Summary Document
For Viewing ONLY

PLEASE BE AWARE THAT
THIS PDF FILE
CANNOT BE PRINTED

IT IS BROWSABLE ON-SCREEN ONLY AND IS ONLY PROVIDED FOR YOUR INFORMATION - TO HELP YOU DECIDE WHETHER TO PARTICIPATE IN THIS RFT AND THEN BECOME A PROSPECTIVE TENDERER

Please read and Note:

This file is provided on the Commerce tenders web site when the Request For Tender (RFT) document is issued in Dmax Lite format.

This file contains (below) a brief scope statement and extracts from the RFT documents, but is not a complete RFT document and does not contain the respondable questions.

To participate in this tendering process you MUST first return to the Commerce tenders web site:
https://tenders.nsw.gov.au/commerce

Then from the RFT web page (see RFT number below) download a full copy of the RFT documents, including the respondable components, and also any addenda issued to date; and also during the tender period.

Copy/Save the RFT documents to your own computer drive or network location – the blue “DOWNLOAD A SOFT COPY” link at the bottom provides access to the page from which you can do this.

DmAX Lite Software
You will need to have a current licensed copy of the Dmax Lite 5 software to read, complete, and respond to the RFT with your tender. If you do not currently have such a licensed copy it can be optionally purchased and downloaded when downloading the full RFT documents from the tenders web site.

NSW Department of Commerce

NSW Procurement – Contracting Services is a Business Unit of the NSW Department of Commerce

NSW Procurement – Contracting Services invites this tender for and on behalf of the NSW Government State Contracts Control Board

PART A - THE REQUIREMENT & TENDER INFORMATION
PART B - THE TENDER PROCESS

Request for Tender (RFT) No.: **0701265**
Contract Name: **NSW Registry of Births, Deaths and Marriages Core System Replacement (LifeLink)**

Tender Issue Date: **13 September 2007**

Closing Date: **24 October 2007**

Closing Time: **9:30 am Sydney Time**

Note:

- In order to respond to this RFT tenderers must have a current license for DMax Lite software.
- Licenses can be purchased through NSW Procurement | eBusiness Solutions Support Desk at: eBS_SupportDesk@commerce.nsw.gov.au or 1800 003 985 at a cost of $110 (inclusive of GST) (representing the DecisionMax license fee). This provides 12 months unlimited application to any Tender formatted in TenderMax Pro. It is anticipated that most RFTs released by the SCCB will be in this format.
- Alternatively, in downloading this RFT you can follow the prompts to confirm your request and purchase of the DMax Lite software and be issued with your Digital Registering Key to commence preparing your tender submission in the appropriate format.

COPYRIGHT

This Request for Tender document ("RFT") has been prepared by NSW Procurement – Contracting Services for the State Contracts Control Board for and on behalf of the Crown in right of the State of New South Wales. This RFT is protected by Crown copyright.

© State of New South Wales – NSW Procurement – Contracting Services, for and on behalf of the Crown in right of the State of New South Wales, 2001.

All rights reserved. No part of this RFT may be produced by any process, electronic or otherwise, in any material form or transmitted to any other person or stored electronically in any form, without the prior written permission of the State of New South Wales, except as permitted under the *Copyright Act 1968.*

For the purposes of this RFT, inquiries should be directed to the Contact Officer nominated in Part A of this RFT.

Other matters should be directed to:

Group General Manager
NSW Procurement – Contracting Services
NSW Department of Commerce
McKell Building
2-24 Rawson Place
Sydney NSW 2000
Tel: (02) 9372 7504
Fax: (02) 9372 7533

RFT 0701265 - NSW Registry of Births, Deaths and Marriages Core System Replacement (LifeLink)

PART A The Requirement and Tender Information 4

1. Outline Description of the Requirement 4

1.1 Introduction 4
1.2 Outline of the Requirement 4
1.3 Procurement Objective 4

2 Summary information for tenderers 4

2.1 Interpretation 4
2.2 Structure of Request for Tender 5
2.3 Contact Officer 5
2.4 Pre-Tender briefing 5
2.5 Nature and duration of agreement 6
2.5 Non-exclusive one off agreement 6
2.7 Eligibility to tender 6
2.8 Other Eligibility Requirements 7

3. Submission of Tenders 7

3.1 General instructions for submission of Tenders 7

4. Evaluation of Tenders 7

4.1 General 7
4.2 Selection criteria 7
5.1 Price Schedule 8
5.2 Calculating the Tender Price 8
5.3 Price Variation 8
5.4 GST Free or Input Taxed Supplies 9
5.5 Project Plan 9
5.7 Minimum Tender Validity Period 9

PART B Tender Conditions -The Tender Process 10

6. Definitions of terms used in Parts A-C 10

7 Tender Process – General 12

7.1 Conformity of Tenders ... 12
7.2 Prescribed form of Tender ... 12
7.3 General instructions for completion of Tenders ... 12
7.4 Tenderers to inform themselves ... 13
7.5 Addenda to RFT ... 14
7.6 Late Tenders ... 14
7.7 Extension of the Closing Date and Time ... 14

8. Tender Process – Submission of Tenders ... 14
8.1 Electronic Tenders to the NSW Department of Commerce *eTendering* website 14

9. Tender Process – Evaluation of Tenders ... 15
9.1 Variation of Tenders ... 15
9.2 Corrupt or unethical conduct ... 16
9.3 Exchange of information between government agencies ... 17

10. Outcomes ... 17
10.1 Acceptance or rejection of Tenders ... 17
10.2 Negotiations before determination of outcome ... 18
10.3 Post Tender negotiations in the event all Tenders are rejected ... 18
10.4 Custody of Tenders after receipt ... 18
10.5 Ownership of Tenders ... 18
10.6 Discontinuance of the Tender process ... 19
10.7 Notification of outcome ... 19
10.8 Complaints ... 19
10.9 Entry into agreement ... 19
10.11 Monitoring of Contractor Performance ... 19

ANNEXURE 1 TO PART B (Disclosure of Information) ... 21

PART A The Requirement and Tender Information

1. Outline Description of the Requirement

1.1 Introduction

This Request For Tender ("RFT") is made by the State Contracts Control Board ("the Board") for the supply of the Deliverables defined in this RFT and detailed in the Specification.

The Board is responsible for the conduct of the tender process, assisted by NSW Procurement – Contracting Services.

1.2 Outline of the Requirement

This Request For Tender ("RFT") covers the acquisition of a replacement core system for the NSW Registry of Births, Deaths and Marriages (the Registry). At a high level the core system must enable the Registry to:

- Fulfil its mandate of registering the life events of individuals in NSW;
- Enable the linking of life events to individuals to produce a person-centric database;
- Produce products (i.e. certificates, birth cards etc);
- Process payment for these products; and
- Minimise fraud.

Suppliers are invited to submit responses, which deliver to the business and technical requirements defined in Part E of this RFT. Acceptable solutions include; implementation of existing packages, bespoke (custom) development or a combination of both.

Responses may include a fixed price for the entire project or a fixed price for the initial Project initiation and design stages with an indicative quote for the total project (see Part A, Section 5.3.1).

For more information about the role of the Registry refer to:
http://www.bdm.nsw.gov.au/aboutUs.htm

1.3 Procurement Objective

The objective of this RFT is to select a Supplier, which will be able to deliver the LifeLink project to the business and technical requirements defined in the Specification of this RFT (Part E, LifeLink Business, Technical and Data Requirements).

2 Summary information for tenderers

2.1 Interpretation

2.1.1 Definitions of terms used in Parts A-C are contained in cl.6 of Part B

2.2 Structure of Request for Tender

2.2.1 This Tender is structured in the TenderMax Pro format.

TenderMax Pro is an e-sourcing application designed to fully automate the traditional paper-based tendering process introducing best practice processes in Electronic Tender production, submission and evaluation.

