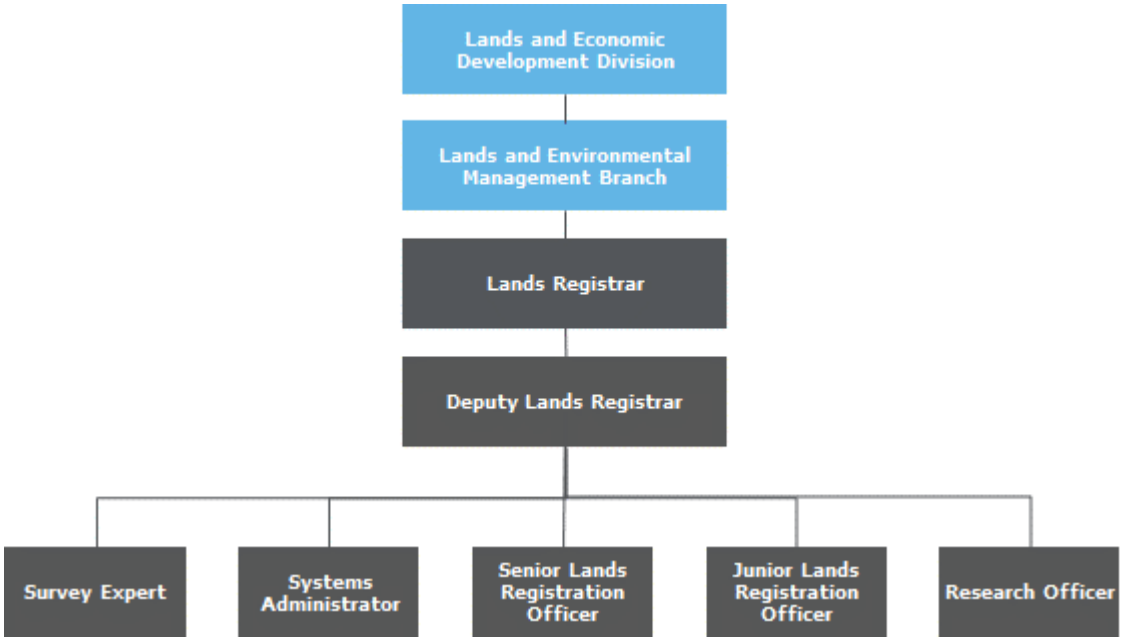
7.6 ISC Organizational Structure

ISC's management and administration of the FLNRS follows a typical land authority structure, seen in the diagram below. Registry staff and supporting functions are located in Ottawa. Registry staff work alongside regional offices across Canada, however, those regional offices do not support work related to the FNLR.



7.7 ISC Staff Roles

The Lands Registry team within the Lands and Environmental Management Branch has seven staff members spending significant time on the FNLRS – although not all are full time. There are five distinct roles on the ISC land registry team:

Lands Registrar:

- Administers the Land Registry Office

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- Provides strategic leadership, administration, management, and oversight of the Lands Registry
- Ensures the integrity and data of the Land Registry System
- Interprets and explains regulations, policies and procedures to internal staff and external clients
- Engages with stakeholder/partners to identify opportunities to enhance the registry system so user needs are met
- Issues and monitors Guidelines and Procedures respecting the administration and operation of the Land Registry System

Deputy Lands Registrar:

- Provides hands-on leadership and direction on the implementation of strategic initiatives of the Registry
- Mentors all direct reports and is their primary resource for all operational requirements
- Schedules and directly supervises training of Registration Officers, First Nations, etc.
- Provides information on registration standards and procedures to legal professionals, land administrators and general public
- Ensures efficient document flow and effective provision of services including timely review and registration of documents completed in accordance with service standards

Registration Officer (Senior and Junior):

- Conducts title searches in the First Nations Land Registry System (Parcel Abstract & Reserve General)
- Provides information, liaison services and direction to First Nations, legal professionals and general public on document requirements and operational issues
- Prepares and certifies registrations (Registrar's Certificate)
- Assists with delivering training to First Nations, Regional Staff, and HQ Staff
- Prepares training packages
- Reviews documents submitted for registration to ensure compliance (i.e., survey, signatures, affidavits, access, etc.)

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- Registers documents received from First Nations in their many phases from registration to scanning, redacting, and uploading to the registry system

Research Officer

- Researches land titles (i.e., parcel boundaries, reserve boundaries, roads and/or railway easements)
- Responds to Land Registry enquiries (ILRS & FNLRS)
- Supports Operational Policies (ILRS)
- Provides technical support for registry systems and E-Rip (ILRS & FNLRS)
- Trains students and manages their workload
- Reviews and responds to Access to Information Requests (ATIP)
- Liaises with National Archives Canada on the retrieval of files

Survey Expert

- ISC HQ has a survey expert on staff (a Canada Land Surveyor, on loan from SGB) to assist with survey related concerns.
- Determines appropriate legal land descriptions for new parcels based on survey plans.

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7.8 FNLRS Delivery Cost Estimate

Background in FNLR Costs

ISC's costs for delivering and maintaining FLNRS functions are challenging to calculate, as these are combined with the ISC's administrative costs for the ILRS and SGFNLRS – as noted above, ISC generally administers this as one system with three registries.

Costs have been estimated based on FTE allocation within the Lands and Environmental Management Branch toward supporting FLNRS functions. Most Branch members split their time between FLNRS and the other two registry systems, while the two Lands Registration Officer roles and one System Administrator role are fully allocated toward FLNRS.

Estimating FLNRS Costs

To estimate the salary of Branch staff, data on the average wages for federal government employees was drawn from Statistics Canada's Survey of Employment, Payroll and Hours, with the average annual wage per employee being $84,928 (exclusive of pensions and other benefits) as of January 2021.

This amount was then applied to the proportion of FTE time per Branch role devoted to supporting the FLNRS (with this data gathered through consultation with Branch members). To estimate additional costs per employee, 50% of the annual wage per FTE was also added to the salary cost of FTE time per employee on the FNLRS. These additional costs include:

- Federal government pension contribution/employee benefits
- Equipment and supplies (computers, phones, stationary, furniture, copiers, etc)
- Plotter (to print maps)
- IT support
- Real estate (office space owned/rented, utilities, physical security, parking, cleaning)
- Insurance
- Desktop Software
- Membership dues (professional affiliations)
- Meals/travel
- Employee education/training
- Subscriptions

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- Legal fees
- Facilities and equipment maintenance and repairs
- Contracts/vendor management
- Administrative support
- Human resource support
- Payroll, financial reporting, and accounting

Most of these costs currently incurred by ISC are shared across the Ministry or the overall Government of Canada – and cannot be isolated purely for those that support the FNLRS.

Overall, the estimate of the labour component for delivery of FNLR by ISC costs about **$550,000** per year and is broken out in detail in the table below:

Role	% of time on FLNRS	Annual Cost
Lands Registrar	33%	$42,039
Deputy Lands Registrar	33%	$42,039
Senior Lands Registration Officer	100%	$127,392
Junior Lands Registration Officer	100%	$127,392
Research Officer	33%	$42,039
Systems Administrator	100%	$127,392
Survey Expert	33%	$42,039
Totals	**4.3 FTE**	**$550,333**

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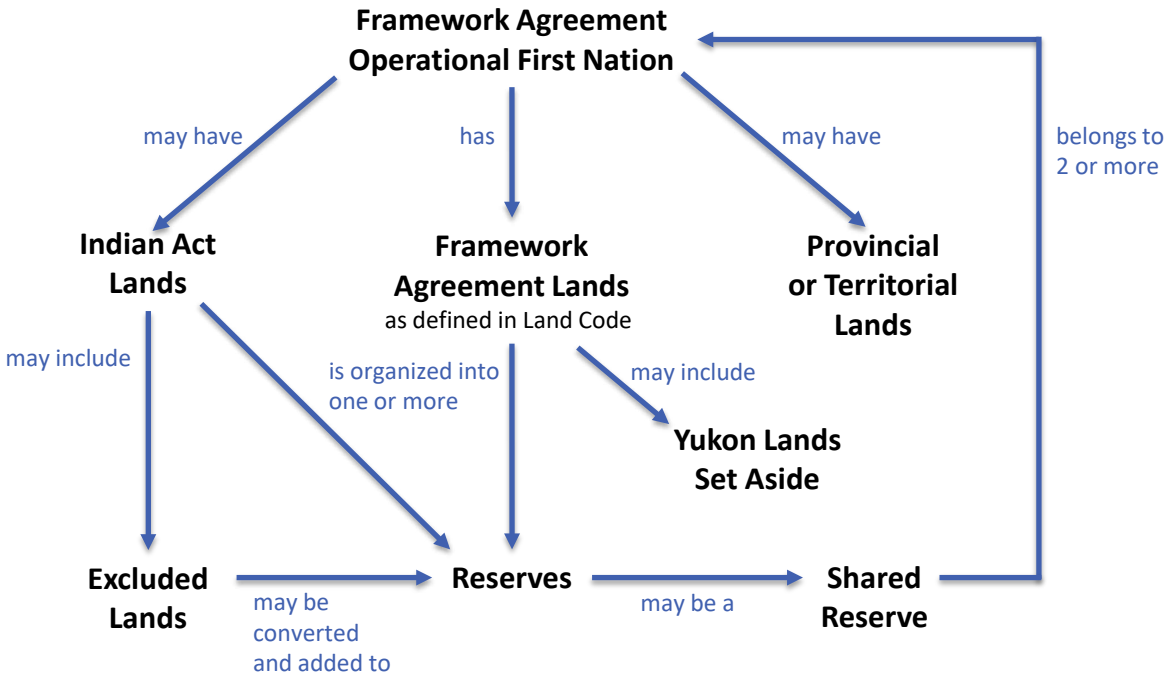
7.9 Land Domain Concept Model

Land concepts are presented below in the following views:

1. First Nation's Land
2. Delineations Within Reserve Land
3. Land Register Concepts

7.9.1 First Nation's Land

A First Nation that is operational under the Framework Agreement may have several different types of land holdings, as shown below.



An **Operational First Nation**'s ratified **Land Code** identifies the **Framework Agreement Lands** they hold as well as the First Nation's rights and powers over its land.

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The land is organized into one or more **Reserves**, i.e., land reserved for the First Nation (Framework Agreement c. 2.1). Reserves are typically a single body of contiguous land, but may be made up of non-contiguous land, e.g., islands. The Indian Act establishes the unique qualities of Reserve lands (INAC Lands Management Manual, December 2002, s 2.3):

a) All transactions involving reserve land must be approved by the Minister or the Governor in Council.

b) Reserve lands cannot be seized by legal process (s.29 of the Indian Act).

c) Reserve lands cannot be mortgaged, pledged, or charged to a non-Indian (s.89 of the Indian Act). However, leasehold interests on reserve lands may be mortgaged.

d) Taxation of reserve lands is restricted. First Nation interests in reserve or surrendered lands cannot be taxed unless held under a lease or permit (s.87 of the Indian Act).

The First Nations Land Management Act (FNLMA) annuls item a) above, but otherwise the remaining sections of the Indian Act referenced above are still in force under the FNLMA (see s. 38, and notably 38 (3) which upholds that leasehold interests are "subject to charge, pledge, mortgage, attachment, levy, seizure, distress and execution").

Three Yukon First Nations have **Lands Set Aside**, a designation which grants use of the land by the First Nation but the lands "do not become a reserve within the meaning of the Indian Act" (Framework Agreement c. 4.2.2), hence the distinction. Lands Set Aside are "eligible to be managed by that First Nation under a land code as First Nation land" (Framework Agreement c. 2.1); however, "the provisions of this Agreement dealing with exclusions of land from the application of a land code apply to Lands Set Aside with such changes or modifications as may be required". In other words, Lands Set Aside do not automatically come under Land Code, but may be brought under a Land Code with possible modifications. Lands Set Aside may be more difficult to manage under Land Code, as they are disjointed smaller parcels of land (e.g., along roadsides) as opposed to one single contiguous body of land. Lands Set Aside are being tracked in the ILRS (none have yet to transfer to the under the Framework Agreement[5]), but unfortunately are not distinguished, i.e., they are part of a reserve – which is incorrect legally and misleading otherwise.

An Operational First Nation may at the same time have land holdings under other statutes/regimes, i.e., **Indian Act Lands** or **Provincial or Territorial Lands** that are registered in the private lands registry of that jurisdiction. This is in fact, quite common.

Excluded Lands are lands that remain under the Indian Act, as established in the Individual Agreement with the First Nation in the process of establishing the First Nation's Land Code. The Framework Agreement (c. 4.1.4 to 4.1.6) defines reasons for why land may

[5] Laird First Nation in the Yukon is just starting to work on a self-government agreement with Canada.

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or may not be excluded. Subsequently, the excluded land may be relinquished by the Crown to the First Nation, whereupon the First Nation is to amend their Land Code to include the excluded portion (Framework Agreement c. 4.1.7). Excluded Lands are being tracked in the ILRS, but unfortunately they are not distinguished, and do get put into the FNLRS when a First Nation becomes operational under the Framework Agreement.

A **Shared Reserve** (a.k.a. Joint Reserve) is where two or more First Nations have overlapping interests in a Reserve[6]. The Reserve as a whole is shared. There is no partial sharing of a Reserve. No Shared Reserves exist as of year 2021 under Land Code; however, should this happen then all FNs will be Framework Agreement bands and the Shared Reserve will be administered through a single party under a single Land Code. The ILRS/FNLRS/SGFNLRS has no specific provisions for distinguishing Shared Reserves.

[6] For example, there exists under the Indian Act a Shared Reserve that this shared by 13 First Nations. Six Nations (of the Grand River) probably have the largest Shared Reserve: 12 to 15 First Nations, 25,000 – 30,000 members.

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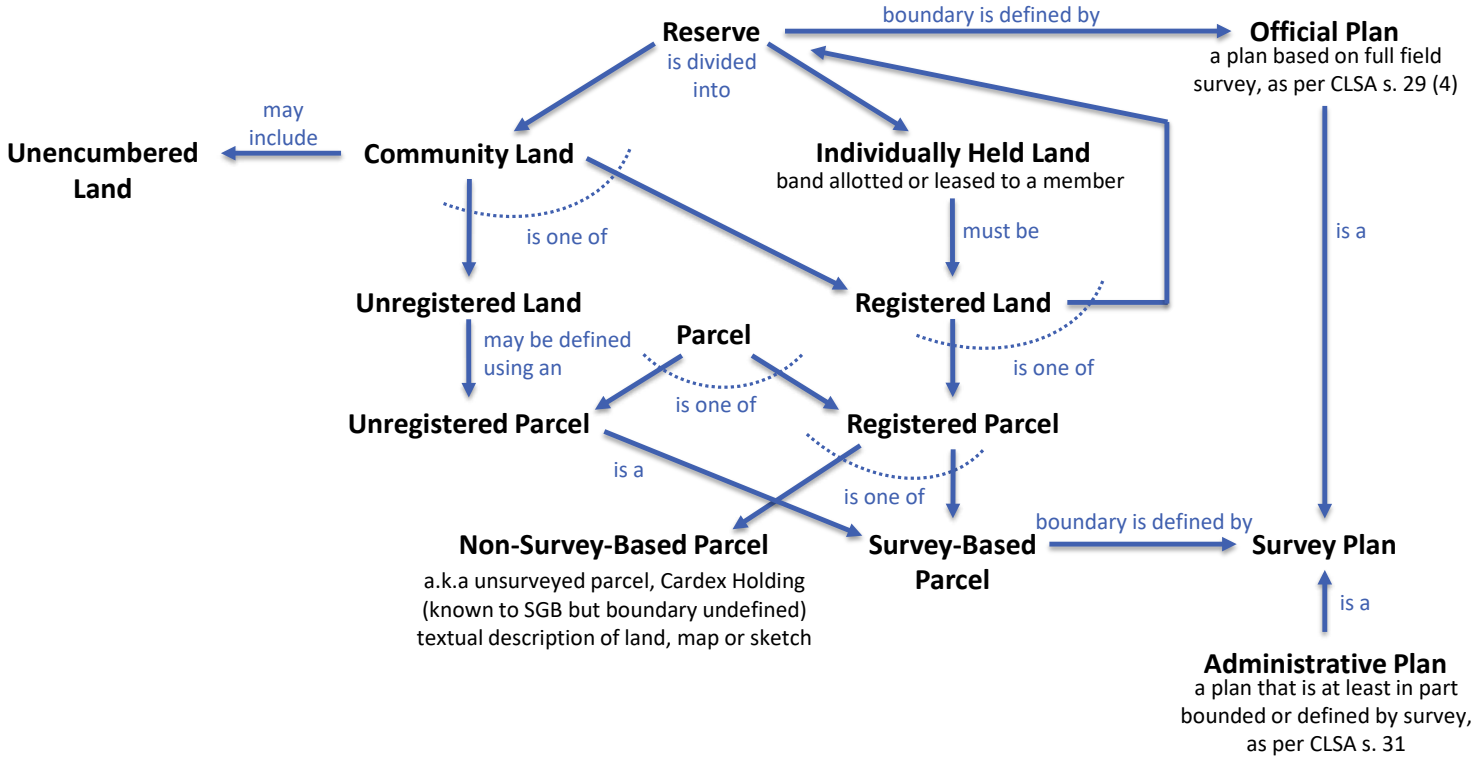
7.9.2 Delineations Within Reserve Land

The dividing up of Reserve land can be categorized in several ways:

1. Community versus individually held land.
2. Unregistered versus registered land.
3. Non-survey-based parcels versus survey-based parcels.

The interplay of these concepts is shown below.



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A **Reserve** (see full definition in section 7.9.1) consists of Community Land and Individually Held Land. This notion is affirmed in the INAC Lands Management Manual (December 2002) where it distinguishes between a "collective First Nation interest" and the "interest of individual First Nation members" (s. 2.4).

Community Land is any "First Nation Land in which all Members have a common interest" (LABRC Land Code Model, May 15, 2019). The First Nations Land Registry Regulations (2007) does not use the term Community Land, nor directly acknowledge the concept. In part because the concerns of the First Nations Land Registry are documents that affect the reserve as a whole (s. 22 (2)) or documents that affect a particular parcel (s. 22 (3)). However, Community Land, may at the discretion of the First Nation be recorded in the First Nations Land Register (at either the Reserve or Parcel level), becoming Registered Land.

The First Nations Land Registry Regulations do refer to **Unencumbered Land** (s. 19) [7] but only in one place. This term does not appear otherwise in the Framework Agreement, First Nations Land Management Act, Indian Act, nor the Indian Lands Registration Manual. However, there is one reference made in the INAC Lands Management Manual where it defines unencumbered lands as "First Nation lands, free of any lawful possession" (s. 4.1 c iii). The concept does not appear to be synonymous with Community Land, as Community Land can be registered and encumbered with interests. As well, Unencumbered Land does not appear to be synonymous with the notion of Unregistered Land, as latter may in some cases be based on Unregistered Parcels that are encumbered through agreements not recorded in the First Nations Land Register.

Community Land may be Registered Land or Unregistered Land. **Unregistered Land** is most likely not surveyed; however, it is conceivable (but less common) that unregistered land – for community purposes – may be surveyed, and was just never registered. Otherwise, if the extents of unsurveyed Community Land are at all defined, it is in essence a **Non-Survey-Based Parcel** that is defined either by a textual description or through some other mapping process (e.g., measured by a method other than a proper survey, or just a sketch not based on measurements at all).

A **Textual Description** is defined by the First Nations Land Registry Regulations (s. 1) as "a metes and bounds description of first nation lands or any other description of first nation lands that does not refer exclusively to one or more complete parcels on a registration plan or official plan". The SGB – ISC Interdepartmental Letter of Agreement defines a textual description as "a word description of land prepared under the guidelines of the Indian Lands Registry Manual or the First Nations Land Registry System (FNLRS) User Guide. Textual Descriptions are prepared without survey instructions, are not based upon a field survey, and are not recorded in the CLSR. Textual Descriptions are suitable only for the description of limited and short-term interests."

[7] S. 19 states "The Registrar shall not register or record a document that contains a textual description unless the document grants an interest — or, in Quebec, a right — in unencumbered land, or a licence to a utility company in respect of unencumbered land, for the purpose of providing service to the residents of a reserve."

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With respect to textual descriptions not being recorded in the CLSR, it appears that an exception has been made for Cardex Holdings as the SGB has created parcels for these (issuing NRCan PINs) but have labelled them as "unresolved". The Indian Lands Registration Manual (Appendix C - Glossary) defines **Cardex Holdings** as "a historical individual interest in reserve land created by Band Council Resolution and approved by the Minister under Section 20(1) of the Indian Act. The legal land descriptions associated with Cardex Holdings were vague and often inaccurate. The interest of the holder of a Cardex holding is considered lawful possession under the Indian Act, however, no evidence of title is issued (NETI) until the land is surveyed." Cardex holdings were identified during the "Reconciliation Project" jointly run by ISC and SGB to resolve non-survey-based parcels, i.e., parcels without any survey plans/documents. The Cardex Holdings are mostly in BC. ISC Deputy Registrar reports that there are 464 such parcels in the ILRS and 57 in the FNLRS. There are no other unsurveyed parcels outside of the Cardex Holdings.

A **Surveyed-Based Parcel** is a parcel based on either an Official Plan or an Administrative Plan. An **Official Plan** is "a graphical description of boundaries of land prepared from field notes of a survey confirmed under section 29 of the Canada Lands Surveys Act" (FN Land Registry Regulations s. 1), i.e., it is based solely on survey field measurements. "As a general rule, Official Plans will be used for the survey of jurisdictional boundaries of Reserve Lands or parcels which will create a jurisdictional boundary once a land transaction has been completed" (SGB-ISC Surveying Interdepartmental Letter of Agreement 2015, s. 1).

An **Administrative Plan** "refers to a survey plan which is approved pursuant to Section 31 of the CLSA. As a general rule, Administrative Plans will be used for all new internal subdivisions or other surveys related to internal interests in Reserve Lands" (SGB-ISC Surveying Interdepartmental Letter of Agreement 2015, s. 1). There are several different forms of Administrative Plans, as per the **Survey Plan Types** defined in the Interdepartmental Agreement (s. 7), from which the following is verbatim:

> **"Plan of Survey of..."** is a plan prepared from a full field survey with official survey monuments placed to reference all corners of the parcels or boundary.
>
> **"Compiled Plan of..."** is a plan prepared or compiled entirely from information found on plans and field notes recorded in the CLSR or provincial registry. A Compiled Plan may be used to create a new parcel where all the corners of the new parcel have been previously defined by surveys; it may be used to describe a Remainder Parcel (see Section 4.7); or it may be used to consolidate existing surveyed parcels.
>
> **"Explanatory Plan of..."** is graphical description of a parcel, prepared without a full field survey of the boundaries. Parcel boundaries are defined by, or in relation to, existing boundaries or monuments shown on plans and field notes recorded in the CLSR. Explanatory Plans are suitable for short-term Exclusive Use Parcels or for Non-Exclusive Use Parcels, or for a Band Vote for Designation.
>
> **"Plan of Building Unit(s)..."** is a plan prepared to show separate units within a constructed building.

