

Annex C

Summary of Requirements and Deliverables for Land Title Registration System (LTRS)

Introduction - The Request for Proposal

- The Government of Bermuda is inviting tenders for an electronic Land Title Registration System (**LTRS**) to replace its current Land registration and management system, **Landfolio**, by way of issue of a Request for Proposal (the “**RFP**”). This Summary of Requirements is to be read in tandem with the RFP.
- The LTRS must be able to facilitate a wide range of registration functions common to land title registration and management systems, including all aspects of land registration, data management and storage, document management, Geographic Information System Infrastructure, calendaring and automated prompts for statutory timelines, protection of personal and private information and financial functions associated with the collection of registration fees.

The Platform

- The Bermuda Government (the “**Government**”) provides the electronic platform (the “**Platform**”) for the information technology needs of Government ministries and departments by way of the Department of Information and Digital Technology (“**IDT**”). This includes the provision of hardware, software, networks, security and general expertise.
- The proponent is required to provide solutions for the housing of the LTRS for the consideration of the **IDT**. Any implementation of the LTRS is in consultation with the **IDT** and is obligated to meet all standards and requirements established by the **IDT**.
- Authorized jurisdictions for data housing are limited to Canada, The United Kingdom and Ireland.

External Partners

- The LTRO operates in conjunction with a number of external partners. Some of those external partners have their own case management systems and are based on the Platform, for example the Land Valuation Department which maintains the valuation record and land tax roll for all parcel of land on which a building has been constructed. Currently the Land Valuation Department automatically pulls change of land ownership details from the Landfolio system. Another external partner is the Office of Tax

Commissioner (OTC) who requires details of land ownership to issue demands for land tax. It is anticipated that the OTC will be able to automatically pull the required records without the need for LTRO intervention. Other external partners can be other Government departments, Banks, Realtors and members of the public who currently conduct searches of the records held by the LTRO. The LTRS will be required to interface with the case management systems of various external partners.

Overview of the Land Title and Registration Office and Personnel.

Background

The Deeds Registry has been the original legislated land record office on the Islands of Bermuda and has been operational for well over 50 years. The Land Title and Registration Office has been operation since 2018. That is, the process of land title registration in Bermuda began in 2018 with the issuance of the 1st title to private land issued in 2018. The Islands of Bermuda has over 23,000 parcels of land and have registered approximately 3,314 parcels representing 14% of the Islands.

Mandatory Land Title Registration is prompted by legislated triggers to first registration. There are 12 triggers however currently, only four triggers are operational due to workload capacity. The four operational triggers or events are the sale, mortgage or lease of an unregistered registrable estate. The four trigger is a declaration of ownership of an unregistered registrable estate by way of a Court order. A registrable estate refers to an interest in land, either freehold or leasehold for which a land title may be issued. It is anticipated that the LTRS will increase the efficiency of the LTRO and facilitate the full legislative functionality of the Office and the release of all triggers.

The Registries

- The Land Title and Registration Office is comprised of two main registries, the Land Registry and the Deeds Registry. Both Registries are located at the same site serviced by the same LTRO staff. The LTRS will maintain both registries on the same platform. The Deeds Registry is a collection of records of ownership, encumbrances, rights and interests related to unregistered parcels of land. Transactions submitted to the Deeds Registry are recorded and not registered resulting a fairly simple workflow. The Land Registry is comprised of registered parcels of land for which a land title has been issued after the process of first registration has been completed.
- The LTRO maintains a third subsidiary register called the judgements register. The Judgement Register is a record of outstanding debts registered against a person or corporate body. The LTRO maintains a fourth subsidiary register called the Cautions register. The Cautions register is comprised of claims of a potential interest against an

unregistered estate in land. A caution allows for the temporary bar a first registration application until the Cautioner has had a right to object.

