

# **Request for Proposal**

**Short Form With New Terms and Conditions** 

# **Registry Integration Planning**

Ministry of Sustainable Resource Management Request for Proposal (RFP) Number: 132688

Issue date: March 1, 2002

Government Contact Person	Closing time and

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All enquiries related to this Request for Proposal are to be directed, in writing, to the following person who will respond if time permits. Information obtained from any other source is not official and should not be relied upon. Enquiries and any responses will be recorded and may be distributed to all Proponents at the Province's option.

Liz Lowe Purchasing Agent Box 9476, Stn. Prov. Govt. Victoria, BC V8W 9W6 Fax: (250) 387-7310

Email: pcadmin@gems2.gov.bc.ca

Proposals must not be sent by facsimile or e-mail. Proposals and their envelopes should be clearly marked with the name and address of the Proponent, the Request for Proposal number, and the project or program title.

location

Eight (8) complete hard copies and one (1) electronic copy in Word 97 of each proposal must be received no later than 2:00 PM Pacific Time on March 28, 2002 at

2:00 PM Pacific Time on: March 28, 2002 at the following location:

MAIL ONLY:

Purchasing Commission
Box 9476, Stn Prov Govt
Victoria, B.C. V8W 9W6
Attention: Liz Lowe

COURIER/BY HAND:

Purchasing Commission
102-3350 Douglas Street
Victoria, B.C. V8Z 7X9
Attention: Liz Lowe

<b>Proponents</b>	Meeting
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A proponents meeting will <b>not</b> be neid.	

**Proponent Section** A person authorized to sign on behalf of the Proponent, and to bind the Proponent to statements made in response to this Request for Proposal, must complete and sign this Proponent Section, leaving the rest otherwise unaltered, and return one original with the first copy of the proposal.

The enclosed proposal is submitted in response to the above-referenced Request for Proposal, including any addenda. Through submission of this proposal we agree to all of the terms and conditions of the Request for Proposal and agree that any inconsistent provisions in our proposal will be as if not written and do not exist. We have carefully read and examined the Request for Proposal, including the Administrative Section, and have conducted such other investigations as were prudent and reasonable in preparing the proposal. We agree to be bound by statements and representations made in our proposal.

Signature:	Legal Business Name of Proponent, and Doing Business As Name If Applicable:
Printed Name:	Address:
m: .1	
Title:	
Date:	

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## A. DEFINITIONS AND ADMINISTRATIVE REQUIREMENTS

#### 1. Definitions

Throughout this Request for Proposal, the following definitions apply:

- a) "Contract" means the written agreement resulting from this Request for Proposal executed by the Province and the Contractor;
- "Contractor" means the successful Proponent to this Request for Proposal who enters into a written Contract with the Province;
- c) "Ministry" means Ministry of Sustainable Resource Management;
- d) "must", or "mandatory" means a requirement that must be met in order for a proposal to receive consideration;
   "Proponent" means an individual or a company that submits, or intends to submit, a proposal in response to this Request for Proposal;
- e) "Proponent" means an individual or a company that submits, or intends to submit, a proposal in response to this Request for Proposal;
- "Province" means Her Majesty the Queen in Right of the Province of British Columbia and includes the Purchasing Commission and the Ministry;
- g) "Purchasing Commission" means the Purchasing Commission pursuant to the *Purchasing Commission Act*, RSBC 1996, chapter 392; and
- h) "should" or "desirable" means a requirement having a significant degree of importance to the objectives of the Request for Proposal.

#### 2. Terms and Conditions

The following terms and conditions will apply to this Request for Proposal. Submission of a proposal in response to this Request for Proposal indicates acceptance of all the terms that follow and that are included in any addenda issued by the Province. Provisions in proposals that contradict any of the terms of this Request for Proposal will be as if not written and do not exist.

#### 3. Receipt Confirmation Form

Proponents are advised to fill out and return the attached Receipt Confirmation Form immediately. All subsequent information regarding this Request for Proposal, including changes made to this Request for Proposal, will be directed only to those Proponents who return the form and will be distributed by the method authorized on the form. Subsequent information regarding this Request for Proposal may also be posted on the BC Bid® Website.

#### 4. Late Proposals

Late proposals will not be accepted and will be returned to the Proponent.

#### 5. Eligibility

 Proposals will not be evaluated if the Proponent's current or past corporate or other interests may, in the Province's opinion, give rise to a conflict of interest in connection with the project described in this Request for Proposal. This includes, but is not limited to, involvement by a Proponent in the preparation of this Request for Proposal. If a Proponent is in doubt as to whether there might be a conflict of interest, the Proponent should consult with the Government Contact Person listed on page 1 prior to submitting a proposal.

b) Proposals from not-for-profit agencies will be evaluated against the same criteria as those received from any other Proponents.

#### 6. Evaluation

Evaluation of proposals will be by a committee formed by the Province and may include employees and contractors of the Province. The Province's intent is to enter into a Contract with the Proponent who has the highest overall ranking.

#### 7. Negotiation Delay

If a written Contract cannot be negotiated within thirty days of notification of the successful Proponent, the Province may, at its sole discretion at any time thereafter, terminate negotiations with that Proponent and either negotiate a Contract with the next qualified Proponent or choose to terminate the Request for Proposal process and not enter into a Contract with any of the Proponents.

#### 8. Debriefing

At the conclusion of the Request for Proposal process, all Proponents will be notified. Unsuccessful Proponents may request a debriefing meeting with the Province

#### 9. Alternative Solutions

If alternative solutions are offered, please submit the information in the same format, as a separate proposal.

#### 10. Changes to Proposals

By submission of a clear and detailed written notice, the Proponent may amend or withdraw its proposal prior to the closing date and time. Upon closing time, all proposals become irrevocable. The Proponent will not change the wording of its proposal after closing and no words or comments will be added to the proposal unless requested by the Province for purposes of clarification.

#### 11. Proponents' Expenses

Proponents are solely responsible for their own expenses in preparing a proposal and for subsequent negotiations with the Province, if any. If the Province elects to reject all proposals, the Province will not be liable to any Proponent for any claims, whether for costs or damages incurred by the Proponent in preparing the proposal, loss of anticipated profit in connection with any final Contract, or any other matter whatsoever.

#### 12. Limitation of Damages

Further to the preceding paragraph, the Proponent, by submitting a proposal, agrees that it will not claim damages, for whatever reason, relating to the Contract or in respect of the competitive process, in excess of an amount equivalent to the reasonable costs incurred by the Proponent in preparing its proposal and the Proponent, by submitting a proposal, waives any claim for loss of profits if no Contract is made with the Proponent.

#### 13. Proposal Validity

Proposals will be open for acceptance for at least 90 days after the closing date.

#### 14. Firm Pricing

Prices will be firm for the entire Contract period unless this Request for Proposal specifically states otherwise.

#### 15. Currency and Taxes

Prices quoted are to be:

- a) in Canadian dollars;
- inclusive of duty, where applicable; FOB destination, delivery charges included where applicable; and
- c) exclusive of Goods and Services Tax and Provincial Sales

#### 16. Completeness of Proposal

By submission of a proposal the Proponent warrants that, if this Request for Proposal is to design, create or provide a system or manage a program, all components required to run the system or manage the program have been identified in the proposal or will be provided by the Contractor at no charge.

#### 17. Sub-Contracting

- a) Using a sub-contractor (who should be clearly identified in the proposal) is acceptable. This includes a joint submission by two Proponents having no formal corporate links. However, in this case, one of these Proponents must be prepared to take overall responsibility for successful performance of the Contract and this should be clearly defined in the proposal.
- b) Sub-contracting to any firm or individual whose current or past corporate or other interests may, in the Province's opinion, give rise to a conflict of interest in connection with the project or program described in this Request for Proposal will not be permitted. This includes, but is not limited to, any firm or individual involved in the preparation of this Request for Proposal. If a Proponent is in doubt as to whether a proposed subcontractor gives rise to a conflict of interest, the Proponent should consult with the Government Contact Person listed on page 1 prior to submitting a proposal.
- c) Where applicable, the names of approved sub-contractors listed in the proposal will be included in the Contract. No additional subcontractors will be added, nor other changes made, to this list in the Contract without the written consent of the Province.

#### 18. Acceptance of Proposals

- a) This Request for Proposal should not be construed as an agreement to purchase goods or services. The Province is not bound to enter into a Contract with the Proponent who submits the lowest priced proposal or with any Proponent. Proposals will be assessed in light of the evaluation criteria. The Province will be under no obligation to receive further information, whether written or oral, from any Proponent.
- Neither acceptance of a proposal nor execution of a Contract will constitute approval of any activity or development contemplated in any proposal that requires any approval,

permit or license pursuant to any federal, provincial, regional district or municipal statute, regulation or by-law.

#### 19. Definition of Contract

Notice in writing to a Proponent that it has been identified as the successful Proponent and the subsequent full execution of a written Contract will constitute a Contract for the goods or services, and no Proponent will acquire any legal or equitable rights or privileges relative to the goods or services until the occurrence of both such events.

#### 20. Contract

By submission of a proposal, the Proponent agrees that should its proposal be successful the Proponent will enter into a Contract with the Province on the terms set out in Appendix B.

#### 21. Liability for Errors

While the Province has used considerable efforts to ensure information in this Request for Proposal is accurate the information contained in this Request for Proposal is supplied solely as a guideline for Proponents. The information is not guaranteed or warranted to be accurate by the Province, nor is it necessarily comprehensive or exhaustive. Nothing in this Request for Proposal is intended to relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in this Request for Proposal.

#### 22. Modification of Terms

The Province reserves the right to modify the terms of this Request for Proposal at any time in it sole discretion. This includes the right to cancel this Request for Proposal at any time prior to entering into a Contract with the successful Proponent.

#### 23. Ownership of Proposals

All proposals submitted to the Province become the property of the Province. They will be received and held in confidence by the Province, subject to the provisions of the *Freedom of Information and Protection of Privacy Act* and this Request for Proposal.

#### 24. Use of Request for Proposal

Any portion of this document, or any information supplied by the Province in relation to this Request for Proposal may not be used or disclosed, for any purpose other than for the submission of proposals.

#### 25. Reciprocity

The Province may consider and evaluate any proposals from other jurisdictions on the same basis that the government purchasing authorities in those jurisdictions would treat a similar proposal from a British Columbia supplier.

# **B.** REQUIREMENTS AND RESPONSE

## 1. SUMMARY OF THE REQUIREMENT

The vision of the Ministry of Sustainable Resource Management includes moving the management of Land and Resource Information from a state of a diverse set of inefficient electronic databases with multiple registries for managing land and resource information to integrated, efficient and accessible electronic system(s) for Crown land and resources registries.

A business planning project was conducted between August 2001 and October 2001 within the Registries and Resource Information Division. This was largely an internal exercise to create a plan for the development of an Integrated Registry (see Appendix C, Integrated Registry Development Plan). Subsequently, the Ministry solicited advice from industry via a Request for Information (RFI No. 02-001) regarding how it should move forward on the development plan.

The Ministry has now determined that it needs to build on the information in the Integrated Registry Development Plan, as follows:

- Conduct a more detailed review of the current and target business architecture, bringing major clients and external stakeholders into the process;
- Examine and learn from what other jurisdictions are doing in the area of Registries Integration; and
- Develop an Implementation Plan to meet the Ministry's stated vision.

The Ministry intends to enter into Contract negotiations with the successful Proponent of this RFP to develop an integrated registries corporate Business Strategy and Implementation Plan. These documents will encompass all areas of the business including governance, practices and standards, clients, services and products, business processes, information and human resources. The Ministry's Business Architecture Framework (see Appendix D) will be used as a tool for guiding the scope of work.

At the completion of any Contract resulting from this RFP, the Ministry intends to issue a subsequent Request for Proposal later in 2002 for the execution of the detailed Implementation Plan. The Business Strategy and Implementation Plan will be attached as Appendices to the subsequent RFP. The successful Proponent of this RFP will be eligible to bid on the subsequent RFP.

## 2. ADDITIONAL DEFINITIONS

In addition to the RFP Definitions set out in paragraph 1 of Section A, throughout this Request for Proposal, the following definitions will apply:

- a) "Business Strategy" means the strategy by which the current and target business architecture and guiding principles are defined.
- b) "Implementation Plan" means a plan outlining the projects, phases and priorities to move the Business Strategy forward.