2.2.2 This RFT is made up of five Parts as follows:

Tender Conditions
Part A: The Requirement and Tender Information
Part B: The Tender Process

Response to be completed by Tenderer
Part C: Tender Response is made up of two (2) sections:
C1 General Tender Response
C2 Response to Specifications
Both Parts, C1 and C2, must be completed by the Tenderer.

Conditions of Contract
Part D: Agreement

Specification
Part E: LifeLink Business, Technical and Data Requirements

Part C (C1 and C2) and any attachments, once completed forms the Tender, and is to be submitted in accordance with Parts A, B, D and E.

2.3 Contact Officer

2.3.1 Refer requests for information or advice regarding this RFT to:

Name: Jerzy Kortynski
Phone: 02 9372 7608
Fax: 02 9372 7633
E-mail: jerzy.kortynski@commerce.nsw.gov.au

2.3.2 Any information given to a tenderer to clarify any aspect of this RFT will also be given to all other Tenderers if in the Board's opinion the information would unfairly favour the inquiring tenderer over other Tenderers.

2.4 Pre-Tender briefing

2.4.1 A pre-tender briefing for all prospective Tenderers will be held on the date, and at the time and place, as nominated below or in the advertisement.

Place: Mercure Hotel, Sydney
818-820 George Street
Sydney NSW 2000

Date: 26 September 2007

Time: 10:00 am

2.4.2 Representatives of NSW Procurement – Contracting Services and Attorney General's Department will be available at that time to answer any queries regarding this RFT and the tender process generally.

2.4.3 Attendance is at the prospective Tenderer's option and expense, and is strongly recommended.

2.4.4 The number of attendees is limited to a maximum of two per organisation.

2.4.5 Tenderers wishing to take advantage of this opportunity should register with the contact officer by sending an email by close of business on 20 September 2007. Registration with the contact officer for the pre-tender briefing is necessary.

2.5 Nature and duration of agreement

2.5.1 The Requirement is to be met by an agreement between the Principal and the successful tenderer(s) on the conditions contained in Part D and subject to the successful completion of contract negotiations.

2.5 Non-exclusive one off agreement

Not used.

2.7 Eligibility to tender

2.7.1 Tenders must be submitted by a legal entity or, if a joint Tender, by legal entities, with the capacity to contract. The Board will only contract with the relevant legal entity or entities.

2.7.2 The Board may submit any financial information provided by the tenderer for independent financial assessment of the Tenderer's business.

2.7.3 The Board may ask a tenderer to provide evidence of its legal status or capacity to contract. If Tenders from entities propose to contract in their capacity as trustees, such evidence may include copies of the relevant trust deeds. Any evidence requested is to be provided within 3 working days of the request.

2.7.4 The Board reserves the right to reject any Tender if the Board judges the tenderer not to have appropriate financial assets.

2.7.5 If the Board judges the Tenderer's financial position to be marginal, the Board reserves the right to make acceptance of any Tender conditional upon the tenderer entering into a bank or parent company guarantee, or an unconditional performance bond in a form satisfactory to the Board (see Part E, section 4.12).

2.7.6 Tenderers must read, understand and comply with the requirements of the Commerce Business Ethics Statement, which is available at the link below. Tenderers must disclose any potential conflict of interests (including any relevant relationships) in the Tender Response.

The Board will consider any disclosure and will only enter into an agreement with tenderers that do not have improper conflict of interests. If the Board becomes aware of improper conflict of interests by a successful tenderer at the time an agreement has already been entered into the Board reserves the right to terminate the agreement.

http://www.commerce.nsw.gov.au/About+Commerce/Business+ethics+statement/Business+ethics+statement.htm#commerce

2.8 Other Eligibility Requirements

2.8.1 The Board will not enter into an agreement with a company that does not have an Australian Business Number (ABN) and is not registered for GST. Normally, Tenderers must be registered for GST and state their ABN in their Tender Response.

2.8.2 Tenders from Tenderers that do not have an ABN and/or are not registered for GST, such as Tenderers commencing business in Australia, may be considered at the Board's discretion if the Tenderer demonstrates that it will obtain an ABN and GST registration before entering into an agreement with the Board. Such Tenderers must state how and when they intend to obtain an ABN and register for GST in their Tender Response.

2.8.3 The use of subcontractors is permitted subject to Part D, section 9.4.

3. Submission of Tenders

3.1 General instructions for submission of Tenders

3.1.1 A Tender must be fully received by the Closing Date and Closing Time.

3.1.2 In order to prepare and lodge a response, Tenderers must have a current license for the DMax Lite V5 software being used. DMax Lite is the application required to participate and respond to any RFT published in the TenderMax Pro format V5.

3.1.3 A Tender must be lodged electronically to the **electronic tender box**, in accordance with Section 8 of this RFT, through the NSW Department of Commerce eTendering website at:

https://tenders.nsw.gov.au/commerce

Locate the web page for RFT **0701265,** and follow the instructions, to lodge the tender through the blue LODGE A RESPONSE link.

4. Evaluation of Tenders

4.1 General

4.1.1 Tenders will be assessed against the selection criteria listed below, which are not necessarily exhaustive, in order of significance or to be given equal weight.

4.1.3 Information supplied by the tenderer in Part C1 and C2 will contribute to the assessment against each criterion. Tenderers are advised to respond clearly to all the selection criteria listed in this RFT.

4.1.4 If any criterion or sub-criterion is stated to be "mandatory" a failure by the Tender to fully comply with that criterion or sub-criterion will result in automatic exclusion of the Tender without further consideration.

4.2 Selection criteria

4.1.4 Specific selection criteria and weightings will be applied to the detailed business and technical requirements outlined in Part E of the RFT document to aid in the evaluation process. However, to assist Tenderers in structuring their responses, the following points describe the generalised evaluation criteria that will be applied to conforming responses to the RFT.

- The overall suitability of the Tenderer, and any proposed Subcontractors, and the Tenderer's probity, financial standing, reputation, and apparent capability to deliver a project of this scale.
- Demonstrated expertise and experience in the successful implementation of the specified or similar system on a similar scale.
- The ability of the Tenderer and any Subcontractors to deliver and deploy the proposed solution within the required timeframe.
- The range and quality of operations, maintenance, support and any other services offered.
- The overall value for money of the solution.
- Degree of compliance with business requirements including the technical requirements identified in this RFT.
- Degree of compliance with the conditions of contract.

5. Preparation of Tender – Price Schedule and Project Plan

5.1 Price Schedule

5.1.1 Complete the Price Schedule at Part C2, Form 2.

5.2 Calculating the Tender Price

5.2.1 The Tender Price must:

(a) be in Australian dollars;
(b) cover all costs of performing the agreement, including packing and delivery (if applicable);
(c) include Goods and Services Tax if it is payable and all other applicable taxes, duties and charges at the rates applicable at the Closing Date and Time for Tenders;
(d) include all costs associated with the preparation and submission of the Tender;

5.3 Price Variation

5.3.1 A fixed price is required for the project. Should a Tenderer be unable to quote a fixed price for the entire project, a fixed price must be provided for the Project Initiation and Architecture and Detailed Design stages, an indicative quote for the total project and annual support. The Tenderer must commit to quote a fixed price at the completion of the Architecture and Design stage for the remainder of the project and for the first year of support. In this instance a fixed price calculation formula must be specified in the response to the RFT. The fixed price calculation formula must take its base in the scope defined in the Architecture and Detailed Design stage.

The Department reserves the right to terminate the project at the completion of any stage or to change Service Provider at the completion of a stage.

The total fee should be broken down into the following components:

- Stage 1: Project Initiation
- Stage 2: Project Execution – Architecture and Detailed Design
- Stage 3: Project Execution – Construction and System Testing
- Stage 4: Project Execution – User Acceptance Testing
- Stage 5: Project Execution – Deployment

- Stage 6: Project Execution – Warranty Support
- Stage 7: Project Closure
- Ongoing System Support and Maintenance
- Licence Fees
- Other

Tenderers are to include proposed financial and payment arrangements, including any special payment terms and conditions, and any guarantees offered. The payment schedule must be based on acceptance of completed stages, less a proposed retainer of 20% with payment due one month after Actual Acceptance Date (AAD).