- The Land and Deed Registry registers are characterized by the type of registrable interest to which it relates. The registrable interest must be either freehold or leasehold. A single parcel of land may hold both a freehold and leasehold interest.
- The LTRO receives an average of 572 applications per year and processing time is currently in excess of 2 years. The LTRO intends to implement targeted turnaround times as key performance indicators.
- The LTRO receives an average of 133 searches of records from external users per month.

Future Capabilities

The LTRO at present does not facilitate electronic conveyancing. The successful proponent will be required to support this feature and facilitate its future implementation. This feature must be included in the implementation plan.

The personnel and roles within the LTRO are as follows:

The LTRO has a current complement of 12 staff members and anticipates that the number will increase to 14 before the implementation of the LTRS.

- **Land Registrar** - Head of Department, Department accounting officer and current project lead
- **Mapping Officer** - Commissioned Land Surveyor, performs mapping functions.
- **Junior Mapping Officer** - Supports Mapping Officer in function
- **Land Title Legal Officer** - In House Attorney-at-Law, quasi-judicial functions as sole adjudicator in land disputes, authorizes all types of applications submitted for registration and is the main point of contact for external Attorneys-at-Law.
- **Land Title Legal Officer Trainee** - Supports Legal Officer in function
- **Senior Land Title Officer** - Supervises Land Title Officers, supporting mapping and authorization functions.
- **Land Title Officers** - Paralegal Officer, vets all application submitted to the LTRO, issues requisitions and ensures legal and procedural compliance, prepares title entry in draft for the approval of the Land Title Legal Officer.
- **Office Manager** - perform administrative and financial functions and support the Land Registrar. Prepares invoices for the payment of registration fees and manipulates the Government financial platform, E-1.

- **Land Administrators** – who perform customer service functions, facilitates and processes the recording of Deeds Registry Transactions. Facilitates in-person searches of physical records housed and the LTRO.
- **External consultant** - Authorizes applications. Remote access will be required.

Current mapping processes of the LTRO are outlined below:

- Every first registration application requires land parcels (comprising the Land Registry base parcel map, Land Title Registry Index Map (LTRIM) to be edited in accordance with the survey plan submitted as part of the legal record.
- Spatial Data integrated a customized tool bar to enable common functions required such as creation of a new parcel, split, merge, delete and adjustment of parcel boundaries. All these functions are available using the ArcGIS Editing feature however, a higher level of understanding the GIS processes is required by the user.
- The toolbar is used in conjunction with the line tool, which enables the user to construct the parcel extents using COGO, in which metric or imperial units can be selected and a direction (bearing) and distance can be entered to draw the parcel line.
- Most survey plans only provide distance, so the onus is on the user to interpret the correct bearing to construct the parcel boundary based on the survey plan, 2012 orthophotography (and in some cases historic ortho data) and the indicative parcel as shown on the LTRIM.
- On occasion, the measurements indicated on the survey plan are incorrect and it is only by constructing the parcel that the user would be able to determine the error.
- The user must also be able to identify subjective easements (ROWS that fall within the parcel boundaries and generally coloured green). These are constructed on the easement layer by starting an editing session using the ARGIS Editor tool.
- Attributes such as Category (Private/Government), Land Use (Leasehold * if applicable) and Type (Unregistered, Provisional Freehold, Absolute Freehold) must also be updated using the ARGIS Editor tool.

- Once the parcel edits have been saved, this current version of the LTRIM will be posted at a later stage of the workflow. In some instances, the user will be alerted to topology errors created as a result of different versions of the map and will have to go through the process of determining the version to be posted and rectifying any topology errors that remain.

Registry Particulars and Types of Applications

The LTRO processes several types of applications which may be submitted simultaneously or separately. A summary of the kinds of application for each Registry is set out below.

The list of application and instruments below represents most but not all of the application and instrument types submitted to the LTRO.