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"Plan of Air Space Parcel(s)..." is a plan prepared to show parcels with an upper and lower vertical limit and may be used for exclusive use interests and non-exclusive use interests.

An Administrative Plan may take any of the above forms. An Official Plan must be a Plan of Survey. Note that the Interdepartmental Agreement (2015) was developed for and applies to land managed under the Indian Act. A new agreement, SGB – LABRC Agreement for Operational First Nations, is in the works and will introduce some changes – for one, a new survey product (TBD).

A **Registration Plan** is a type of Administrative Plan (Indian Lands Registration Manual, s. 10.2.2). It is defined as a "graphical description of the boundaries of land shown on the plan made by the Surveyor General under section 31 of the *Canada Lands Surveys Act*" (First Nation Land Registry Regulations, s. 1). Registration Plans may be "No Survey" (like an Explanatory Plan), "Partial Survey" or "Full Survey" (Canada Lands Survey Manual – General Instructions for Surveys, e-Edition). Regional Survey (RS) Plans are a predecessor to Registration Plans, prior to November 1, 2005. Some of these older plans were not actually based on survey.

Chart A (s. 10) of the Interdepartmental Agreements defines the minimum land description (i.e., Survey Plan Type or in some cases a textual description) required for a particular kind of land transaction. Textual Descriptions are acceptable for the following registerable interests:

1. Lease of building unit for 10 years or less – exclusive use.
2. Utility Permit over unencumbered lands – non-exclusive use.
3. Access Agreement (Access Right over Allotted or Leased lands – non-exclusive use.

The First Nations Land Register primarily concerns **Individually Held Land**, which is either lawfully possessed by a First Nation member through allotment (whereby the member may be referred to as the "locatee"), or is leased or licenced (FNLMA s. 6 (1)(b)).

The First Nations Land Register is established through the Framework Agreement (s. 51) and the FNLMA (s. 25 (1)). The FNLMA in turn grants the Governor in Council the authority to "make regulations respecting the administration of the First Nation Land Register" (s. 25 (3)). The First Nations Land Registry Regulations state that the Register shall include abstracts for each First Nation reserve and parcel (s. 8), i.e., **Registered Land** consists of both the reserves and the registered parcels within them, as there may be portions of a reserve that do not contain registered parcels.

The First Nations Land Registry Regulations state that the Registrar can only create a **Parcel** if "the parcel abstract refers exclusively to a lot described on an official plan or registration plan" (s. 9). The use of textual descriptions for registerable interests (see above) would appear to contravene this regulation, unless registration plans are allowed that are not based on survey. Given that Registration Plans are Canada Land Surveys Act s. 31 plans, gives the Surveyor General full discretion and so they could allow graphical representations based on textual descriptions.

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Plans not based on survey (i.e., plan's graphical description based solely on a textual description) have been "grandfathered in", exempted from changes in regulations. As a result, some plans do not reflect what is actually on the ground. SGB - ISC Interdepartmental Agreement (2015) s. 4.6d permits a parcel to be transacted even though plan on which it is based no longer meets current requirements. This means that survey plan requirements are not being applied equally across the board and inaccurate plans are not being upgraded.

It is worth noting that the notion of **Traditional Lands** does not appear in the diagram above. This term does not appear in any of the statutes or regulations. The INAC Lands Management Manual states "some First Nations recognize traditional or custom holdings by individuals, but these holdings are not sanctioned by the Indian Act and are not administered by the department." (s. 2.4 (b)). Some First Nations are believed to be protecting their Traditional Lands (whether community land or individually held lands) by registering them but this is not believed to be a consistent or widespread practice.

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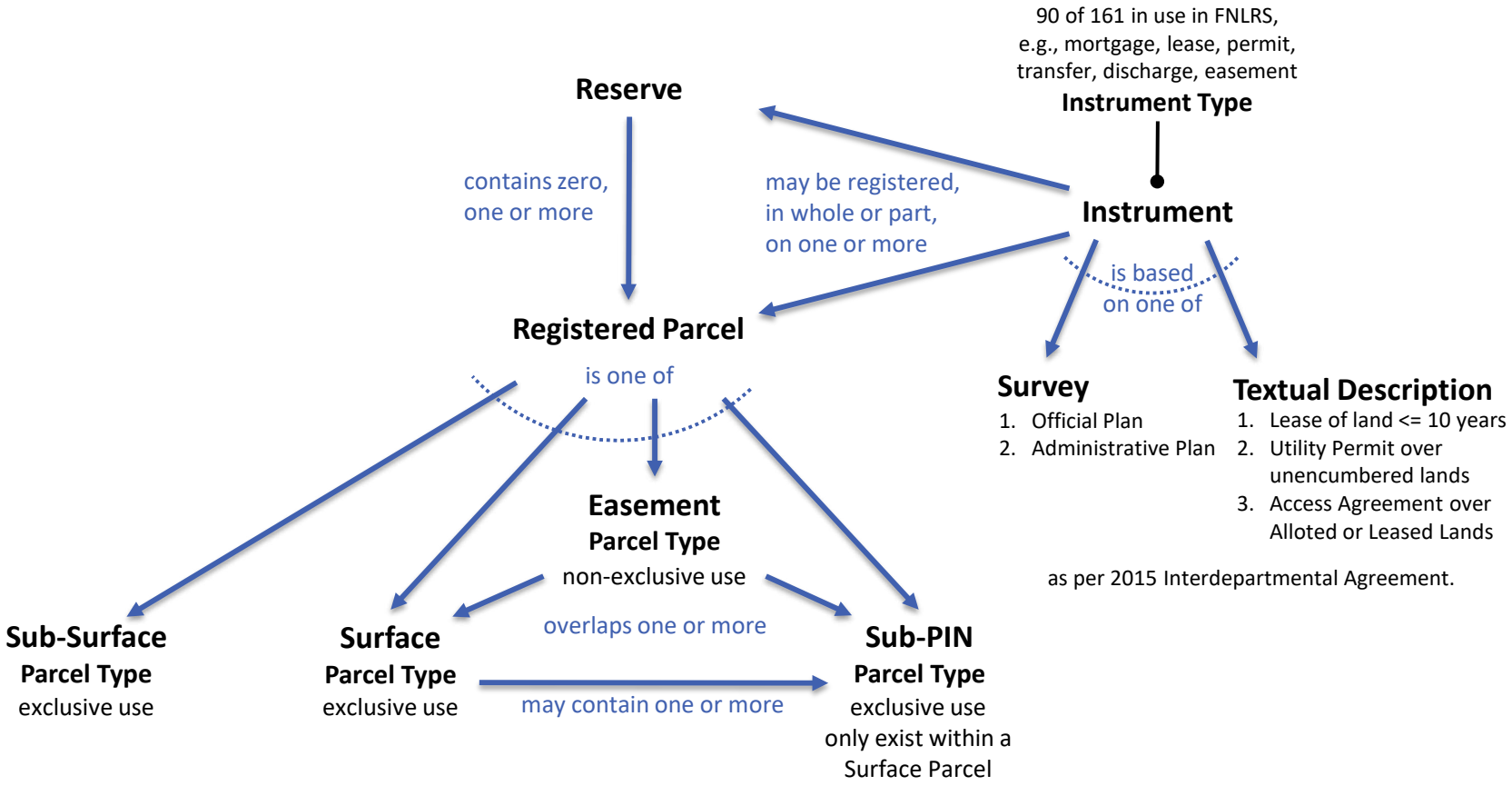
7.9.3 Land Register Concepts

The fundamental organization of the Land Register is shown below.



A **Reserve** (see previous definitions in section 7.9.1 and 7.9.2) establishes the boundary and geospatial extent within which registered parcels may be located.

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An **Instrument** is "a legal document that gives effect to the transaction, and describes the parcel of land, the parties to the transaction, and any legal details and specifications required" (Indian Lands Registration Manual, chapter 2). The LABRC Land Code Model states:

> 26.3 A copy of the following instruments shall be deposited in the First Nation Lands Register:
>
> (a) any grant of an Interest or Licence in Name First Nation Land;
>
> (b) any transfer or assignment of an Interest or Licence in Name First Nation Land;
>
> (c) every Land use plan, subdivision plan or resource use plan;
>
> (d) every Land law; and
>
> (e) this Land Code and any amendment to this Land Code.

The terms Interest and Licence are defined as follows (s. 1):

> **Interest**: means any Interest, right or estate of any nature in or to that Land, including a certificate of possession, certificate of entitlement, lease, easement, right of way, servitude, or profit à prendre, but does not include title to that Land.
>
> **Licence**: means any right of use or occupation of that Land, other than an Interest in the Land.

A licence grants non-exclusive use of land for a limited period of time, e.g., a permit. An interest may grant either exclusive right to land for an indefinite period of time (e.g., an allotment) or limited period of time (e.g., a lease) or may grant a non-exclusive right to land, e.g., an easement.

Although not mentioned in the Land Code Model, an Instrument may also be used to modify, cancel, discharge, or relinquish an interest in full or in part.

Each Instrument in the Land Register is categorized by **Instrument Type**. Currently, 90 of 161 enumerated Instrument Types have been used in the FNLRS in the last ten years; similarly, 49 of 162 in the SGFNLRS.

Instruments may be registered against a reserve and/or one or more registered parcels. Although parcels must be based on **survey** (excluding historical exceptions), some instruments/interests registered against a parcel or reserve may include **textual descriptions** (as explained in section 7.9.2) that may define an extent of land for which there is no surveyed parcel. For example, a

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Band Council Resolution (BCR) Instrument Type can be used to define an interest on the Reserve General affecting a portion of land that is not defined using a Parcel, e.g., "Portion of Snake Island", for a BCR for electric service on the Chippewas Of Georgina Island First Nation reserve (reserve 06198; registration number 4928-149, registered in 1953).

Instruments concerning First Nation land code, amendments, land laws and bylaws if registered (it doesn't appear that all operational First Nations have adopted this practice) are registered against each Reserve, i.e., there isn't a single overarching spot to register First Nation instruments that apply to all their land holdings. The notion of 'First Nation' does not appear as a primary concept in the ILRS/FNLRS/SGFNLRS even though legally (and logically) each First Nation was to have its own distinct register according to the Framework Agreement:

> "51.2 A separate register will be maintained for each First Nation with a land code in force."

In a similar fashion to land code and laws, land use plans and resource use plans may be registered. The implications of these plans (e.g., land management policy, location affected) are not in any way understood by the Register. Subdivision plans (interpreted here as an administrative or official plan) are not deposited into the Register. Instead, they are submitted by a Canada Land Surveyor to the SGB, and subsequently registered in the Canada Land Survey Record. Subdivision plans are referenced from survey-based Parcels using the SGB issued survey plan number.

Instruments are typically submitted by external applicants; however, the ISC HQ Registrar may raise **Administrative Instruments**, e.g., RS Plans, Requests, Registrars Note, etc. (ILRS User Guide, p. 153).

A **Registered Parcel** is to be created through an administrative or official plan prepared by a Canada Land Surveyor. However, this has only been required in more recent years (as explained in section 7.9.2), and there exist registered parcels based on textual descriptions or sketches and not based on survey.

The Register defines four parcel types into which all registered parcels are classified:

1. **Surface Parcels**: represent areas on the earth that are non-overlapping with respect to any other surface parcel, i.e., each surface parcel is a mutually exclusive extent of land. The primary interest holder (First Nation member, or First Nation itself) has exclusive use of the parcel. Sub-PINs and easement parcels must overlap (be contained within) surface parcels. Sub-surface parcels may or may not overlap surface parcels.

2. **Sub-surface Parcels**: "is a type of parcel added to register instruments (i.e. Permits/Leases) that originate from Indian Oil and Gas Canada for exploration or extraction of oil and gas products below the surface of the ground" (ILRS User Guide, Adding a Parcel). This is a separate layer of mutually exclusive extents of subterranean space, granting exclusive use of the parcel to the primary interest holder. Ultimately, sub-surface parcels must be accessed through surface parcels; therefore, instruments registered on surface parcels (e.g., well sites) pertain to sub-surface parcels. If relationships between sub-

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surface and surface interest/licences are tracked, it would only be registering an instrument at both levels, or by referencing corresponding instruments in remarks.

3. **Sub-PINs**: are solely contained within one surface parcel (referred to as the Head PIN). A Sub-PIN is in essence a sub-parcel that is active simultaneously with the head surface parcel. The ILRS User Guide (Adding a Parcel) states "this parcel-to-parcel association is done to register leases and/or subleases". It appears that for the most part Sub-PINs are used to represent Building Units (e.g., apartments, condo or strata units) that are leased or sub-leased; however, based on some preliminary inspection of the FNLRS some recent exceptions have been found, e.g., where a Sub-PIN is for a BCR Allotment[8], and a parking licence[9]. Using Building Units as an example, Sub-PINs are mutually exclusive extents of space, but may be stacked/overlapped vertically.

4. **Easement Parcels**: are "a type of parcel used for the registration of easements/utilities/permits in the system. The boundaries of an easement parcel may overlay one or more Surface or Sub-PIN parcels" (ILRS User Guide, Adding a Parcel). Deputy Registrar has never seen an Easement Parcel on a Sub-surface Parcel.

Sub-PIN is distinguished from an Easement Parcel in that the former implies exclusive use, the latter non-exclusive use. Therefore, multiple easements could overlap; whereas Sub-PINs must not.

The purpose of a parcel is not self-evident. Surface parcels are general purpose; however, it appears that Sub-PINs likely designate a space for a specific purpose/feature (e.g., building unit, parking) and similarly Easement Parcels (e.g., pipeline, transmission line, access). Three different notions appear to be tied to the four parcel types:

[8] Sub-PIN for BCR Allotment: ISC PIN 402524037; Legal Description: LOT 51 CLSR 5024; Band: Atikameksheng Anishnawbek; Reserve: 06156 WHITEFISH LAKE NO. 6; Issued 2008.
[9] Sub-PIN for Licence: ISC PIN 903029009; Legal Description: PARCEL A WITHIN LOT 15-1 CLSR 109465; Band: Kwikwetlem First Nation; Reserve: COQUITLAM NO. 2; Issued 2020/11/03; Expires: 38 months later.

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Parcel Type	Layer	Subdivision within Layer	Exclusivity of Use
Easement	Overlay upon surface layer: must overlap one or more surface parcels.	No restrictions. Easements may overlap other easements.	Non-exclusive: however, affects any overlapping surface parcels and sub-parcels.
Surface	Surface	Non-overlapping on horizontal (surface) plane and non-overlapping space in three dimensions.	Exclusive, but subject to easement parcels, sub-PIN parcels and reserve.
Sub-PIN (Sub-Parcel)	Surface	Non-overlapping horizontally and vertically within volume of head surface parcel	Exclusive, but subject to surface parcel, easement parcels and reserve.
Sub-surface	Subterranean	Non-overlapping	Exclusive, but subject to reserve.

1. Layering of space
2. Subdivision of space within a layer
3. Exclusivity of use

The following table shows how these three notions work in combination with each parcel type:

As shown above, the register's concept for parcel combines exclusivity/non-exclusivity of space with exclusivity/non-exclusivity of use.

Air space parcels are recognized as a type of survey plan (see Administrative Plan, section 7.9.2); however, it is not known how these are represented in the Register[10]. They cannot be surface parcels nor sub-surface parcels; which means they have to be handled as a sub-parcel for exclusive use to be granted; otherwise, they could be represented by a non-exclusive easement parcel.

The **precedence of interests** between reserves and the various parcel types is determined based on priority and exclusivity of use. The First Nations Land Registry Regulations state that priority of interests is based on registration date and time (s. 28 (1)), unless

[10] Enquired of Deputy Registrar, but no answer provided.

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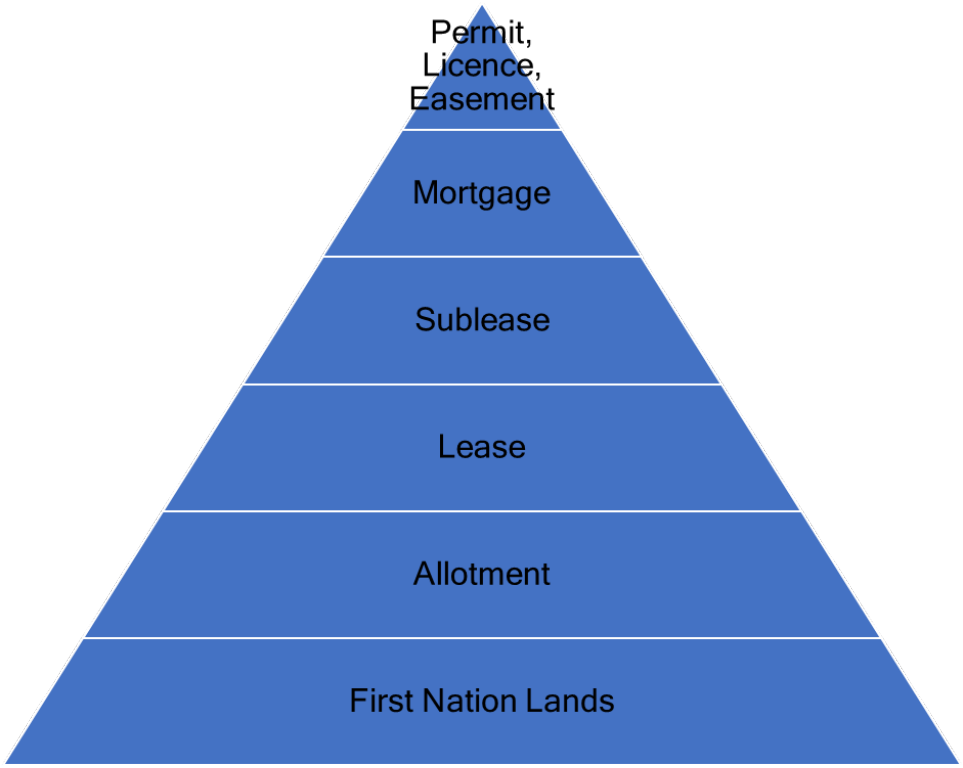
there is a postponement agreement that grants a later registered interest priority over an earlier registered interest (s. 31)[11]. Other registered licences and documents do not have priority whatsoever with respect to interests, (s. 29 (2)). Therefore, when determining the status of land at a particular location, applicable registered interests must be identified at the reserve, surface parcel, sub-parcel, and easement parcel levels. The total set of registered interests must then be ranked by priority (date/time, plus an adjustments due to postponement agreements) to determine the full set of active interests and their precedence based on the nature of interest/licence must also be taken into account. The following diagram from LABRC gives an example of precedence based on nature of interest (highest precedence at bottom, decreasing precedence moving up).



[11] The FNLRS appears to differ from the ILRS in this regard, if the following statement from the Indian Lands Registration Manual is correct: "The ILRS is a repository of documentation and does not purport to guarantee title or accuracy of documentation filed therein, nor gives priority to any interests…" (s. 1.2.4).

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It is worth noting that the notions of **Interest** and **Licence** do not appear as explicit concepts in the Land Register, even though most Instrument Types pertain to interests or licences. The fact that instruments are related to a single interest is apparent through references entered in the remarks field by the Registration Officer. Similarly, relationships between interests, (e.g., sub-lease to lease) are also indicated in the remarks field.

7.9.4 Summary Observations

1. **'First Nation' is not a primary concept in the ILRS/FNLRS/SGFNLRS**:
    a. In the key information products (Reserve General Abstract Report, Parcel Abstract Report) the government of Canada (ISC) and Registry (FNLRS) appear far more prominent than the First Nation, even though legally it is the First Nation's Register.
    b. Land Code, amendments, land laws and bylaws must be registered as instruments against every reserve, as opposed to just being registered once at the level of the First Nation.

2. **FNLRS/SGFNLRS do not explicitly support several First Nation land administration concepts**:
    a. Interests, licences: these are represented by Instruments, and Interests typically by more than one Instrument.
    b. Excluded lands.
    c. Yukon lands set aside.
    d. Shared reserves.
    e. Community lands.
    f. Traditional lands.

3. **The FNLRS operates like a "Deeds" registry system:**
    a. All interests ever registered are listed chronologically in the Reserve General Report and Parcel Abstract Report in the FNLRS. In essence, the FNLRS is an electronic journal of land interests (i.e. an electronic deeds register).
    b. Determining the current state of rights in a Reserve or Parcel is a manual, tedious and error prone activity that requires reviewing long reports, some of which may be 50 pages or more in length, and deciphering the chain of possession, leasing and lesser interests.
    c. As time progresses, the chains of interests will only grow longer and more complicated, the pages of the Reserve General Reports and Parcel Abstract Reports ever increasing. Figuring out land status will become harder and more prone to error.

4. **Status of registered land in FNLRS/SGFNLRS is not readily evident**: determining the active interests and their priority for a particular location in land requires manually searching through historical and active interests from the reserve, surface parcel, any co-located sub-parcels (sub-PIN) and easement parcels and then compiling them into a prioritized list.

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5. **ILRS/FNLRS/SGFNLRS does not explicitly track relationships between instruments, interests, and licences**:
    a. Most types of instruments pertain to interests or licences – to create, transfer, modify, discharge in whole or part, alter the relative priority of – and this is not explicitly evident: it is captured through remarks.
    b. There is a hierarchy amongst interests and this is not explicitly evident: it is captured through remarks.

6. **ILRS/FNLRS/SGFNLRS contain parcels and instruments with inaccurate or unresolved locations**:
    a. Cardex Holding parcels with unresolved spatial location.
    b. Parcels and instruments for which textual descriptions are not allowed whose land descriptions reference non-survey-based plans.

7. **ILRS/FNLRS/SGFNLRS records may reference plans from decades ago that were not based on survey and may be inaccurate.**

8. **ILRS/FNLRS/SGFNLRS have only partial coverage of surveyed parcels and community lands**. There are surveyed parcels that are not registered. Similarly, there are community lands that are not registered.

9. **Policy and best practices for use of Register concepts does not appear to be well documented**:
    a. Rationale for use of Sub-PIN Parcels versus Easement Parcels is only captured in the User Guide.
    b. Instrument Remarks, which are often critical for understanding.
    c. Inheritance and precedence of interests between reserves and the various parcel types.
    d. Handling of air space parcels.

10. **Purpose/feature specific to an instance of a Sub-PIN or Easement Parcel is not explicitly captured or controlled**: this weakens the connection between the Register records and the real world, making it more difficult for users to comprehend.