- c) "Integrated Registry" means a repository where land/resource registry information that agencies maintain to support their land/resource management responsibilities is queried using an internet-based access tool.
- d) "Land and Resource Information" means tenure or encumbrance information registered on Crown land or resources.
- e) "Department" means the Registries Department within the Ministry of Sustainable Resource Management.

### 3. MINISTRY SITUATION/OVERVIEW

In support of the Ministry's vision to move from a diverse set of inefficient electronic databases within multiple registries to integrated efficient and accessible electronic Crown land and resource registries, the Registries Department within the Ministry initiated an internal business planning document (Appendix C - Integrated Registry Development Plan) and a "Request for Information" from industry (RFI No. 02-001).

An excerpt from the Development Plan provides the best situation overview:

"In order to fulfill part of this vision, the Ministry has initiated a Registries Integration initiative. This involves consolidating land and resource registries functions for government in efforts to eliminate duplication in business processes, information, infrastructure cost and administrative functions. Government's direction to establish a central registry for all Crown land and resource encumbrance information contemplates centralization in: (1) registry business functions; (2) registry data and system infrastructure and (3) governance of registry organizations.

The objective of an integrated registry of Crown Land and resource encumbrance information is improved access to registry information, to assist business in quickly selecting areas of operational interest, and to allow government to provide response to industry requests for information and resources in a predictable and timely fashion. Registry information and the land and resource application processes will be operated on a web-based platform in support of e-government objectives.

The primary motivations for government's instruction to develop an integrated registry for Crown Land and encumbrance information are economic development and public cost savings. New era commitments that are business drivers for the Ministry's Registries Department in general, and the integrated registry project in particular, include:

- Faster approvals and access to Crown Land;
- Economic Development and competitive business climate;
- Open and accountable decision making;
- Improved customer service; and
- Leadership in electronic governance."

The Ministry intends to enter into Contract negotiations with the successful Proponent of this RFP to develop an integrated registries corporate Business Strategy and an Implementation Plan. The strategy and the plan will be expected to encompass all areas of the business including governance, practices and standards, clients, services and products, business processes, information and human

resources. The Ministry's Business Architecture Framework (see Appendix D) and the Project Charter (see Appendix E) will be used as a tool for guiding the scope of work.

At the completion of any Contract resulting from this RFP, the Ministry intends to issue a subsequent Request for Proposal for the execution of the Implementation Plan. The Business Strategy Plan and the Implementation Plan will be attached as Appendices to the subsequent RFP. The successful Proponent of this RFP will be eligible to bid on the subsequent RFP.

## 3.1 Ministry Responsibility

The Ministry of Sustainable Resource Management was created in June 2001, from more than 8 different ministries in government. The mandate of the Ministry is to provide leadership in sustainable economic development through strategic land use plans, integrated information systems and water and Crown land management.

To do this, the Ministry is divided into four divisions: Resource Planning, Business and Information Services, Registries and Resource Information, and Corporate Policy and Planning.

The Ministry's overall goal is to deliver efficient and effective land and resource information to clients through:

- Integrated resource information;
- Integrated title and encumbrance information;
- Base geographic information framework;
- Client information and access services;
- Public/Private partnerships; and
- Organizational excellence.

One of the key projects that the Ministry has been directed by government to complete is the creation of an integrated registry for all tenures and other legal encumbrances of Crown land and resources.

#### 3.2 Background

The creation of the Ministry of Sustainable Resource Management represents a fundamental shift in the provincial government's approach to resource management. Examples include:

#### From:

- Expensive inefficient databases and registries
- Uncoordinated approach amongst government agencies and key sectoral interests

#### To:

- Integrated systems and land registries that are widely available to businesses, local governments and general public
- Coordinated partnerships through comprehensive resource sector strategies

As part of the provincial government's new way of doing business, each ministry is required to develop a multi-year service plan (www.gov.bc.ca/prem/popt/corereview/default.asp). The service plan establishes goals, objectives and strategies and sets measurable performance targets for the next three years. The plan also emphasizes client service, based on identification of client needs.

Key principles and organizational values of the Ministry include:

- Integrated Resource Management
  - Provide consistent, predictable and coordinated decisions, and streamlined delivery of services.
- Science-Based Decision Making
  - Use the best available knowledge and technology.
- Shared Stewardship
  - Exercise stewardship responsibilities in a consultative and collaborative manner to address diverse interests and build strong governmental, industrial and environmental partnerships.
- Public and Client Consultation
  - Provide opportunities to contribute to decision making and improvement of service quality.

The Ministry has five broad goals that are expected to guide it to achieving its mission. The relevant goal to the key project of creating a central registry is the effective delivery of integrated, science-based land, resource and geographic information.

The Minister will be expected to report on the annual performance of meeting the assigned targets and projects. Although the achievement of objectives and targets may be affected by unpredictable external factors, it also depends on the direct and constructive engagement of the private sector.

#### 3.3 Project Scope and Timelines

The purpose of this Request for Proposal is to solicit proposals from Proponents for the development of a Project Statement that details:

- 1. a Business Strategy; and
- 2. an Implementation Plan.

The scope of work includes, but is not limited to:

- 1. Business Strategy
  - the documentation and analysis of the business architecture of the current Registry components (including Crown land surface rights, Crown land cadastre, administrative boundaries, timber and range tenures, mineral titles and reserves, water

rights, energy rights, park boundaries, commercial fish and wildlife harvesting rights, heritage sites, strategic land use plan zones and contaminated sites);

- a review and analysis of current strengths and weaknesses of the current system and potential opportunities for inclusion of other registry systems (e.g. parks);
- a review and analysis of land registries initiatives in other jurisdictions;
- review of the linkages and possible synergies of other Ministry integration work such as the Integrated Data Warehouse Project and the land and water integration project occurring within Land and Water British Columbia Inc.; and
- the development of corporate registries integration Business Strategy, based on business drivers, which will include the development of a target business architecture (an "operationalized" vision for the 3 year horizon), governance options (including partnerships) and guiding principles.

#### 2. Implementation Plan

• the development of an Implementation Plan identifying the projects and priorities to move the business architecture forward and meet provincial business needs. This Implementation Plan will be incorporated into the Ministry and Department's service and operating plans.

The Integrated Registry Development Plan (see Appendix C) contains all program areas within the Ministry of Sustainable Resource Management that are involved in the managing of registries information. Many of these program areas, and in particular the Registries Department, the Business and Information Services Division, Land Title Offices, and Resource Management Division, will be involved in this project.

Key client groups will be expected to be consulted in setting the direction for the business architecture. These include Land and Water British Columbia Inc., Ministry of Energy and Mines, Ministry of Forests, Ministry of Water, Land and Air Protection, BC Assessment Authority, the Integrated Cadastral Information Society, and external industry associations (e.g. Council of Forest Industries, BC and Yukon Chamber of Mines, Corporation of Land Surveyors of the Province of British Columbia).

The successful Proponent will be expected to start the work immediately upon execution of the signed Contract and will have all deliverables completed within 90 calendar days.

# 4. **REQUIREMENTS**

## 4.1 Proposed Approach

#### 4.1.1 PROJECT PLAN

An overarching Project Plan <u>must</u> be provided that addresses all the deliverables being delivered within 90 days of signing the Contract. The Project Plan should include Ministry review demands and extensive consultation. The key deliverables to be completed include:

• Business Strategy; and

• Implementation Plan.

The Ministry expects that all the above deliverables will require at least one iteration for the Ministry's review, comment and approval. The Ministry requires at least five (5) working days (Monday to Friday, 8:30 a.m. to 4:30 p.m. Pacific Time) to review, comment on and approve each iteration.

Key client groups will be expected to be considered in the development of all deliverables, as follows (but not limited to):

- Land and Water British Columbia Inc.;
- Ministry of Energy and Mines;
- Ministry of Water, Land and Air Protection;
- Ministry of Forests;
- BC Assessment Authority;
- Integrated Cadastral Information Society; and
- External industry associations (e.g. Council of Forest Industries, BC and Yukon Chamber of Mines, Corporation of Land Surveyors of the Province of BritishColumbia).

#### 4.1.2 **DELIVERABLES**

Following are the expected deliverables for any Contract resulting from this RFP:

#### **4.1.2.1 Project Statement**

The Ministry expects that the Contractor will develop a project statement, detailing the work to be undertaken on the project, which should follow the Ministry standards located at

http://srmwww.gov.bc.ca/imb/3star/sdlc/2define/1define/statement.htm.

#### **4.1.2.2** Business Strategy

The Ministry expects that the Contractor will develop a Business Strategy that includes, but is not limited to:

- an assessment of the current situation;
- "operationalizing" the Government and Ministry's stated vision by articulating the direction the Ministry should take;
- a detailed analysis of the current issues and opportunities;
- a detailed discussion of the Ministry's options (with analysis of each option); and
- subsequent recommendation(s).

The Business Strategy should include, but not be limited to, the following elements:

i) Identification and reassessment of the current agencies and industries with interests in the registry information.

- ii) Documentation of the business architecture of the current status of Registries within the Ministry's realm of responsibility. This portion of the strategy will be expected to identify and review the following:
  - Governance (Legislation, Policy, Regulations, various business models and agreements e.g. planning, funding, resource allocation, governing bodies);
  - Practices and standards (including methods, models, Best Practices frameworks);
  - Key client groups and other clients (client groupings and needs, relationships, dependencies);
  - Services and products (service/product offerings, delivery channels, cost recovery model);
  - Processes (processes, procedures, roles and responsibilities);
  - Information (information required to deliver services and products and manage the business process); and
  - People (roles and responsibilities).
- iii) Identification and a reassessment with a brief discussion of the major current and future drivers for Registry Integration. (i.e. what are the reasons (compelling or otherwise) for undertaking this initiative?)
- iv) The investigation, analysis and summarization of the work completed and planned by other jurisdictions (i.e. North American, Commonwealth and European federal, provincial, state and regional governments) in the area of integration of registry business.
- v) Identification and assessment of the current issues, major concerns, weaknesses, strengths, and opportunities related to Registries Integration and the issues to address effective delivery of registry information to clients.
- vi) Analysis of the current state of the major Registry programs, based on business drivers, to define a set of guiding principles and an overall target business architecture ("corporate vision"). The overall target business architecture should highlight potential governance models, including possible partnership options and organizational changes within the Department.
- vii) Review linkages and possible synergies with other related Ministry projects such as the Integrated Data Warehouse Project, electronic survey plan filing, and land and water program integration.

This review of linkages should also include projects or initiatives that are occurring outside of the Ministry (e.g. Ministry of Energy and Mines "Map Staking" Project or initiatives that may be underway in the Province's Chief Information Office (CIO).

#### **4.1.2.3** Implementation Plan

An implementation approach will be defined in terms of alternatives to both move the business architecture forward and meet the corporate provincial business needs of the Registry Programs. (This approach should consider different implementation options, discuss the pros and cons of each, budget implications, and provide recommendations regarding which option(s) the Ministry should adopt.)

At the completion of the Business Strategy, the Ministry and the Contractor will be expected to discuss the options and implementation approach presented and the Ministry will determine which, if any, are to be implemented. These approved option(s) and approach(es) are expected to form the basis of the Implementation Plan.

The Implementation Plan will be expected to have a client-centred delivery that is focussed on how clients want to receive information (e.g. web sites organized for ease of clients use rather than set by government's organization). The Implementation Plan will also be expected to include "quick wins", that provide early delivery of benefits to the Ministry's key client groups (e.g. a single web site interface with the registries that could be deployed while more complex elements of the Plan are still being developed).

The Implementation Plan should include, but not be limited to, the following elements:

- detailed strategies;
- project phases;
- sub-projects;
- detailed tasks:
- resources assigned to each task, sub-project, and phase;
- sequencing;
- timelines;
- dependencies;
- deliverables:
- cost estimates; and
- recommendations regarding governance options and the Department's organization for implementation of the Registries Integration.

#### 4.1.3 COMMUNICATION AND STATUS REPORTING

The Ministry expects regular communication and status reports on work in progress to be provided to the Ministry Project Manager, which should follow the Ministry standards located at

http://srmwww.gov.bc.ca/imb/3star/sdlc/8manage/4projstat/status.htm

### 4.1.4 CHANGE MANAGEMENT AND ISSUE RESOLUTION

The Ministry expects Proponents to have formal, proven, effective change management and issue resolution processes in place that follow the standards contained in the Project Management Approach located at <a href="http://srmwww.gov.bc.ca/imb/3star/sdlc/8manage/3project/pmapproach.htm">http://srmwww.gov.bc.ca/imb/3star/sdlc/8manage/3project/pmapproach.htm</a>.