5.4 GST Free or Input Taxed Supplies

Tenderers must identify and state the value of any GST Free or Input Taxed Supplies to be made under the agreement.

5.5 Project Plan

5.5.1 Tenderers must provide a high-level proposed project plan, to be attached to their Tender, indicating how and when deliverables would be supplied under the agreement.

5.7 Minimum Tender Validity Period

5.7.1 Tenders must remain open for acceptance for a period of at least 12 months from the Closing Date and Time for Tenders. Tenderers must state in Part C if their Tenders will remain open for any longer period.

PART B Tender Conditions -The Tender Process

6. Definitions of terms used in Parts A-C

Unless the context indicates otherwise, the following terms, where used in Parts A-C of this RFT, shall have the meanings set out below. Note the defined terms below will not all necessarily appear in this RFT.

"AAD" means Actual Acceptance Date.

"ABN" means an Australian Business Number as provided in the GST law.

"ACN" means an Australian Company Number as provided by the ASIC.

"Addendum" means an addendum or addition to this RFT made by the Board before the Closing Date and Time under cl. 7.5.

"Alternative Tender" means a Non-Conforming Tender that is intended to offer a different method of meeting the object and intent of the Requirement.

"Board" means the State Contracts Control Board established under the *Public Sector Employment and Management Act 2002* whose responsibilities include:

- Inviting and accepting tenders;
- Determining the conditions under which tenders are invited or accepted;
- Entering into contracts on behalf of Departments and other public sector agencies ; and
- On-going contract administration and management,

and includes the duly authorised delegates of the Board, including officers of NSW Procurement – Contracting Services.

"Closing Date and Time" means the Closing Date and Time for receipt of tenders, specified on the cover sheet to this RFT.

"Code" means the NSW Government Code of Practice for Procurement as amended from time to time, together with any other codes of practice relating to procurement, including any amendments to such codes that may be applicable to the particular RFT. The code can be viewed and downloaded from:
http://www.treasury.nsw.gov.au/procurement/pdf/code_of_prac-curr.pdf

"Conforming Tender" means a Tender that:

(a) conforms to the Requirement;
(b) is in the prescribed form;
(c) conforms to the terms and conditions of Part D, and
(d) conforms to all of the other requirements of this RFT.

"Contractor" means the tenderer as a party to the proposed agreement.

"Deliverables" means the goods and services or goods or services sought under this RFT, as detailed in the Specification.

"Government Businesses" means in general, entities which:

(a) have some form of public sector ownership;
(b) are engaged in trading goods and/or services;
(c) have a large measure of self sufficiency; and
(d) are subject to Executive control.

In this context, the term Government business includes Public Trading Enterprises, State Owned Corporations and General Government Businesses.

"GST" is a goods and services tax and has the same meaning as in the GST Law.

"GST Free Supplies" and **"Input Taxed Supplies"** have the same meaning as in the GST Law.

"GST Law" means any law imposing a GST and includes *A New Tax System (Goods & Services Tax) Act 1999* (C'th) or if that Act does not exist, means any Act imposing, or relating, to a GST and any regulation made under those Acts.

"Late Tender" means a Tender received after the Closing Date and Time for tenders and includes a Tender, which is only partly received by the Closing Date and Time.

"Non-Conforming Tender" means a Tender that:

(a) does not conform to the Requirement;
(b) is not in the prescribed form;
(c) does not substantially conform to any one or more of the terms and conditions of Part D, including a Tender which seeks to substantially qualify or amend these conditions, or
(d) does not conform to any of the other requirements of this RFT.

"NSW Procurement – Contracting Services" means a business unit of the NSW Department of Commerce representing the Board and authorised to arrange and administer contracts on behalf of the Board.

"OHS&R" means occupational health, safety and rehabilitation.

"On Request Items" means any Deliverables nominated as On Request Items.

"Price" includes a price expressed as a lump sum or a rate per unit of quantity, calculated in accordance with cl.5.3.

"Price Schedule" means the list of Deliverables offered by the tenderer, together with the corresponding pricing information. The Price Schedule forms, or is to be attached to, Part C2, Form 2 of the RFT.

"Principal" means the party named as Principal in the proposed agreement.

"Registry" means the NSW Registry of Births, Deaths and Marriages.

"Requirement" means the requirement for the Deliverables to be met by the Tender, outlined in cl.1 of the RFT and detailed in the Specification.

"RFT" means the Request for Tender.

"Specification" means the detailed description of the required deliverables described in Part E.

"Tender" means the offer to supply the Deliverables submitted in response to the RFT.

“Tender Price” means, in respect of each Deliverable offered, the Price nominated in the Price Schedule for that Deliverable.

7 Tender Process – General

7.1 Conformity of Tenders

7.1.1 The Board seeks Conforming Tenders.

7.1.2 Non-Conforming Tenders that do not include a fully completed Part C1 and C2, in particular those Tenders which do not contain sufficient information to permit a proper evaluation to be conducted, or, in the case of electronic tenders, which cannot be effectively evaluated because the file has become corrupt, may be excluded from the tender process without further consideration at the Board’s discretion.

7.1.3 Tenderers may, if they choose, submit an Alternative Tender. Tenderers are encouraged to offer options or solutions that contribute to the Principal’s ability to carry out its business in a more cost-effective manner.

7.1.4 Alternative Tenders will only be considered if submitted in conjunction with a Conforming Tender.

7.1.5 The Board may assess an Alternative Tender against the evaluation criteria where submitted with a Conforming Tender.

7.1.6 An Alternative Tender must be clearly marked “Alternative Tender”.

7.1.7 The Board expressly reserves the right to accept, in its discretion, either or both of the following:

(a) Any Alternative Tender or part of an Alternative Tender, where submitted with a Conforming Tender; and

(b) Any other Non-Conforming Tender or part of a Non-Conforming Tender (not, in either case, being an Alternative Tender or part of an Alternative Tender) that, in the Board’s opinion, is substantially a Conforming Tender.

7.2 Prescribed form of Tender

7.2.1 The Tender, including any Alternative Tender, must comprise a completed Part C (C1 and C2) and any attachments to Part C, as may be necessary. Any attachments should be labelled to identify those clauses of the RFT to which they relate.

7.2.2 The Tender will be taken to be for the supply of the Requirement on the terms and conditions stated in Part D except to the extent that these are amended by the Tender.

7.3 General instructions for completion of Tenders

7.3.1 Prices, responses and other information provided in the Tender are to be in writing and in English.

7.3.2 Tenderers must complete ALL of Part C (C1 and C2) of this RFT, as directed and must not amend any of the questions provided.

7.3.3 Tenderers should notify the Contact Officer in writing on or before the Closing Date and Time if they find any discrepancy, error or omission in this RFT.

7.3.4 All tenders must be provided in the TenderMax Pro format, using DMax Lite software, and Part C must be included in one or more files with an extension of *.dtr.

7.3.5 Product samples, models and other supporting items that are required to be delivered must be identified in the tender and delivered in accordance with arrangements made with the Contact Officer before lodgement of tender.

7.4 Tenderers to inform themselves

7.4.1 Before submitting its Tender, a tenderer must:

(a) Examine all information relevant to the risks and contingencies and other circumstances having an effect on its Tender; and

(b) Satisfy itself:

(i) that the Tender, including the Tender Price is correct; and

(ii) that it is financially and practically viable for it to enter into and perform the proposed agreement.

7.4.2 The following must be considered:

(a) The eTendering system is at peak use on the morning prior to Tenders closing.

1) Due to communication traffic via this means of communication it may take longer to lodge a Tender near Closing Date and Closing Time than at other times.