The Deeds Registry

- The following legal documents/instruments may be recorded under the Deeds Registry by way of the heading application types:
 - Record of Land owned by Non-Bermudians
 - Alien Acquisition
 - Alien Deed Alien Disposal
 - Record of a Land owned by Companies
 - Corporate Bodies Acquisitions
- Corporate Bodies Disposal
- Changes to existing land boundaries/access
 - Boundary Adjustments
 - Deed of Rectification
 - Deed of Exchange
 - Deed of Partition
 - Deed of Release
 - Deed of Easement
- Change of ownership of Land held by a Trustee
 - Deed of Appointment
 - Deed of Retirement and Appointment of a Trustee

- Deed of Termination of a Trust
- Deed of Trust
- Disposition of Land (except by way of a sale of the whole share and interest)
 - Deed of Conveyance- including part shares
 - Voluntary conveyance (dispositions by way of gift)
 - Vesting Deeds (Testamentary disposition)
- Leasehold Interest
 - Lease
 - Head Lease
 - Sublease/Under lease
 - Assignment of Lease
 - Surrender of Lease
 - Voluntary Lease
- Mortgages
 - Mortgage Deed
 - Deed of Reconveyance
 - Deed of Reassignment
- Miscellaneous
 - Deed of Variation

Land Registry

The suite of land registry forms is as listed below. The Judgement register forms are itemized at number 7 below and the Cautions Register form is the A4 itemized at number 1 below. The forms below are associated with an application that may be registered with the LTRO.

1. APPLICATION FORMS

- A1 First Registration
- A2 Dealing of Whole of Registered Estate
- A3 Dealing of Part of a Registered Estate
- A4 Caution Against First Registration
- A5 Voluntary First Registration

2. REGISTRATION FORMS

- R1 Transfer of Whole of Registered Estate(s)
- R2 Transfer of Part of a Registered Estate

- R3 Transfer of a Registered Estate by a Chargee (Power of Sale)
- R4 Transfer of a Registered Estate by an Estate Representative
- R5 Determination of a Registered Lease/Cancellation of Notice of Lease
- R7 Charge of a Registered Estate
- R8 Transfer of Registered Charge(s)
- R9 Release of Registered Charge(s)
- R25 Deed of Grant of Easement
- R26 Severance of a Joint Tenancy

3. UPDATE OF REGISTER FORMS

- R6 Amalgamation of Two or More Registered Parcels
- R10 Registration of a Restriction against a Registered Estate
- R11 Removal of Registered Restriction(s)
- R12 Registration of an Agreed Notice against a Registered Estate
- R13 Registration of a Unilateral Notice against a Registered Estate
- R14 Removal of Registered Notice(s)
- R15 Application to Note the Death of a Joint Registered Owner
- R16 Transfer of a Registered Estate held in a Condominium
- R18 Application to register Bankruptcy, Insolvency or Court Proceedings
- R19 Upgrade of Title
- R21 Registration of a Subdivision
- R24 Registration of a Lease incumbent on a Registered Estate
- R29 Registration of Rights under the Law Reform (Husband & Wife) Act 1977

4. SUPPORTING EVIDENCE FORMS

- R20 Exempt Documents
- R22 Registration of an Acquisition of Land by a Restricted Person
- R23 Statutory Declaration in Support of an Application for Adverse Possession or Lost Deeds
- R27 Registration of Power of Attorney
- R28 Revocation of Registered Power of Attorney

5. MISCELLANEOUS FORMS

- ADJ1 Notice of Objection
- CS Continuation Sheet
- CIT Investigation or enforcement proceedings (court, insolvency, tax)
- DL Documents Lodged with an application for Registration
- R30 Miscellaneous Registration Form

6. REGISTRATION SERVICES FORMS

- R31 Search of Whole of a Registered Parcel
- R32 Search of Part of a Registered Parcel
- S1 Application for Official Copies of the Register/ Extract of the Land Title Registry Index Map (LTRIM)/Scanned documents referred to on the Register
- S2 Search of Land Title Registry Index Map
- S3 Application for Miscellaneous Request of the Registrar

7. JUDGMENT REGISTRATION FORMS

- R33 Registration of a Judgment
- R34 Release of a Judgment
- R35 Release of Part of a Judgment
- S4 Search of the Judgment Register

Results of an application submitted to the LTRO can vary and are as follows:

- Refusal - the Application will come to an end due to a serious legal flaw. The Applicant will be refunded the registration fees paid.
- Requisition - the application is held by the LTRO for a minimum of 30 days, if no action is taken then the application is rejected.
- Rejection
- Registration or completion
- The LTRS should prompt the Applicant of the result or outcome of their application and issue requisitions accordingly.