#### 4.1.5 RISK MANAGEMENT

The Ministry expects Proponents to have formal, proven, effective risk management processes in place, which include but are not limited to:

- identification of general and specific risk factors;
- a determination of the degree of risk;
- mitigation strategies for each risk identified; and
- clearly defined responsibilities for both the Proponent and its clients.

The Ministry expects Proponents' risk management processes to adhere to the standards set out in

srmwww.gov.bc.ca/imb/3star/sdlc/8manage/risks/risk\_principles.html and srmwww.gov.bc.ca/imb/3star/sdlc/8manage/risks/risk\_std.html.

The Ministry also expects Proponents to have a contingency plan to address resource issues.

## 4.2 Proponent Capabilities

#### 4.2.1 CORPORATE CAPABILITIES

Proponents should have the following corporate experience and capabilities:

- Successful completion of more than one project of a similar scope for a client of a similar size. Similar scope is defined as a project that is multi-faceted and client-centred, that includes strategic-level and implementation-level aspects. Clients of a similar size are defined as having multi-agencies, covering a large geographic area, and serving multiple client needs ranging from large corporations (government and private sector) to individual businesses.
- Experience in information management project(s) for clients of a similar size.
- Resources available to meet the Ministry's requirements within the stated timeframes as defined in the Proponent's project plan.

#### 4.2.2 KEY PERSONNEL

Proposals should include the following:

• Key roles that are tied into the project plan tasks, sub-projects and phases identified in section 4.1. At a minimum, the key roles should include a Project Manager, a Facilitator, and a Business Analyst. It is also desirable that the Project Team include technical expertise in systems and data management.

- Named personnel for each key role identified. The named key personnel will be expected to perform the work assigned to their role for the duration of the Contract. Any changes to named key personnel will require written approval by the Ministry.
- A Project Manager with at least five (5) years experience managing projects of a similar scope for clients of a similar size.
- A Facilitator with at least three (3) years experience facilitating groups with diverse needs in consensus building that leads to fundamental change to business practices or processes.
- A Business Analyst with at least five (5) years experience in providing business analyst services to both government and industry, and some experience in projects of a technical nature.
- Named back-up personnel with similar experience for each key personnel identified.

#### 4.3 Price

Proposals <u>must</u> include a fixed, all-inclusive price for all aspects of the work described in the proposal. Any work described in the proposal will be assumed to be included in the fixed price. Any additional work being proposed by the Proponent outside the fixed, all-inclusive price <u>must</u> be shown separately. Additional scopes of work not included in the fixed, all-inclusive price will not be evaluated. The Ministry is under no obligation to commit to any additional work proposed.

In addition, a breakdown of the key personnel costs should be provided. See section 7.3 for more information.

Pricing will be evaluated and scored out of a maximum of 20 points. The lowest fixed, all-inclusive priced proposal will receive the maximum points available. All other proposals will be scored using the following formula:

\$ Lowest Priced Proposal

X Maximum Points Available

This Proposal's Price

## 5. EVALUATION

This section details all of the mandatory and desirable criteria against which proposals will be evaluated. Proponents should ensure that they fully respond to all criteria in order to receive full consideration during evaluation.

#### 5.1 Mandatory Criteria

Proposals not clearly demonstrating that they meet the following mandatory criteria will be excluded from further consideration during the evaluation process.

Criteria		
a)	The proposal must be received at the closing location by the specified closing date and time.	
b)	The proposal must be in English and must not be sent by facsimile or e-mail.	
c)	Eight (8) hard copies and one electronic copy in Word 97 of the proposal must be submitted.	
d)	An unaltered, completed and signed RFP cover page including proponent section must be submitted with the proposal.	
e)	An overarching Project Plan <u>must</u> be provided that addresses all the deliverables being delivered within 90 days of signing the Contract. (see section 4.1.1).	
f)	Proposals <u>must</u> include a fixed, all-inclusive price for all aspects of the work described in the proposal. Any additional work being proposed by the Proponent outside the fixed, all-inclusive price <u>must</u> be shown separately. (see section 4.3).	

## **5.2** Desirable Criteria

Proposals meeting all of the mandatory criteria will be further assessed against the following desirable criteria.

Criterion	Weight	Minimum score
Proposed Approach (section 4.1)	<mark>45%</mark>	<mark>27</mark>
Proponent Capabilities (section 4.2)	<mark>35%</mark>	<mark>21</mark>
Price (section 4.3)	<mark>20%</mark>	
TOTAL	100%	

## 6. PROPOSAL FORMAT

The following format, sequence, and instructions should be followed in order to provide consistency in Proponent response and ensure each proposal receives full consideration. All pages should be consecutively numbered.

- a) An unaltered, completed and signed RFP cover page including Proponent Section.
- b) Table of contents including page numbers.
- c) A short (one or two page) summary of the key features of the proposal.
- d) The body of the proposal, including pricing, i.e. the "Proponent Response".

#### 7. PROPONENT RESPONSE

In order to receive full consideration during evaluation, proposals should include a detailed response to the following:

#### 7.1 To Meet Mandatory Criteria

Proponents are advised to carefully review their proposals to ensure that all mandatory criteria listed in section 5.1 have been clearly met. Failure to meet any of these criteria will result in the proposal not being considered for this requirement.

#### **To Meet Desirable Criteria**

Proponents should clearly respond to each of the following sections in order to ensure that proposals are given full consideration during evaluation. It is recommended that proposals include the same headings and are in the same order as section 4 of this RFP, with any cross-referencing to other sections clearly indicated.

#### 7.2.1 PROPOSED APPROACH

#### **Project Plan** (see section 4.1.1)

Provide an overview of the milestones for this requirement, including timelines (i.e. number of days from Contract signing) for the Project Statement, Business Strategy, and Implementation Plan. Include details of the consultation process, both internal and external to government, reflecting the emphasis on client service delivery in the Project Plan.

Provide details of key activities for each of the identified milestones. Map responsibility of the key activities to key roles, and estimate the amount of effort required for each.

Clearly identify which of key activities are the responsibility of the Ministry. Include timelines for each of the Ministry's responsibilities, and any assumptions made regarding the Ministry's role, resources, etc.

Describe how the key client groups will be involved in the development of all deliverables.

#### **Deliverables (see section 4.1.2)**

#### **Project Statement** (see section 4.1.2.1)

Describe in detail how the Project Statement will be developed and what will be included. Identify how the Project Statement will conform to, as a minimum, Ministry standards.

## **Business Strategy** (see section 4.1.2.2)

Describe in detail what will be included in the Business Strategy. Explain how the elements that the Ministry has identified for the Business Strategy will be featured. Incorporate the relevant information contained in the

Integrated Registry Development Plan (Appendix C), Ministry's Business Architecture Framework (Appendix D), Project Charter (Appendix E) and the Ministry's Multi-Year Service Plan (www.gov.bc.ca/prem/popt/corereview/default.asp).

#### **Implementation Plan** (see section 4.1.2.3)

Describe in detail what will be included in the Implementation Plan. Explain how the elements that the Ministry has identified for the Implementation Plan will be featured. Incorporate the relevant information contained in the Integrated Registry Development Plan (Appendix C), Ministry's Business Architecture Framework (Appendix D), Project Charter (Appendix E), and the Ministry's Multi-Year Service Plan (www.gov.bc.ca/prem/popt/corereview/default.asp).

#### **Communication and Status Reporting** (see section 4.1.3)

Describe in detail how effective communication between the Proponent and Ministry will occur, and what will be included in the status reporting. Clearly identify how the status reporting will conform to Ministry standards.

### **Change Management and Issue Resolution** (see section 4.1.4)

Describe the change management and issue resolution processes that are proposed for the duration of the project, including but not limited to responsibilities, escalations, and reports. Provide an overview of the formal documentation in place for this methodology, and how long it has been in use. Clearly identify how these processes fit with the Ministry's standards.

#### **Risk Management** (see section 4.1.5)

Describe the risk management methodology that is proposed for the duration of the project. Provide an overview of the formal documentation in place for this methodology, and how long it has been in use. At a high level, describe the inherent risks for this project and methods for mitigating each. Provide a contingency plan to address resource issues.

#### 7.2.2 PROPONENT CAPABILITIES

#### **Corporate Capabilities** (see section 4.2.1)

The following information is required for the Proponent and any sub-contractors proposed. If sub-contractors are proposed, clearly identify what information is pertinent to the Proponent and what relates to the sub-contractor(s). Provide only relevant corporate experience information for any sub-contractors proposed (i.e. relating to the scope of work that they are proposed to provide).

- Provide information on your corporate experience with projects of a similar scope for clients of a similar size. Include the name of the client, the timeframes when the work was completed, and a brief description of the work performed.
- Provide information on your corporate experience in information management projects for clients of a similar size. Include the name of the client, the

timeframes when the work was completed, and a brief description of the work performed.

- Provide at least three references from the experience cited above, including names, titles and phone numbers and/or e-mail addresses. The Ministry may contact these references to verify statements made in the proposal.
- Describe the Proponent's corporate resources that may be required for any of the services proposed. Include numbers of resources, their physical location, and general areas of responsibility. Identify the Proponent's relationship to these resources (e.g. staff, contractors, etc.). Include an organization chart that can easily be mapped to the corporate resource descriptions provided.

#### **Key Personnel** (see section 4.2.2)

Provide the names of the key personnel and their back-up personnel for each key role identified in the project plan. Identify the relationship between these individuals and the Proponent (i.e. employee, contractor, etc.), and their physical location.

Briefly describe the relevant experience for each key personnel and their back-up, including the name of the organization they worked for, how long they worked there, and their duties and responsibilities.

Provide at least two references for each named key personnel and their back-up from the experience cited above, including names, titles and phone numbers and/or e-mail addresses. The Ministry may contact these references to verify statements made in the proposal.

Provide resumes for each named key personnel and their back-up.

## **7.2.3 PRICE**

Provide a fixed, all-inclusive (including any travel required) price for all aspects of the work described in the proposal. Travel expenses will not apply to any Contract resulting from this RFP.

Provide a breakdown of the personnel costs, showing the key personnel, their per diem rates, and the percentage of time they expect to work on this project. Identify the number of hours that comprise a day for the per diem rate. This information will not be evaluated, but may be incorporated into any Contract resulting from this RFP.

# **Appendix A** Receipt Confirmation Form

Compony

# **Registry Integration Planning**

Closing date: March 28, 2002 Request for Proposal No. 132688 Ministry of Sustainable Resource Management

To receive any further information about this Request for Proposal please return this form to:

Attention: Liz Lowe Purchasing Commission PO Box 9476, Stn Prov Govt 3350 Douglas Street, Suite 102 Victoria, B.C. V8W 9W6 Fax: (250) 387-7309

Company		
Street address:		
City/Province:	Postal Code:	
Mailing address if different:		
Phone number:	Facsimile number:	
Contact person:	Title:	
e-mail:		
Proposal should be sent by:  Courier collect Provide Courier name and ac	mile, further correspondence about this F	lequest for
□ Mail		
(Note: If neither box above is	s ticked, further correspondence will be s	ent by mail.)

# **Appendix B** Contract Form

By submission of a proposal, the Proponent agrees that should its proposal be successful the Proponent will enter into a Contract with the Province in accordance with the terms, of the Province's Service Contract (General); a copy of which is available on the Internet at:

http://www.pc.gov.bc.ca/psb/Service Contract General.pdf

# **Appendix C** Integrated Registry Development Plan

An Integrated Registry for Provincial Land & Resource Encumbrance Information

# Development Plan

## Prepared by

Registries Department
Registries & Resource Information Division
Ministry of Sustainable Resource Management

Final Report November 29, 2001

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## **Executive Summary**

Government currently maintains various land and resource registries that contain "encumbrance" information defining the nature and extent of legal rights that government has issued over Crown land, minerals, forests, water, oil and gas and other resources. Other information that affects the availability or use of Crown lands and resources such as administrative designations is also housed in various Crown land and resource registries.