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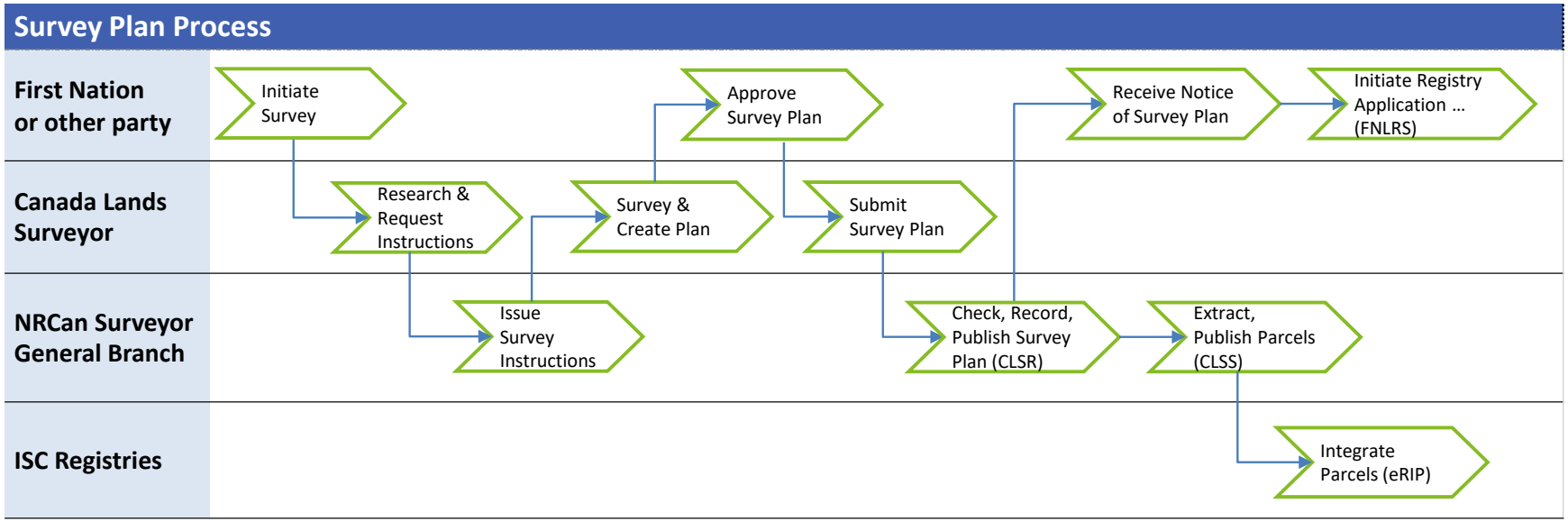
7.10 Primary Processes

7.10.1 Survey Plan Process

The goal of the survey plan process is to define parcels and integrate them into the parcel map. The timeframe between completion of a survey and establishing rights varies widely as the survey plan process relies heavily on NRCan SGB, who can at times experience high volumes of work leading to long wait times for the registration of the survey in the Canada Land Survey Records (CLSR).

A high-level view of the Survey Plan Process is outlined in the diagram below.



The survey process follows these general steps:

1. The survey process is initiated by the First Nation (e.g., the Land Office) or other party (e.g., band members, band member lawyers, engineers, SGB or First Nation survey advisors) when they hire a Canada Lands Surveyor who determines the type of survey required.

2. The Canada Lands Surveyor conducts research in the FNLRS (and other registries if needed) and requests survey instructions from the Surveyor General Branch (SGB). One of the challenges they face is ensuring they do not miss any pertinent information.

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Accessing instrument documents is important as they may contain informative sketches, particularly for blanket easements that pertain to a whole reserve or leases that have no survey plan.

3. SGB reviews the request and documents provided by the First Nation and issues survey instructions to the Land Surveyor.

4. The Canada Lands Surveyor conducts the survey, prepares the survey plan, and sends the plan to the First Nation for approval.

5. The First Nation reviews and approves the survey plan, which is then returned to the Canada Lands Surveyor who submits the plan electronically to the SGB for approval.

6. SGB reviews the survey plan, records the plan in the CLSR, where a numeric survey plan identifier is issued and shared with the First Nation.

7. SGB extracts geospatial data from the survey plan and inputs it into the CLSS, assigns PINs, flows CLSS updates to eRIP as well as publishes updates online for download.

8. Finally, the First Nation receives notice of the CLSR Plan (feedback from Canada Land Surveyors indicates this might not be happening, at not consistently). It may subsequently start the registration process by submitting an application to the FLNRS, and/or may update its land/asset system with the new parcels.

A more detailed version of the diagram is included in Appendix 12.1.

Sources – MS Teams LAB-LTSA site

1. NRCan SGB – Official Plan process details:
   Documents > General > Reference > Survey > Survey Process > Official plan process (FN funded survey).pdf
2. Administrative Plan process details on MS Teams:
   Documents > General > Reference > Survey > Survey Process > Survey Process Roles Flowchart.pdf
3. First Nation Land Office perspective on Administrative Plan process:
   Documents > General > Reference > Survey > Survey Process > Survey Process Flowchart for Admin plan.pdf
4. Association of Canada Lands Surveyors (ACLS) process perspective:
   Documents > General > Reference > Survey > Survey Process > What does a CLS do.pdf
5. Survey stages and timelines – Westbank First Nation:
   Documents > General > Reference > Survey > Survey Process > brochure-wfn land survey.pdf

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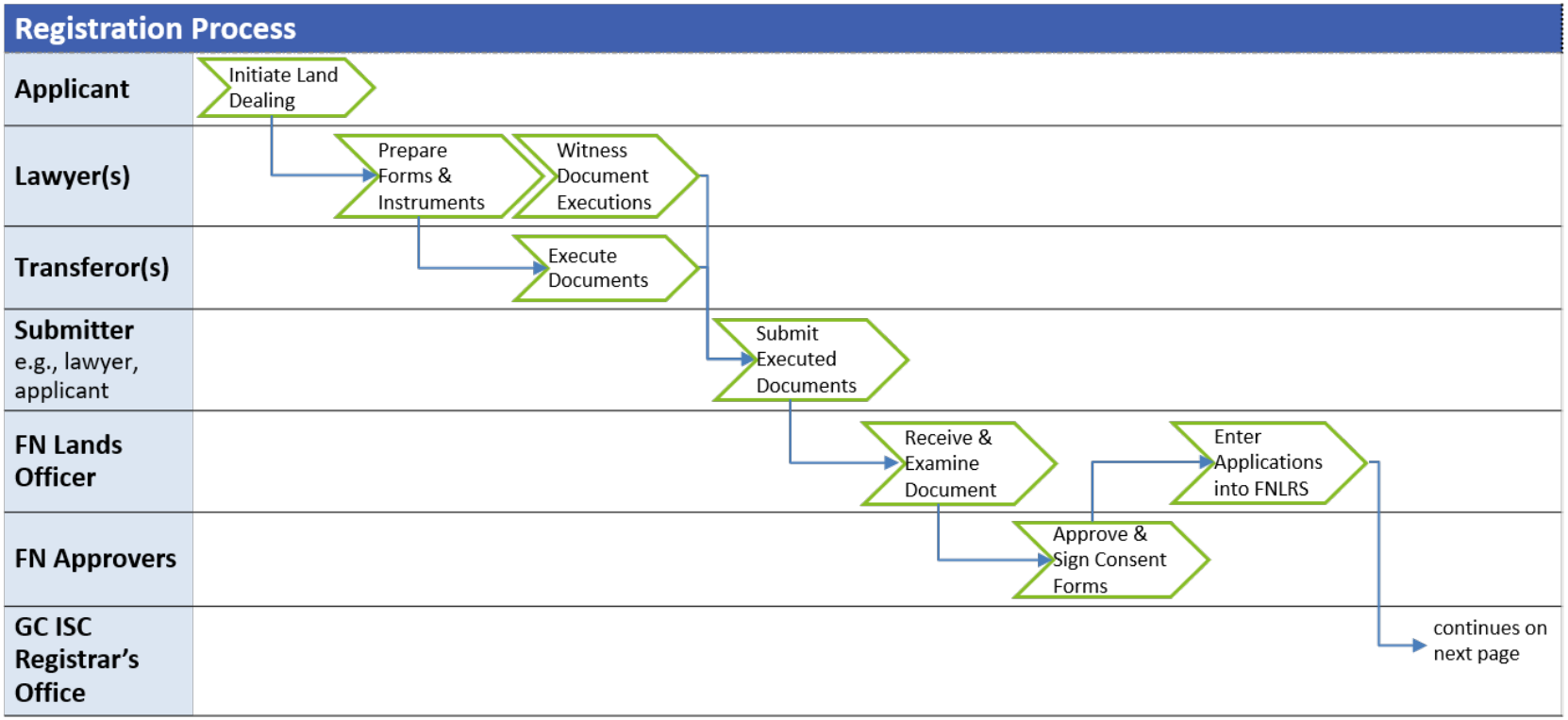
7.10.2 Registration Process

There are three reasons to undertake the registration process.

1. Give notice to the public of all documents that are registered or recorded pertaining to a piece of land.
2. Establish priorities among competing registered interests (not recorded documents).
3. Create an orderly listing of documents which concern a First Nation reserve or parcel of land.

A high-level view of the Registration Process is outlined in the diagram below.



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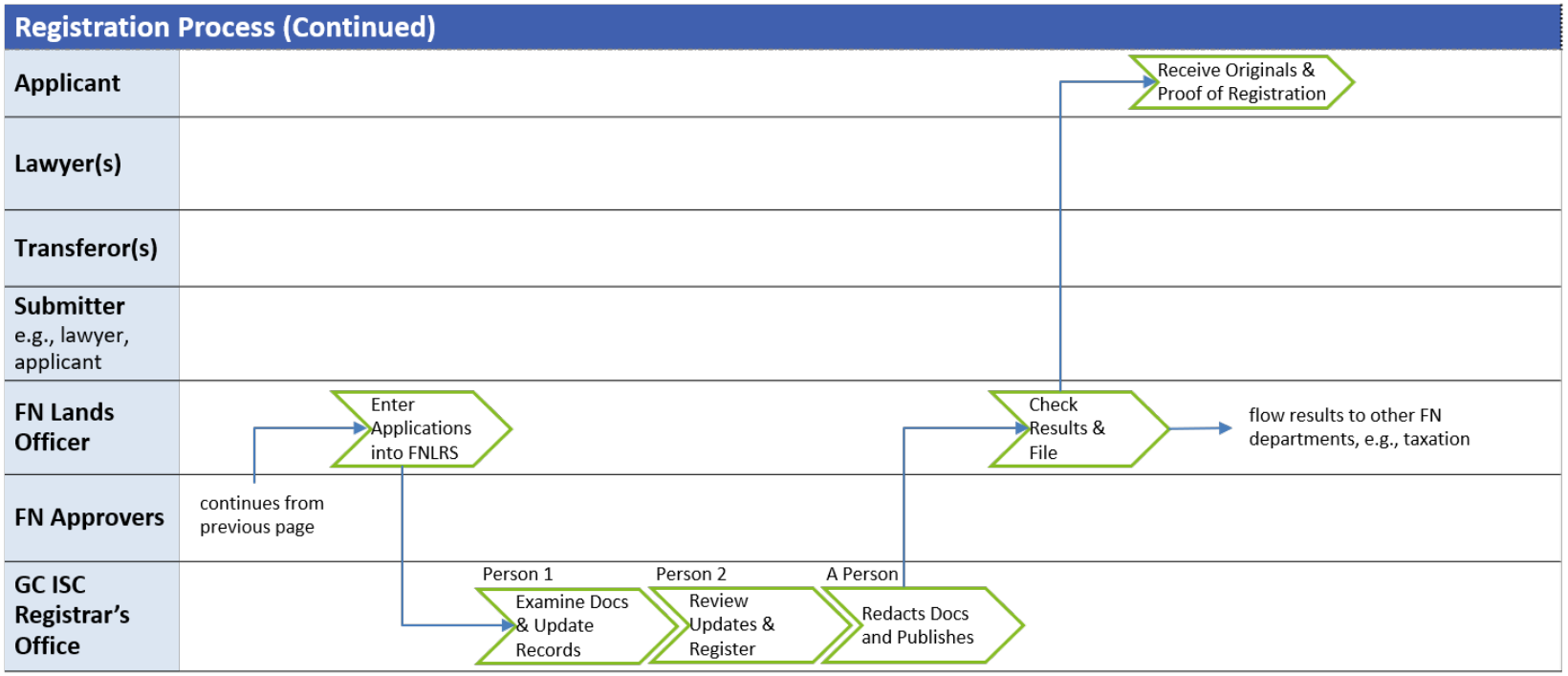

The registration process follows these general steps:

1. An applicant or interest holder (usually a member of a First Nation) initiates a land dealing and hires a lawyer.

2. The lawyer will research the dealing, exchange letters of undertaking, prepares instruments, obtains and completes forms (if available), witnesses the execution of documents by the transferor, and returns documents to the applicant.

3. The applicant or lawyer submits two or more copies of the original documents to the First Nation's Land Officer.

4. The First Nation Lands Officer receives the documents, collects fees, researches land parcel(s) (in the FLNRS and local files), prints and completes an internal checklist, reviews documents, and sends a documents package with consent forms to approvers within the First Nation (if required).

5. The First Nation approvers then sign and stamp consent forms and return the package to the Lands Officer.

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6. The Lands Officer completes the FNLRS applications for registration, uploads a scanned PDF for each application/instrument, prints applications and puts them (along with the original document) in Land Office's file system.

7. An ISC staff member receives and checks the application for completeness, accuracy, compliance (using eRIP and CLSS as necessary), updates records, and may pass the application to a second staff member to review the proposed Register updates.

8. The ISC staff member then registers the instrument if acceptable and uploads the unredacted document to the protected library.

9. ISC staff redacts any personal information from the document and uploads the redacted document to the public library.

10. The Lands Officer receives an email notification, checks the registration results, cross-references with the records in the Land Office's file system and makes any required updates.

11. The Land Officer stamps and dates original files, returns all but one original file to the submitter (applicant, interest holder or lawyer) along with a Parcel Abstract Report and receipt for fees, puts original in Land Office file system, distributes an interdepartmental form to manually update other First Nation systems (if applicable), and updates the electronic land/asset system (if applicable).

A more detailed version of the diagram is included in Appendix 12.2.

Sources – MS Teams LAB-LTSA site

1. LABRC – Lands Office perspective on registration process:
   Documents > General > Reference > Registry > FN Lands Office (LABRC materials) > 1.3 FNLRS 201 Land Registry Policy & Procedures – PPT.pdf
2. LABRC – Lands Office example checklist template:
   Documents > General > Reference > Registry > Checklist – Transfer of Interest into Community Lands.doc
3. ISC Registrar's perspective on registration process:
   Documents > General > Reference > Registry > FNLRS Electronic Registration Workflow.docx

7.10.3 Summary Observations

Manual and labour-intensive processes:

- Redaction Process is not a valuable use of staff time - Within the current registration process, there is a significant amount of resources drawn into the redaction process, which is required since land information will eventually become publicly available.

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However, the personal information collected is not critical to the registration process and is of questionable value to the process.

  - The current redaction process is highly manual and takes approximately 20-25 minutes per document. Over a year, this amounts to a part time role and there currently sits a large backlog of approximately 45,000 unredacted documents that have yet to be published. ISC currently has plans to bring on additional staff to address this backlog, but it will likely take at least one year before it can be cleared.

- FNLRS reports are cumbersome for users – Reports produced by the FNLRS (Reserve General Report, Parcel Abstract Report) show both historical and active interests on parcels. As a result, these are very lengthy documents that are cumbersome for Land Office staff to use and to locate the critical information required.
- Paper submissions are permitted – only three First Nations submit paper applications to the FNLRS, which occurs in total about twice per month. Financial institutions and lawyers may also submit paper documents to the ISC Registrar. Although there are a relatively small number of paper submissions, this process requires additional staff effort to process and file these documents.

Ambiguity of general processes and requirements:

- There are no formally documented processes or requirements supporting requests or searches of the FLNR system. This includes a lack of standardized forms, creating inconsistent submissions that can lead to additional time required to process applications and the need for ISC staff to follow-up with Land Offices to gather additional information. This also prevents any opportunity for process improvement as there is no baseline for evaluation.

No access to customer support services:

- There is a published email address for Land Registry Enquiries, but no published telephone number for either Land Registry inquiries or technical support. The ISC Registrar indicates that inquiring customers must know who to call to reach out to ISC by phone.

No fees for FNLRS Services

- ISC provides FNLRS services to First Nations Land Offices and other customers free of charge. However, some Land Offices charge fees to First Nations members for their services in working with FNLRS.

No benchmarks for FNLRS processing times

- ISC has not established or communicated expected turnaround times for FNLRS services nor provides services estimates or process updates to customers.

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7.11 Lifecycles of Register's Primary Entities

This section summarizes the lifecycle events and states of the primary entities tracked by the register:

1. Reserves
2. Parcels
3. Instrument
4. Interests (implicitly)
5. Plans
6. Land Code and Laws

7.11.1 Reserves

1. **Formation**: Canada sets aside land to which it holds title to form a Reserve on behalf of one or more First Nations. Reserves are listed in the Land Code of the First Nation. Reserves are recorded in the Register.

2. **Inclusion of Excluded Portion of Reserve**: Prior to a First Nation becoming operational and its Land Code taking effect a portion of a reserve may be excluded, e.g., because of environmental issues or litigation (Framework Agreement c. 4.1.4). Subsequently, that land – once the issues for its exclusion have been resolved – may be included under the Land Code (Framework Agreement c. 4.1.7), terminating the exclusion. The net result to the Register is that a parcel is added to the Reserve.

3. **Additions to Reserve**: Canada may subsequently add land to a reserve (Framework Agreement c. 14.2) by Ministerial Order (MO) or Order In Council (OIC) prepared by an ISC Regional Office. This is referred to as an Addition to Reserve (ATR). ATRs must be added in the First Nation's Land Code. ATRs typically result in land leaving the provincial land system, being transferred to Canada, then being set aside for the First Nation. Ideally, land is defined by an Official Plan; however, land may or may not be surveyed. A provincial survey plan may be referenced, or a township plan may be used. Addition of land may be tracked in the Register through OIC on reserve. Land may be added to a Reserve directly, as described above, or more indirectly by first bringing in the land under the Indian Act, then transferring it to be governed under Land Code. About 100 ATRs per year across all First Nations (includes Indian Act, Framework Agreement and Self-Government First Nations).

4. **Voluntary Exchange of Reserve Land**: A First Nation has the right to exchange a parcel of First Nation land for another parcel of land if that other parcel of land becomes First Nation land (Framework Agreement c. 14.1.1). The FNLMA refers to this as the alienation of First Nations land (s. 26 (1)). This is a rare event – two known examples of this. Parcel to be

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exchanged is surveyed first. Official Plan is recorded in the CLSR. In the Register, if parcel never created, just list on the Reserve General: a Ministerial Order Instrument used. Exchange may take either one or two Ministerial Orders.

Under the Indian Act, reserve land can be surrendered. This can not happen under the Framework Agreement.

7.11.2 Parcels

1. **Added**: By registration of an allotment, lease, etc.
2. **Divided or Amalgamated**: Only surface parcels can be divided, a Sub-PIN cannot be divided.
3. **Modified**: The following attributes can be modified (ILRS User Manual, p. 254):
    a. Parcel Type
    b. Unresolved Flag
    c. NRCan PIN
    d. New Legal Description
    e. Plan Type or Plan Number upon re-survey
4. **Retired**: Most of the time a parcel has one or more forward parcels that succeed it – 99% of time.

7.11.3 Instruments

Instruments are submitted through applications and if they pass all registration checks, are registered.

The states an Instrument can go through, as tracked by the system are as follows (see ILRS User Guide diagram below):

Application formulation stage, e.g., by FN Land Office

1. **Initiated**: "applied to a new Instrument that has been newly created in the system. This is a working state."
2. **Received**: "instruments that have been formally accepted by HQ", i.e., submitted by FN users.
3. **Withdrawn/Deleted**: "Instrument has been removed from the active processing flow and will not be registered." "A withdrawn Instrument may still be searched for, but it does not appear on reports", (p. 201).

Note that Pending and Returned states are not used for FNLRS.

Registry Office processing stage:

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4. **Land Interest**: "indicates that an Instrument has been formally associated and referenced to a specific land by an HQ end-user thereby detailing the 'Land Interest'." i.e., instrument linked to reserve or parcel.
5. **Reviewed**: "Instrument has been reviewed and due diligence has been completed by HQ end-user. Reviewed Instruments are ready for registration and all updates/reviews/validations are complete."
6. **Returned**: "when HQ requests revisions to an Instrument received."
7. **Registered** (Successful Completion): "Instrument has been formally registered. The Registered Status is an end-state, however, if required, a Registered Instrument may be Deleted by an HQ end-user."

Sources: LRUP – Use Cases – Application Administration; ILRS User Guide (Instrument Statuses, p. 119).