Core Requirements of the LTRS – An Overview and Deliverables

- This section provides an overview of the main functions required for the LTRS. The sections that follows provides a more in-depth description of the requirements.

At its highest level, the LTRS will manage an application or case from inception to document delivery. It is anticipated that deeds registry will be fully automated with minimal human intervention. Upon the payment of registration fees, the external user (Attorney or Law Clerk) will scan and upload the Transfer notice and deeds. An application number will be assigned. The LTRS will extract the following data as applicable; party names, address, mortgagee name, assessment number, leasehold term, landlord name, presence of a survey plan and create the deeds register.

The process of the Land Registry is more complex. The progress of a case will begin with the payment of registration fees and selection of the application type which is done by applicant off site by the applicant. The Applicant must also locate the relevant parcel on the Land Title Registry Index Map (LTRIM) and extract the parcel number. The Applicant will scan the latest executed deed. The Applicant will then deliver to the LTRO the hard copy deed packet contains the relevant application forms and supporting documents/ Instruments. A sequential application number is generated and a receipt issued, confirming the date and time reception. The LTRS must be able to manage fees, facilitate reception of application, drafting of applications, issuing of land titles, issuing a wide range of documents, receipts, notices and calendaring.

- The LTRO currently maintains an electronic Land Register with the power to issue both paper and e-titles. It is the desire of the Government of Bermuda that the system operates primarily as a semi-paperless environment. Any document, filing, or report must have the ability to be printed or scanned in, but the default output and source should be assumed to of an electronic nature.
- The LTRS and user work together to perform all necessary tasks to accurately reflect the sum total of all the information contained in deeds, documents and instruments submitted for registration and reduce them to a predetermined format and enter the information on the land register. The LTRO staff will verify the entries to be entered on to the land register and amend as necessary. The hard copy, original documents, instruments deeds and survey plans are scanned by the LTRO staff and the various workflows proceed using the scanned image. The hard copy, original documents, instruments deeds and survey plans are returned to the applicant and not retained by the LTRO. The scanned record is intended to become the official record. It is imperative that the scanned record is secure, publicly accessible for a fee and easily verifiable as being issued by the LTRO. The LTRS must ensure that should a hard copy file be required for any particular matter; the entire case and application history should be recreated from the information saved to the system. This will include, but not be limited to owner and applicant information, deeds, documents, records, events, scanned images of all submissions and filings, images of all LTRO generated documents and Land Titles, register reports, reports, payments, receipts etc.
- Cases are initiated through the action of the applicant.
- The LTRS will utilize manual and automated functions to execute defined workflows. There are currently 4 workflows. The current work flow charts have not been included as they are outdated and will be wholly abandoned. The Proponent will be required to advance innovative proposals to streamline workflows and processes.
- Workflows can be executed through user initiation. Workflows may require user input or parameters to perform their tasks. It may be required that certain functions and workflows may be invoked and performed with limited or no user intervention. A specified selection of the LTRO management team will be able to create new workflows when necessary.
- The LTRS must tracks the progress of applications in process as well as be able to generate reports for internal and external use. Internal reporting features includes: productivity reports, management information reports, application type metrics, financial reports and other reporting features relevant to the operations of the Government of Bermuda. External Reports includes the results of any application listed above especially those listed under Registration Services Forms. The basic units of information the LTRS will use to generate Land Title entries and reports are: the applicant (Purchaser), Applicant's Attorney-at-Law, Vendor, Vendor (previous registered owner), Cautioner, Judgment debtor, Judgement creditor, Grantor, Grantee, Mortgagor (registered owner), Mortgagor, Mortgagee, Rate of Interest, Consideration (price paid), address, contact information for parties, parcel numbers, assessment

numbers, acreage, etc. The LTRS should be able to pull units of basic information from application forms, deeds and any other request made or inputted by the applicant.