The Ministry of Sustainable Resource Management is responsible for "consolidating" land and resource registries functions for government in efforts to eliminate duplication in business processes, information, infrastructure cost, and administrative functions. Government's direction to establish a "central registry" for all Crown land and resource encumbrance information contemplates centralization in: (1) registry business functions; (2) registry data and system infrastructure; and (3) governance of registry organizations. It will be necessary to move forward concurrently in all three areas in order to meet the aggressive completion timelines.

This "development plan" outlines a work programme comprising individual projects required to rationalize business functions and to consolidate registry data and systems infrastructure. Governance of registry organizations is a broader structural matter that the ministry will need to address as an internal matter to establish the relationship of the registries consolidation with other initiatives such as the Integrated Cadastral Initiative and Land Title Offices. As well, the matter of a governance model needs to establish connections with the other agencies and ministries responsible for program delivery of related areas such as the Assessment Authority. It is anticipated this type of evaluation will be conducted concurrently by an independent third party.

The objective of an integrated registry of Crown land and resource encumbrance information is improved access to registry information, to assist business in quickly selecting areas of operational interest and allow government to provide response to industry requests for information and resources in a predictable and timely fashion. Registry information and the land and resource application processes will be operated on a web-based platform, in support of e-government objectives.

It is anticipated that registry business functions and registry data and system infrastructure will be developed incrementally in three distinct phases. In the first phase, the registries of Crown land, forest/range tenures and mineral tenures will be consolidated. In the second phase, information on water, energy, highways/roads, heritage sites, strategic land use plan zones, contaminated sites, and commercial fish and wildlife harvesting will be added. In the third phase, information related to private land, federal land, treaty settlement land and links to provincial land and resource inventories will be added. The system design for achieving this integration strategy is undetermined at this time, pending investigation of registry user requirements and business functions.

Seven projects are identified in this "development plan" for implementing the integrated registry goal over approximately the next three years. The projects are:

- 1. Confirm specific user requirements and the business case for an integrated registry;
- 2. **Determine the common business processes** of agencies that generate Crown land and resource encumbrance information, with a view towards increased standardization of business practices and outputs;
- 3. Analyze data integrity issues and the risks associated with those issues, given the common provision of access to encumbrance information;
- 4. Define **corporate standards** (technology, data and process) for registries management and work with other groups undertaking related systems developments to ensure interoperability;
- 5. **Design, develop and implement the first phase** of an integrated registry, which involves providing integrated access to Crown land (surface), mineral, and forestry rights;
- 6. Following an evaluation of the first phase, **expand the integrated registry** by incorporating other encumbrance information "layers" (e.g., water rights, historical sites, private land surveys); and
- 7. Address associated management and policy / regulatory issues.

Costs for implementing an integrated registry are difficult to determine at this time because users' specific requirements, a business practices review, and business case analyses have not yet been completed. It is expected, however, that costs to implement the *first phase* of the programme (i.e., integrating Crown land, mineral and forest encumbrance information) will range between \$0.7 million to \$2.4 million, depending on the approach taken and the requirements met. In order to complete registry integration objectives within the timelines suggested, the development plan contemplates the use of contractors as well as ministry staff.

Phases 2 and 3 of the programme will leverage on infrastructure (technology, hardware, software) and architectures (business, data and applications) that are developed in Phase 1 and will involve in most part extending the system with more registry data sets and applications.

# 1. Report Purpose and Scope

In July 2001 the Ministry of Sustainable Resource Management (MSRM) was mandated to "create a central registry for all tenure and other legal encumbrances on Crown land and resources". This report describes a work programme for achieving that aim. Background information is provided on the kinds of information that would be placed in a central registry; the concept of a central registry (hereafter referred to as an "integrated registry") is explained; and a number of distinct projects are identified for implementing the integrated registry concept over a multi-year period.

This report is the outcome of a business planning exercise in the MSRM's Registries Department that occurred between August and October 2001. Planning team participants are identified in Appendix 1.

## 2. Terminology

The following terms are defined for the purposes of this report. Note that these definitions may vary somewhat from strict legal definitions.

*Encumbrance* - a disposition of a legal right or interest in land / resources or an official designation on land / resources that affects the availability or use of those lands / resources.

GATOR - internet access system to Tantalis (Crown land surface rights registry system).

INCOSADA/FAMAP/FTAS - registry system for forest and range tenure rights.

Integrated Registry - a repository where land / resource registry information that agencies maintain to support their land / resource management responsibilities is consolidated, and may be viewed and queried using an internet-based access tool. An integrated registry is part of the MSRM integrated data warehouse.

MapPlace - internet access system to MiDA (sub-surface rights registry).

MiDA - registry system for mineral and placer rights and coal tenures.

*Registry* - a place (i.e., system) where land / resource encumbrance information is systematically recorded.

*Tantalis* - registry system for surface rights, legal survey information relating to provincial Crown land.

*Tenure* - conditional rights that are granted by the Crown to access and use land / resources.

## 3. Background

The ideal of having all Crown land and resource legal encumbrance information accessible in a single place has been talked about for years by those involved in managing and using the numerous separate registries that house such information. The diverse and unrelated mandates and programs of provincial agencies responsible for generating encumbrance information, cost considerations, and also technological limitations, kept the ideal from becoming a reality.

Recent events, however, have moved the central registry concept closer to fruition. In March 2001 an independent business review of Crown land and resource encumbrance information<sup>1</sup> recommended the development of a "consolidated registry" to replace the numerous independent registries that house such information. Shortly following that study, the Premier directed the Minister of SRM to proceed with creating a "central registry". At the same time, government reorganization established an integrated Registries Department within the MSRM Registries and Resource Information Division to facilitate the Premier's direction through consolidation of (1) registry business functions, (2) registry data and systems infrastructure, and (3) governance of registry organizations. A strategic plan has also been developed for provincial land and resources information that emphasizes the integration of such information and making it accessible to users<sup>2</sup>. These events coincide with technological advancements in recent years, such as internet-based map viewing and query tools, that make the ideal of an integrated registry a feasible proposition.

#### 4. What Information Are We Concerned With?

#### 4.1 New Era & Core Review Commitments—Business Drivers for an Integrated Registry

The primary motivations for government's instruction to develop an integrated registry for Crown land and resource encumbrance information are: (1) economic development and (2) public cost savings.

With respect to the economic development goal, government's main priority is getting the provincial economy "back on track", and a number of "New Era" commitments have been made that have a relationship to Crown land and resources. New era commitments that are business drivers for MSRM's Registries Department in general, and the "integrated registry" project in particular, include:

- Faster approvals and access to Crown land,
- Economic development and competitive business climate,
- Open and accountable decision-making,
- Customer service, and
- Leadership in electronic government.

<sup>&</sup>lt;sup>1</sup> RLS & Associates Consulting Inc. and Sierra Systems Consultants Inc. "Provincial Government Legal Encumbrance Programs: Business Review – Current Assessment". (Report 1, April 27, 2001) and Future Direction (Report 2, May 15, 2001).

<sup>&</sup>lt;sup>2</sup>"Corporate Land and Resources Information and Inventory Strategy", Prepared by QVI Consulting Group, May 31, 2001.

On the cost-savings side, government wishes to provide required services at the lowest possible public cost. All provincial agencies are in the process of "core services" reviews in aid of defining opportunities for streamlining services and practices. With respect to land and resource encumbrance registry services, government has committed to reducing the number of computerized information systems that house land-related information. Increased standardization of business practices to reduce requirements for separate / independent registry systems, increased electronic sharing of common records in registry systems, and consolidating the various systems that currently house registry information into fewer systems that require less resources to operate are the proposed means of reducing government's land-related information management costs.

#### 4.2 Information for Economic Decision-making: The Priority

With New Era direction known, it is possible to identify the general types of information that must be incorporated into an integrated registry. The priority is Crown land & resource encumbrance information that is vital for *economic decision-making* – in other words, information needed for business decisions by the private sector, and information needed by government agencies to make legally-based decisions about access to land & resources by the private sector. This means that we are interested in providing simplified and ready access to information on:

- 1. land and resource ownership,
- 2. existing tenure rights and in-stream applications for new tenures, and
- 3. other land & resource "designations" (e.g., reserves) that can affect access to Crown land and resources, or that significantly influence or constrain how land & resources may be used.

Integrated registry users must be able to go to a map of the area they are interested in to see if there are any existing or pending legal encumbrances covering that area and, if there are, to get details about those encumbrances. Questions that an integrated registry should be able to answer are:

- Is the land / resource area that I am interested in owned by the provincial Crown, or are ownership rights held by other interests (e.g., other levels of government, private interests)? If the lands have been alienated, what nature and extent of property rights have been granted to private interests (e.g., Crown grants)?
- For provincially-owned lands / resources, have legal tenure rights been granted, and what is the nature and extent of those rights? (i.e., type and duration of tenure, location, tenure holder contact information),
- Are there any applications for new Crown land / resource tenures "in the works"? If so, what type of tenure, where, to whom, and what is the application status?

Are there any land / resource designations or administrative allocations (encumbrances)
over the land / resources that in any way affect the uses that can be made of those lands /
resources or how approval is obtained to use the lands / resources? (e.g., zones, reserves
or administrative boundaries that are established by authority of a statutory decisionmaker?)

Because land and resource encumbrance information can be put into a spatial context<sup>3</sup>, users should be able to ask these questions by querying a map of their area of interest, and the results of their queries should be visible in map form to enable users to relate encumbrance boundaries to known geographic features such as place names or water bodies.

Some users may wish to also be able to access information for Crown land / resource encumbrances (and other locations too) on the *quality and quantity* of resource values. Although an integrated registry system will not itself provide land and resource inventory information (such information will be warehoused elsewhere), it must be able to "peer to" or inter-operate with it in order to facilitate ease of access to, and utility of, the full range of government land and resource information that may exist.

It is also anticipated that the integrated registry will provide users with view-only access to government held encumbrance information, plus the ability to generate reports on encumbrances that exist in the locations of interest. This is distinct from the ability to download a copy of the registry data itself. Users who require access to raw data on encumbrances would likely continue to obtain it through standard data distribution channels, not via the integrated registry.

Additional assumptions about the registry and how it could work are discussed later in this report. It is important to note, however, that specific user requirements and business practices have not been reviewed. Projects to document user requirements and review business practices are early priorities, the results of which will drive subsequent integrated registry design and development decisions.

## 4.3 Where is Land & Resource Encumbrance Information Currently Kept?

Provincial land and resource encumbrance information is housed in various formats on various computer (and also hardcopy) systems throughout government. The agencies that issue and record rights and designations over land and resources are the primary source of registry information. The information systems that they employ were developed to support the agencies' unique business requirements. Business applications typically involve a combination of decentralized delivery of land & resource disposition / management programs and headquarters information management and systems support functions. Agencies' primary information management (production) systems were typically not designed with the needs of external users in mind and this has implications for the design of an integrated registry system that will enable common access to Crown encumbrance information.

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<sup>&</sup>lt;sup>3</sup> At present, not all encumbrance information is in spatial (digital map) form.

There is potentially far more information in agencies' computer systems than is necessary for responding to the above-listed questions about basic Crown land / resource status. Decisions will be required, based on the results of user surveys that still need to be conducted, on the particular encumbrance information that should be made accessible via an integrated registry.

The types of land and resource encumbrance information that currently exist in agencies' separate information management (registry) systems are shown in Table 1. Figure 1 summarizes the provincial land / resource encumbrance situation. Note the diversity of systems that currently house land and resource encumbrance information, each of which must presently be checked independently if users want a comprehensive picture of "land status" for the area they are interested in. Note also the large volume of encumbrance records that are contained in these systems.