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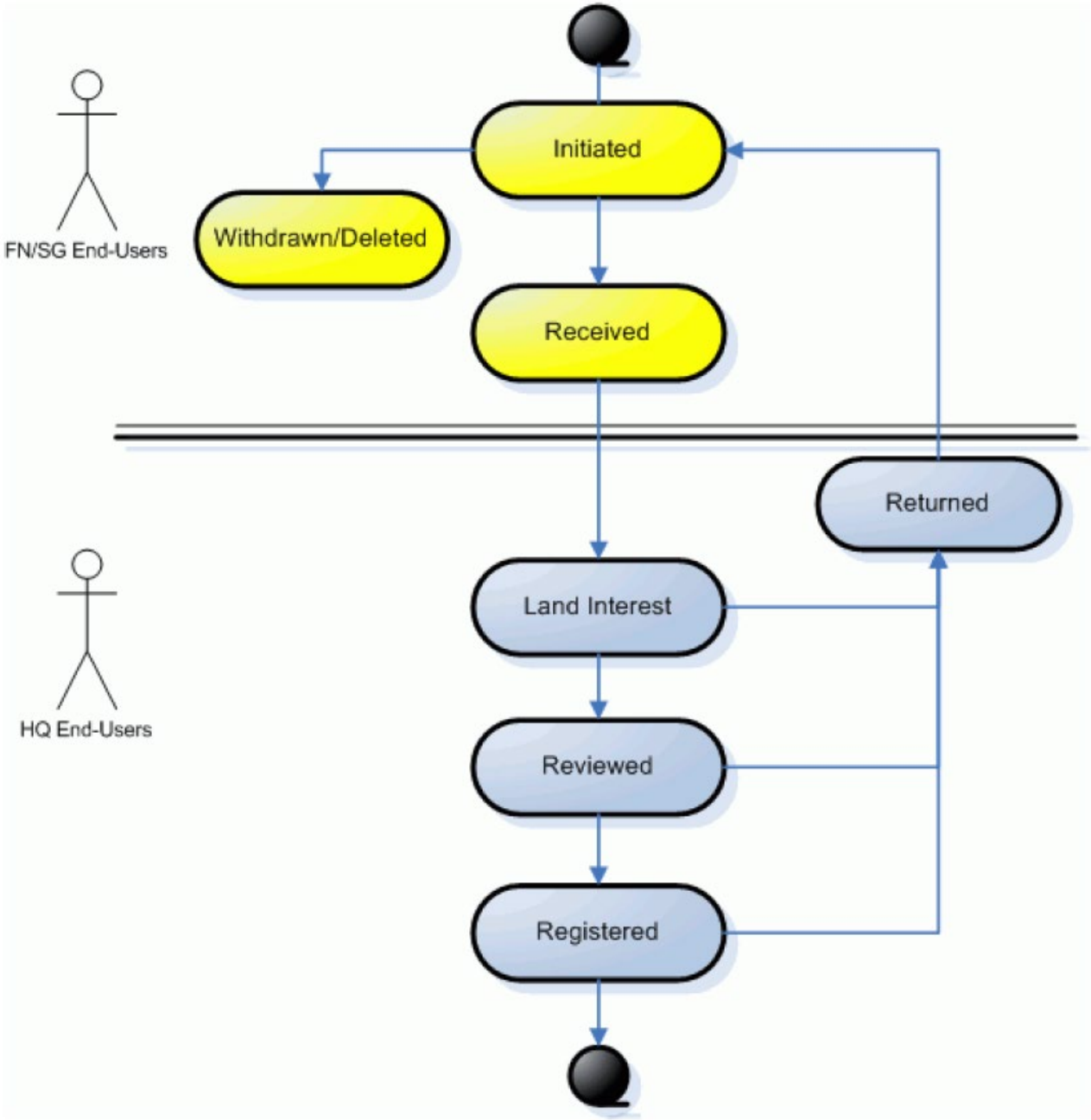
FN/SG End-Users
Initiated
Withdrawn/Deleted
Received
Returned
HQ End-Users
Land Interest
Reviewed
Registered

7.11.4 Interests and Licences

These are not explicitly represented in the Register, but instead implicitly represented through Instruments registered against parcels and reserves.

1. **Grant/create**: Land Code Model c. 26.3 (a)
2. **Transfer/assign**: Land Code Model c. 26.3 (b)
3. **Relinquish/cancel**: under FNLMA First Nation issues cancellation (involuntary discharge); otherwise Grantee issues relinquishment (voluntary discharge).
4. **Expire**: for leases, notices.
5. **Correct**: an Instrument is needed to correct something previously registered, usually handled as an amendment. A Registrar's Note "records any fact which is not covered by a registered document and provides useful information that would otherwise be omitted from the register. A Registrar's Note is reflected on the ILRS without a registration number." (Indian Lands Registration Manual, s. 9.3.29). A 'Request' for Evidence of Title (Instrument Code 023) can be used to register a correction when "a parcel has been re-surveyed or sub-divided, or a band membership number or an individual's name has changed" (Indian Lands Registration Manual, s. 9.3.33).

7.11.5 Plans

Survey Plans are submitted to the NRCan SGB, who registers them in the Canada Lands Survey Record (CLSR) and issues survey plan numbers. They can subsequently be access through the CLSS. Plan Numbers are recorded in the Register with the parcel record.

Plans may be:

1. **Filed**: in the CLSR.

2. **Corrected**: only for clerical errors, e.g., change of lot numbers. For a survey error a re-survey is required (CLSA, s. 33 (1)) resulting in a new plan number. The old plan remains in the CLSR, as it is a public record. A note is added to the old plan to indicate that it has been replaced. A note is also added to new the plan to indicate that it replaces the old plan. Corrections do not happen often. Permission is obtained from the Land Surveyor (when possible) before making any modifications on the plan. It is up for the land surveyor to contact their clients. Plans corrections are to correct omissions, clerical errors, or other defects. Requests to change or correct lot designations are usually coming from the land registry or the client. In these rare cases, the SGB works with the Registry (ISC) and/or the client on the plan correction process and everyone is kept in the loop. Going forward, SGB intends to notify land administrators when a plan correction is made.

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3. **Cancelled**: Plans can be cancelled, but this is very rare. Reasons for cancellation include: a court order, a plan is not signed by all parties. A cancelled plan is usually replaced with another plan. Cancellation is used for legacy purposes to fix the system.

There is no such notion as a 'phased' plan, e.g., such as BC has for strata survey plans.

7.11.6 Land Code and Laws

Land Codes, laws and bylaws are registered as Instruments against the Reserve General.

Once registered, any amendments are repealing of their contents is done through registration of a subsequent Instrument.

7.11.7 Summary Observations

1. **Parcel lifecycle tracked within survey records and registry operate independently of each other**: The Registry establishes when a surveyed parcel becomes active and ceases to be active in the Register. Registry changes to parcels are not tracked on the survey side; however, instruments to create, sub-divide, amalgamate and replace (retire) a parcel must be accompanied by a survey plan, so these events can be traced back to the survey record but the timing of when they come into effect is determined by registration.

2. **HQ user links instrument to reserve or parcel**: In the Land section of the application the parcels are identified; however, the system does not appear to use this information to establish the linkage of instrument to parcel, or at least does not do it until manually triggered by HQ user. This means there is a delay between the point at which the application is received to the point where its affect on a specific parcel is made evident. This stands in contrast to other land registers where an application's priority on a parcel is established at the point of reception (e.g., what BC Land Titles calls mark-up).

3. **No concept of packaging of instruments**: When multiple applications are submitted for registration by mail on paper, the submitter is requested to indicate the ordering of the applications. When submitted electronically, the order of submission / receipt determines the order in which the applications are considered. For digital submissions there is no packaging concept to group instruments. The Registration Officer determines how the applications should be processed.

4. **Interests are not explicitly represented in register therefore its current state must be determined manually**: All instruments on a parcel or reserve must be reviewed to determine what interests are currently active. The lifecycle of instruments is not tracked by the register.

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5. **Register Corrections are not made evident to end users**
    a. **Registered Instruments may be deleted by an HQ end-user**: The instrument is not physically deleted (ILRS User Guide, p. 201) and the activity is logged identifying the user (p. 203). A more accurate statement of what the system permits: instruments may be revoked after registration[12]. "A withdrawn Instrument may still be searched for, but it does not appear on reports" (p. 201).
    b. **Reports do not indicate if there have been corrections to the Register**: The Parcel Abstract Report (and any other report, as far as known), does not indicate what corrections have been made to the Register.

[12] This is an Indian Act hangover as the Registrar cannot revoke an instrument under the FNLRS, only correct it; see s. 27 FNLR Regulation.

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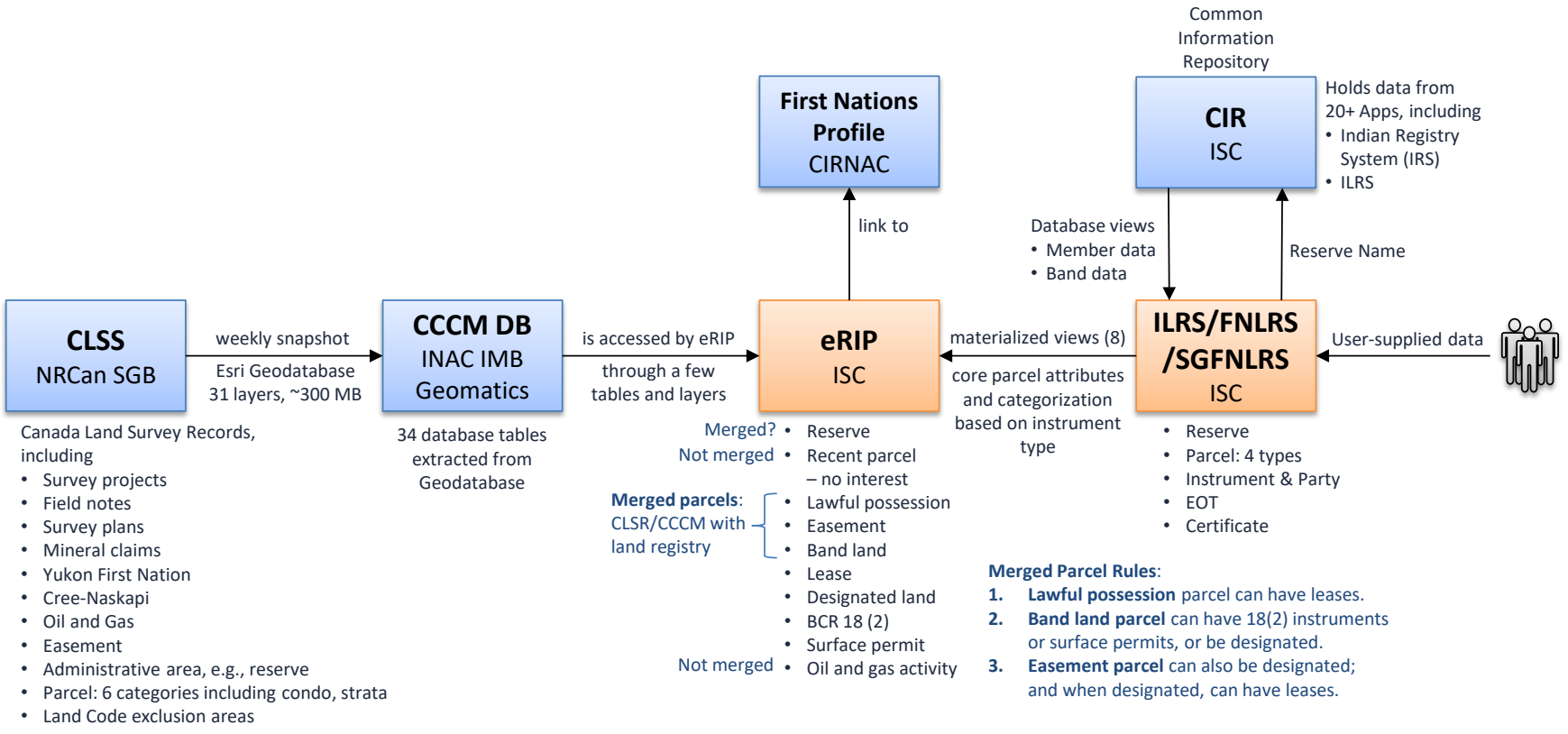
8 DATA

8.1 Context

The sources and flow of data into the Land Registry data stores (ILRS, FNLRS, SGFNLRS and eRIP) are shown below.



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The primary data holdings and their sources are as follows:

1. **ILRS/FNLRS/SGFNLRS**: These land registers (one system) hold the chronology of instruments registered against reserves and/or parcels. All data is user-supplied (submitted by an applicant or entered by the ISC HQ registry office), with one exception. Band and member data needed in party records is obtained from the Common Information Repository (CIR), a data warehouse that aggregates core summary information from 22 different ISC applications, including ILRS. The band and member data is originally sourced for the Indian Registry System (IRS). The ILRS is the definitive source for Reserve Names and Reserve Numbers which it supplies to CIR.

2. **eRIP**: The eRIP parcel map viewer only provides users with read access to data. There is no data update capability in eRIP; therefore, all data is sourced from other systems and databases. The data eRIP holds is the union of land register data and reserve and parcel data sourced from the SGB Canada Land Survey Records via the intermediary CCCM database. An Esri personal Geodatabase (single file, single user) containing 31 layers is pulled weekly from the SGB and extracted into 34 CCCM database tables. eRIP, in turn, is updated and uses a much smaller subset of the feature type layers and CCCM database tables, focused on reserve and parcel data. The extracted data is joined and filtered based on data from the land registry. Parcels, in part, are categorized based on active instruments registered against them, e.g., lease and surface permit. 'Recent parcel – no interest' is solely sourced from the SGB: the parcel does not exist in the land register. Parcel data is joined based on NRCan PIN. Reserve data appears to be joined based on reserve name, as it shown in the CLSS Map Viewer and Google Earth; however, the reserve number does not appear in either tool, neither in the CLSS data model.

Sources – MS Teams LAB-LTSA site

1. **eRIP II original design**: This document is from 2013. It is evident that not all aspects of the design were implemented as specified. Figure 2 presents a detailed data model which it appears may only be partly correct.
   Documents > General > Reference > Registry > ILRS Technical Materials > Geomatics-eRIP II Requirements Data and Use Cases 5504711
2. **eRIP – CLSS interface**: This document contains an email correspondence with INAC Information Management Branch Geomatics System Architect, Yves Carboneau.
   Documents > General > Reference > Registry > ILRS Technical Materials > eRIP – CLSS interface email – Yves Carboneau – 2021-06.docx
3. **Common Information Repository**:
   Documents > General > Reference > Registry > ILRS Technical Materials > Common Information Repository – SKM_C55819091814010.pdf

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8.1.1 Summary Observations

1. **eRIP does not give a complete view** of either the land register data or the SGB CLSR/CLSS First Nations data:
    a. **SGB CLSR**: contains more categories of data than is evident in eRIP. For example, the categorizations of parcel provided in the CLSS Map Viewer include:
        - **Inconclusive parcel**: Not known what these are, or if they appear in eRIP.
        - **Unresolved parcel**: These are for Cardex Holdings, as explained in Section 7.9.2, and are available in eRIP as points, not polygons.
        - **Condominium**: This appears to be used for building footprints that are either bare land strata buildings (identifying individual building units, e.g., lot 79-17-3) or multi-level multi-dwelling buildings (where a range or list of building units is given but are not individually selectable, e.g., lot 79-15, lot 79-4-3 in Burrard Inlet 3 Reserve). Building footprints do not appear in eRIP.
        - **Strata parcel**: One example where this was found (plan 85902 CLSR, Burrard Inlet 3 Reserve), this category was used for a road right-of-way (79-15-1) over a 'parcel' (lot 79-15). Strata parcels do not appear in eRIP. The one example cited here was found as a 'Survey Plan' Instrument Type against the parent surface parcel: lot 79-15.
        - **Parcel**: This is the general category for parcels and these appear in eRIP.
        - **Parcel – other**: Not known what these are, or if they appear in eRIP.
        - **Easement**: In the CLSS Map Viewer, Easement is in a distinct category from Parcel. It corresponds to the Easement Parcel Type in the Land Register and does appear in eRIP as an easement.
        - **Land Code exclusion areas** (excluded lands): These are established in the Individual Agreement with the First Nation in the process of establishing their Land Code. These lands remain under the Indian Act but may subsequently relinquished to the First Nation.

    b. **ISC Land Registers**: contain parcels and instruments affecting portions of land that do not appear in eRIP.
        - **Non-survey-based parcels**: Their boundaries are not tied to survey and are based on textual descriptions or a sketch map and these do not appear in eRIP as they do not have any polygons.
        - **Instruments affecting a portion of a reserve**: These are like non-survey-based parcels but differ in that there is no parcel to represent the interest. The interest is simply stated as a portion of a reserve.
        - **Sub-PIN Parcels** (sub-parcels of surface parcels): Typically used to represent individual building units (but also used for other purposes, see Section 7.9.3) do not appear in eRIP.
        - **'Survey Plan' Instrument Type**: This is used to reference Survey Plans that provide further definition of features but do not affect interests in land, e.g., lot 79-15-1, CLSR 85902, for a Strata Parcel which is a road right of way.

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The table below summarizes the differences in presentation of data across the SGB CLSR, eRIP and ISC Land Registers. These differences highlight where alignment of data and semantics is weak or not there at all.

SGB CLSR/CLSS Map Browser	ISC eRIP	ISC Land Registers
1. **Inconclusive Parcel**	1. ???	1. ???
2. **Unresolved Parcel** – Cardex Holdings	2. Appear as points only, no polygon for boundary.	2. One kind of non-survey-based **Surface Parcel**.
3. Not in records.	3. Not available.	**3. Non-Cardex Non-Survey-Based Surface Parcels**, i.e., parcels for which textual descriptions are acceptable for registered interests.
4. **Condominium**, i.e., building footprints a. Bare Land Unit: has NRCan PIN b. Multi-level Dwelling Unit: limited differentiation, no NRCan PIN.	4. Not available.	4. Building not distinguished from Surface Parcel a. Bare Land Unit: **Sub-PIN Parcel**. b. Multi-level Dwelling Unit: **Sub-PIN Parcel**.
5. **Strata Parcel**, e.g., a road right-of-way through a parcel that contains a condominium.	5. Not available.	5. **'Survey Plan' Instrument Type** registered against a Surface Parcel.
6. **Parcel**	6. Could map to one of the following layers: a. Recent Parcel – no interest b. Lawful Possession c. Band Land d. Lease e. Designated Land: ILRS only, does not apply to FNLRS, SGFNLRS f. BCR 18 (2): ILRS only, does not apply to FNLRS, SGFNLRS g. Surface Permit	6. A kind of **Surface Parcel**

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SGB CLSR/CLSS Map Browser	ISC eRIP	ISC Land Registers
7. **Parcel - Other**	7. ???	7. ???
8. **Easement**	8. **Easement layer**	8. **Easement Parcel**
9. Not available	9. Not available.	9. **Non-Building Unit Sub-PIN Parcels**
10. Oil and Gas – **Sub-surface Parcel**	10. **Oil and Gas Activity**	10. **Sub-surface Parcel**??? eRIP II documentation indicates this is <u>not</u> merged.

2. **SGB CLSS Parcel Map contains considerably more data than that available in eRIP**: In addition to the items listed in the table above (i.e., categories of parcels), the CLSS Map (Browser) contains other layers that are relevant to First Nations land administration including: land code exclusion areas, Yukon First Nations lots/parcels.

3. **The Land Registers do not explicitly indicate what a Sub-PIN is used for**: Typically a Sub-PIN is used for a strata Building Unit, but there is no specific indication of this, nor of its type, e.g., bare land strata unit or unit in a multi-level multi-dwelling complex. There are also instances where a Sub-PIN has been used for some other purpose (e.g., parking lot, see Registry PIN 903029009) and this can only be determined from the remarks entered for the registered instrument. The concepts/terms for strata complexes and building units are not in the Land Register data model / database.

4. **Survey and Parcel information only flows indirectly to the Land Registers**: Survey Plan numbers and parcel data (e.g., NRCan PIN, textual elements of the legal description) come to the Registration Officer through submitted applications/instruments, instead of more directly from the source (SGB), e.g., as parcel records. This can pose challenges for the Registration Officer particularly when a subdivision results in remainder parcels that do not have a clear parcel designation. One notable example of this is found on the Musqueam 4 reserve, where there are two parcels with distinct NRCan PINs (1150352, 1153056) both having the parcel designator 'Parcel B', that are remainder parcels, and the two (unregistered) parcels are a considerable distance apart. The Interdepartmental Agreement, 2015, (s 4.8) permits remainder parcels to be formed this way, and should they subsequently need to be registered this becomes a problem.

5. **Delayed Synchronization Between CLSR/CLSS Parcel records and eRIP, and between textual Land Registers and eRIP**: eRIP is updated only weekly from the CLSR/CLSS. eRIP is updated every 15 minutes from the textual Land Registers. Although this may appear to be minor, it does mean that changes made in the Land Register are not necessarily

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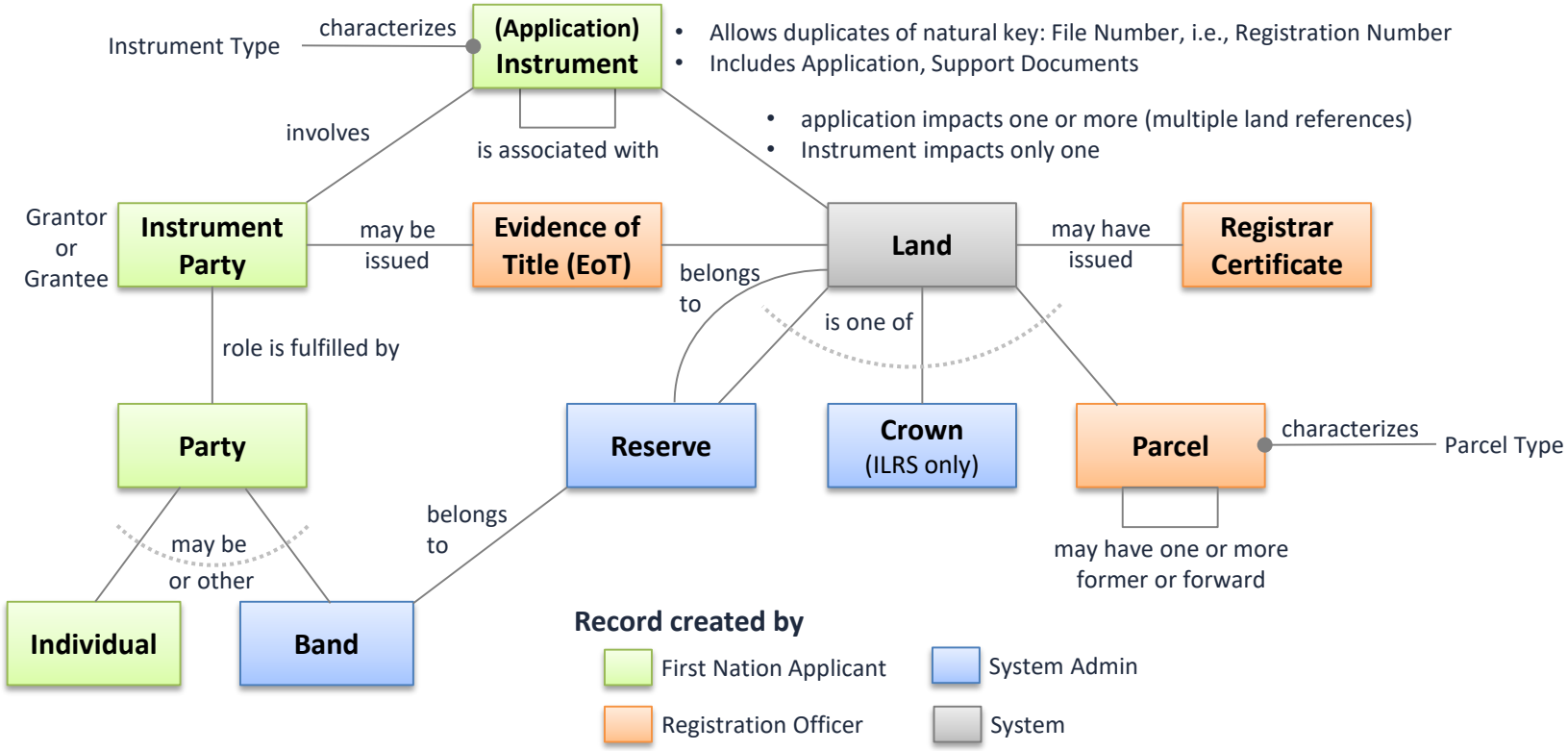
immediately evident on eRIPs parcel map, and it has been noted that there are occasional hiccups in the synchronization results.