- The proponent must provide data migration and integration services for existing records held. The approximate size of the database is 4,269 Land Title Registration cases and 22,890 Deeds Registry cases. Land Title Information that predates the Deeds Registry are contained in bounded Parish Vestry Books. The Deeds Registry cases stated above reflects records as at the year 2000. Deeds Registry Records predating the year 2000 are contained onsite in bounded Volume books. It is anticipated that the LTRO will undertake a scanning project in the future to convert physical records into digital format.

The LTRS must be capable of:

The following is not an all-inclusive list.

1. Electronic Filing.
 2. Creating records based on application type and registry type.
 3. Instrument coding- (see technical document) and Document/Instrument type.
 4. Sorting applications by legal sequencing, eg. Releasing a Charge before noting a Transfer or noting a Transfer before a Mortgage.
 5. Assigning application number based on legal sequencing
 6. Generating and auto-issuing receipts
 7. Creating and managing all aspects of the application process.
 8. Creating user profiles with varying functionality and access (internal and external to the LTRO)
 9. Managing user profiles.
 10. Reducing manual data inputting with the use of built in Document Intelligence Technology. The Document Intelligence system must be capable of text and data extraction with standards models for routine documents and processes such as the financial functions stated below and a customizable model to be applied to legal documents.
- The data to be extracted from documents and deeds include but are not limited to: party names, address, mortgagee name, assessment number(s), leasehold term, landlord name, presence of a survey plan, particulars of the survey plan.
 - Documents received the LTRO may be typed or handwritten of varying ages and conditions.

- The Document Intelligence Technology should be able to extract data and appropriately index and catalogue scanned Parish Vestry Records and pre-2000 Deeds Registry records.
- Each application submitted will accompanied by at least 10, multipage documents or deeds.
- Allowing authorized LTRO staff to create new, re-executable, parameter driven custom reports and running pre-defined reports.
- Using AI in assisting the Land Registrar with the analysis of information and drafting of requisitions, standard letters, notices, site visit reports, justifications and reasons for decisions.
- Using AI in assisting members of the public in searching the records of the LTRO.
 - Document comparison features. The Land Registrar will from time to time approve an affidavit or mortgage deed or other application in draft format. The LTRS must be able to determine that the submitted document or deed is the version that has been approved by the Land Registrar.

11. Allowing searches, inquiry and printing

- Allowing users to use inquiry as a stand-alone function or sub function of the case management system.
- Allowing varied and flexible inquiry keys (e.g., Application number, Application type, party name, address, Attorney or Law firm name, Subdivisions application number and other search criteria.
- Allowing users an option to print applicable information displayed on the screen.
- Facilitate and calculate payment for certified and uncertified copies obtained.
- Preventing editing and manipulation of e-copies of documents obtained from the LTRS.
- Allowing users to search multiple registries at the same time.

12. Document management

- Allowing for the redacting of documents and various versions of the same document to exist in the LTRS. Some versions of the documents will be accessibility with permission, based on the Bermuda Privacy Legislation.
- Allowing for e-filing of documents in Adjudication hearings
- Allowing modification - Allowing the modification of displayed information and sorting options on some display screens with proper user authorization.

- Restricting access - Restricting access to case and personal or sensitive information to only those authorized to access the information.
- Automation of Workflows - Utilizing workflows to automate functions.

13. Security features and verification details. (outlined in Technical Document)

14. Scheduling and calendaring

- Scheduling meetings
- Sending out automated reminders of key dates electronically
- Manage the Adjudication Hearing process by tracking events which occurred in the past, and future events in the case. These are initial appearances, hearings, adjournments, filing deadlines, case management hearings, awards and orders, noting appearances, etc.
- Users of LTRS should be able to schedule appointments for on-site searches within business hours excluding lunch time.