Table 1. Provincial Land & Resource Registry Information

Responsible Organization*	Responsible for managing records on:
MSRM – Registries Department (formerly Crown Land Registry Services Branch of MELP)	Crown land surface rights (e.g., Crown grants; Land Act leases, licenses, permits, easements, rights-of-way)
	Reserves, designations & map notations established under Land Act
	Cadastre (legal property boundaries)
	Administrative Boundaries that are established under various statutes (e.g., school districts, electoral areas, municipalities, etc.)
MSRM – Registries Department (formerly Resource Tenures & Engineering Branch of	Timber and other tenures issued under Forest Act (e.g., forest licenses, tree farm licenses, special use permits)
MOF)	Timber marks
	Forest roads and road permits
	Recreation sites, trails and projects
	Range (grazing) tenures issued under <i>Range Act</i> (e.g., range licenses, permits, hay cutting permits)
	Forest related administrative boundaries (e.g., TSA's, provincial forests)
MSRM – Registries Department (formerly Mineral Titles Branch and Petroleum Titles	Mineral claims, mining leases, placer tenures and no-staking reserves issued under <i>Mineral Tenure Act</i>
Branch of MEM)	Coal tenures issued under Coal Act
	Petroleum tenures and reserves issued under Petroleum and Natural Gas Act
	Geothermal tenures issued under Geothermal Resources Act
MSRM – Registries Department (formerly Archaeology Branch of MSBTC)	Archaeology sites and heritage sites protected under Heritage Conservation  Act
MSRM – Registries & Resource Information Division (formerly Land Titles Branch of MAG)	Certificates of indefeasible title and registration of charges / liens against title, established under <i>Land Title Act</i>
MSRM – Water Branch	Water licenses issued under Water Act
MWLAP – Wildlife, Habitat & Enforcement	Guide outfitter certificates / licenses, angling guiding licenses, trapline licenses issued under <i>Wildlife Act</i>
MWLAP – BC Parks	Protected Areas (parks, ecological reserves) established under Park Act or Protected Areas of BC Act
MWLAP – Pollution Prevention & Remediation Branch	Contaminated sites designated under Waste Management Act
МоТ	Provincial highways established under Highway Act
Land Reserve Commission	Agricultural land reserves established under Agricultural Land Reserve Act and Forest land reserves established under Forest Land Reserve Act

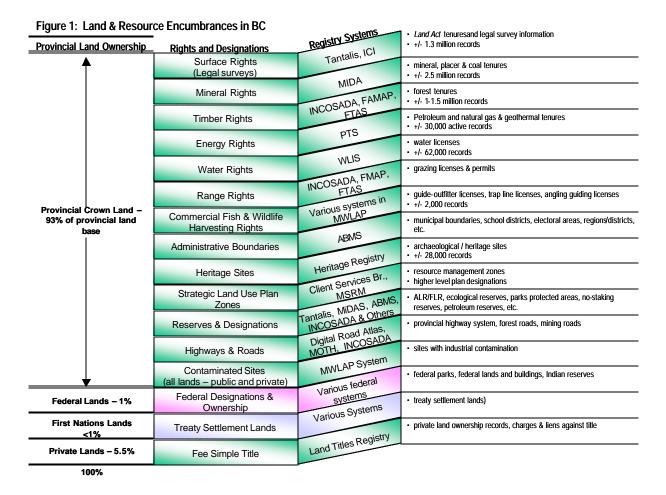
\* The MSRM Registries Department is primarily an "information steward", managing encumbrance information access and distribution on behalf of the agencies that have ownership responsibility for the information. For example, MOF is responsible for generating and updating forest tenure encumbrance information. Access to that information via an integrated registry will be provided by MSRM's Registries Department. As the integrated registry concept is implemented over time and additional categories of encumbrance information become accessible via an integrated registry, the role of MSRM as an information steward will expand.

## 4.4 Phased Implementation of an Integrated Registry

Government has determined that integrated registry development will proceed in distinct phases, as shown in Figure 2. Each phase would be followed by a period of client testing and quality assurance before proceeding to the next phase.

The initial priority (Phase 1) is to enable integrated access to government's three "primary" registries that contain encumbrance information on:

- Crown land surface rights,
- Crown land cadastre (legal surveys),
- administrative boundaries / designations,
- timber and range tenures, and
- mineral titles and reserves.



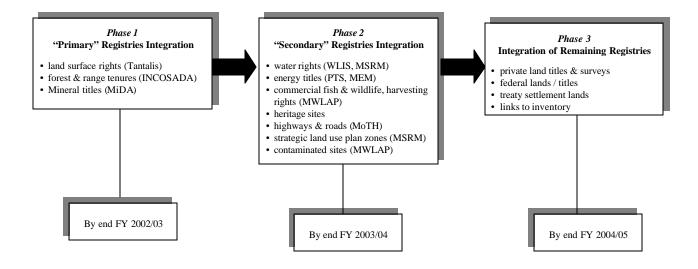
This will be followed in Phase 2 by providing integrated access to the remaining ("secondary") registries, including:

- water rights,
- energy rights,
- commercial fish and wildlife harvesting rights,
- cultural sites,
- strategic land use plan zones, and
- contaminated sites.

It is envisioned that Phase 3 will entail integration of:

- private land titles and surveys<sup>4</sup>,
- federal lands and titles
- treaty settlement lands, and
- provide appropriate links to provincial land and resource inventory information.

Figure 2. Integrated Registry Development Phases



Prepared by Registries Department, Ministry of Sustainable Resource Management

<sup>&</sup>lt;sup>4</sup> Private land survey information is currently being captured in an "Integrated Cadastre Initiative (ICI)" system that is a partnership arrangement between the provincial government, utility companies and local governments. Government does not have independent control over this information and any proposals to make ICI data accessible via an integrated registry viewer will require negotiation with these parties.

## 5. Description of the Integrated Registry Concept

#### 5.1 Basic Vision Described

Government's integrated registry of land and resource encumbrance information will serve the needs of a diversity of users including industry, large and small business, individuals, government personnel and other interest groups. Any user with internet access will be able to click onto the province's "Land & Resource Registry" site which allows users to query the encumbrance status of any parcel / area of land or water in BC. This can be done in a number of ways including entering a known map reference or by "fencing off" an area of a provincial map that can be "zoomed into" on the computer screen.

Adjacent to the map image will be a number of expandable tabs that users can click onto, depending on the type of information they are interested in. For example, if a user is interested in finding out about existing timber tenures in the area they have "fenced off", they would click on an expandable tab for "forest tenures". The various types of forest tenures would appear and the user would tick-off the ones of interest (e.g., tree farm licenses, forest license, timber sale license) and request the system to display the result. There would be expandable tabs for other categories of encumbrance information such as surface tenures, mineral titles, water rights, petroleum rights, protected areas, etc. that could also be ticked-off.

## Integrated Registry Vision From a User's Perspective: Hypothetical Example

Jill supervises a research group in a pipeline company that is planning the route of a possible new natural gas pipeline between two centres in the central interior. Her unit has been asked to investigate and recommend a preferred route alignment. She has done this before and knows that the task can be challenging because of the difficulty and delay in getting access to government information about land and resource values and encumbrances. But this time, she is optimistic because she is aware of the availability of new internet-based tools for accessing government land & resource information and is intending to use them for this project.

Jill's team starts by looking at topographic maps and resource inventory information and selecting three possible routes that meet initial physical design and environmental criteria. They then turn their attention to investigating land and resource encumbrance status on the route options. They go to the provincial integrated registry web site and transfer their first route alignment alternative onto the map screen. They are interested in researching potential legal conflicts with the route alignment and ask the system to search for the presence of surface rights tenures and in-stream applications, timber tenures, mineral tenures, protected areas and First Nations lands. They also ask the system to show all legal survey boundaries and associated land owners that intersect the alignment. They look at these different levels independently and lain on top of one another, and request the system to generate a summary spreadsheet listing all of the encumbrances that exist.

They do this for all three route alternatives and determine that one route stands out as having the fewest conflicts. They then begin to investigate that route more thoroughly by hot-linking to other web sites that supply greater detail on the conflicting encumbrances and by making contact with provincial registry staff to obtain information about specific encumbrances.

Jill's group concludes their assignment on-time by writing up their research results and submitting their report with a recommended route alternative. They are able to report on all of the potential conflicts along their recommended route and the implications of overcoming those conflicts.

Some time later, they get the company go-ahead to proceed to obtain regulatory approvals for the recommended route. The first thing they do to register their interest in the route is to go on-line to the provincial integrated registry site and file an "investigative permit" application. They do this by plotting their application alignment onto the screen map and providing the

necessary application form information that the system prompts them to answer (e.g., company name, contact, land use purpose). The system advises them of the procedures that will be followed to process their permit application and provides contact name information for other regulatory agencies that they may be required to deal with.

The search result would display coloured boundaries of the encumbrances on the map screen. For example, green-outlined shapes (polygons) might be forest licenses, and blue boundaries might be mineral claims. Each tenure shape could be "double-clicked" to find out some more basic information about the individual tenure, such as the date the tenure was issued. If more detailed information is needed about a particular tenure, a hot link may be provided to take the user to the source where further attribute information may be found, or an individual contacted for further information. The user would be able to request the system to plot a map of the query and to generate a spreadsheet report that lists all of the encumbrance types that have been searched in the "fenced area".

## **5.2** Design Options for Registries Integration

It is too early to arrive at decisions on the preferred systems infrastructure and architecture of an integrated registry. Before such decisions can be made it is necessary to: (1) define specific registry user requirements, (2) investigate opportunities for rationalizing / consolidating the business functions of agencies that generate information—aimed at reducing the base requirement to retain separate registry systems, and (3) analyze the cost-effectiveness of alternative system configurations to ensure that the configuration that is selected is supported by a solid business case. These prerequisites are reflected in the separate projects (see section 7) that constitute the recommended work programme for integrated registry development.

It is possible at this early stage, however, to identify the range of conceptual design options for an integrated registry system. These are summarized below.

At one end of the "consolidation continuum" is the *complete consolidation option* of replacing all of the separate "production" registries such as Tantalis, INCOSADA, or MiDA with a single "mega registry" system that combines all of the business functions and encumbrance data that is currently retained in these separate systems. Naturally, the independent (production) registry systems have each evolved in response to the business requirements of the agencies that employ the systems, and if this conceptual design option is chosen it will be necessary to ensure that agencies' business functions (even if they are standardized to the maximum extent) continue to receive the systems support they require. Note as well that registry users do not require access to all of the "production data" that would reside in a consolidated registry—some sort of public viewing interface tool would be needed to enable access to selected data categories, for example, like the GATOR interface that currently complements the Tantalis system.

Somewhere in the middle of the consolidation continuum is the *partial consolidation option* where components of registry systems are shared, so that duplication in data and application management and maintenance is reduced to the maximum extent. There would still be more than a single registry system containing Crown land and resource encumbrance records, but

these would be reduced in number and the systems would be more streamlined and rationalized in relation to each other. In the future, when antiquated registries are replaced (e.g., such as the existing water licensing information system that needs replacement), they would be combined with a pre-existing registry, rather than being reconstructed as a separate registry.

At the other end of the consolidation continuum is the *distributed option* where the existing separate registries continue to be retained in the foreseeable future. Encumbrance data that is needed by registry users would be funnelled into a data warehouse that would be accessible to users via a GIS viewing tool. Efficiencies would be achieved in a more evolutionary way over the longer-term as the independent business practices and registry functions are reviewed and rationalized, and as opportunities for registries integration are realized when upgrades are made to the independent registries. Government may wish to consider some form of this design option in the short-term in order to achieve its time commitment for providing a "central registry".

It must be noted that the above conceptual design options are not all mutually exclusive. For example, a "partial consolidation" model would, similar to the "distributed option", require warehousing of selected encumbrance information. All options would require some form of internet-based GIS viewing tool to enable external access to registry information.

## **5.3** Existing Examples of Integration

There are several existing provincial examples of land and resource encumbrance information integration that may provide useful information for proceeding with integrated registry development.

The first example is the Ministry of Energy & Mines "MapPlace" site where internet users currently have access to mineral titles, selected forest tenure, and selected administrative boundary information. Using "Audodesk Map Guide" viewing software, users can query the presence of these encumbrances for defined spatial areas. Reports can also be generated. This facility is fully operational and is presently used extensively by the mining sector.

Another example is the provincial Integrated Cadastral Initiative where local governments, utility companies and the province have partnered to combine legal survey (Crown and private land) and associated attribute and administrative boundary information into a data warehouse. The system is currently under development with complete information available for selected regions. Access is available to partner subscribers.

A third example is a "prototype integrated registry" that is currently being developed as part of the integrated registry project itself. Crown land registry (Tantalis), forest tenure registry (INCOSADA) and mineral title registry (MiDA) information are being integrated for the Cranbrook Forest District and will be viewable using ARC IMS viewing software. It is being developed as a potential tool for soliciting information from prospective integrated registry users on their specific information requirements.

A fourth example is the "GATOR interface" that provides external users with internet access to Crown land registry information that is stored in the Tantalis system. Although this tool is currently limited to showing surface rights and Crown cadastre information, it serves as one model for providing outside users with access to encumbrance information. Subscribers pay a fee for downloading information through GATOR.