8.2 Land Register Conceptual Data Model

This subsection presents how the Land Register data model is designed, i.e., the types of data it was designed to hold. A high-level conceptual data model is shown below. It was reverse engineered primarily from the Physical Data Model, with additional input from the ILRS User Manual, Use Case documents and the system code tables.



Fundamentally, the Land Register is a register of instruments that connect parties involved in land transactions with land, i.e., who-what-where.

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Application and Instrument

In the data model, instrument embodies the notion of application as well as instrument[13], but it is simply labelled 'Instrument', as indicated in the diagram above. The Registration Number is its natural key, which in the physical data model is any field that includes in its name 'File_Number' but in the Use Case documents can be referred to as 'File#' or 'Registration#'.

It appears that one application may reference multiple lands (i.e., reserves, crown land, parcels) but just one kind, (see Internal ILRS User Guide, p. 183); however upon registration, the system automatically creates an instrument record for each additional distinct land record referenced[14]. This would need to be the case in order to perform a subsequent 'partial' transaction that affects only some of the land referenced by the original application-instrument, e.g., using instrument types such as: partial discharge, assignment – partial, partial relinquishment, partial revocation, partial surrender.

Instrument Associations

All instruments created from a single application share the same Registration Number (a.k.a., File Number). The system automatically relates these through an 'Instruments Related by Registration Number' Instrument Association. Two other types of Instrument Association may be established:

1. **Reference Registration**: "A referenced registration is another Instrument that is affected by the Instrument you are modifying/registering." (Internal ILRS User Guide, p. 145, see also p. 142). In essence, this association type connects a subsequent instrument to a preceding registered instrument where they both concern the same particular interest. For example, this could be used to associate an amendment instrument to a lease or permit instrument. Only one Reference Registration may be defined for each Instrument. Only HQ end-users have access to this capability – according to the User Guide. The Instrument Use Case document indicates that this association type is mandatory when the to-be-registered instrument type is one of 'Cancellation', 'Relinquishment', 'Revocation', 'Rent Review Letter' or 'Release' (see element 'Reference Registration type'). The User Guide gives no indication that these are mandatory. A 'Become Expired' flag is available to control whether the referenced registered instrument is to be automatically set as expired upon registration of the subsequent instrument.

[13] In the Use Case documents, the term "application-instrument" is used quite a bit.
[14] Have not yet found a clear explanation of this in the design documentation to be 100% certain this is the case; however, there are many statements in the Instrument Use Case document that suggest this is the case. Best evidence may be the Internal ILRS User Guide, p. 142, Associating an Instrument, Item 3B, Instruments Related by Registration Number that states this happens.

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2. **Associated Instruments**: Associated Instruments "are references to Instruments within the registry that are associated (by Land or by other means) to the Instrument being updated/viewed. These associations are manually accomplished by a user." (Internal ILRS User Guide, p. 142). The user may enter text concerning the association in a "Details" field. Associated Instruments are established by the user who initiates the application/instrument, i.e., typically the First Nation Land Office. The ISC Registrar's FNLRS system training materials (listed under sources below) does not actually provided any instructions or guidance for using the Associated Instruments feature. Quite likely this is not being used substantially, if at all.

Instrument Type

The nature of the transaction is represented in the Register by the Instrument Type, e.g., BCR Allotment, Lease, Mortgage, Transfer, Discharge. The FNLRS has 161 configured Instrument Types (SGFNLRS has 162) of which 90 (49 for SGFNLRS) have been used in the last 10 years.

The Instrument Management Use Case document indicates that there are rules (constraints) based on Instrument Type, e.g.,

> g) System validates that **if** the instrument to be registered is of the type 'Lease' or 'Sub-Lease', then the corresponding Land-Interest **must** point to a parcel that is of the 'sub-pin' type (**E16**).

ISC's Deputy Registrar states that the practice is to register leases against Surface Parcels and sub-leases against Sub-PINs. Two points to note here:

1. The technical documentation (e.g., Use Cases) no longer accurately reflects the actual system implementation.
2. Practices are not applied consistently – as is evident in the case of Sub-PINs, as described in the Summary Observations below.

Also, an Instrument's 'Purpose' field is only required for certain Instrument Types, e.g., Permit, Lease, Designation, BCR (Internal ILRS User Guide, p. 176).

Instrument Party & Party

Typically a transaction involves two parties – Grantor and Grantee – each of which may be made up of one but possibly more of the following: Individual, Band, Crown Canada, Corporation, Provincial/Territorial Crown, Crown Quebec. When a party is a registered band member, they are uniquely identified by their Indian Registry Number, obtained from the Indian Registry System (IRS) via the Common Information Repository (CIR), accessed from within the FNLRS. Should the party be an Indian Band, the Band is selected from a Band list that is provided via the CIR.

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Land

An instrument must be registered against land. 'Land' is an abstract entity that represents one of Reserve, Parcel or Crown (only applicable in the ILRS). All Land must belong to a Reserve (for Reserves this is in essence self-referencing). Reserves, in turn, belong to a particular Band.

Parcel

Parcels are characterized by Parcel Type. The Internal ILRS User Guide identifies four types: Surface, Sub-surface, Sub-PIN and Easement (p. 223). However, the underlying system code table (parcel-types) also includes: Building, CRINA (simply labelled 'land' in its English description) and Admin Lot. It is not known whether these were ever actually used.

Parcels may be formed out of one or more previous parcels through subdivision or amalgamation. The previous (ancestor) parcels are referred to as the Former Parcels. The subsequent (descendant) parcels are referred to as the Forward Parcels. The Root PINs, which would be the first parcel in the chain that has no Former Parcel, are also indicated in the Parcel Abstract Report. A Sub-PIN must always have a Former Parcel, by its very nature, but it is understood that these cannot be further subdivided (a hypothesis that needs to be confirmed by data analytics). It is believed that Easement Parcels are independent, having neither Former Parcels nor Forward Parcels.

Evidence of Title (EOT) & Registrar Certificate

An EOT may be issued to a particular party (grantee) pertaining to a particular instrument (implied interest) registered on a specific record of land[15]. Although under the FNLRS and SGFNLRS these are issued by the First Nation Land Office, they may be tracked in the Register. Also, EOTs may have been issued under the Indian Act and carried forward into the FNLRS.

A Registrar's Certificate may be issued for Parcel Abstract and Reserve General Abstract Reports (Internal ILRS User Guide, p. 342), but only by HQ end-users (p. 337, 347). The Register tracks the Certificate Number and date issued against the applicable land. Multiple Registrar Certificates may be issued for one instance of land over time.

Database Tables

Based on the Physical Data Model and its categorization of database tables, the total number of tables are as follows:

[15] This should probably always be a parcel, but the data model allows for this to be for an instrument registered against a reserve, although this would appear to be an odd usage.

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Category	Top-Level Entity Tables	Detail Tables	Cross-reference Tables	System Code Tables	Total
1. Community (light blue)	1	2	2	0	**5**
2. Instrument (green)	1	8	5	15	**29**
3. Location (pink)	0	1 (address)	0	2	**3**
4. Land (light brown)	5	2	1	4	**12**
5. ILRS Party (blue)	3	1	2	4	**10**
6. Land Parcel (deep orange)	1	2	1	4	**8**
7. System (white or grey)	0	12	0	6	**18**[16]
Totals	**11**	**28**	**11**	**35**	**85**

Excluding the 12 Details Tables in the System category, the core Register database consists of 27 tables: 11 top-level entities and 16 detail tables.

Top-level entities are those which appear in the Conceptual Data Model presented above. Materialized View tables (e.g., needed to assemble data for eRIP) and other special purpose tables (e.g., Orphan Parcel Hierarchy, temporary system tables) have been excluded in the above totals.

Sources – MS Teams LAB-LTSA site

[16] There are more system tables, but not worth counting as they exist solely to handle implementation concerns.

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1. **Physical Data Model**:
   Documents > General > Reference > Registry > ILRS Technical Materials > ILRS Physical Data Model – ILRS V2 08022021.pdf
2. **Physical Table Schema**:
   Documents > General > Reference > Registry > ILRS Technical Materials > Metadata_ILRS_May7th2021.pdf
3. **System Code Tables**:
   Documents > General > Reference > Registry > ILRS Technical Materials > ILRS System Lookup Tables.xlsx
4. **Instrument Types**:
   Documents > General > Reference > Registry > Data > FNLRS & SGFNLR Registrations 2020-2010.xlsx
5. **Use Case Documents**:
   Documents > General > Reference > Registry > ILRS Technical Materials > ILRUP Use Cases – several documents
6. **Internal ILRS User Guide**:
   Documents > General > Reference > Registry > FNLRS – ILRS – SGFNLRS > Internal ILRS User Guide English.pdf
7. **ISC FNLRS System Training**:
   Documents > General > Reference > Registry > ISC Registrar > FNLRS_System_Training.pdf

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8.2.1 Summary Observations

1. **Register of Instruments, not an explicit Register of Interests**: Instruments are the central concept in the Register database that ties land and parties together. The notion of a land interest[17] is only evident in a subset of the Instrument Types, and for each type of interest there may be several different Instrument Types that operate upon it to create, modify, transfer, and relinquish/cancel it.

2. **Sub-PINs are not used consistently with respect to defining a particular kind of space or interest**: The Sub-PIN parcel type has been used in a variety of ways, as it does not appear that the Register enforces any particular rules regarding its usage. Examples include a licence for parking (e.g., Registry PIN 903029009), a BCR allotment (e.g., Registry PIN 402524037), as well more typically, for a building unit that is sub-leased (e.g., Registry PIN 902517569).

3. **Relatively small core database**: From a data modeling perspective, the core Register is 11 top-level entities and 16 supporting tables with details.

8.3 Land Register Data Holdings

Although there have been no analytics performed on the Register data holdings, it is apparent that the data model is not entirely indicative of the data it contains. This is evident from examples from the Register as well as input from working group members. Two general kinds of variations between the data and the data model have been observed:

1. **Data recorded that is beyond the conceptual framework of the data model**, e.g., excluded lands, and arguably First Nations Land Codes, laws, and policies.
2. **Unused aspects of the data model**, e.g., it appears that Associated Instruments may fall into this category.

Specific instances of these variations are described below.

[17] The Physical Data Model includes a table called 'Land_Interest', however, its serves to cross-reference 'Land' and Instrument Party with EOTs.

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8.3.1 Summary Observations

1. **Data model permits options that do not appear to be used in practice**: It appears that the Associated Instruments feature has not been readily used, as it is not presented in the training materials, and should be established by applicants (First Nation Land Offices). Another feature that might not be readily used is Support Documents: these are references to external documents that are not actually held in the Register. Data analytics will need to be performed to determine these or any other general omissions exist.

2. **Sub-PINs**: The use of Sub-PINs appears to be varied, as described in the previous Summary Observations section. This is not surprising given that the are no materials that clearly define the concept and its intended usage.

3. **Excluded Lands**: Excluded Lands are First Nations lands that remain under the Indian Act (ILRS) until relinquished to the First Nation. The ILRS/FNLRS data model / database / system does not explicitly track and indicate what is excluded land. Therefore, when a Reserve is transferred from the ILRS to the FNLRS, excluded lands may be included. However, the FNLRS Registration Office (ISC Headquarters) is not responsible for excluded lands and transactions on them. When a transaction must be performed on excluded lands the Reserve must be reverted to be under the ILRS (Indian Act) so that the responsible ISC Regional Office may transact against the excluded land using the ILRS.

   Excluded Land parcels are not marked as such in eRIP – as there is no explicit data source for this designation in the ILRS/FNLRS, nor the SGB CLSS.

4. **Shared Reserve**: The data model does not accommodate representing shared reserves, i.e., where two or more First Nations jointly share a whole reserve under one Land Code. No shared reserves exist today purely under Framework Agreement First Nations; however, they do exist under the Indian Act (ILRS) and it is anticipated that shared reserves will come under the Framework Agreement in the not-to-distant future.

5. **Yukon Lands Set Aside**: Yukon Lands Set Aside are tracked in the ILRS, and there are none yet in the FNLRS. However, Lands Set Aside are recognized as being eligible under the Framework Agreement and there may be some transferring to be managed under First Nation Land Code as allowed for in the Framework Agreement (c. 2.1). They are handled in ILRS using Reserve and Parcels. While this may be a practical means to keep records without making any modifications to the system, Lands Set Aside are mislabeled as Reserves (there is not even a Reserve Type system code for Lands Set Aside), while it is clearly stated in the Framework Agreement that these are not Reserves (Framework Agreement c. 4.2.2).

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8.4 Metrics

8.4.1 First Nations

As of July 9, 2021, LABRC reports on their website the following counts of signatory First Nations:

Signatory Status	Total
Developmental - Active	48
Operational	99
Self Governance	3
Total	**150**

The geographical distribution of operational First Nations is as follows:

Province / Territory	Total
Newfoundland	1
Nova Scotia	1
New Brunswick	1
Quebec	2
Ontario	22
Manitoba	8
Saskatchewan	10
Alberta	0
British Columbia	52
North West Territories	1
Total	**98**

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An assessment of First Nation developmental density was undertaken by LABRC's GIS Analyst. The rough categorization yielded the following results:

Developmental Density	Total
Low	60
Medium	7
High	31
Total	**98**

8.4.2 Register Data

The following counts were provided by ISC for end of April 2021:

Entity	FNLRS	SGFNLRS	Combined
Reserves	461	5	466
Parcels – active	16,806	3,696	20,502
Parcels – retired	2,843	450	3,293
Parcels – total	19,649	4,146	23,795
Instruments	139,745	41,465	181,210
Documents – Protected B	86,874	28,830	115,704
Documents – Public	50,281	19,991	70,272

The breakdown of parcels based on parcel type – active and retired combined – is as follows (based on data from ISC, March 2021):

Parcel Type	FNLRS	SGFNLRS	Combined
Surface	15,300	1,639	16,939

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Sub-PIN	4,293	2,481	6,774
Sub-surface	34	0	34
Easement	250	24	274
Total	**19,877**	**4,144**	**24,021**
Percentage of total	83%	17%	100%

Including both active and retired parcels, the total number of parcels that have a Registry (ISC) PIN, but no corresponding NRCan (SGB) PIN within the FNLRS and SGFNLRS are as follows (based on data from ISC, March 2021):

Parcel Type	FNLRS	SGFNLRS	Combined
Surface	2,748	375	3,123
Sub-PIN	1,980	919	2,899
Sub-surface	34	0	34
Easement	8	0	8
Total	**4,770**	**1,294**	**6,064**
Percentage of total	24%	31%	25%

What is the explanation for the above? Based on two surface parcels investigated, two different situations were uncovered:

1. **No NRCan PINs issued for surveyed lots**: For example, CLSR Survey Plan 107589 from 1975, in Meadow Lake Saskatchewan, depicts lots 1 to 10 in block 41. Lot 7 (and likely the others – not confirmed) was registered in 2019 in the FNLRS as Registry PIN 603027382, for FLYING DUST FIRST NATION RESERVE NO. 105 (Reserve 06584). This lot, and some other nearby lots, are part of an agreement and OCPC that resulted in a permit and easement being granted to two different Saskatchewan corporations concerning a natural gas pipeline and fibre optic cables.

2. **NRCan PIN issued, but no association established with Registry PIN in FNLRS**: For example, surface parcel Registry PIN 903027332, in KOOTENAY NO. 1 (Reserve 07422), does not have a matching NRCan PIN in the FNLRS (nor is Registry PIN recognized in eRIP); however, the parcel does have an NRCan PIN. Using the survey plan number – CLSR 108544 – the

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NRCan PIN can be found in eRIP: 1228078. The parcel is categorized as 'Recent parcel – No interest' in eRIP even though it has been registered (with instruments) in the FNLRS.

Concerning Cardex Holdings (unresolved parcels that have been assigned an NRCan PIN but only have a point location as opposed to a polygon representation for their boundaries), the ISC Deputy Registrar has stated the following counts:

- FNLRS: 57 Cardex Holdings
- ILRS: 464 Cardex Holdings

An analysis of NRCan published data with respect to ISC data by LABRC's GIS Analyst determined the following:

- **9,705 NRCan parcels** on operational First Nation reserves have no corresponding Registry PIN. Parcel Type is not known; however, it is presumed these are mostly Surface Parcels.
- Westbank, a self-governing First Nation, has in total more Registry PINs than NRCan PINs; however, there could still exist NRCan PINs without Registry PINs.

8.4.3 Transactions

Transaction counts by Instrument Type since 2010 have been provided by ISC in a spreadsheet. Findings from analysis of this data are as follows:

Finding	FNLRS	SGFNLRS	Combined	ILRS
Total Transactions – 11 years	29,694	16,815	46,509	63,627
Highest Volume year	3,113 in 2019	1,892 in 2010	5,005	7,138 in 2017
Transactions – 11 years – Top 5 Instrument Types	14,403 49%	11,609 69%	26,012 56%	29,126 51%
Transactions – 11 years – Top 10 Instrument Types	20,451 69%	14,037 83%	34,488 74%	46,745 73%
Transactions – 11 years – Top 15 Instrument Types	23,608 80%	15,349 91%	38,957 84%	53,506 84%
Total Instrument Types Used	90	49	N/A	101

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Total Instrument Types Configured	161	162	N/A	164

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The Top 10 Instrument Types by transaction volume are as follows:

FNLRS	SGFNLRS	ILRS
1. 003 – Assignment	1. 016 – Mortgage	1. 028 - Transfer
2. 016 – Mortgage	2. 095 – Partial Discharge	2. 003 - Assignment
3. 012 – Discharge	3. 003 – Assignment	3. 014 - Lease
4. 028 – Transfer	4. 012 – Discharge	4. 012 - Discharge
5. 014 – Lease	5. 026 – Sub-Lease	5. 018 - Permit
6. 026 – Sub-Lease	6. 209 – Modification	6. 002 – Admin Transfer
7. 018 – Permit	7. 085 – Release	7. 016 - Mortgage
8. 210 – BCR Allotment	8. 028 – Transfer	8. 026 – Sub-Lease
9. 002 – Admin Transfer	9. 013 – Easement	9. 210 – BCR Allotment
10. 076 – Death Certificate	10. 033 – Agreement	10. 042 - Letter[18]

[18] Letter ranked higher due to 2017 being an anomalous year with very high transactions volumes. Otherwise it would have been Death Certificate followed by Addendum.

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8.4.4 Database Constructs

ISC Database Administrators provided the following counts from the Production system:

	OBJECT_TYPE	COUNT(OBJECT_TYPE
1	DATABASE LINK	2
2	FUNCTION	3
3	INDEX	372
4	LOB	9
5	MATERIALIZED VIE	10
6	PACKAGE	35
7	PACKAGE BODY	35
8	PROCEDURE	1
9	SEQUENCE	16
10	TABLE	111
11	TRIGGER	65
12	VIEW	44

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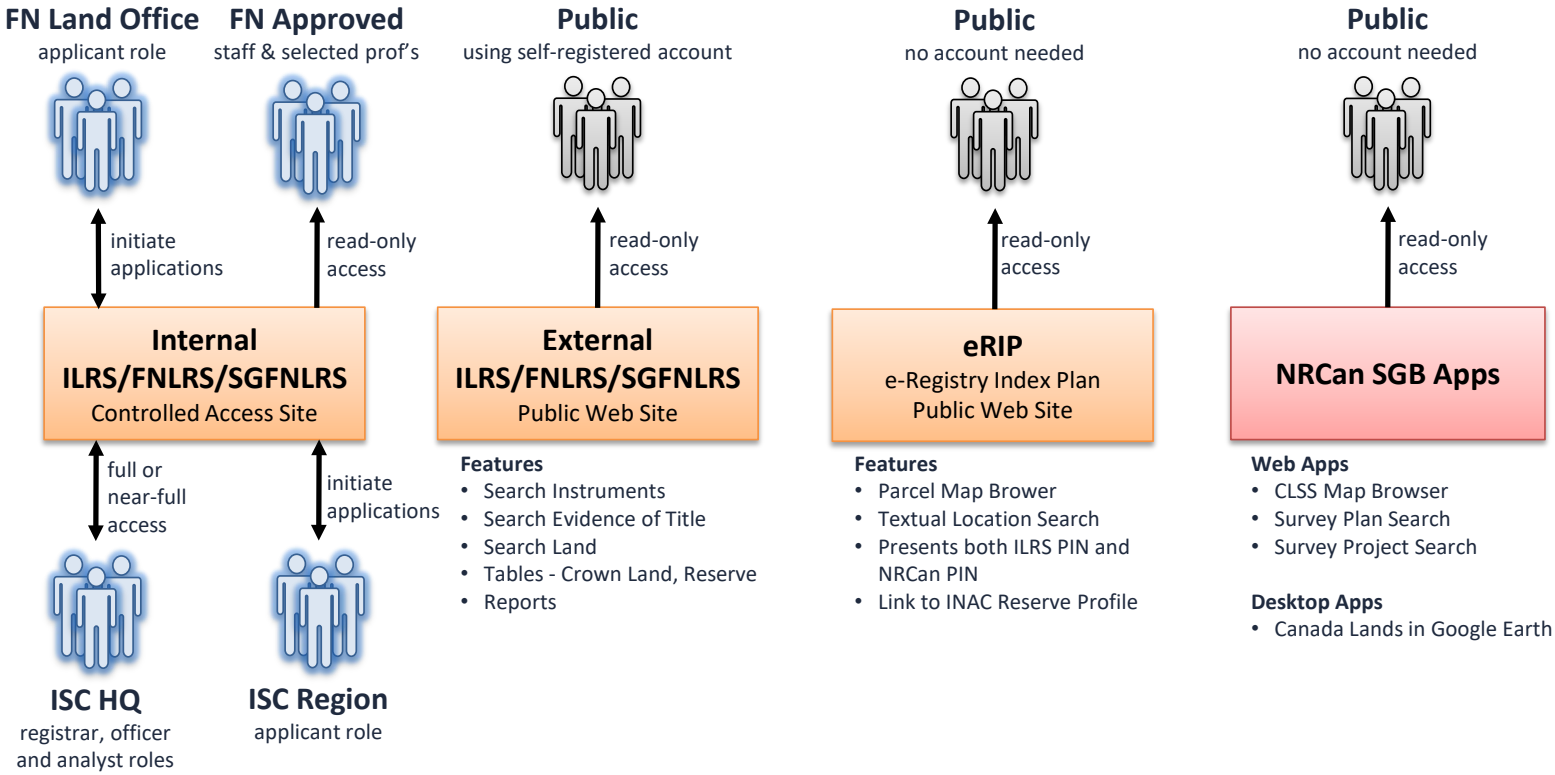
9 APPLICATIONS

The Applications Layer consists of the software-enabled system functionality provided to users through computer access. An overview of the various applications, features/functionality, and supported user groups/roles is presented below.