15. Sending out Statutory Notices and other notifications

- Sending out automated reminders of key dates electronically
- Delivering automated warnings for upcoming events and for non-compliance to statutory dates and adjudication hearing orders.
- Providing case tracking and alerts
- Recording outcomes of objections
- Recording the outcomes of all dispositions and adjudication hearings.
- Use of templates
- Using templates to standardize documents created by the LTRO.

16. Facilitating communication

- Issuing requisitions
- Requests for meetings
- Allowing Attorneys to upload documents in response to requisitions
- Allowing for inter-user communication between Attorneys for the purposes of granting consent and requesting documents in response to requisitions. For example, Attorney A wishes to grant permission to the LTRO to release

a soft copy of a document to Attorney B, who has made the request for documents via the LTRS.

- Compiling all correspondence including emails relating to a particular application or parcel number and associating the correspondence with the application or parcel, irrespective of whether or not that parcel has been registered. It is imperative that all correspondence be recorded for legal and corporate succession reasons.
- Allowing for file notes and instructions to be passed from the Legal Officer, Mapping Officer and the Land Registrar to the Land Title Officers and vice versa.

17. Creating parcel maps from survey plans with the use of AI

The LTRS should be able to process surveyor plans whether in digital or scanned format and convert them into accurate, georeferenced parcel maps. The LTRS must be able to extract plan numbers, surveyors name and firm name, date of survey, subdivision number and approval stamp of the Department of Planning, Easements/Right of Ways, encroachments, measurements, and names of roadways and the Plan Scale. The mapping component of the LTRS should have the following features:

i. Scanning and Digitizing Survey Plans

- **Optical Character Recognition (OCR):** AI extracts text (e.g., property boundaries, dimensions, annotations) from scanned surveyor plans.
- **Image Recognition:** Computer vision identifies key features like parcel boundaries, landmarks, and other geographic markers.
- **Vectorization:** Raster images are converted into vector data, creating georeferenced, editable maps.

ii. Analyzing Boundaries and Measurements

- **Boundary Identification:** AI detects lines, angles, and shapes representing property boundaries.
- **Dimension Extraction:** Algorithms interpret numerical data, such as distances and angles, to calculate parcel sizes and shapes.
- **Geospatial Analysis:** AI integrates surveyed coordinates into GIS systems to position parcels accurately.

iii. Error Detection and Correction

- **Consistency Checks:** AI identifies discrepancies in survey data, such as mismatched dimensions or missing boundary points.

- **Topological Validation:** Ensures that parcels don't overlap unless intended (e.g., shared boundaries) and that no gaps exist between parcels.

iv. Map Generation

- **Automated Plotting:** AI plots the extracted parcel data onto a base map or GIS platform.
- **Layer Integration:** AI can overlay additional layers, such as roads, utilities, or environmental features, for a comprehensive map.

v. Legal and Administrative Integration

- **Data Structuring:** AI organizes the parcel data for integration with land registries and other legal systems.
- **Metadata Addition:** Information like ownership, zoning, and restrictions can be automatically linked to parcels.

Integration with other applications.

- The LTRS must allow for integration with other functional applications such as:
 - Oracle's JD Edwards (E-1) Platform- the financial management system utilized by the Government of Bermuda
 - Integration with Microsoft Office Suite. System functions should be integrated to permit them to operate together and exchange data so users can avoid performing the same function several times and entering the same data into several functions.

User Groups

The LTRS should be able to facilitate the information needs of several different types of user groups. Each user will require access to the LTRS by way of a profile. The users are as follows:

Adjudicator- Any person that has been appointed by the Land Registrar to perform quasi-Judicial functions and make a final determination in land disputes (Adjudication Hearings). The Adjudicator will require access to the calendaring and scheduling functions of the LTRS and be able to view all electronic filings in relation to an adjudication hearing.