2) When lodging through the NSW Department of Commerce *eTendering* website, it is recommended that a Tender be lodged well in advance of the Closing Date and Closing Time.

(b) The NSW Department of Commerce *eTendering* website may experience difficulties in accepting a large Tender. A tender lodged via the NSW Department of Commerce *eTendering* website should ideally be below 7 megabytes (MB) in total file size. Responses totalling more than 7MB may experience difficulties in lodgement. In this case Tenderers may break down the lodgement into smaller packages if clearly identified eg. package 1 of 3; 2 of 3; 3 of 3. A tenderer is referred to cl. 8.1.4(b) for instructions as to compressing electronically submitted Tenders.

(1) If submitting an electronic tender with supporting items:

a) The complete Tender, including the required supporting items unless otherwise directed, must be submitted by Closing Date and Closing Time, and

b) Supporting items should be clearly designated as “Supporting Items to…” the RFT to which they relate.

c) Supporting items not required to be lodged as part of the initial Tender by the RFT should not be lodged in the tender box, and arrangements should be made with the Contact Officer.

7.4.3 A tenderer is not required to provide multiple copies of a Tender. Any "Alternative Tender" under clause 7.1 must be attached to the Conforming Tender at Part C of this RFT.

7.4.4 If a tenderer provides multiple lodgements, the latest tender received in a NSW Department of Commerce Tender Box will be the tender evaluated.

7.5 Addenda to RFT

7.5.1 If, for any reason the Board, at its sole discretion, requires the RFT to be amended before the Closing Date and Time, an Addendum will be issued.

7.5.2 In each case, an Addendum becomes part of the RFT.

7.5.3 The Board, during the tender period may issue Addenda altering the RFT. In such cases, it is the obligation of the tenderer to verify if any addenda were issued prior to closing date, even if a tender has already been submitted. They must obtain a copy of all addenda as given in clause 7.5.4 or 7.5.5 as applicable.

7.5.4 Tenderers must check the web site address, https://tenders.nsw.gov.au/commerce and download the Addendum.

7.6 Late Tenders

7.6.1 In accordance with the requirements of the NSW Government Code of Practice for Procurement, Late Tenders will not be considered except when the Board is satisfied that the delay is not the fault of the tendering party.

7.7 Extension of the Closing Date and Time

7.7.1 The Board may, in its discretion, extend the Closing Date and Time.

8. Tender Process – Submission of Tenders

8.1 Electronic Tenders to the NSW Department of Commerce *eTendering* website

8.1.1 A tenderer is required, to lodge its Tender electronically through the NSW Department of Commerce *eTendering* website at https://tenders.nsw.gov.au/commerce. A tender submitted electronically will be treated in accordance with the *Electronic Transactions Act 2000* (NSW), and given no lesser level of confidentiality, probity and attention than Tenders lodged by other means.

8.1.2 A tenderer, by electronically lodging a Tender, is taken to have accepted conditions shown in the Conditions of Tendering and on the NSW Department of Commerce *eTendering* website.

8.1.3 A tenderer must follow the following directions:

(a) RFT for which electronic lodgement is available through the website can be identified by the blue "Lodge a Response" link on the web pages for the RFT.

(b) To lodge a Tender electronically, the files containing the Tender Response must be up-loaded through the website. Access to the up-loading process is through the blue “Lodge a Response” link, then follow the steps and instructions on the NSW Department of Commerce *eTendering* website and any instructions which may have been supplied with the RFT.

8.1.4 A tenderer must observe the following format for lodgements:

(a) An electronically lodged Tender must be lodged in a file format required by the RFT.

(b) If a tenderer compresses files, it must be possible to decompress them using WinZip. A tenderer must not submit self-extracting (*exe) zip files.

(c) A tenderer must not change pre-existing text in the RFT other than to insert the required information.

(d) The file/s name/s must have an extension and not have invalid characters or file names/loading pathnames too long for the system, as detailed on the NSW Department of Commerce *eTendering* website

8.1.5 Signatures are not required for a Tender submitted to the NSW Department of Commerce *eTendering* website. A tenderer must ensure that a Tender is authorised by the person or persons who may do so on behalf of the Tenderer and appropriately identify the person and indicate the person’s approval of the information communicated.

8.1.6 Electronically submitted Tenders may be made corrupt or incomplete, for example by computer viruses. The Board may decline to consider for acceptance a Tender that cannot be effectively evaluated because it is incomplete or corrupt. Note that:

(a) To reduce the likelihood of viruses, a tenderer must not include any macros, applets, or executable code or files in a Tender.

(b) A tenderer should ensure that electronically submitted files are free from viruses by checking the files with an up to date virus-checking program before submission.

8.1.7 If a tenderer experiences any persistent difficulty with the NSW Department of Commerce *eTendering* website in submitting a Tender or otherwise, it is encouraged to advise the Contact Officer promptly in writing.

(a) If there is a defect or failure of the NSW Department of Commerce *eTendering* website and the Board is advised, the Tender Closing Date and Closing Time may be extended provided that, in the view of the Board, the tender process will not be compromised by such an extension.

9. Tender Process – Evaluation of Tenders

9.1 Variation of Tenders

9.1.1 At any time before the Board accepts any Tender received in response to this RFT, a tenderer may, subject to cl.9.1.2, vary its Tender:

(a) by providing the Board with further information by way of explanation or clarification;

(b) by correcting a mistake or anomaly; or

(c) by documenting agreed changes to the Tender negotiated under cl.10.2 of this Part.

9.1.2 Such a variation may be made either:

(a) at the request of the Board, or

(b) with the consent of the Board at the request of the tenderer;

but only if,

(c) in the case of variation requested by the tenderer under cl.9.1.1(a)-(b), it appears to the Board reasonable in the circumstances to allow the tenderer to provide the information or correct the mistake or anomaly; or

(d) in the case of variation under cl.9.1.1(c), the Board has confirmed that the draft-documented changes reflect what has been agreed.

9.1.3 If a Tender is varied in accordance with cl. 9.1.1(a) or (b), the Board will provide all other tenderers whose Tenders have similar characteristics with the opportunity of varying their Tenders in a similar way.

9.1.4 A variation of a Tender under cl. 9.1.1 will not be permitted if in the Board's view:

(a) it would substantially alter the original Tender; or

(b) in the case of variation under cl.9.1.1(a) or (b), it would result in the revising or expanding of a Tender in a way that would give a tenderer an unfair advantage over other tenderers.

9.2 Corrupt or unethical conduct

9.2.1 If a tenderer, or any of its officers, employees, agents or sub-contractors is found to have:

(a) offered any inducement or reward to any public servant or employee, agent or subcontractor of the Board, the Client Agency or the NSW Government in connection with this RFT or the submitted Tender;

(b) committed corrupt conduct in accordance with the provisions of the *Independent Commission Against Corruption Act 1988*, or

(c) a record or alleged record of unethical behaviour,

(d) not complied with the requirements of Commerce Business Ethics Statement available at:
http://www.commerce.nsw.gov.au/About+Commerce/Business+ethics+statement/Business+ethics+statement.htm

9.2.2 The Board may, in its discretion, invite a relevant tenderer to provide written comments within a specified time before the Board excludes the tenderer on this basis.

9.3 Exchange of information between government agencies

9.3.1 Lodgement of a Tender will itself be an authorisation by the tenderer to the Board to make available, on request, to any NSW government agency information, including but not limited to, information dealing with the tenderer's performance on any contract that may be awarded. Such information may be used by the recipient NSW Government agency for assessment of suitability for pre-qualification, selective tender lists, expressions of interest or the award of a contract or termination of contract.

9.3.2 The provision of the information by the Board to any other NSW Government agency is agreed by the tenderer to be a communication falling within section 22(1) of the *Defamation Act 1974* (NSW), and the tenderer shall have no claim against the Board and the State of New South Wales in respect of any matter arising out of the provision or receipt of such information, including any claim for loss to the tenderer arising out of the communication.