9.1 Context

ISC provides three distinct applications for accessing the land registry data and electronic services, as shown below.



Users of the ISC Apps may also use the NRCan SGB Apps (all freely available) in conjunction.

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There is lightweight integration between these Apps, enabling a parcel found in the ILRS/FNLRS/SGFNLRS (Internal or External Apps) to be viewed in eRIP. eRIP does not provide any linkage back to the Internal/External Apps. eRIP does provide a link to the INAC First Nations Profile from the Indian Reserve tab.

9.2 ISC Applications

The three ISC Apps – internal Indian Lands Registry, external Indian Lands Registry and eRIP – are described below.

9.2.1 Internal ILRS/FNLRS/SGFNLRS

The Internal ILRS User Guide is the primary source of the following information. Other sources are indicated where used.

9.2.1.1 Roles

The system has pre-defined roles that serve to control access to functionality. Each system/register – ILRS, FNLRS, SGFNLRS – have their own distinct set of roles (limiting them to that system/register), each following the same pattern as defined below (FNLRS and SGNFNLRS appear to be identical in rights granted, ILRS has some differences concerning instrument states).

A more detailed breakdown of rights pertaining to modifying instrument states can be found on MS Teams in Documents > General > Reference > Registry > ILRS Technical Materials > azman-task-list.xls. This spreadsheet is not consistent with the ILRS User Guide. Inconsistencies are noted in the table below.

An earlier design document – 'User Role Hierarchy – Image.doc' – appears to be from an earlier conceptual design and not quite as accurate.

Role	Description / Access Rights
HQ Registrar	• Access to all functions. • Access to lookup band membership data from Indian Registry System. • Can register an instrument.
HQ Officer	• More limited than HQ Registrar: e.g., cannot register instruments. • Access to some update functions, e.g, Instrument status excluding registration. • Access to all parcel functions, e.g., create, modify, divide/amalgamate, retire.

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Role	Description / Access Rights
	• Can record Evidence of Title on an instrument. • Access to lookup band membership data from Indian Registry System.
HQ Analyst	• More limited than HQ Officer: e.g., very limited update rights. • Access to some update functions, e.g, can receive instruments, User Guide indicates can create (initiate) instruments but azman-task-list.xls indicates can only update pending/received. • Parcel access: view only.
Regional Officer	• More limited than HQ Analyst. • Very limited update functions: e.g., create new instrument, request registration, withdrawn unregistered instrument; but cannot receive or register and instrument. • Parcel access: view only. • Search, view reports, view documents. Note: azman-task-list.xls indicates that this role cannot update instruments whatsoever for any of the three systems. Perhaps role is not actually being used.
Regional Analyst	• Same rights as ILRS User Guide claims for Regional Officer (azman-task-list.xls confirms this).
FN Applicant	• Same rights as Regional Analyst (according to azman-task-list.xls).
Read Only User	• ILRS User Guide does not list this role; however it appears in azman-task-list.xls • Cannot create or make any updates to instruments. • Presumably search-only access.

The CITRIX Access Form indicates that there are three categories of FNLRS access available:

Type of Access	Typical Users	System – Role
FNLRS Access – CITRIX ILRS, read/write access	First Nation Authority Access	Production – FN Applicant
FNLRS Access – CITRIX ILRS-training	First Nation Training	Training – FN Applicant – used by LABRC TMPD. Contains a snapshot of the Production system data that is periodically refreshed.

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Type of Access	Typical Users	System – Role
FNLRS Access – CITRIX ILRS, read only access	First Nation staff First Nation approved professionals (legal, real estate, etc.)	Production – Read Only User

9.2.1.2 Functionality

The functionality is organized in the Internal ILRS User Guide (excluding eRIP) as follows:

1. **Common Functions**: add, modify, delete Grantors/Grantees (a component of an instrument); User Preferences.
2. **Find (lookup) Functions**: Band, Crown Land (N/A for FNLRS/SGFNLRS), Grantee/Grantor, Instrument, Parcel, Reserve.
3. **Search and Search Results Handling**: for EOTs, Instruments, Land – search and retrieve, print or export search results, save/modify saved search criteria.
4. **Instrument**: a range of functions pertaining to instruments and scanning organized under the categories of 'general', HQ Users (Registry Office), Regional Users (Applicants).
5. **Parcel**: functions to add, associate, delete, divide or amalgamate, modify, retire and view parcel details.
6. **Evidence of Title (EOT)**: record, modify, inactivate, view, print EOT – only available to HQ Users (Registry Office).
7. **Reporting**: nine different reports available to view and print.
8. **System Administration**: functions for user maintenance (add, maintain, delete, search); manage system messages; view/print system code tables.

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9.2.1.2.1 Reserves

Reserves are not defined/updated as top-level entities (presumably because they change infrequently); however, they can be searched, created and modified through the Reserve Code Table access from the System Maintenance (administration) tab:

MS Teams Source Folder: Documents > General > Reference > Registry > FNLRS – ILRS – SGFNLRS > Reserve – System Maintenance Functions

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9.2.1.2.2 Instruments

The functionality related to instruments is as follows:

1. **General procedures**
    a. Application Details: view, print.
    b. Scanned Document: view.

2. **HQ Users** (Registry Office)
    a. Instrument Communication: add, modify, delete
    b. Associate an Instrument
    c. Copy Instrument
        - From a Parcel to additional Parcels of land
        - To Reserve General (or Crown Land Register)
    d. Initiate Instrument
    e. Manually Register Instrument
    f. Modify Instrument
    g. Receive Instrument
    h. Add/Remove Land Reference to an Instrument
    i. Register Instrument
    j. Reset Instrument
    k. Return Instrument
    l. Review Instrument
    m. Withdraw/Delete Instrument

3. **Scanning Administration**: The ILRS User Guide is missing content for some of these functions. It states that linking scanned documents to instruments "can only be accomplished through the Fortis Workstations in the HQ office." Clearly this is no longer the case. First Nation's Land Office staff initiate instruments and link scanned documents to them (see MS Teams: Documents > General > Reference > Registry > FN Lands Office (LABRC materials) > 1.3c FNLRS 201 – Citrix – Upload File Procedures – HANDOUT.pdf
    a. Link Scanned Document

    The following have no description in the ILRS User Guide – most likely an indication that the functionality is now deprecated from the system:

    b. Export Image File

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c. Generate Image File
d. Maintain Image Metadata
e. Manage Image File
f. Manage Scanning File Administration
g. Scan Document

4. **Regional Users**: The following appears to be more generally applicable, also applying to the 'FN Applicant' role.
    a. Request Instrument Registration: To set an instrument to the 'pending' (Regional users) or 'received' (FN users) status.

5. **Grantors/Grantees**: Mentioned above under Common Functions, the Grantors/Grantees lookup is specific to instruments. The ILRS User Guide (p. 17) states the following:
    a. Every Instrument has associated Grantor(s)/Grantee(s) to identify the person giving an interest in the land (i.e. the Grantor) and the person receiving the interest in the land (i.e. the Grantee).
    b. Grantor(s)/Grantee(s) are first identified when an instrument is initiated, however, they can be added, deleted and/or modified at different stages and statuses of the instruments life cycle.
    c. When Grantor(s)/Grantee(s) are registered Band Members, they may be located and/or found in the Indian Registry System (IRS).

    To the last point above, the system accesses data from the Indian Registry System. As explained in section 8, this data and system is not accessed directly, but rather through the Corporate Information Repository.

9.2.1.3 Reports

The reports the system provides fall into two categories: information products (described in section 7.5) and administrative reports.

Information Products:

1. Band/Reserve Report
2. Instrument Report
3. Parcel Abstract Report
4. Reserve General Abstract Report
5. Registrar's Certificate Report

Administrative Reports – descriptions taken from ILRS User Guide:

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1. **Administrative Notes Report** (HQ end-users only): "a list of all entries made in the Administrative Notes field of an Instrument for the Reserve General, Crown Land Register and the Parcel Registers for a specific Reserve or Crown Land."

2. **EOT/Lawful Possessors Report** (all users): "detailed information regarding Evidence of Title and/or Lawful Possession by Band or Reserve. The report displays the PIN and Legal Description of the lot for which the EOT was issued as well as the EOT Type and Number, EOT Status, Grantee and the date the EOT was issued."

3. **Online Activity Report** (all users): the status and statistics on all Initiated, Pending, Received, Returned and Withdrawn applications for a specific period.

4. **Work Allotment Report** (HQ end-users only): "provides information on Registrations made by a specific user or All Registry Staff during a specific time frame."

9.2.1.4 Integration with other Systems

The eRIP viewer can be accessed from the Internal ILRS system in the following ways (ILRS User Guide, p. 291):

1. With no parcel context, resulting in eRIP launching to show the map zoomed to all of Canada.
2. Based on NRCan PIN, resulting in eRIP launching to show the map zoomed to the selected parcel.

There is no further integration provided.

There is no integration with the SGB CLSS to access survey plans or other records.

9.2.1.5 Useability

Some First Nations users have commented that the user interface needs to be more user friendly, more intuitive, less cumbersome and difficult, and interactions more streamlined.

A compilation of feedback from the May 6, 2021 LABRC TMPD Workshop can be found on MS Teams:
Documents > General > Solution > TMPD Workshops > Participant Feedback to the Introduction to the New.pptx

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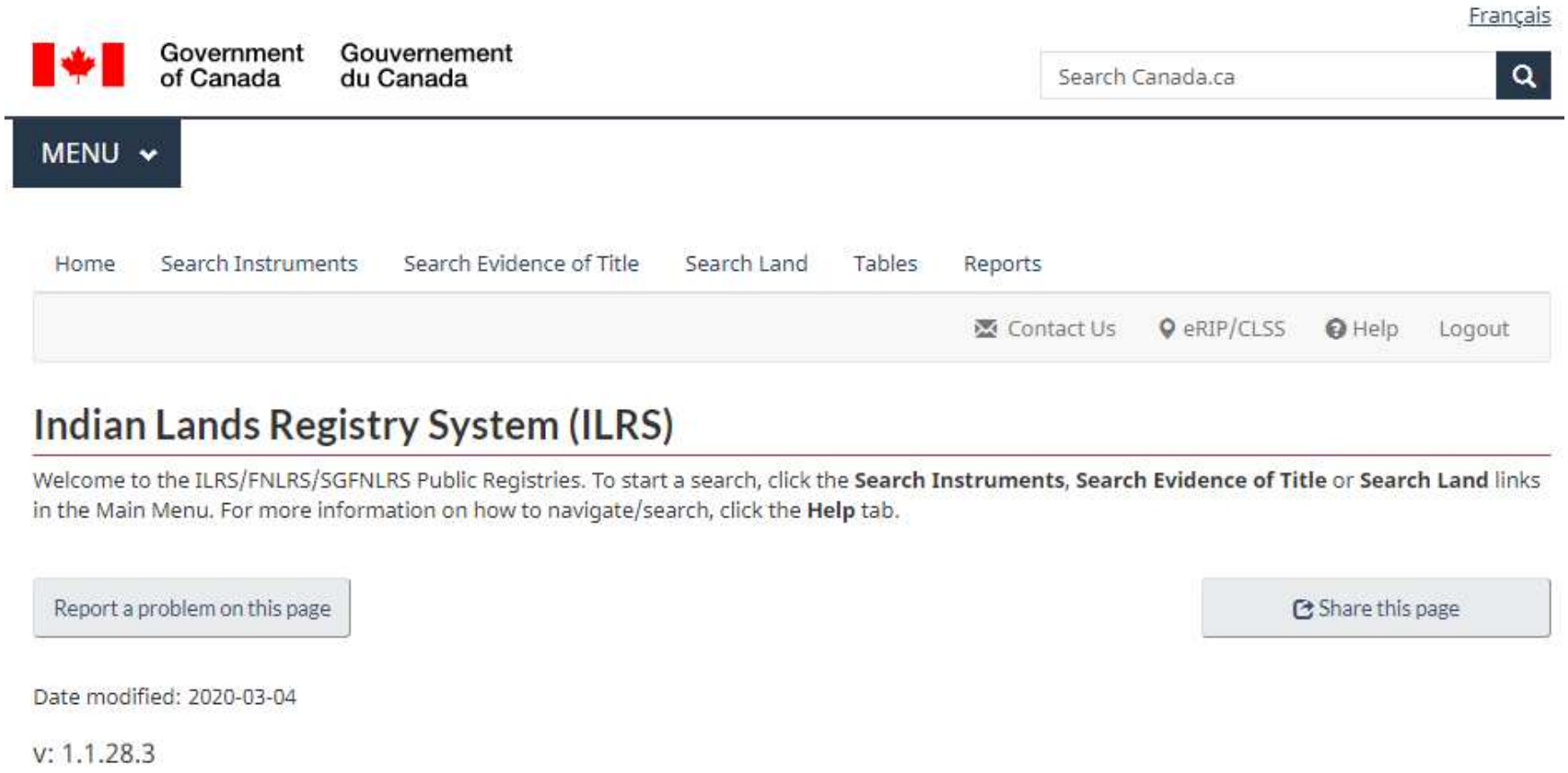
9.2.2 External ILRS/FNLRS/SGFNLRS

The public web site for accessing the land registry provides searching and information products (fully described in section 7.5). It is accessed through a self-registered account at this web address. The top-level page and menu is shown below.



An online help guide is available. Searches require selecting the specific system/register, i.e., ILRS, FNLRS, SGFNLRS.

Search result lists present multiple records, and are sortable on various columns. The capabilities provided for each search function are as follows:

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1. **Search Instruments**: supports basic and advance searches to obtain the Instrument Details search product (section 7.5.5). From the search results list, a user can access the Instrument Details and the Land Details. The Instrument document itself is not accessible for privacy reasons – although Instruments had previously been accessible prior to policy changes.

2. **Search Evidence of Title**: supports basic and advance searches to obtain the Evidence of Title search product (section 7.5.6). From the search results list, a user can access the EOT Details, Parcel Details, or Instrument Details.

3. **Search Land**: supports basic and advance searches for parcels to obtain the Land Details search product (section 7.5.7). Not all associated instruments are listed. The Parcel Abstract Report provides the full list.

4. **Tables**: supports basic and advance search on Reserve Table and Crown Land Table (only applicable to ILRS). The Reserve Table search retrieves the Reserve Details search product (section 7.5.8).

5. **Reports**: the following reports are available:
    a. Band/Reserve Report
    b. Instrument Report
    c. Parcel Abstract Report
    d. Reserve General Abstract Report

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Search Instruments – example results below.

Instrument Search Results - FNLRS

393 records of 393

Export Print

1 2 3 4 5 6 7 8

Registration Number	Instrument Type	Land Affected/Legal Description	Instrument Date	Received Date	Registration Date
******	Registrar's Note	LOT 2-2	1974-09-20		
******	Registrar's Note	LOT 2-2	2008-03-14	2008-03-12	2008-03-14
******	Survey Plan	LOT 52	1997-08-26		1997-08-26
******	RS Plan	LOT 11	2000-10-18		
******	Registrar's Note	LOT 2-2	2016-06-24	2016-06-24	2016-06-27
******	Registrar's Note	LOT 44	2016-06-24	2016-06-24	2016-06-27
******	Survey Plan	PARCEL 18.8 ACRES	1968-06-24		1997-12-04
******	Registrar's Note	LOT 53-1	2016-06-24	2016-06-24	2016-06-27
******	Survey Plan	LOT 46	1984-07-16	2021-04-01	2021-04-01
******	Registrar's Note	LOT 2-1	2016-06-24	2016-06-24	2016-06-27
1016-1	OCPC	TSEATAH NO. 2	1913-01-25		1970-04-02
1016-1	OCPC	CHEAM NO. 1	1913-01-25		1970-04-02
10314	BCR	LOT 52	1969-04-14		1969-06-04

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Search Evidence of Title – example results below.

EOT Search Results - FNLRS

500 records of Get Total

Export Print

1 2 3 4 5 6 7 8 9 10 ...

EOT Number	EOT Type	PIN	Legal Description	Plan	Grantee Name	Registration Number
1103	Band	902500402	LOT 109-2	RSBC 3215R	Musqueam	286772
1103	Band	902000456	LOT 18 VILLAGE SUBDIVISION SKETCH 141-34	CLSR 55138	Musqueam	286772
1158	Band	902500749	LOT 94-5-2	RSBC 3243R	Musqueam | Musqueam	287388
1158	Band	902002779	LOT 94-5	RSBC 2258	Musqueam | Musqueam	287388
1159	Band	902500750	LOT 94-5-3	RSBC 3243R	Musqueam | Musqueam	287388
1159	Band	902002779	LOT 94-5	RSBC 2258	Musqueam | Musqueam	287388
1160	Band	902500751	LOT 94-5-1	RSBC 3243R	Musqueam | Musqueam	287388
1160	Band	902002779	LOT 94-5	RSBC 2258	Musqueam | Musqueam	287388
1161	Band	902000432	LOT 32 VILLAGE SUBDIVISION SKETCH 141-34	CLSR 55138	Musqueam	287391
20868	Band	902014722	LOT 107-2	RSBC 2791R	Musqueam	267928

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9.2.3 eRIP

eRIP is the Electronic Registry Index Plan, a web-based map browser, that shows Reserve Lands and the surveyed parcels on Reserves. This means that eRIP does not show registered non-survey-based parcels. The map is only intended to be a guide, and is not considered to be a legally authoritative source. That is the place of the survey plans (CLSR) and registered documents (ILRS/FNLRS/SGFNLRS).

Online help is available, which appears to be quite thorough. eRIPs main features are as follows:

- Table View
- Legend
- Basemap Gallery
- Add Layer
- Set Transparency
- Location Search
- Identify
- Clear Search Results
- Hide/Show selection on map
- Measure
- Print
- E-mail map
- Session
- Reload the page
- Map navigation
- Overview map
- Result grid keyboard navigation

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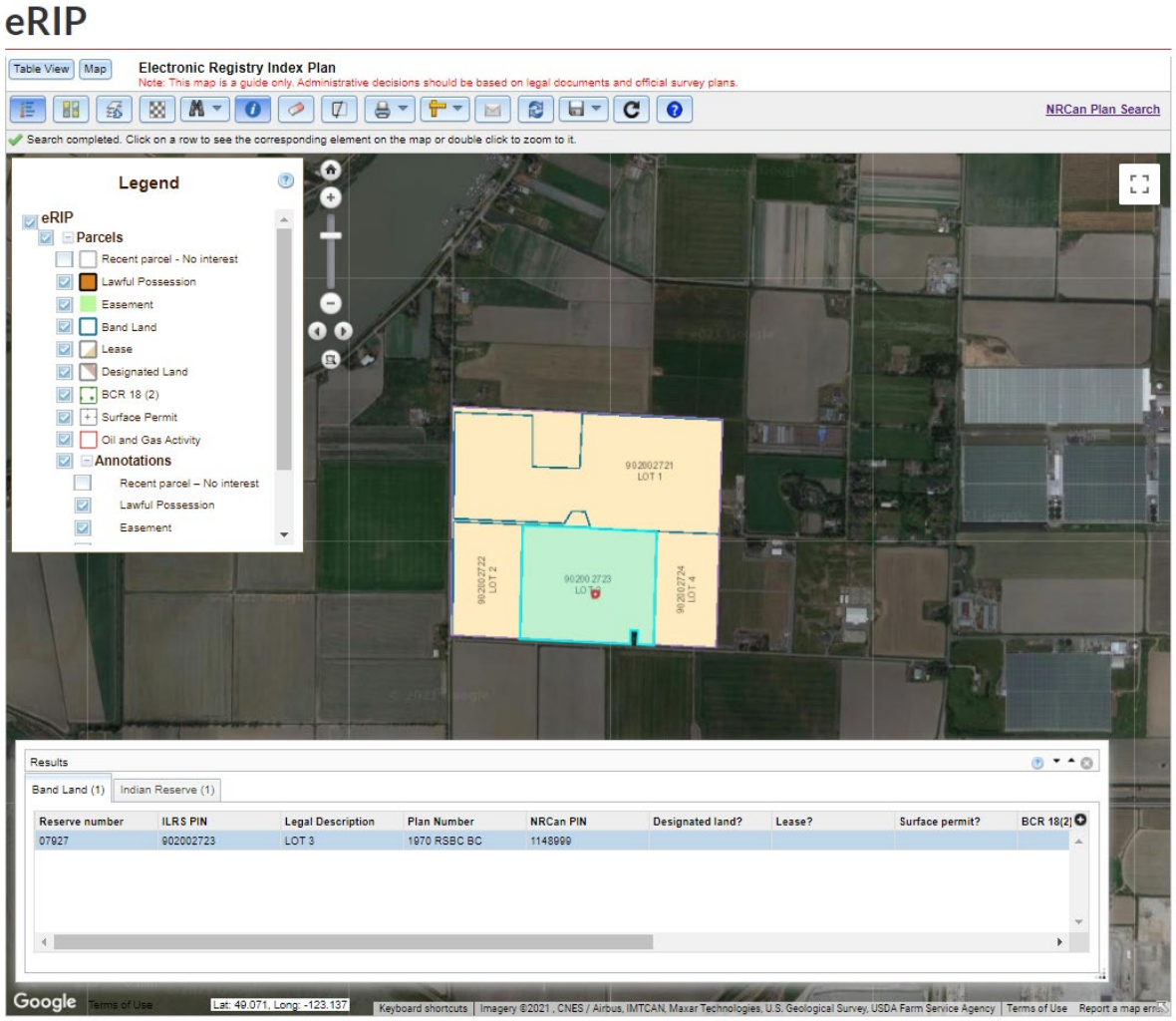
The Map View is the primary means of interaction, and through it tabular data on parcels and reserves can be accessed. An example of it in use is shown below.