Attorneys and Law Clerks- most applications to the LTRO will be made by an Attorney or Law firm on behalf of the Applicant. These users will initiate the registration process under a specific registry. They will require specific protection of their financial information. They should have filing privileges in relation to Adjudication hearings.

Internal (LTRO Staff) - needs and access will be dictated by function and rank of officer.

Realtors- Rely on the comparable and sales reports to carry out their duties. Realtors will do general searches to confirm land ownership.

Banks- Rely on the Mortgage statistical reports and general searches to confirm land ownership.

Other Government Departments – rely on general searches to confirm land ownership and specific information to carry out departmental functions (please see Report Generation (external) below).

Members of the public - rely on general searches to confirm land ownership. They will require specific protection of their financial information

Surveyors- rely on general searches to confirm land ownership and will need the capability to upload survey plans.

Electronic filing – E-Filing

- The LTRS should allow for electronic submission of new applications and all associated documents as well as the submission of documents to be associated with existing applications from a remote location (e.g., Attorneys’ offices, parties’ residence, etc.)
- The E-Filing process should include capabilities for:
 - Users in remote locations to prepare electronic documents according to the LTRO’s legislative requirements, and to transmit the documents to the LTRO using the LTRS.
 - The LTRS to confirm receipt of the document.
 - Records pertinent information (e.g., sender identifier, time, and date of filing),
 - Links the filing to the appropriate parcel
 - maintains the document
 - in a secure environment,
 - in a verifiable format,
 - saves a copy of the document in searchable PFD format and in a manner that allows rapid access, and transfers data from the document into the case processing system.
- The electronic filing capability may help users complete the forms through techniques such as drop-down menus of standard document names, automatic default entries of basic data already in the system, and “smart forms” (e.g., that automatically edit entered data, provide instructions for completing forms, assign temporary application numbers).
- The system must allow users to:
 - “sign” the documents;
 - transmit the documents between applicant and the LTRO (e.g., by the Internet),

- “stamp” the documents as received and acknowledge their receipt to the senders;
- Assign an interim application number pending approval by the LTRO
- Add a link to the search index and store the documents, with proper security, allow internal and external users (applicant only) to access the documents.
- Prohibit senders from updating copies of submissions already received by the LTRO without manual permission from the LTRO;
- Describe document structure and content
- Transfer data from the documents to the case processing system.
- Add a link to the search index and store the documents, with proper security, allow external users (the general public) to access the documents after registration has been completed.

Electronic Conveyancing

- The LTRS will be the authorized network to facilitate the carrying out of electronic conveyancing. Applicants should be able to remotely complete electronic dispositions and land transactions by the affixing of an electronic signature.
- All electronic signatures must be associated with an accredited certificate issued by an authorized certification service provider (external to the LTRO and LTRS). The LTRS should allow for the confirmation of an accredited certificate and the suspension of electronic conveyancing privileges if the accredited certificate has been revoked.

Electronic Filing (Adjudication Hearings)

- The LTRS should be able to transmit documents and notices between the parties and the LTRO.
- The LTRS should facilitate the filing of all documents on or before the deadline date as scheduled by the LTRS.

Change / Amendments

- The LTRS must be able to complete rectifications. Rectifications are changes to titles that have already been issued, such as amendments to misspelt names or addresses. The System should have limited access to features such as manual override. A Log of all changes and rectifications must be retained.
- These functions require elevated security, and limited access to top Management.

Electronic document distribution

- The LTRS must allow for electronic distribution of documentation (using the internet or intranet, e-mail, and other technologies (using “push” as well as “pull” technology) to other Government departments.

Title and Report Generation

The LTRS must provide functions for the generation of official documents, such as notices, orders, and reports, which summarize the transactions processed by the LTRO. The output required includes:

Title Generation

The LTRO is an office of record and all Titles and document issued by the LTRO must be retained indefinitely. The LTRS must be able to auto-populate the various sections of the land register and issue the Land Title Register. The LTRS must also issue the LTRIM extract, the Cautions Register and the Judgment register.