9.3.3 In the evaluation of Tenders, the Board may take into account any information about the tenderer that the Board receives from any source.

9.3.4 To avoid doubt, information that may be collected, exchanged and used in accordance with this provision includes "personal information" about the tenderer for the purposes of the *Privacy and Personal Information Protection Act 1998*. Lodgement of a Tender will be an authorisation by the tenderer to the Board to collect such information from third parties, and to use and exchange such information in accordance with this cl. 9.3.

9.3.5 The tenderer's attention is drawn to the *Freedom of Information Act 1989* which may confer rights, subject to the terms of that Act, to access, and to require the correction of, information held by certain agencies.

9.3.6 During the course of the agreement, the successful tenderer's performance will be monitored and assessed. Performance assessment reports, including substantiated reports of unsatisfactory performance, can be taken into account by NSW government agencies and may result in future opportunities for NSW government work being restricted or lost.

10. Outcomes

10.1 Acceptance or rejection of Tenders

10.1.1 The Board may accept all or any part or parts of any Tender or Tenders, including, in accordance with cl. 7.1, any Alternative Tender or other Non-Conforming Tender.

10.1.2 The Board is not bound to accept the lowest or any Tender.

10.1.3 If the Board rejects all the Tenders received it may:

(a) invite fresh Tenders based on the same or different criteria (specifications and details contained in Alternative Tenders will not be used as the basis for the calling of new Tenders), or

(b) conduct post-tender negotiations in accordance with cl. 10.3.

10.2 Negotiations before determination of outcome

10.2.1 Before making any determination as to acceptance or rejection of Tenders the Board may, at its discretion, elect to conduct limited negotiation with preferred tenderers, including those who have submitted Alternative Tenders or who have submitted substantially Conforming Tenders, to mutually improve outcomes.

10.2.2 The Board will generally not enter into negotiations on the standard conditions of contract contained in Part D.

10.3 Post Tender negotiations in the event all Tenders are rejected

10.3.1 If the Board rejects all Tenders on the basis that all Tenders are Non-Conforming, but considers that conformity with the requirements of this RFT is achievable, it may enter into negotiations with the least non-conforming tenderer with a view to achieving a Conforming Tender and entering into an agreement. If such negotiations are unsuccessful the Board may then enter negotiations with the next most acceptable tenderer. This process may be repeated with each of the rejected Tenders in order of potential acceptability. However, the Board is not obliged to enter into negotiations with any tenderer.

10.3.2 The purpose of the negotiations will be advised by the Board and made clear to the participants before the commencement of negotiation. Negotiations will not seek to play off tenderers' prices against other tenderers' prices.

10.4 Custody of Tenders after receipt

10.4.2 Tenders lodged electronically to the NSW Department of Commerce Tenders website will be treated in accordance with the *Electronic Transactions Act 2000* (NSW) and given no lesser level of confidentiality, probity and attention than Tenders lodged by other means.

(a) On receipt of Tenders lodged electronically to the NSW Department of Commerce *eTendering* website, Tenders are encrypted and stored in a secure "electronic tender box."

(a) For reasons of probity and security, NSW Department of Commerce is prevented from interrogating the electronic tender box to ascertain whether tenders have been received or for any reason, until after the Closing Date and Closing Time.

(b) The e-mail receipt that is sent to the Tenderer after successfully up-loading and lodging the Tender electronically is the only evidence of Tender lodgement provided.

10.5 Ownership of Tenders

10.5.1 All Tenders become the property of the Board on submission.

10.5.2 The Board may make copies of the Tenders for any purpose related to this RFT.

10.6 Discontinuance of the Tender process

10.6.1 Where the Board determines that awarding a contract would not be in the public interest, the Board reserves the right to discontinue the tender process at any point, without making a determination regarding acceptance or rejection of Tenders.

10.6.2 The Board will not be liable for any losses suffered by a tenderer as a result of discontinuance of the tender process, including costs of tendering.

10.7 Notification of outcome

10.4.1 Following the Board's decision, all tenderers will be notified in writing of the outcome of their Tenders.

10.8 Complaints

10.8.1 It is the NSW Government's objective to ensure that industry is given every opportunity to win Government contracts. Should any entity feel that it has been unfairly excluded from tendering or unfairly disadvantaged by the Conditions in Part D or the Requirement, it is invited to write to:

Chairman, State Contracts Control Board
Level 22, McKell Building
2-24 Rawson Place
SYDNEY NSW 2000

10.9 Entry into agreement

10.9.1 The Board may enter into an agreement with the successful tenderer either by letter of acceptance or by execution of a formal agreement in terms of Part D. If the Board chooses to proceed by way of formal agreement it will indicate in any notification of acceptance that such acceptance will be formalised by execution of a formal agreement.

10.10 Disclosure of information concerning tenderers and outcome of the tender process

10.10.1 Details of tenderers and the outcome of the tender process may be disclosed in accordance with the NSW Government Tendering Guidelines, available at:

http://www.dpws.nsw.gov.au/Government+Procurement/Procurement+Policy+Framework/NSW+Government+Tendering+Guidelines.htm

An outline of these requirements can be found in Annexure 1 of Part B of this RFT.

10.11 Monitoring of Contractor Performance

10.11.1 During the course of the agreement the Contractor's performance will be monitored and assessed. For details refer to the NSW Government Procurement Guidelines on Service Provider performance management which is available on request from the Contact Officer, the NSW Department of Commerce or can be viewed and downloaded from

http://www.ogp.commerce.nsw.gov.au/NR/rdonlyres/eucuz2722gdb54776cyhkw7ntoj4cpiw5iga5ztwvtvjjethi2xjujwd4zrgsfte4cye7lgoqtlf4wxywdioutedaph/Service+Provider+Performance+Management.pdf

10.11.2 The terms and conditions of the proposed agreement, set out in Part D, detail the performance criteria to be applied in the monitoring of Contractor performance.

ANNEXURE 1 TO PART B (Disclosure of Information)

Disclosure of information concerning tenderers and outcome of the tender process

1. In accordance with the NSW Government Tendering Guidelines referred to in clause 10.10.1 and found at http://www.dpws.nsw.gov.au/Government+Procurement/Procurement+Policy+Framework/NSW+Government+Tendering+Guidelines.htm, the following **tender information** is required to be disclosed -

Tender Type	Level of disclosure	Basis of disclosure
For all public calls for tender, expressions of interest or other such public calls which may result in a contract with the private sector.	As a minimum: a concise description of the proposed works, goods or services the subject of the tender call; the date responses to the tender call close and where responses are lodged; and location of the tender call documents. The names and addresses of all entities which submit responses.	Routine public disclosure at the time tender calls are advertised. Routine public disclosure within 7 days of the date tender calls closed.
In a multi-stage tender process.	The names and addresses of the shortlisted entities, except where such disclosure is likely to compromise the competitiveness of the subsequent tender process.	Routine public disclosure within 7 days of these entities being advised of their shortlisting.