### 5.4 Public—Private Partnerships?

The MSRM Registries Department and the Business Information and Services Division have been set up to ensure that government's independent "source" registries work effectively together from a corporate perspective, and to oversee the development of an integrated registry tool and standardization of business practices. A question remains, however, of whether or not a public—private partnership is possible (or desirable) for delivering integrated registry information. There are successful precedents for this in the form of BC Online where, for example, government's land titles and BC Assessment Authority information are accessible via the internet, with the information distribution service provided by a private sector partner.

Involving private partners may create a requirement to charge users a fee for encumbrance information, and there are a number of implications of such a policy. For example, the mining sector currently has free internet access to mineral title information. Introducing fees to view this information may discourage use of titles information and this may dampen mineral exploration activity. Also, some Crown land / resource encumbrance information does not have the same completeness / accuracy levels as, for example, LTO information and asking users to pay for information that is not completely reliable for final decision-making purposes may be difficult to justify (see section 6.3 for further explanation). The role of the private sector in distributing integrated registry information is a policy question that relates to the broader initiative of developing a MSRM integrated data warehouse.

Bringing the private sector in as a distribution partner really only makes sense if government's motive is to generate revenue from the sale of Crown land and resource encumbrance information, or to reduce costs to government. Certainly, government has a monopoly on land & resource encumbrance information and revenue generation is a possibility. This question, however, requires further focused consideration. Decision-makers need to be presented with options and implications as a basis for making informed choices on the merits of integrated registry public private partnership arrangements. This work is proposed to occur under Project #7 – see section 7 below).

#### 6. Issues

#### **6.1** User Requirements and Benefits

A fundamental issue that needs attention as a first priority is that we do not have a precise fix on who we are building an integrated registry for, and what their specific information needs

are. Existing registry managers naturally have an approximate idea of users and user requirements—certainly they know their own registry information requirements as internal users; and some previous work has been done to survey external users about their needs (e.g., as part of MEM's Phase II map design—TRIM-based mapping, and the former MELP's development of the GATOR interface). It will be essential, however, to do comprehensive surveys of potential integrated registry users and their specific requirements to ensure that the integrated registry tool is client driven and provides the benefits envisioned. Surveys must include internal provincial users and external users.

Some threshold level of effort is also needed to document the benefits of an integrated registry tool relative to the costs of developing and maintaining the tool—i.e., a business case analysis. Knowing the approximate magnitude of anticipated economic benefits / cost-savings that will flow from an integrated registry tool is needed as a basis for decisions on the size of investment into an integrated registry consolidation / development, and associated data improvement initiatives that are warranted / prudent. Re-engineering business practices (e.g., electronic document filing) should also speed approvals decision-making and lower costs to applicants and government. These benefits must be factored into a business case analysis that sees the integrated registry project as more than just a computer systems initiative.

#### **6.2** Business Practices

Government's goal is to minimize costs by reducing the number of existing independent registry systems that require ongoing maintenance and support. A main strategy for achieving this aim is to consolidate registry information to the extent possible into one or other registries and to create the ability for electronic sharing of common registry information.

To maximize this opportunity, it will be necessary to reform agencies' business practices so that they are more similar with each other, thereby reducing the need to record registry information in different ways in different systems. For example, if all registry entries begin with acceptance of a tenure application, it may be possible for tenuring agencies to adopt the same general methods / practices for tenure issuance, so that the same types of information are captured in a similar fashion in one location.

Business practices within the tenuring agencies (and the registry systems that support the practices) have all evolved out of historical legal and policy requirements. Before registry system efficiencies can be achieved it will be necessary to look closely at business practices to see how far it is possible to go in reforming and standardizing operational policies / business practices in search of simplification and cost-savings.

# **6.3.** Information Reliability and Interpretation

The information that exists in government's various registries is of variable quality. For the most part, it is accurate and relatively up-to-date, however, there are anomalies that can affect the level of confidence that can be placed in it for final decision-making / investment purposes.

All of today's computerized registries originate from old hard-copy registries and in some cases their conversion process resulted in "less than perfect" information capture. In other cases, the historical record-keeping procedures themselves resulted in information weaknesses (e.g., lands in the E&N railway land grant). Specialized knowledge is required to appreciate these issues and to understand the limitations of the information being viewed. Expertise is similarly required to understand how legislative and policy changes over time have affected the types of information that is stored in the registries.

Registry staff that work continuously with the information and understand its history and limitations possess this knowledge; outside users, however, would not. The implication is that unless efforts are made to clean and upgrade all "problem areas", there will always be limits on the extent to which integrated registry information should be used for final decision-making and investment purposes, without first obtaining professional assistance (e.g., from a lawyer, land surveyor, registry expert) to help interpret and verify the information.

The types and locations of existing data issues are generally known to staff who work regularly with the registries, but the precise nature and extent of the "information reliability" problem across all of government's separate registry systems has not been documented. There is, therefore, no solid basis for assessing the level of risk (i.e., liability) that government would bear in putting its encumbrance information out to the general public and business community.

Aside from some potential liability risk to government, a primary implication of providing wide access to information with reliability concerns is that one of the underlying goals behind an integrated registry system—i.e., to stimulate economic development through quicker and cheaper access to information—is potentially hampered. If users feel that they must verify that the information they are downloading is correct by speaking to a registry expert, then we may not really have gained that much. Another potential implication of making data available that has reliability limitations is that the economic value of such information may be reduced. This may affect the ability of the government or a private sector partner to charge users a fee for accessing the information.

Again, the real extent of this issue is presently not well understood and a project is needed to define the specific nature and extent of information reliability concerns, to assess the associated risks, and define options for addressing the risks.

# 6.4 Data Incompatibility

Government's existing separate registry systems are far from static. They continue to evolve as new technology and products become available and as business functions shift with legal and policy changes. Several of the primary registries that we are concerned with are in the process of converting old information into new models in efforts to improve their business functionality. For example, old forest tenure information (Forest Atlas information) is being upgraded and converted into their INCOSADA system. MEM is also transferring old tenure

mapping onto government's new (TRIM) mapping standard. Still other systems are antiquated (e.g., water rights) and do not meet current standards for "GIS'able" information.

Registry systems have evolved independently without a broader corporate perspective and without common standards for things like:

- the basic systems technology, architecture, and software that are used,
- a common base map for draping encumbrance information onto,
- procedures for capturing 'cleaned' data in the system of origin, or
- standards for data currency.

The implication is, firstly, that not all encumbrance layers may be presently available for incorporation into an integrated registry without first being "cleaned-up" and put into a "GIS'able" format. This means that there may be gaps or 'holes" in registry coverage, at least in the short- to mid-term. Secondly, when integrated registry users want to overlay multiple encumbrance layers to understand relationships, some line work (i.e., boundary information) that is depicted may not accurately represent where the boundaries are actually located in relation to other boundaries (e.g., heights-of-land boundaries).

These are technical issues that can be overcome with data conversion and cleaning over the longer-term, however, in the immediate term they will have some effect on the overall integrity and utility of an integrated registry system. If we are content to provide sufficient qualifiers and caveats on the information, this may not prove to be a large issue. As with the above "information reliability" issue, the nature and extent of this problem needs more careful scoping to understand the limitations that this issue imposes on developing a quality integrated registry tool, and cost-effective ways of overcoming the issue need investigating.

#### 6.5 Resources

The costs of implementing government's integrated registry commitment are difficult to estimate at this stage. Front-end costs (i.e., Phase 1 costs, see section 8 below) are thought to be lower than longer-term costs of addressing registry data reliability and incompatibility issues.

Although the initiative is expected to generate economic benefits in the form of economic development spin-offs, reduced administrative costs to government, and potentially cost-recovery revenues from user fees<sup>5</sup>, there will be challenges in delivering the project in the current (and foreseeable) environment where resources are constrained.

# 7. Getting From Here to There: Integrated Registry Development Plan

Section 5 in this report describes the vision of an integrated registry tool and Section 6 identified some of the major issues standing between the vision and our present ability to deliver it. To address these issues and fulfil the vision, a number of discrete projects need to be undertaken.

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<sup>&</sup>lt;sup>5</sup> These benefits need to be scoped as part of a basic business case analysis – see Project #1, section 7.

This section describes seven projects in an integrated registries "development plan". This plan should be seen as a general blueprint for action over the next approximately three year period. The sequence of projects should occur roughly in the order they are presented, however, some projects will need to be undertaken concurrently. The results of any one project may influence the nature and scope of subsequent projects.

For each project in the development plan, basic project purpose and scope is identified and key activities and deliverables are defined. A preliminary estimate of Phase 1 costs is also supplied—subsequent phases are not costed. Given costing uncertainty a cost range is provided. It is expected that all costing estimates will need to be revisited at the time that terms-of-reference for individual projects are developed. Specific responsibilities for performing the seven projects in the integrated registry development plan are not defined. It is assumed that project teams will be established primarily comprising MSRM staff in the Registry and Resource Information Division and the Business Information and Services Division, with consultant support playing a major role in project delivery.

# 7.1 Project 1. Confirm User Requirements & Business Case

# **Project Purpose**

- To confirm who the users of an integrated registry are / would be, and identify their functional requirements for access to land & resource encumbrance information—as the logical basis for designing and developing the integrated registry and related client applications.
- To confirm the business case for an integrated registry and associated re-design of registry-related business practices.
- To see if there are lessons from other jurisdictions that we should be applying here.

#### **Key Activities / Deliverables**

- Review past agency initiatives to survey users' requirements.
- Design and apply appropriate survey techniques to assess internal and external users' requirements (e.g., questionnaire, interviews, focus groups, workshop).
- Complete development of a demonstration prototype(s) for use in soliciting user responses on specific requirements.
- Research selected jurisdictions to determine their progress, motivations and approaches for supplying integrated registry information to internal and external users.
- Develop a business case (i.e., cost-effectiveness analysis) to serve as a basis for deciding the appropriate scale of public investment into integrated registry development.
- On the basis of documented findings / conclusions, make recommendations on basic integrated registry design criteria / parameters.

### **Preliminary Cost Estimate**

Users' requirements study		\$25,000 to \$50,000
Prototype development & user reaction / evaluation		\$10,000 to \$20,000
Review of other jurisdictions		\$5,000 to \$10,000
Business case analysis		\$20,000 to \$30,000
	Total	\$60,000 to \$110,000

# 7.2 Project 2. Business Practices Review

# **Project Purpose**

Investigate business practices in agencies that generate land and resource encumbrance
registry information to determine what level of standardization / equivalence in business
practices can be generated as a basis for deriving a common, logical data and process
models.

### **Key Activities / Deliverables**

- Investigate what changes to business practices and / or land & resource disposition / management regulations / procedures are needed to bring about increased efficiency and effectiveness in registry management, to enable data consolidation and specification of common applications: For example, look at ways to:
  - (1) reduce total volume of land & resource encumbrance data that is generated / handled through standardization of business practices and outputs;
  - (2) capture information that clients submit on-line as part of official registry information (e.g., through red-lining, electronic filing) as opposed to having staff re-enter that data;
  - (3) ensure that data that is "cleaned" by one agency is returned to the originating agency so that the updated data makes its way into the official registry;
  - (4) replace regulations that require archaic business practices to be followed by applicants or within government; etc.
- Examine antiquated registry systems that need replacing (e.g., water licensing system) to determine how the information in those systems may be consolidated onto an existing registry system that is more modern and robust.
- Identify common processes with the intent of delivering standard applications useable by a wide range of clients.

#### **Preliminary Cost Estimate**

Investigate opportunities to standardize business practices	\$25,000 to \$50,000
Examine opportunities for integrating antiquated registry systems into en existing registry platform	\$20,000 to \$40,000
Total	\$45,000 to \$90,000

# 73. Project 3. Analyze Data Integrity Issues

# **Project Purpose**

• For Phase 1 information sets, to define the current extent of land and resource encumbrance information "deficiencies" (i.e., inaccuracies, gaps, incompatibility issues), and how concerned government should be about providing open access to such information because of potential legal risks, and because such information may fall short of users' requirements for decision-making.