Report Generation (internal)

- Management and statistical reports - generating workload, case flow, and other reports.
- Assigning application to the Land Title Officers.
- Financial Reports at various intervals such as daily, weekly, monthly, quarterly, yearly, per date range. The LTRS should be able to generate financial reports concerning receivables, payments, deposits, voids, Late fees received, etc.
- System Reports – Security Logs, maintenance logs, configuration reports, change reports, case metrics, data quality and exception reports, etc.
- Employee performance reports

Report Generation (External)

The LTRS must be capable of generating a variety of parameter driven custom reports. The result of all searches of the LTRO records are to be presented in a standard report format. In addition to copies of records LTRO currently provides the following analytical reports to external users:

- The Bank- Bank Mortgages Reports (both deeds and Land Registry) - This report shows the mortgages for a specific bank at a specific date.
- Realtors- Real Estate Comparable and sales statistics

- Government of Bermuda – some departments may from time to time submit ad hoc request, however the departments which interface consistently with the LTRO are:
 - a. Department of Immigration/ Cabinet Office- Non-Citizens owned Lands/ Alien land holdings,
 - b. Department of land Valuation- changes in land ownership for the purpose of Land Taxation.
 - c. Office of the Tax Commissioner- changes in land ownership for the purpose of Land Taxation.

Financial and Accounting Requirements

These functions address financial and accounting activities, which include general, front office and cashiering, back office, and general ledger functions. Thus, the LTRS should have an extensive range of actions to record financial transactions related to a land title registry system including:

- The LTRS should record the accrual of financial obligations through registration fees, late fees and search fees.
- The LTRS must be able to maintain links between registration fees paid and the specific application.
- The system will be able to calculate late fees at a rate of \$200 Bermudian Dollars per day excluding weekends and public holidays.
- Record the fulfilment of obligation through monetary payments and void of payments with the reintroduction of the reversed obligation.
- The system will be able to change the application status of a specific case if a payment obligations is not fulfilled.
- All financial adjustments must be recorded in the appropriate defined 'bucket' for deposit to bank accounts, reporting, and transfer to other systems.
- End of day, end of week, end of month, year-end and user range selected reports must be able to be run or rerun for any period requested.
- The LTRO does not currently have a POS system with which the LTRS is required to integrate. Presently all payments of registration fees are facilitated through the JD Edwards (E-1) Platform, after an invoice is raised by the LTRO.

System Security and Audit

The LTRS should provide security and audit functions. These functions are ancillary to application processing, such as tracking case action metrics; recording changes to data in audit logs; performing control table entry and maintenance; managing business flow/workflow design, maintenance, and functionality; template design and maintenance; and security. The functions should include:

- File and property management - creating, managing, tracking, archiving, receiving, tracking, and returning documents.
- Data Integrity management – creates logs, issuing warning notifications, tracks database and program errors such as read/write errors with details required for debugging the source of the errors, creating reports identifying security violations, control table and data modifications, and situations that can cause data issues.
- Security - ensuring security, privacy, and integrity of the case processing systems and its data.

Maintenance and Support

- Managing, maintain and supporting external and internal user profiles.
- Database maintenance – performing housekeep tasks to keep data secure, processing speedy and search indexes maintained.
- Providing customer support services and platform support to end users.
- The Proponent must be able to deliver the level of service outlined in Annex D, Service Level Requirements Checklist.

Hosting Services

To provide a central database of land ownership information and manage the data contained therein.

Initial Training (internal to the LTRO)

- To provide onsite training of LTRO staff of a duration of no less than two weeks.
- To provide a demonstration to Officials of the Government of Bermuda either virtually or onsite.
- To provide 6 months testing/training period post-delivery. This period is to allow the LTRO an opportunity to process a wide variety of applications.

Initial Training (external users)

- To create simple, informative and demonstrative videos to be used by external users.

END OF SUMMARY OF REQUIREMENTS