A Table View provides a simple search by Reserve Number to retrieve parcels for any one of the following data layers:

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1. Oil and Gas Activity
2. Lawful Possession
3. Easement
4. Band Land
5. Recent parcel – No interest
6. Other parcel – No interest
7. ILRS Retired
8. Indian Reserve

An example is shown below:

Results

Reserve number	ILRS PIN	Legal Description	Plan Number	NRCan PIN	Designated land?	Lease?	Surface permit?	BCR 18(2)?	Remainder?	Outside of reserve?	NRCan category	Latitude (dd)	Longitude (dd)
06009	202524738	LOT 133	96187-2 CLSR NB	1181701	Designated land						Current	47.3684	-68.2975
06009	202508060	LOT 61	93668 CLSR NB	1002323							Retired	47.3604	-68.3016
06009	202001645	LOT 6-3-1	96-007R RSATL NB	1002251							Current	47.3619	-68.3068
06009	203014125	LOT 142	99303 CLSR NB	1192867		Lease					Current	47.3737	-68.3042
06009	202505248	LOT 12-2	2000-004R RSATL NB	1002207							Retired	47.3626	-68.317
06009	202001655	LOT 3-4-1	96-008R RSATL NB	1002332							Current	47.3625	-68.3124
06009	200011262	LOT 4-2	53396 CLSR NB	1002393							Retired	47.3625	-68.3104
06009	202524737	LOT 134	96187-2 CLSR NB	1181704							Retired	47.3752	-68.2944
06009	202526770	LOT 132	96187-2 CLSR NB	1181707							Current	47.3688	-68.3091
06009	202001727	LOT 3-4-2	97-016R RSATL NB	1002733							Retired	47.3626	-68.3119
06009	202001363	LOT 28	79448 CLSR NB	1002735							Current	47.3617	-68.2981
06009	201000538	LOT 12	79528 CLSR NB	1002731							Retired	47.3625	-68.3169

1 - 39 of 39 results « ‹ 1 › »

Location Search provides a simple textual search to get to a location on the map. The search options are as follows:

- Indian Reserve Name
- Indian Reserve Number

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- Parcel by ILRS Pin
- Parcel by NRCan Pin
- Parcel by Parcel Designator
- Parcel by Plan Number
- Place Name

9.3 NRCan SGB Tools

The SGB "placemat" web page briefly describes each of the four tools (Apps) and what to use based on what information you have, and what information you are looking for. The tools are as follows:

1. **CLSS Map Browser** – web-based: "a location-based search tool that illustrates information from Canada Lands Surveys Records in an interactive map". This is comparable to eRIP in that it provides a parcel map view; however, it differs in several respects. Specifically, the CLSS Map Browser:
    a. Does not present any land registry data, e.g., ILRS PIN, Reserve Name, Reserve Number, Permits, Lease, etc.
    b. Shows survey projects in progress.
    c. Contains different feature types/layers than provided in eRIP, e.g., Land Code Exclusion Area, etc.
    d. Provides a different breakdown of parcels: inconclusive parcel, unresolved parcel, condominium, strata parcel, parcel, other.
    e. Provides link to survey plan details, which in turn includes links to plan images and/or field books.

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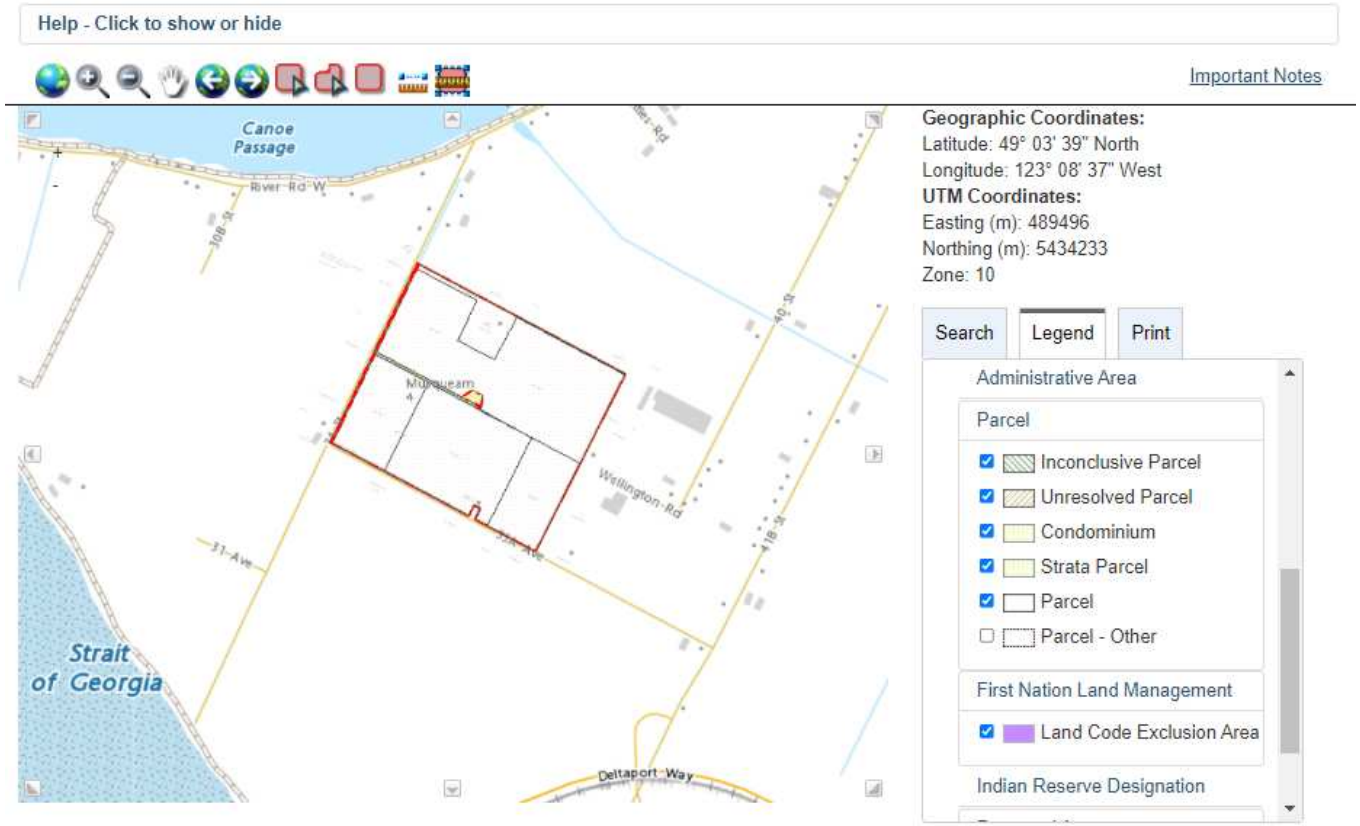
Canada Lands Survey System - CLSS Map Browser



Parcel (8) | Surveys in Progress (0) | Survey Plan (0) | Township (0) | Administrative Area (0) | Additional Info (0)

Parcel Designator	Remainder	Plan Number	Plan Detail	Parcel Type
LOT 1	No	1851 RSBC BC	View	Parcel
LOT 2	No	1851 RSBC BC	View	Parcel
LOT 3	No	1970 RSBC BC	View	Parcel
LOT 4	No	1970 RSBC BC	View	Parcel
MUSQUEAM 4	Yes	68394 CLSR BC	View	Parcel
PARCEL B	Yes	59430 CLSR BC	View	Parcel

Date Modified: 2014-03-27

2. **Survey Plan Search** – web-based: "a text-based search tool that allows users to find, view and download survey plans and records from the Canada Lands Surveys Records."

3. **Survey Project Search** – web-based: "text-based search tool that allows users to monitor the status of survey projects conducted on Canada Lands".

4. **Canada Lands in Google Earth** – desktop: "a digital overlay of current surveyed parcels, plan numbers, project numbers and administrative boundaries of Canada Lands shown in Google Earth."

9.4 Summary Observations

1. **Internal ILRS/FNLRS/SGFNLRS system is accessed via CITRIX and does not have a web-native user interface**.

2. **Minimal integration between the Apps**:
    a. **Public web apps (eRIP, external land registry) are only slightly integrated**: eRIP can be access from external web app, but not vice versa.
    b. **Internal App and eRIP one way integration**: eRIP can be launched from Internal App, but otherwise there is no synchronization between them.
    c. **No integration with SGB CLSS**: to access survey plans and other records.

3. **Instrument documents are not available through public web site**.

4. **eRIP does not show registered parcels that are not based on survey**.

5. **Not all useful SGB data is flowing through to Registry**: CLSS Map Browser contains useful data not found in eRIP, nor in the Registry system itself, e.g., parcel categorization, other feature types/layers.

6. **Excluded Lands**

    Excluded Lands, although they belong under the rule of the Indian Act, in practice move into the FNLRS when the First Nation becomes operational under the Framework Agreement, because the system does not distinguish them. At the Application Level, the issue is that different Registration Offices cannot perform transactions (as a matter of policy and responsibility) on the data if it does not fall under the statute/regime they operate under, i.e., Indian Act, First Nations Land Management Act. The workaround practice is to switch a First Nation Reserve from FNLRS to the ILRS (by changing a flag), have the ISC

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Regional Office perform the transactions on the excluded land, then revert the Reserve back to the FNLRS. This happens about once a month. The point: the Application (nor the data model) does not readily and easily accommodate the need to distinguish and transact on excluded lands under different statutes/regimes.

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10 TECHNOLOGY

The Technology Layer is concerned with the significant system and software components that make up the Land Registry or interface with it. The software is hosted by ISC on their infrastructure. The underlying infrastructure technology and architecture has not been investigated and so is not presented here as it probably won't have a significant bearing on the Future State architecture.

10.1 Context

The main system and software components, data stores and external components in and surrounding the Land Registry are shown below. The components are grouped into three categories:

1. Specific to the Land Registry – orange.
2. Shared with other systems in ISC or the Government of Canada – red.
3. External to the Land Registry – either within the Government of Canada or outside – blue.

At the heart of the Land Registry (and centre of the diagram) is the Oracle database that holds the textual and spatial data. The three ISC Applications – External Land Registry, Internal Land Registry and eRIP (presented in section 9.2) – access this database.

Users access the External Land Registry and eRIP from their web browser through a Web Server. Users access the Internal Land Registry through ISC's Access Portal, which establishes a Citrix session with the Internal Land Registry Microsoft Windows application. For Citrix to work, a client-side App must either be installed and run natively on the user's local computer (the Citrix Workspace App – full version) or run from within a web browser (light version). ISC runs a Citrix server that interfaces to the Internal Land Registry. The ISC Access Portal User Guide, available from the Access Portal splash page, describes the setup process.

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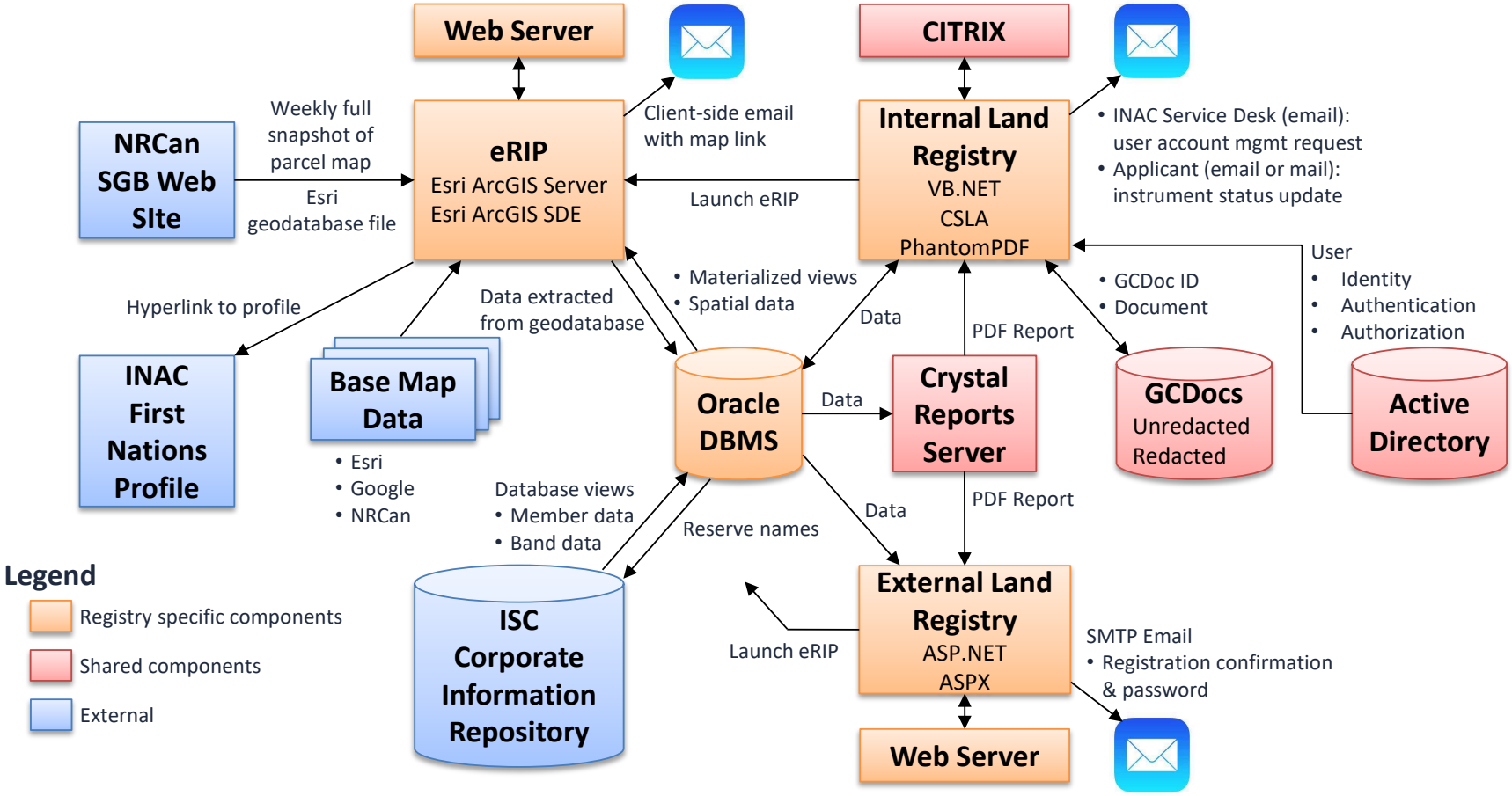

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10.2 System and Software Components

The following sections briefly describe the system, software, and technology components at a high level for each of the three ISC Applications. For each, the interfaces are described.

Sources

The information below is based on the following primary sources:
MS Teams location: Documents > General > Reference > Registry > ILRS Technical Materials

1. ILRS Software Architecture Document (SAD), most recent version: 15, 2013-11-03. This document is dated. Not all the information in this document is still accurate. Some significant changes have been made since the last revision. Most notably, the replacement of the CIDM document management capability with GCDocs.

2. **Nine Use Case Documents**: Some of these have been updated as recently as January, 2021.

3. **Three technology workshop sessions**: held with ISC technology experts in April and May 2021 including:
    a. Andre St. Jean: project manage, ISC system modernization initiatives.
    b. Mike Bouchard: technical advisor with ISC, supporting ILRS for 10 years.
    c. Sandi Kelly: business analyst and quality control, work on ILRS since 2009.

10.2.1 Internal Land Registry (ILR App)

The SAD indicates that the ILR App is fundamentally based on the Microsoft .NET architecture and has been architected according to the "Three Layered Services Application architecture pattern" that consists of presentation, business and data layers (s. 5.1). The application is built on the .NET Framework (SAD indicates v. 3.51, circa 2008) using the Visual Basic (VB) programming language. The software is organized into packages. Metrics could not be obtained on the number of lines of code.

Notable technologies used include:

1. **Microsoft AzMan** (Authorization Manager): A role-based access and security framework for .NET applications.

2. **Active Directory**: An ISC shared service for identity management, authentication and authorization based on Microsoft's Active Directory Service. The ILR does not update Active Directory itself, it only looks up users in it. Users are managed in the Active Directory by the INAC (ISC) Service Desk.

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3. **CSLA .NET**: Component-based Scalable Logical Architecture software framework built for .NET. It is reported to be used for the business layer: business object validation and controlling state transitions.

4. **Oracle DBMS** (recently upgraded to 12c): Relational data store used for the core register data, see section 8.

5. **Stored Procedures**: All database access is done through stored procedures; thereby avoiding inline PL/SQL in VB.

6. **Crystal Reports Server**: A shared service that pulls data from Oracle and generates PDF Reports, as per section 9.2.1.3.

7. **GCDocs**: The third document management solution integrated over the lifetime of ILRS. Originally (2009) this was based on Fortis Imaging Solution, then migrated to CIDM (INAC's Comprehensive Integrated Document Management based on the Hummingbird Enterprise suite) around 2013 (according to the SAD's revision history). Subsequently around 2018 GCDocs, Government of Canada's archiving and record management solution based on OpenText (adoption story). The ILR App is one of many applications and government departments that use GCDocs.

   Documents stored in GCDocs are issued a GCDoc ID. The ILR stores the GCDoc ID for a document (e.g., PDF of scanned instrument) in the Oracle database, and so is able to retrieve the document later from the instrument record. Both unredacted and redacted documents are stored in GCDocs.

8. **PhantomPDF** (from Foxit software): Used for redacting the PDF instruments (previously used Adobe Acrobat Edit).

External Interfaces – other than the user interface (accessed remotely via Citrix), include:

1. **Launch eRIP**: described in section 9.2.1.4.

2. **SMTP email**: The ILR App may send out emails for several different reasons:
   a. **User account request**: Emails are sent to the INAC (ISC) Service Desk to create, update, and delete user's defined in the Active Directory.
   b. **Instrument status update**: An applicant can opt in to get an email when an instrument is set to Received, Returned, and/or Registered statuses. The Instrument Communication section requires at least one record, but allows more. Mail is an alternate mode of contact supported.

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3. **ISC Corporate Information Repository**: This is ISC's central data clearinghouse, referred to as "Common", see picture below from the Common Information Repository - SKM_C55819091814010. Three kinds of data are exchanged between the Land Registry Oracle database instance and the Common Information Repository (SAD, s. 9.1):
    a. **COMMON.REGISTERED_INDIAN table**: This is queried on demand by the ILR App to lookup Grantors and Grantees to verify they are registered band members. Access in the form of confirmation of identity of registered individuals. Neither the registry number, nor the spouse registry number of the individual are retained in the ILRS database.

    b. **COMMON.BAND table**: This is periodically written to a matched table inside the ILRS schema. The synch mechanism is performed by a PL/SQL job that is executed by the Oracle scheduler. The job is called COMMON_TABLE_SYNC and is run weekly.

    c. **ILRS Reserve Data**: ILRS is the authority on defining Reserves for Common. The process for extracting ILRS Reserve data is controlled by the Database Group - ILRS exposes data, which is extracted (pulled) into Common.

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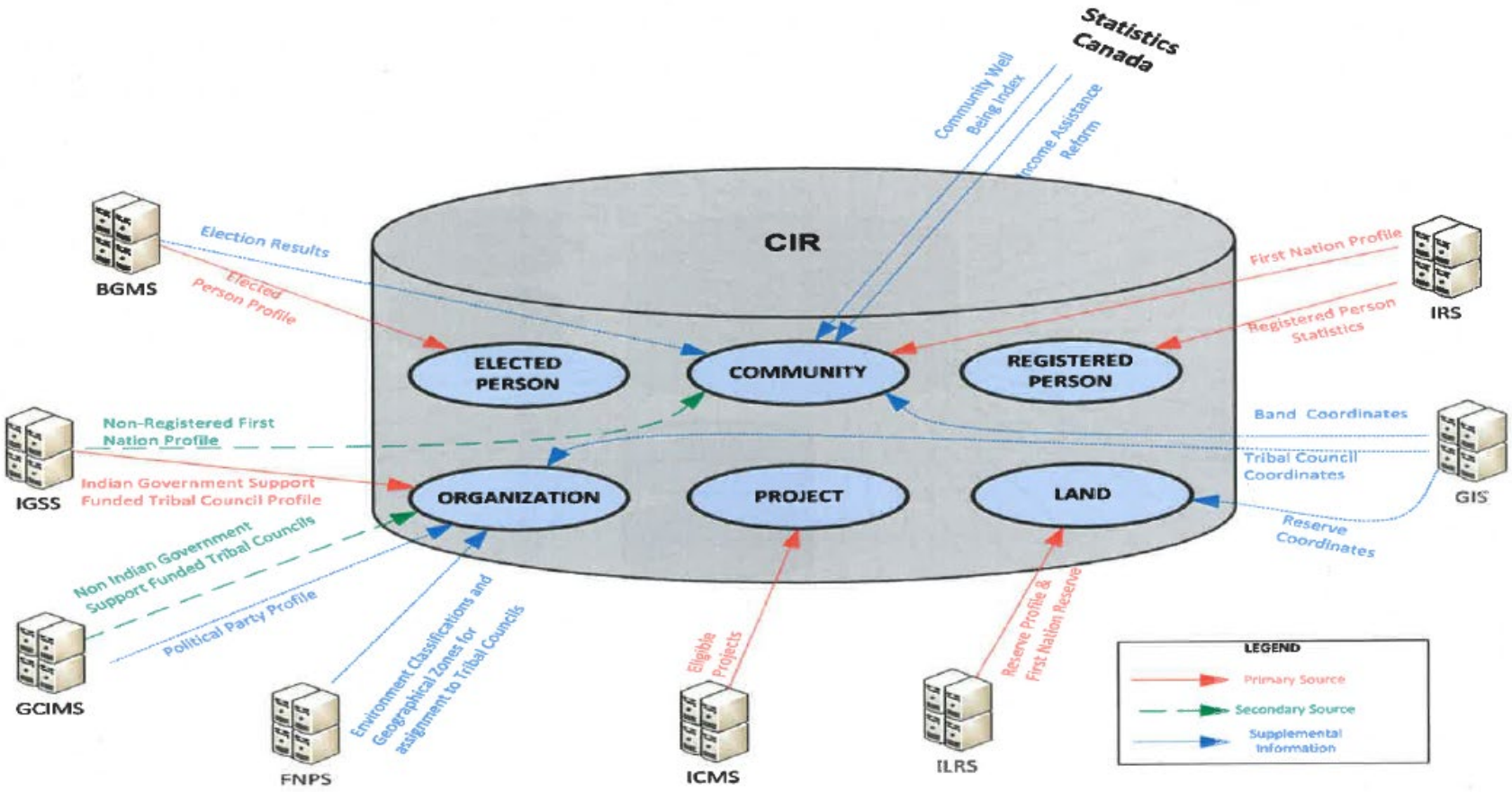
Indigenous Services Canada | Services aux Autochtones Canada

Sources for Common Information Repository (CIR)



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10.2.2 External Land Registry (ELR App)

The SAD indicates that the ELR web App is based on Microsoft Active Server Pages .NET Framework. Microsoft's web server – Internet Information Server – is used. The ELR App does not use Active Directory for identity and authentication. Users self-register on the ELR App, they are emailed a registration confirmation with password, and login authentication is handled by the CSLA (business) layer. There is only one level of authorization: complete access. "All database access will use a Generic Read Only account to query the Oracle Repository" (SAD s. 8.3).

The four report products (see section 7.5) are generated by the Crystal Reports Server. The remaining search capabilities and search products are provided by the ELR App.