### **Key Activities / Deliverables**

- Document areas (e.g., topic areas and geographic areas) where data quality is questionable, where data gaps occur, and where data incompatibility is a concern. (Phase 1 information sets only i.e., surface, forestry, mineral rights information). Assess the magnitude of these issues.
- Identify risks (e.g., legal liability) to government of providing external access to registry information that is known to contain errors and / or which requires expert knowledge to interpret properly.
- Identify implications to registry users of data integrity issues in relation to their stated information needs and expectations (as determined from Project 1).
- Develop a "corporate action plan" for responding to risks to government and client needs, including the identification of action priorities and costs to implement the actions. The action plan should be based on an assessment of options and implications. Short-term responses might include: placing caveats on registry information; providing "reliability ratings" for some registry information; providing help desk service; conducting training workshops on what the registry information means and its limitations. Ongoing initiatives over the longer-term would include data cleaning / improvement projects for priority areas.

# **Preliminary Cost Estimate**

Data integrity / incompatibility & risk assessment study	\$20,000 to \$30,000
Development of corporate action plan (options & implications assessment) for addressing priority data reliability & incompatibility problems (Note: this does not include implementing the action plan).	\$5,000 to \$10,000
Total	\$25,000 to \$40,000

# 7.4 Project 4. Standards Definition

# **Project Purpose**

• To identify corporate standards (technology, data, and process) for registries management so that when registry "layers" are combined they fit properly in relation to each other, and so that the various information layers that users are viewing is of a similar quality.

# **Key Activities / Deliverables**

- Identify the 'topic areas' where differing standards are currently being applied by registry managers (e.g., differing systems software, base mapping, data updating protocols).
- Analyze how much of a problem having differing standards creates in relation to achieving the integrated registry vision.
- Based on the problem analysis, develop recommendations on the common standards that should be applied across government's registry systems.
- Develop procedural recommendations for implementing the common standards that are being proposed across the various registry systems in government.

## **Preliminary Cost Estimate**

Registry standards study, including recommendations on specific standards and procedures for implementing standards

\$30,000 to \$60,000

# 7.5 Project 5. Integrated Registry Design, Development & Phase 1 Implementation

# **Project Purpose**

• To proceed to design, build, test and put into production an integrated registry (province-wide information for the three, Phase 1 information sets), based on the requirements that users have expressed, the findings of the business practices review, and the business case (cost-effectiveness) analysis.

# **Key Activities / Deliverables**

- Based on the findings of preceding projects, develop data models and systems architecture design criteria.
- Develop the integrated registry system (for Phase 1 information sets), based on approved data model and design criteria.
- Implement resulting system in pilot project environment as basis for testing / evaluating performance against pre-defined performance criteria.
- Implement revised business practices that are required to support / complement the integrated registry design.
- Maintain and support the integrated registry system.

#### **Preliminary Cost Estimate**

System design, development and trial period evaluation (Phase 1 information sets only)

\$300,000 to \$1.5 million\*

An Integrated Registry for Provincial Land & Resource Encumbrance Information Development Plan

Ongoing maintenance and support (Phase 1 information sets only)	\$200,000 to \$500,000 / year
Total	\$230,000 to \$2 million

<sup>\*</sup> This broad range reflects the options that are available. The low-end option reflects a system that leverages from an existing registry viewer to provide expanded access to other "as-is" registry information sets. The higher-end option reflects a newly constructed, more stable / reliable registry system, but which still employs "off-the-shelf", contemporary viewing software that accesses a combination of warehoused and consolidated registry information.

# 7.6 Project 6. System Expansion and Phase 2 & Phase 3 Implementation

# **Project Purpose**

• Based on experience gained through the trial implementation project, to expand the integrated registry to include other (secondary, Phase 2 and other, Phase 3) registry information.

# **Key Activities / Deliverables**

- Incorporate the "fixes" that were recommended from the results of the Phase 1 implementation.
- Assess the Phase 2 and 3 information sets for data reliability / incompatibility issues.
- Develop a schedule of integrated registry expansion to provide access to other registry layers (e.g., petroleum, water, archaeological sites, private cadastral fabric, etc.) as opposed to a single "mass" enhancement project. This schedule will be required to identify any technical upgrades to source data that may be needed before the data is released via the integrated registry.
- Add access to other registry layers through periodic enhancements, per the expansion schedule.
- Keep users / potential users notified of expanding access to registry information.
- Continue to support the integrated registry tool (i.e., help desk support, technical support).
- Monitor usage on an ongoing basis and make refinements / upgrades, as needed.

### **Preliminary Cost Estimate**

This project has not been costed at this time--it will be possible to identify relatively accurate costing estimates following completion of Phase 1 registries integration.

Costs not estimated.

# 7.7 Project 7. Address Management and Policy / Regulatory Issues

### **Project Purpose**

• In parallel with the above projects, to identify management, financial and administrative support mechanisms needed to develop and implement the integrated registry. This

project will include a number of aspects, including: a review of department organizational structure; policy and procedures development; identification of needed legislative change and deregulation; and development of public-private partnerships.

### **Key Activities / Deliverables**

- Develop an organizational structure for the Department that will support the development and maintenance of the integrated registry. Define staff responsibilities for design, development and ongoing maintenance of the integrated registry. Review the Department staffing allocation and job descriptions, as necessary.
- Develop policies / procedures and inter-agency protocols as necessary for development and delivery of the integrated registry (e.g., with BCALC, MOF, others).
- Review and reconcile pricing policies / practices for accessing registry information in relation to:
  - (1) corporate pricing policy for acquiring land & resource (raw) data and for viewing online information; and
  - (2) existing viewing facilities that may or may not charge for access to registry information (i.e., MapPlace, GATOR, ICI).
- Consider the merits of a public-private partnership(s) to distribute integrated registry information (e.g., BC Online expansion).

# **Preliminary Cost Estimate**

Individual aspects of project have not been costed separately. \$25,000 to \$50,000 / year

# 8. Implementation Timing and Phase 1 Cost Summary

Table 2 below summarizes integrated registry development plan projects (Phase 1) by fiscal year. Figure 3 below shows project scheduling by fiscal year.

Table 2. Timing and Phase 1 Cost Summary

Fiscal Year & Phase		Projects	Preliminary Cost Estimate
2001 / 2002	Project 1.	Confirm User Requirements and Business Case	\$60,000 - \$110,000
(Phase 1) Project 2. Business Practices Review		\$45,000 - \$90,000	
	Project 3. Analyze Data Integrity Issues		\$25,000 - \$40,000
	Project 4	Standards Definition	\$30,000 - \$60,000
	Project 7	Address Management and Policy/ Regulatory Issues (selected aspects only, not entire project)	\$25,000 - \$50,000
		2001 / 2002 total	\$175,000 - \$350,000
2002 / 2003 (Phase 1)	Project 5. Integrated Registry Design, Development & Phase. 1 Implementation		\$500,000 - \$2 million
	Project 7. Address Management and Policy / Regulatory Issues	\$25,000 - \$50,000	
		2002 / 2003 total	\$525,000 - \$2.05 million

# An Integrated Registry for Provincial Land & Resource Encumbrance Information Development Plan

\$700,000 - \$2.4 million	Phase 1 cost estimate (2001/02 & 2002/03)	·	
	System Expansion & Phase 2 Implementation	Project 6.	2003 / 2004
not costed	Address Management and Policy / Regulatory Issues	Project 7.	(Phase 2)
	System Expansion and Phase 3 Implementation	Project 6.	2004 / 2005
not costed	Address Management and Policy / Regulatory Issues	Project 7.	(Phase 3)

Figure 3. Project Schedule by Fiscal Year

	Project	Ph	ase 1	Phase 2	Phase 3	
Project 1	Confirm User Requirements & Business Case	?????	? ?			
Project 2.	Business Practices Review	? ? ? ? ?	? ?			
Project 3	Analyze Data Integrity Issues	? ? ? ? ?	? ?			
Project 4	Standards Definition	?????	? ?			
Project 5	Integrated Registry Design, Development & Phase 1 Implementation		?????			
Project 6	System Expansion and Phase 2 / Phase 3 Implementation			?????	?????	
Project 7	Address Management, Business Practice, and Policy / Regulatory Issues	?????	?????	?????	?????	
		FY 2001 / 02	FY 2002 / 03	FY 2003 / 04	FY 2004 / 05	

Moneys required to deliver the projects in this development plan are expected to come from a combination of base budgets and other special appropriations (e.g., "InfoSmart Funds") that have been earmarked to implement government's stated priorities for meeting "New Era" commitments related to electronic government.

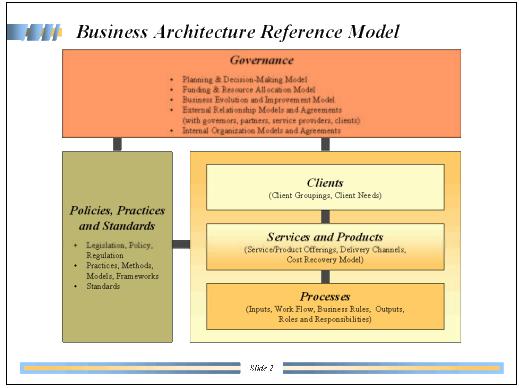
# **Appendix 1: Planning Team Participants**

The following individuals participated in team meetings to prepare the integrated registries development plan.

Godfrey Archbold, Chair	Don Howes
Registries Department	Business and Information Services Division
Registries and Resource Information Division	
Justine Batten	Evert Kenk
Registries Department	Business and Information Services Division
Registries and Resource Information Division	
Sue Bergin	Olga Kopriva
Business and Information Services Division	(forests), Registries Department
	Registries and Resource Information Division
Ken Bowen	Gord Lloyd
(forests), Registries Department	(forests), Registries Department
Registries and Resource Information Division	Registries and Resource Information Division
Daryl Brown	Scott Macphail
Consultant	(lands), Registries Department
	Registries and Resource Information Division
Scott Clark	Blair Matheson
Business and Information Services Division	(lands), Registries Department
	Registries and Resource Information Division
Darlene Cockle	Rosa Munzer
(lands), Registries Department	(sub-surface), Registries Department
Registries and Resource Information Division	Registries and Resource Information Division
Adam Dewey	Jill Picard
(sub-surface), Registries Department	(forests), Registries Department
Registries and Resource Information Division	Registries and Resource Information Division
Stan Hoffmann	Eric Partridge
(sub-surface), Registries Department	Registries Department
Registries and Resource Information Division	Registries and Resource Information Division
	Chuck Salmon
	Surveyor General, Registries Department
	Registries and Resource Information Division

# **Appendix D** Ministry's Business Architecture Framework







# Objective of Business Architecture

- Identify and leverage opportunities for business integration and streamlining, throughout the Ministry
  - Eg. shared services, common processes, etc.



# Current Business Architecture

- Governance
  - New government priorities represent significant change in business focus
  - "New Era" commitments establish key ministry targets and focus
  - Many existing partnerships (eg. federal government, private sector)
  - Fiscal constraints; diminished budgets
  - Anticipating significant loss of expertise (30% of government staff retiring over next 5 years)
  - Few resources to support internal and external client (eg. as we move to e-
  - Approval authorizations are entrenched and inflexible
- Policies, Practices and Standards
  - Comprehensive legislation guiding Ministry business activities
  - Policy often requires more onerous processes than are required to meet legislation
  - No business process modelling standards, methods or tools



# Current Business Architecture (continued)

- Clients
  - Like clients are forced to use multiple services/products provided by multiple organizations
  - MSRM serving a broad range of clients with sometimes competing interests and priorities
  - Client groupings and client needs not clearly defined nor understood
  - Client technical capabilities and capacity varies significantly
- Services and Products (see next slide also)
  - Few business areas organized by services (usually by process)
- Processes
  - Duplicate business processes exist
  - Many business processes haven't been reviewed for a long time; they are entrenched, making change difficult
  - Many similarities among business processes; there are cases where business processes could be changed to be the same
  - Many processes span organizational dependencies
  - Business processes are not well documented and communicated generally
  - Process review is not dynamically linked to policy changes
  - When process review is conducted it is usually done on an organizational basis rather than across all organizations involved
  - Converging business processes from areas with different philosophies regarding centralization and decentralization

Slide 5



# Business Architecture Issues & Opportunities

- Governance
  - No corporate business plan in place across all branches, addressing business priorities, resource allocations, etc.
  - We are living with a short-term organizational structure (dynamic organizations for BIS and BIS internal clients)
  - Business optimization opportunities not being actively pursued
- Policies, Practices and Standards
  - Business processes are rarely considered when policy is set
  - No enforcement of business practices e.g. when a standard business process is developed it may not be enforced in all business units
  - Inadequate user involvement in establishing standard business practices
- Clients
  - (to be developed)
- Services and Products
  - Ministry services not organized according to client group
- Processes
  - Roles and responsibilities across the organization have not been finalized

Stide 6



# Target Business Architecture

#### Governance

- Operational business plans should be developed and in place by <date>
- Identify new opportunities for partnerships (fiscal and workload) e.g. capture information at source in the format government needs
- Expand professional accountability (for deliverables and services to government) and move government staff from a full QA role to a monitoring and auditing role

#### Policies, Practices and Standards

- Establish business process modelling standards, methods and tools
- Establish process for user signoff of standards e.g. standard business process, along all phases of process development

#### Clients

- Clearer identification of clients and the "impact of relationship" e.g. who are our key clients, where can we gain the best efficiencies
- Client-centric business practices
- Move to self help as much as possible (where appropriate)
- Establish minimal level of technical requirements for clients dealing with e-Government

Stide ?