2. In accordance with the NSW Government Tendering Guidelines referred to in clause 10.10.1 above, the following **contract** information is required to be disclosed -

Contract size and type	Level of disclosure	Basis of disclosure
Class 1 contracts All government contracts with estimated value $150,000 or above).	(a) The name and business address of the contractor; (b) Particulars of any related body corporate (within the meaning of the Corporations Act 2001 of the Commonwealth) in respect of the contractor, or any other private sector entity in which the contractor has an interest, that will be involved in carrying out any of the contractor's obligations under the contract or will receive a benefit under the contract; (c) The date on which the contract became effective and the duration of the contract; (d) Particulars of the project to be undertaken, the goods or services to be provided or the real property to be leased or transferred under the	Routine public disclosure within 60 days after the contract becomes effective.

	contract; (e) The estimated amount payable to the contractor under the contract; (f) A description of any provisions under which the amount payable to the contractor may be varied; (g) A description of any provisions with respect to the renegotiation of the contract; (h) In the case of a contract arising from a tendering process, the method of tendering and a summary of the criteria against which the various tenders were assessed; and (i) A description of any provisions under which it is agreed that the contractor is to receive payment for providing operational or maintenance services.	
Class 2 contracts Class 1 contracts (i.e government contracts with estimated value $150,000 or above) which also: - result from a direct negotiation where there has not been a tender process; or - have been the subject of a tender process and where the final contract terms and conditions are substantially negotiated with the successful tenderer (this includes alliance type contracts); or - involve operation or maintenance obligations for 10 years or longer; or - involve a privately financed project as defined by relevant Treasury guidelines; or - involve a transfer of land or other asset to a party in exchange for the transfer of land or other asset to an agency.	The information required for class 1 contracts and (a) Particulars of future transfers of significant assets to the State at zero, or nominal, cost to the State, including the date of their proposed transfer; (b) Particulars of future transfers of significant assets to the contractor, including the date of their proposed transfer; (c) The results of any cost-benefit analysis of the contract conducted by the agency; (d) The components and quantum of the public sector comparator if used; (e) Where relevant, a summary of information used in the contractor's full base case financial model (for example, the pricing formula for tolls or usage charges); (f) Where relevant, particulars of how risk, during the construction and operational phases of a contract to undertake a specific project (such as construction, infrastructure or property development), is to be apportioned between the parties, quantified (where practicable) in net present-value terms and specifying the major assumptions involved; (g) Particulars as to any significant guarantees or undertakings between the parties, including any guarantees or undertakings with respect to loan agreements entered into or proposed to be entered into; and (h) Particulars of any other key elements of the contract.	Routine public disclosure within 60 days after the contract becomes effective.
Class 3 contracts Class 2 contracts where the estimated value of the government contract is $5 million or more.	The information for class 1 and 2 contracts and the complete contract, less confidential information. Note: if some or all of a class 3 contract is not disclosed for reasons of confidentiality, the agency is to disclose: the reasons for not publishing the contract or provisions; a statement as to whether the contract or	Routine public disclosure within 60 days after the contract becomes effective.

	provisions will be published and, if so, when; and where some but not all of the provisions of the contract have been disclosed, a general description of the types of provisions that have not been published.	

3. **Requests for disclosure of additional contract information**

Tenderers must acknowledge that any person may make a specific request to the State Contracts Control Board for any item of contract information contained in schedules 1 or 2, or for a copy of a contract, which is not required to be routinely disclosed under section 15A of the FOI Act. The State Contracts Control Board must provide the requested contract information or the requested copy of the contract to the requesting person (less any confidential information) within 60 days of receiving the request.

Where a copy of a contract has been requested and some or all of the contract is not provided for reasons of confidentiality, the State Contracts Control Board will disclose:

- the reasons for not providing;
- a statement as to whether the contract or provisions will be provided and, if so, when; and
- where some but not all of the provisions of the contract have been provided, a general description of the types of provisions that have not been provided.

4. **Disclosure of amendments or variations to contract information under the FOI Act**

The FOI Act requires that, if there is an amendment to the contract terms or a material variation made under the contract that changes information already routinely disclosed under the FOI Act, the State Contracts Control Board must ensure that the information concerning the change is routinely disclosed within 60 days after such amendment or variation becomes effective, less any confidential information. In the case of class 3 contracts, the full amendment or material variation, less any confidential information, must be disclosed within the 60 day timeframe.

5. Confidential information

None of the disclosure obligations contained in the FOI Act, or the requirements for disclosing tender information or a copy of a contract or information in relation to a contract under these guidelines, require the disclosure of:

- the commercial-in-confidence provisions of a contract (as defined in schedule 3 to the Freedom of Information Act) (the contractor's financing arrangements; the contractor's cost structure or profit margins; the contractor's full base case financial model; any intellectual property in which the contractor has an interest; or any matter whose disclosure would place the contractor at a substantial commercial disadvantage in relation to other contractors or potential contractors, whether at present or in the future.);
- details of any unsuccessful tender;
- any matter that could reasonably be expected to affect public safety or security; or
- information which would be exempt from disclosure if it were the subject of an application under the Freedom of Information Act.

Where such confidential information is withheld, the State Contracts Control Board must inform the requesting person that access to that information may be sought in accordance with the Freedom of Information Act. This will enable a person seeking the information to have the appeal rights available under the Freedom of Information Act.

6. Tenderers are invited to nominate items they consider are confidential and why.

NSW Department of Commerce

NSW Procurement – Contracting Services is a Business Unit of the NSW Department of Commerce

NSW Procurement – Contracting Services invites this tender for and on behalf of the NSW Government State Contracts Control Board

PART E

LifeLink Business, Technical and Data Requirements

Request for Tender (RFT) Number: **0701265**

Contract Name: **NSW Registry of Births, Deaths and Marriages Core System Replacement (LifeLink)**

Note: In order to respond to this RFT tenderers must have a current license for DMax Lite software. Licenses can be purchased through NSW Procurement | eBusiness Solutions SupportDesk at:

eBS_SupportDesk@commerce.nsw.gov.au or 1800 003 985

at a cost of $110 (inclusive of GST) (representing the DecisionMax license fee). This provides 12 months unlimited application to any Tender formatted in TenderMax Pro. It is anticipated that most RFTs released by the SCCB will be in this format.

Alternatively, in downloading this RFT you can follow the prompts to confirm your request and purchase of the DMax Lite software and be issued with your Digital Registering Key to commence preparing your tender submission in the appropriate format.

TABLE OF CONTENTS

CHAPTER 1 – INTRODUCTION 5

1 PURPOSE.....5

2 REGISTRY BACKGROUND 5

3 LIFELINK PROJECT DESCRIPTION 5

3.1 Overview 5
3.2 Associated Projects.....6
3.3 Document Organisation 6
3.4 Readability 7
3.5 Glossary of Terms.....7

CHAPTER 2 – PROJECT DELIVERY REQUIREMENTS 11

4 PROJECT DELIVERY REQUIREMENTS.....11

4.1 High-level Requirements.....11
4.2 Solution Characteristics 11
4.3 Project Accommodation 12
4.4 The Project Team.....12
4.5 Security of Information 12
4.6 Project Management.....13
4.7 Software Development Approach 13
4.8 Project Stages.....14
4.9 Deliverables 16
4.10 Quality Assurance.....18
4.11 Skills Requirements 18
4.12 Agreement.....19

CHAPTER 3 – BUSINESS REQUIREMENTS 20

5 PURPOSE.....20

6 REGISTRY STRUCTURE AND ORGANISATION 20

7 PROCESSING REQUIREMENTS.....22

7.1 Processing Overview 22
7.2 Actors 23
7.3 Summary Use Cases 25
7.4 Use Case Descriptions 28

8 FUNCTIONAL REQUIREMENTS.....30

8.1 Registration Functions (UC010).....30
8.2 Process Notification (UC011).....30
8.3 Process Application (UC012).....31
8.4 Compliance Checking (UC013) 33
8.5 Matching (UC014).....33
8.6 Process Registration (UC015) 34
8.7 Maintain Person (UC016) 35
8.8 Certificate Production (UC017) 37
8.9 Auditing (UC018).....38
8.10 Point of Sale (UC020) 38
8.11 Process Payment (UC021) 39
8.12 Process Refund (UC022).....40
8.13 Float Management (UC023) 40
8.14 Searching (UC030) 41
8.15 Reporting (UC040).....41
8.16 Certificate Validation (UC050) 42
8.17 System Administration (UC060).....42

8.18 Workflow Maintenance (UC061) ... 43
8.19 Rules Service Maintenance (UC062) ... 43
8.20 Certificate Layout Maintenance (UC063) ... 43
8.21 Correspondence Template Maintenance (UC064) ... 43
8.22 Archiving (UC065) ... 43
8.23 Reference Data Maintenance (UC066) ... 43
8.24 Security/Access Control (UC067) ... 44