10.2.3 eRIP

eRIP is the Electronic Registry Index Plan, a web-based map browser, that shows Reserve Lands and the surveyed parcels on Reserves. Microsoft's web server – Internet Information Server – is used. The web site is freely accessible, no registered account is required.

eRIP's provides a view of data that combines the SGB parcel spatial (map) data with selected ILRS/FNLRS/SGFNLRS textual register data. It is based upon the Government of Canada's GeoViewer II, but is a separate (copied) codebase. eRIP uses ArcGIS Server 10.8.1 on the server side. The client side is HTML with Esri ArcGIS API for Javascript v3 used to access REST services.

The spatial data, an Esri geodatabase format file provided by the SGB on their website, is retrieved by an eRIP scheduled Python script weekly. Data is extracted from the geodatabase and "joined" with data obtained from the ILR App Oracle database instance obtained using "materialized views", i.e., database tables whose content is derived by queries on other database tables. The NRCan PIN is provided by SGB in the geodatabase file. It is also entered by the Registration Officer on the ILR App side when they add a parcel to the register. They obtain the NRCan PIN by finding the parcel in eRIP, and presumably using a survey plan to help them find the correct parcel/lot. Therefore, the NRCan PIN is used as the "join" key to associate the ILR records with the SGB data. Note, however, that the Registration Officer can create parcels without providing an NRCan PIN.

The geodatabase file contains a full snapshot of all the parcel data (not just the most recent updates). The file takes about 30 minutes to process. It includes a check to ensure no data was missing to block an ill-formed geodatabase file from corrupting eRIPs data view.

Materialized views are automatically synchronized every 15 minutes using stored procedures. eRIP has a button to refresh on-demand to force synchronization.

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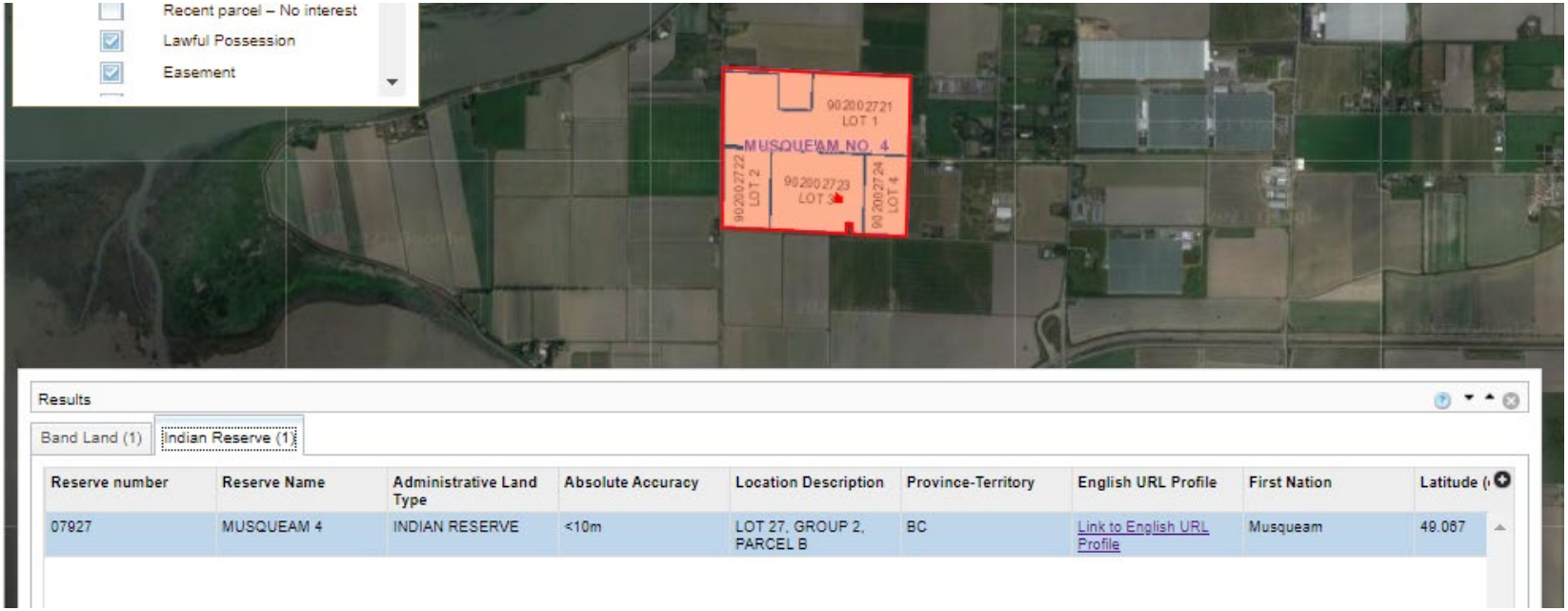
Base maps are retrieved on demand from NRCan, Google or Esri.

eRIP provides a link from the Table View Reserve record to the INAC First Nations Profile, as shown as the hyperlinked field below.



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10.3 Summary Observations

1. **Internal Land Registry application not built for web-based access**: Microsoft windows style application requires Citrix to access it.

2. **Corporate Information Repository is a low-level cross-database interface**: In essence, this is a very-tightly coupled interface, where in some cases database tables are mirrored on both sides. It is also a very privileged level of interface, from a technical security perspective.

3. **eRIP has synchronization delays with SGB and the Internal Land Registry application**: Weekly for the SGB data feed, every 15 minutes for the ILR App data feed.
    a. Other synchronization issues: eRIP does not stay synchronized with FNLRS – statuses are not getting through. Theming is hit or miss. There appears to be shortcomings in underlying synchronization technology.

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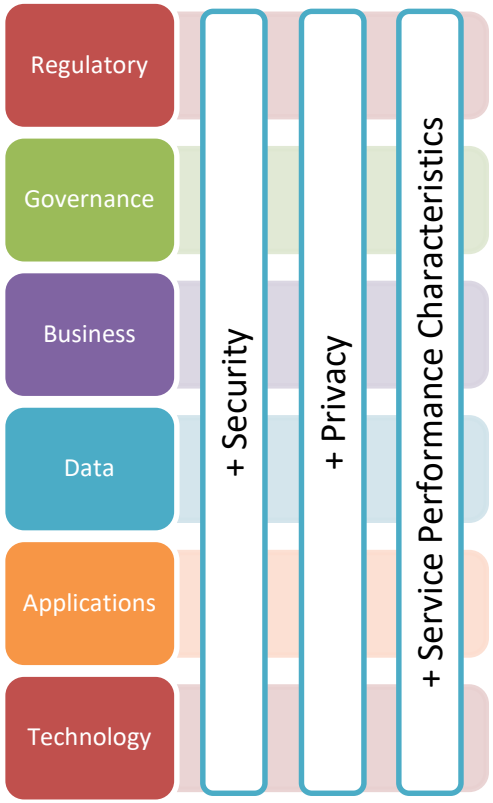
11 CROSS-CUTTING CONSIDERATIONS

11.1 Context

While the sections above detail the major components of the Land Registry in its current state, there are a number of considerations that apply across all layers of the analytical framework (shown in the diagram below).



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11.2 Security

The degree of security provided, by layer in the analytical framework, is as follows:

- **Business Layer**: Controlled access to ISC's Access Portal and the Internal Land Registry App to the ISC HQ, ISC Regions, First Nations Land Offices, staff and selected third parties limits the people with data-write privileges. Only the ISC HQ staff can actually register instruments, parcels and reserves. However, there are no barriers in place to prevent one First Nation Land Office from submitting applications pertaining to another First Nation. i.e., a form of spoofing. There is also a lack of policy in place to preventing and deterring these activities from occurring.

- **Data Layer**: Data is not encrypted for storage. The ILRS SAD (section 9.1) indicates that encryption is used in the SQLNET connection with the ISC Common Information Repository (CIR). All Oracle database access is through stored procedures that require and validate a security key (SAD section 5.2.3).

- **Application Layer**: The three FNLRS applications provide different levels of security:
    - **eRIP** is accessible to the general public;
    - **External Land Registry App** requires an account however an account is created without screening of the registrant.
    - **Internal Land Registry App**: Citrix access is required, and password controlled. There is also role-based access control (see section 9.2.1.1) that only allows ISC HQ users to actually register instruments, create parcels, add reserves, etc. A wider group of users – First Nation Applicants, ISC Regional Offices – are able to initiate applications for registration of instruments and submit, putting the instruments into the received state.

- **Technology Layer**: Based on documentation and interviews, no issues have been identified concerning the technical system and software security. The ILRS SAD indicates the system was to be developed to meet the AANDC IT Security Policy (2009) and that it was to undergo a Threat Risk Assessment. The SAD also indicates that security is in place at the database level, and that network zones (e.g., DMZ) would be established.

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11.3 Privacy

The Framework Agreement does not have any provisions that address privacy or protecting personal information. The FNLMA does make provision for the Governor In Council, on recommendation of the Minister, to make regulations concerning the disclosure of personal information as defined in section 3 of the Privacy Act (s. 3 (e)). However, the FNLR Regulations do not contain any rules regarding privacy or protecting personal information.

Data Submitted by Applicants

The Indian Lands Registration Manual contains a Privacy Act Statement (s. 1.4.1) that identifies sections 21 – 55 of the Indian Act as authorizing the collection and use of personal information. Some of these sections cease to apply to operational First Nations (FNLMA s. 38 (1) (a)), but the rest still remain in effect. Departmental regulations cited (INAC PPU 090, INCA PPU 096) as a link no longer appear to be available on the web. ILRM s. 1.4.3, 'Protecting and Handling Information – Best Practices', lists nine specific practices, the first of which is:

1. Land Registry documents are to be considered Protected B until they have had a privacy review completed. If no sensitive information is contained within them, the classification can be lowered to "Unclassified".

Consequently, the ISC HQ Registration Officers must review the instrument documents and redact any personal information before making them available publicly. Information that needs to be redacted appears on transfers, leases or permits and some personal information can appear on forms, i.e., First Nations forms, e.g., Tzeachten First Nation Transfer of Interest Form, Item 6 requires proof of membership be attached. Some instruments (e.g., consents) 99% of the time do not need to be redacted, but there are exceptions. The ISC Registrar has established a 'Redaction Checklist'. The items in the list, and where they are typically found, are presented in the following table.

Redaction Checklist Item	Instruments where Personal Information may be found
1. Social Insurance Number	Sometimes on funeral directors statements or death certificates.
2. Band Membership and/or Band Registration Number	Transfer forms.
3. Band Membership Record	Indian Act s. 10 band manages their own membership list, to confirm they are band members.
4. Passport Information	Provided for change of name; however, not required by Land Registry.
5. Driver's Licence	Same as above.

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Redaction Checklist Item	Instruments where Personal Information may be found
6. Health Card	Same as above.
7. Birth Certificate	Same as above.
8. Marriage Certificate	Same as above.
9. Will (redact whole document)	Come in with administrative transfers. Not needed. Don't want to receive will. Used to receive under Indian Act. Practice has continued.
10. Court Order	Leasing documents. Instrument is in the public domain if it has come from a public court. Just need court order number. If receive court order document, the entire document is redacted.
11. Matrimonial Real Property (MRP) forms (redact all forms as they are protected B)	Required for transfers, admin transfers, assignments. See MRP Assessment Form.
12. Civic Addresses	If name and address are provided together, then civic address becomes Protected B. Seen on leasing documents, but not on individual land holdings, e.g., transfers.

Source MS Teams location for the above links to privacy documents:
Documents > General > Reference > Registry > ISC Registrar > Privacy

From the checklist above, it is apparent that the Land Registry does not require any personal information be submitted; however, since personal information is being put into instruments the Registrar is obliged under the Privacy Act to redact that information before making it public.

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There currently sits a large backlog of approximately 45,000 unredacted documents that have yet to be published. ISC currently has plans to bring on additional staff to address this backlog, and it is estimated that it will take at least one year before the backlog can be cleared. The time to redact a document is a function of its page size, and that is typically a function of the Instrument Type. For example, a transfer document is typically short whereas a lease document may be many pages (e.g., 50 to 100).

Data Sourced from ISC Common Information Repository

The Band Membership/Registry Number is obtained for an individual grantor or grantee of an instrument party from the Indian Registry System (IRS) via the ISC Common Information Repository (CIR). The 'Registry Number' is stored in the Land Register's Oracle database instance (as described in section 10.1) in the ILRS_Individual.Indian_Registry_Individual_Num table and field. Concerning this data, the ILRS User Guide states (p. 39): "The IRS data is read-only and contains private information that is controlled and viewable ONLY to users with the appropriate permissions." It appears that this data is only accessible through the Internal ILRS/FNLRS/SGFNLRS application, and not through the external public web site, nor eRIP.

In the Internal application, access would need to be provided to the FN Applicant role as they need to establish grantors and grantees. This would mean that the FNLRS FN Applicant role has access to individual Indian Registry Numbers for all (operational) First Nations, not just their own. The 'Find' function for a grantee/grantor allows the Registry Number, or a portion of it, to be used to find a person (ILRS User Guide, p. 41). A matching list of individuals is presented that includes the following for each (ILRS User Guide p. 42): Registry Number, Last Name, First Name, Gender, Birth Date.

11.4 Service Performance Characteristics

This section concerns the availability, reliability, responsiveness/timeliness of the Land Registry services. These are examined at to levels: the business services and the system as whole, i.e., the application, data and technology layers.

11.4.1 Business Services

1. **ISC Land Registry**
    a. Generally, based on some initial feedback from First Nation representatives at the first National Land Registry workshop, users are satisfied with the turnaround time on applications for registration. They appear to be less satisfied concerning the level of support available to them.
    b. Currently there are no formal business service standards nor formal policy or procedures regarding service performance, e.g., turnaround times. This issue is layered throughout the inputs to the FNLRs and causes issues for end users.

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2. **SGB Services**
    a. There is no established turnaround time target for registering Canada Lands Survey Plans, and it appears that this can be quite variable from weeks to months.

11.4.2 System

Regarding system performance, the notable findings are as follows:

1. **System**: The core FNLRS system appears to be stable and reliable in terms of its performance, but other components are not as reliable, e.g., Crystal Reports server. In terms of system support, about once a month, support staff need to touch the application server.

2. **Data Backups**: Data backups are being performed regularly.

3. **Infrastructure**: ISC depends on SSC for the overall computing infrastructure. Changes by SSC to the infrastructure can have a ripple effect on the FNLRS applications.

4. **Citrix Access Issues**: Users of the FNLRS must access the registry using Citrix. In the fall of 2020, Shared Services Canada shut down Citrix access for many days because of a security problem. This action blocked First Nations from FNLRS although Land Registry staff were not affected. Users of the FNLR were not informed of the reason for shutdown.

11.5 Summary Observations

1. **None of the personal information received in instruments is required by the Land Registry**: Redaction of documents would not be necessary if the personal information was not included in the instruments.

2. **Band Membership Registry Number is searchable within Internal application**: Although this data is subject to privacy requirements, there is no evidence to access controls to prevent users from searching on individuals in First Nations other than the one for which they are responsible.

3. **Targets for service turnaround times have not been established**: This is the case for the Land Registry in terms of registration of applications and customer support, as well as for the SGB in terms of registration of Survey Plans.

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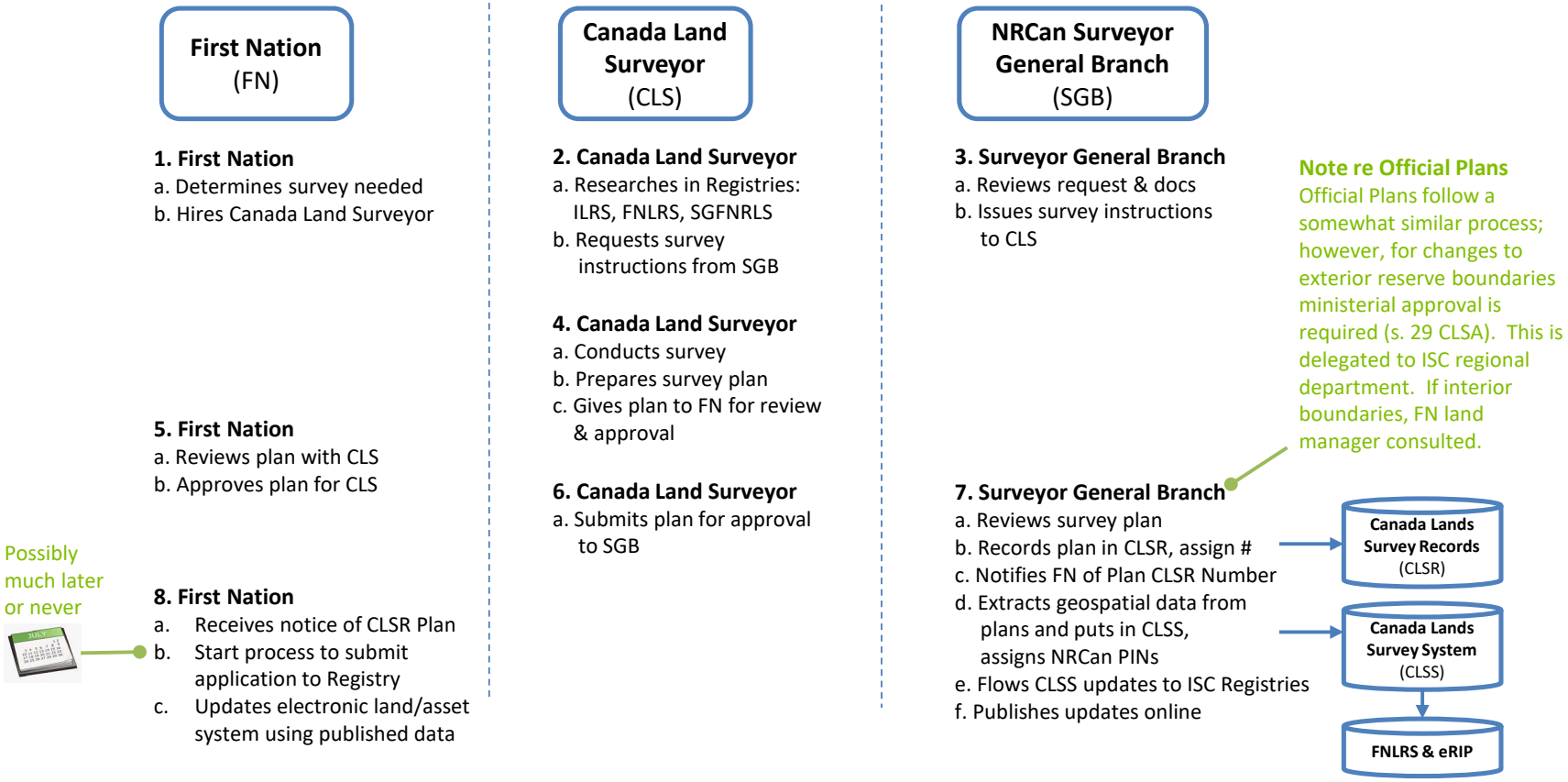
12 APPENDIX

12.1 Survey Plan Process – Elaborated

The following diagram provides a more detailed distillation of the survey plan process presented in section 7.10.1.



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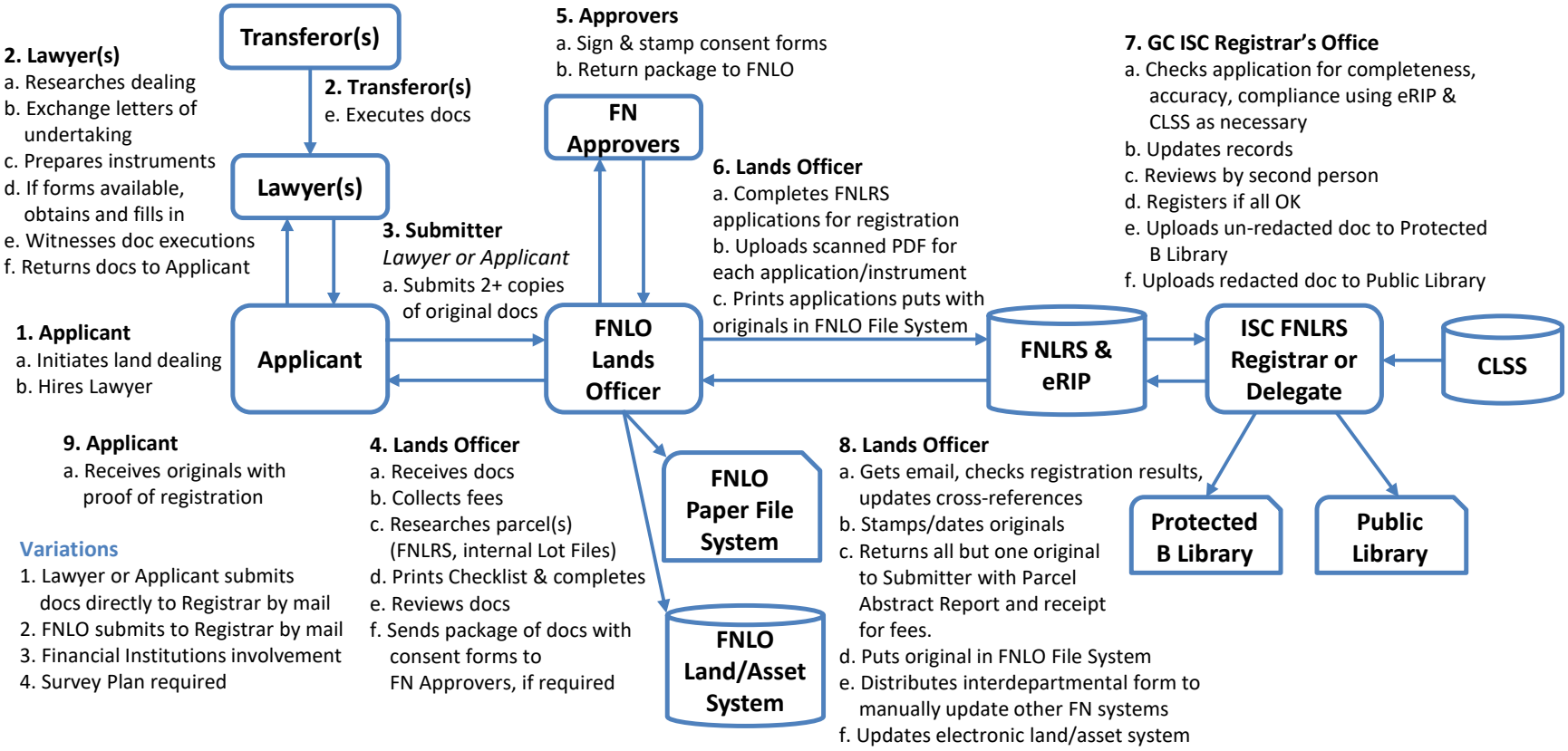
12.2 Registration Process – Elaborated

The following diagram provides a more detailed distillation of the registration process presented in section 7.10.2.



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