# Target Business Architecture (continued)

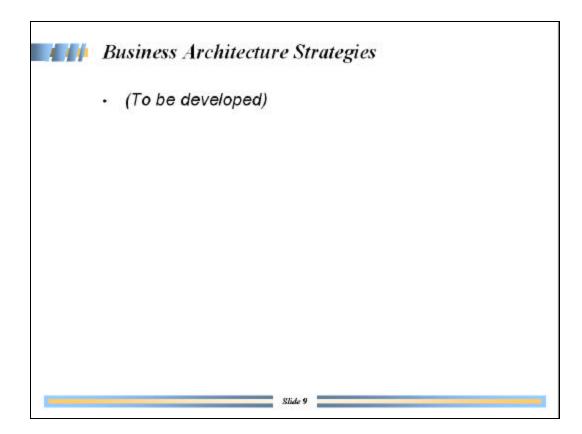
# Services and Products

(to be developed)

#### Processes

- Incremental implementation of business processes
- Establish formal communications between policy and business operations
- All business processes should be reviewed by cross-program groups
- Define priorities for business process reviews
- Address streamlining of processes for "high impact" clients first e.g. high impact on reducing gov't workload
- Conduct inventory of common components e.g. tombstone applicant information, credit card processes

Slide 8





# Next Steps for Business Architecture

- Undertake business architecture reviews around registry services (Scott Clark) and inventory services (Lesley Preston)
  - Also include information delivery services (Evert Kenk, Don Howes)?
  - Specifically excludes planning services and support services
  - Primary focus on issues needed to rationalize and integrate existing MSRM systems and information
- Reviews to document, at a high level:
  - Current Architectures:
    - » What is the current situation with respect to each of the items within the reference model?
    - » What are the key issues and opportunities around business integration, optimization and efficiency improvement?
  - Target Architectures:
    - » What are some the most significant scenarios and options to be considered?
    - » What is the target situation with respect to each of the items within the reference model?
  - Architecture Transition Strategies:
    - » How will change be pursued?
  - Architecture Projects, Priorities and Costs
    - » What will be done? When? In what order? At what cost?

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# **Appendix E Project Charter**

February 26, 2002

# PROJECT CHARTER

### 1.0 PROJECT NAME

Registries Integration Project

# 2.0 PROJECT SPONSOR

Allison Bond, Assistant Deputy Minister, Registries and Resource Information Division

# 3.0 BUSINESS CHAMPION

Godfrey Archbold, Executive Director, Registries Department

#### 4.0 PROJECT MANAGER

David Chater, Director, Lands and Sub-surface Branch, Registries Department

### 4.1 Project Management Support

Lesley Preston, Business Analyst, Information Management Branch, Business Information Services Division

# 5.0 PRIORITY

This is a high priority project which was included in government's "New Era" commitments and a key assigned project from the Premier to the Minister.

# 6.0 RATIONALE/BENEFITS

This project supports the ministry's vision to move from a diverse set of inefficient electronic databases within multiple registries to integrated efficient and accessible electronic Crown land and resource registries.

### 7.0 PROJECT OBJECTIVES

The major objectives of the project are to design and implement an integrated system of registries (including a business architecture redesign), outline an implementation plan and initiate the "building" of a new system that will meet government's expectation of a registries system that is accessible, efficient, affordable and secures the public's interest in maintaining or enhancing the integrity of the registry system in British Columbia.

# 8.0 <u>DELIVERABLES</u>

The key deliverables for the project include:

#### Phase I

The development of:

- 1. Business Strategy
- 2. Implementation Plan

# Phase II

1. Initiating the implementation plan including "building" the new system and business architecture redesign.

#### 9.0 LINKAGES TO CORPORATE PLANS

This project was a "New Era" commitment by government and is contained within the ministry's 2002-2005 Service Plan (Goal 3, Objective 1 - effective delivery of integrated, science-based land, resource and geographic information). The project also supports the government's objective to provide leadership in electronic governance.

#### 10. PROJECT DEPENDENCIES

This project involves a large number of linkages to other projects, initiatives and systems.

The first phase of the project (i.e. Business Strategy and Implementation Plan) requires a significant amount of consultation with key client groups and stakeholders such as Land and Water British Columbia Inc., Ministry of Forests, Ministry of Energy and Mines, and external industry association (e.g. Council of Forest Industries).

Through these detailed consultations, it is expected that the key linkages (e.g. Integrated Data Warehouse Project, land and water integration program, and partnerships initiative) will be identified and incorporated into the system design and implementation plan.

The second stage of the project involving the actual design and implementation of the system will continue to incorporate the key linkages.

#### 11. SCHEDULE

The generalized integrated registry development phases are as follows:

PHASE 1	PHASE 2	PHASE 3
"PRIMARY REGISTRIES INTEGRATION"	"SECONDARY REGISTRIES INTEGRATION"	"INTEGRATION OF REMAINING REGISTRIES"
<ul> <li>Land surface rights (Tantalis)</li> </ul>	<ul><li>Energy rights (PTS, MEM)</li></ul>	<ul> <li>Private land and surveys</li> </ul>
<ul> <li>Forest and range tenure (INCOSADA)</li> </ul>	<ul> <li>Commercial fish, wildlife, harvesting rights (MWLAP)</li> </ul>	<ul> <li>Federal lands and titles</li> </ul>
<ul> <li>Mineral titles (MIDA)</li> </ul>	<ul> <li>Heritage sites</li> </ul>	<ul> <li>Treaty settlement lands</li> </ul>
<ul> <li>Water rights (WLIS, MSRM)</li> </ul>	<ul> <li>Highways and roads (MOT)</li> </ul>	<ul> <li>Links to inventory</li> </ul>
<b>L</b>	<ul> <li>Parks         boundaries/classificatio         ns (MWLAP)</li> <li>Strategic land use plan</li> </ul>	•
	zones (MSRM)	
	<ul><li>Contaminated sites (MWLAP)</li></ul>	
	7	
END OF FY 2002/03	END OF FY 2003/04	END OF FY 2004/05

The deliverables from the Request for Proposal process will provide a more detailed project schedule.

# 12. SCOPE/EXCLUSIONS

The project's scope is limited to the issuance of two phased Requests for Proposals in early to mid 2002. These Requests for Proposals will result in:

Phase 1 RFP: a)

- a) Development of a Business Strategy
  - Define the current and target business architecture (including governance) and future guiding principles.
- b) Preparation of an Implementation Plan
  - Plan outlining the projects, phases and priorities to move the Business Strategy forward.
  - Outline some early "wins" for the ministry and government.

Phase 2 RFP:

Building on the approved direction received from RFP #1, design and build the system requirements, including quality assurance testing. This phase will also begin the necessary business architecture changes to support the new system.

The project scope will also include extensive client and stakeholder consultation throughout the process.

This project excludes the actual reorganization of the Registries Department. This department reorganization is proceeding in early 2002/2003 fiscal as a separate process, but is being influenced by the RFP project and with similar completion timelines.

#### 13. ASSUMPTIONS/RISKS AND STRATEGIES

The ministry targets for this project are very aggressive in light of the complex nature and overall extent of the registry system in British Columbia.

The issuance of the two Requests for Proposal over the next six months will provide a more defined sense of the achievability of the project completion and project budget targets.

The Request for Proposal process has an expedited timeline and contains key communication/status reporting; change management/issue resolution; risk management factors to enable an adaptable and reactive process to assist in meeting the overall project targets.

# 14. <u>COMMUNICATION STRATEGY</u>

The project will be highly consultative in nature and involves direct consultation with key clients and stakeholder groups.

The project will involve an internal working group of registry agencies (e.g. Lands, Sub-surface, Forests) and major client groups such as Land and Water British Columbia Inc., Ministry of Energy and Mines, and Ministry of Forests. Other groups likely to be involved as an external working group included the British Columbia Assessment Authority and industry associations such as the Council of Forest Industries, BC and Yukon Chamber of Mines).

Regular status updates will be provided on the project's progress to those groups.

Division and ministry executive will be updated regularly on the division's monthly "Project Tracking System".

There are also scheduled monthly briefings with the Project Sponsor.

#### 15. TRAINING STRATEGY

This will be articulated in the Implementation Plan that is a key deliverable in Phase 1 RFP.

# 16. <u>KEY CLIENTS/STAKEHOLDERS</u>

The list of key clients and stakeholders include as a minimum:

#### A. Internal

- Ministry of Sustainable Resource Management
  - Registries Department Managers and Directors
  - Business Information Services Managers, Directors and Analysts
  - Resource Management Division
- Land and Water British Columbia Inc.

- Ministry of Forests
- Ministry of Energy and Mines (including Oil and Gas Commission)
- Ministry of Water, Land and Air Protection

### B. External

- British Columbia Assessment Authority
- Integrated Cadastral Information Society
- Council of Forest Industries
- BC and Yukon Chamber of Mines
- Corporation of Land Surveyors of the Province of British Columbia
- Mining Association of British Columbia
- Canadian Association of Petroleum Producers

#### 17. PROJECT RESOURCES/COSTS/FUNDING

Individual projects will be developed primarily through the use of professional consulting firms, but overall project management and leadership will be directed by ministry personnel.

Key consulting personnel within the first phase of the project will include:

- Project Manager (for assigned projects)
- Facilitator (consultation phases)
- Business Analyst (Business Architecture Design)
- Technical experts in system development and data management

The key personnel in the Phase 2 component of the project will be defined during the development of the second phase RFP.

The overall project is being managed and championed by the Registries Department within the Registries and Resource Information Division of the Ministry of Sustainable Resource Management.

The Business and Information Services Division of the Ministry of Sustainable Resource Management will also provide key overall project support.

The overall project will require an internal business working group made up of managers from the various registry systems. Key client group representatives, especially from the major users of the registries such as Land and Water British Columbia Inc., Ministry of Forests, and Ministry of Energy and Mines will also be involved in the working group level of the project.

The project, currently estimated at N/A is contained within the capital allocation of the Business and Information Services Division within the Ministry of Sustainable Resource Management.

# 18. PROJECT STATUS

The project has been partially implemented with the completion of a high level Registry Integration "Development Plan" and solicitation for advice and recommendations to industry via a "Request for Information".

A Request for Proposal is in the process of being issued to begin to define the Business Strategy (business architecture, including governance options and guiding principles) and an Implementation Plan. The contract and deliverables from this Request for Proposal will be complete by June 30, 2002.

Initial briefings on the Request for Proposal process are underway with key client groups and the ministry's Integrated Steering Committee.

The second Request for Proposal, building on the approved direction from the first Request for Proposal contract, is expected to be issued in July of 2002.

One of the ministry's performance measures and targets identifies that 50 percent of the primary registries of lands, sub-surface, forests and water will be integrated into the new system by the end of 2002/2003.

# 19. ESTIMATED ANNUAL OPERATING COSTS

The estimated annual operating costs, including FTE's, is not defined at this time. This information will be thoroughly reviewed and analysed in the first phase RFP which includes the Business Strategy and Implementation Plan.

A key performance measure and target in the 2002-2005 Division Plan outlines an expected 30 percent reduction of costs from the present system's annual expenditures.

# 20. <u>APPROVALS</u>

Project Sponsor		
J I	Allison Bond	Date
	Assistant Deputy Minister	
	Registries and Resource Information Division	
Project Manager		-
	David Chater	Date
	Director	
	Lands and Sub-surface Branch	
	Registries Department	