9 BUSINESS TRANSACTION TYPES ... 44

10 CERTIFICATES ... 45

11 TRANSACTION VOLUMES ... 46

12 REPORTS ... 47

13 CORRESPONDENCE ... 48

14 EXTERNAL INTERFACE POINTS ... 50

15 FUTURE DIRECTIONS ... 53

CHAPTER 4 – BUSINESS PROCESS FLOWS 54

16 PURPOSE ... 54

17 STRUCTURE ... 54

18 MAJOR PROPOSED PROCESS – LIFELINK ... 55

18.1 Complete Notification ... 56
18.2 Complete Application ... 60
18.3 Process Application ... 64
18.4 Process Notification ... 75
18.5 Matching ... 80
18.6 Registration ... 83
18.7 Amendment ... 85
18.8 Certificate Production ... 93
18.9 Review Person Relationships ... 96

CHAPTER 5 – TECHNICAL REQUIREMENTS 98

19 PURPOSE ... 98

20 LIFELINK ARCHITECTURE ... 98

20.1 Architectural principles ... 98
20.2 Architecture Description ... 100
20.3 Technical Requirements ... 102

CHAPTER 6 - DATA MODEL DESCRIPTION 105

21 INTRODUCTION ... 105

22 CORE STRUCTURES SUMMARY ... 105

22.1 Party, Event and Event Participation ... 105
22.2 Party, Event and Participation Cross References ... 106
22.3 Event Type Role ... 107
22.4 Event Type Cross References ... 107

23 PARTY ... 107

23.1 Parties ... 107
23.2 Addresses ... 108

24 CORE DATA STRUCTURES ... 108

25 BIRTH EVENT LIFECYCLE ... 108

25.1 Events ... 108

25.2 Participations 108
25.3 Cross references 109

26 MARRIAGE EVENT LIFECYCLE 109

26.1 Party 109
26.2 Events 109
26.3 Participations 109
26.4 Cross references 109

27 DEATH EVENT LIFECYCLE 109

27.1 Events 110
27.2 Participations 110
27.3 Cross references 110

28 ADOPTION EVENT LIFECYCLE 110

28.1 Events 110
28.2 Participations 110
28.3 Cross references 110

29 CHANGE OF NAME EVENT 111

29.1 Events 111
29.2 Participations 111
29.3 Cross references 111

30 AMENDMENT OF EXISTING REGISTRATION 111

30.1 General Amendments 111
30.2 Change of Sex Amendments 112

31 POS PRODUCT SUMMARY 112

31.1 Applications 112
31.2 Data Matching 112
31.3 Products 112
31.4 Entitlements 112

32 POINT OF SALE TRANSACTIONS 113

32.1 Applying for products 113
32.2 Fees and payments 113
32.3 Who can apply for what 114
32.4 Contacts 114

33 SYSTEM ADMINISTRATION 114

33.1 Simple System Entities 115
33.2 Complex System Entities 115

34 PRINTING QUEUES 115

34.1 Users and Workstations 115
34.2 Printing 115

35 FILING 115

36 ALERT AND BLOCK FACILITY 116

37 USER RIGHTS AND PRIVILEGES 116

37.1 Data is accessed by users 116
37.2 System users can undertake functions. 116
37.3 Interaction is constrained to particular devices 117
37.4 Interaction is constrained by location 117
37.5 Access to data is audited 117

CHAPTER 1 – INTRODUCTION

1 PURPOSE

This document provides a description of the LifeLink project and specifies Project Delivery, Business and Data Requirements for the proposed LifeLink application.

2 REGISTRY BACKGROUND

The NSW Registry of Births, Deaths and Marriages (Registry) is a Government Trading Enterprise that relies on the revenue generated from the sale of regulated and non-regulated products and services to meet operating and capital expenses.

The Registry has offices in Sydney (Chippendale), Newcastle and Wollongong. The Registry has a full-time staff equivalent of 142 of which 128 are in the Sydney Registry, 9 in Newcastle and 5 in Wollongong.

Rural Court Houses and Government Access Centres (GACs) act as agents of the Registry in country NSW. These agents provide a certificate application service and information and advice to clients regarding Registry services.

The Registry has decided to replace its core computerised system, LifeData, after eleven years of operation. The new system will be known as LifeLink.

The new Registry system will support the core business services of the Registry and all its areas of business. It includes all the main business and support services of the Registry required to fulfil its operational mandate, which includes the following:

- Registration of births, deaths and marriages in New South Wales (NSW)
- Registration of adoption information
- Registration of changes of name
- Registration of changes of sex
- Keeping of registers for recording and preserving information about births, adoptions, deaths, marriages and change of name and sex in perpetuity
- Provision of access to the information in the registers in appropriate cases by government or private agencies and members of the public from within and outside the state
- Issue of certified information from the registers
- Collection and dissemination of statistical information.

3 LIFELINK PROJECT DESCRIPTION

3.1 OVERVIEW

This Request for Tender (RFT) covers the acquisition and implementation of a replacement core business system (LifeLink) for the Registry. At a high level the solution must enable the Registry to:

1. Fulfil its mandate of registering the life events of individuals in NSW;
2. Enable the linking of life events to produce a person-centric database;
3. Produce products (i.e. certificates, birth cards etc);
4. Process payments for these products; and
5. Minimise Fraud.

The Information Services Branch (ISB) of the Attorney General’s Department (the Principal) is providing Information Technology (IT) resources and support to the Registry.

3.2 ASSOCIATED PROJECTS

3.2.1 eRegistry

The eRegistry project will rebuild the various Registry custom developed electronic data exchanges on a common communications and messaging platform. The project will provide a standardised method of electronic communications with customers, partners, clients, other systems and agencies. It will implement a common XML interface to LifeLink to ensure ease of date exchange and utilisation of best practice technology, policies and procedures.

The project will source, install and customise an Enterprise Service Bus (ESB) and appropriate development resources to provide a centralised, scalable, fault-tolerant, messaging framework. Utilising the rich feature set of the ESB, 18 bespoke applications (current and proposed) that are built using different tools and technologies will be replaced with a common service oriented infrastructure. A common XML exchange mechanism with LifeLink will be developed as will shared XML schema and vocabulary.

3.2.2 LifeData Data Migration

A Data Migration project will be undertaken in parallel with the development of LifeLink. The output of this project will be the core historical data for LifeLink. The existing LifeData system is constructed using a number of proprietary products including Texpress; a proprietary, flat file database system. A total of 125 Texpress databases have been identified as forming part of the existing LifeData system. Of these, 67 will be migrated to LifeLink. This represents around 31.2 million records and approximately 17 million registered events. All data will be subject to rigorous analysis and cleansing before migration to the new LifeLink database.

3.2.3 Numbered Certificate Paper (NCP)

The Registry is currently implementing a system which links every certificate number to a pre-printed document serial number on each sheet of “blank” certificate paper and accounts for every sheet of certificate paper. A separate project will be initiated to modify NCP to interface with LifeLink through the latter’s integration layer.

3.3 DOCUMENT ORGANISATION

This document is divided into 6 chapters as follows:

- **Chapter 1 – Introduction**

  This chapter.

- **Chapter 2 – Project Delivery Requirements**

  This chapter specifies the project delivery requirements for the proposed LifeLink application. It describes in some detail the Principal’s expectations in relation to the execution of the tender.

- **Chapter 3 – Business Requirements**

  This chapter specifies the functional, operational and other business requirements of a computerised system required to support the core business processes of the Registry. As such this chapter represents the core functional requirements of the proposed LifeLink solution.

- **Chapter 4 – Business Process Flows**

  This chapter describes the business process flows proposed to support the key activities of the Registry. The chapter supports and should be read in conjunction with the LifeLink Business requirements.

  This chapter is considered to be a working document and the starting point for the detailed design phases of the project. Validations and business rules for each process will continue to be captured as the design progresses and will, at the end of the design phase, represent a complete set of business rules to be implemented.

- **Chapter 5 – Technical Requirements**

  This chapter documents in some detail the Principal's technical infrastructure and the performance and other characteristics of the proposed application.

  This chapter also describes a conceptual view of the proposed architecture of LifeLink as a series of loosely coupled services. Application resources are viewed as independent services that can be accessed without knowledge of their underlying implementation in a modular, flexible, scalable, and supportable manner.

- **Chapter 6 – Data Model Description**

  The primary goal of the LifeLink data model is to capture in a structured manner the complex series of relationships and participations involved in the registration of NSW life events (births, deaths, marriages etc). LifeLink is envisaged to be a 'person centric' system where a person/organisation is a party to a series of life events with other parties. The complete data model expressed as an entity-relationship model is contained in a separate directory included with the tender. Chapter 6 provides a detailed explanation of the model and its operation. All data models can be accessed as hypertext links from the primary headings.

  The LifeLink data model represents a conceptual view of a 'person centric' database. It represents a substantial deviation from the traditional event centric view of registrable events. It is anticipated that it will form the starting point for the development of the LifeLink database.

3.4 READABILITY

This documents represents the collective effort of a large number of different contributors and project personnel. As such the reader will notice varying styles and methods of expression used throughout the document.

3.5 GLOSSARY OF TERMS

TERM	DESCRIPTION
AAD	Actual Acceptance Date
ABS	Australian Bureau of Statistics.
AGD	Attorney General's Department of NSW
AGility	AGD's project management framework, based on Prince 2 project management methodology.
AIHW	Australian Institute of Health and Welfare.
Amendment	A change to an existing Registration. Excludes changes for 'Change of Name' and 'Change of Sex'.
Application	Application for a Registry product. Examples include: Birth Certificate, Change of Name Certificate, and Family History.
BDM	Births, Deaths and Marriages.
Birth Cards	Plastic card identification offered as a product by the Registry.
BPEL	Business Process Execution Language, a business processing modelling language responsible for the orchestration of Web Services.
CON	Change of Name.
Connect Series	A series of Registry developed programs that allow Marriage Celebrants, Funeral Directors, Court Houses and Government Access Centres to enter Notifications.
Counter Staff	Staff who deal with the public on a face-to-face basis. They may

TERM	DESCRIPTION
	be based at the Sydney Registry, or one of the Regional offices.
CRM	Customer Relationship Management system.
CVS, CVSD, CVSB	Certificate Validation System.
Data Processing Bureau	An external agency is used to data enter Birth Registration Forms received by mail at the Registry.
DBA	Database Analyst/Administrator.
DOCS	Department of Community Services.
DVS	Document Validation Service.
Endorsement	A notation linked to a Registration indicating an amendment or some other associated notice.
eRegistry	A suite of web based applications used by external parties to lodge Notifications and Applications. Includes eBirths, eMarriages and eDeaths.
ESB	Enterprise Services Bus.
Event	An activity to be recorded in the NSW Registry, eg. Birth, Death, Marriage, Change of Name.
External Agencies	Government Organisations used to verify an Applicant's identification. Examples include: Passport Office, RTA.
Fact of Death	Quarterly data load of all deaths registered across Australia.
FOI	Form of Information. This denotes the registration data filled in by an informant on the prescribed form.
GAC	Government Access Centre.
GL	General Ledger.
GOS	See Guarantee of Service.
GST	Goods and Services Tax.
Guarantee of Service (GOS)	Turn around time frames set by the Registry to manage Customer expectation. The GOS starts when all required information has been provided and full compliance is achieved. The GOS ends when the Certificate is delivered to Australia Post or the Customer directly.
ICR	Intelligent Character Recognition.
IDE	Integrated Development Environment.
ISB	Information Services Branch, NSW Attorney General's Information Technology department.
Issue	Child.
IT	Information Technology
IVR	Interactive Voice Recognition.
Life Event	A life event of an individual that occurred in NSW and is subject to registration by the Registry.
LifeData	The Registry's current core application.
LifeLink	The proposed new application.
LifeLink Rules Service	Facility that defines the Validations for an item. The Rules Service will be called by both external systems and LifeLink to ensure that

TERM	DESCRIPTION
	data quality and format is acceptable for use within LifeLink.
NCP	See Numbered Certificate Paper.
NOIM	Notice of Intended Marriage.
Notification	Advice about a Life Event, submitted to the Registry by an acknowledged source (eg parents, hospital).
Notification	Advice to the Registry about an Event eg. Notification of birth from a Hospital or Parent.
Numbered Certificate Paper (NCP)	An application that assigns a unique Certificate Number to each request to print a Certificate. The application also manages Certificate wastage.
OCR	Optical Character Recognition.
Party	A Person who is participating on a Notification or an Application.
Person	An individual that is interacting with the Registry.
Person Centric	Data Model for LifeLink where all Events and Applications are linked to a Person. Persons can be linked to other Persons to enable the extraction of Person and Event relationships.
POI	Proof of Identity.
Point of Sale (POS)	An application that facilitates the processing of cash, cheque, money order and credit card transactions.
Polaroid	Camera used to photograph applicants for a Birth Card.
POP3	Post Office Protocol (version 3), an application layer internet standard protocol.
POS	See Point of Sale.
Principal	The party named as Principal in the proposed agreement. That is, the NSW Attorney General's Department.
Public records	A public record is one that the public can access without identification requirements. Current rules are: births more than 100 years old, marriages more than 50 years and deaths more than 30 years old.
QAS	See Quick Address System.
Quick Address System (QAS)	Address system from Australia Post used to validate Australian addresses.
Registration	The process where a Notification is acknowledged as an Event to be Registered.
Registry	NSW Registry of Births Deaths and Marriages.
Registry Marriage Solemnisation	A ceremony to formalise the marriage conducted by Registry-based celebrants in one of the Registry's offices in Sydney, Wollongong and Newcastle.
Registry Web Services	A generic term for the Registry Connect systems and the eRegistry provided by the Registry to submit Notifications to the Registry.
RFT	Request for Tender.
SecurePay	Online payment gateway used to process credit card payments received from Registry customers.

TERM	DESCRIPTION
SOA	Service Oriented Architecture.
SOE	Standard Operating Environment.
SSO	Single Sign-on.
Standard Certificate	A uniquely numbered certificate recording a registered life event (excludes commemorative certificates, copies, etc).
SUN Financials	The Registry's financial system.
Tower Imaging	Application that stores images to be retained in perpetuity by the Registry. Examples include old church records, historic Certificates, documents providing evidence for the creation of a registration.
TRIM	Document and Record Management System used by the Registry.
UAT	User Acceptance Testing.
UI	User Interface
Watermarks	Text or pictures predominately marked on paper during production or printing of certificates.
XML	Extensible Markup Language.

CHAPTER 2 – PROJECT DELIVERY REQUIREMENTS

4 PROJECT DELIVERY REQUIREMENTS

This chapter specifies Project Delivery requirements for the proposed LifeLink application.

4.1 HIGH-LEVEL REQUIREMENTS

Acceptable Tender responses include the implementation of existing packages, bespoke development or a combination of both, that meet the business and technical requirements as detailed in this RFT.

The following high-level deliverables are in the scope of this RFT:

(a) Solution implementation supporting the core business processes and installed on the Principal's enterprise platform;

(b) Provision and integration of any third party software, which may be required (other than the Principal's Enterprise Platform and SOE);

(c) Interfaces / integration with external system as specified in the business requirements;

(d) Import and test of cleansed historical data;

(e) Licensing for any number of simultaneous users accessing the system in any way;

(f) Development of training and operational support documentation;

(g) Provision of training services; and

(h) Technical rollout of the new solution.

The following high-level items are **NOT** in the scope of this Request for Tender:

(a) Production and UAT Platforms. The system must be capable of and planned to run on the Principal's Enterprise Platform.

(b) Business Process Redesign.

(c) Organisational Change Management.

(d) Non-core systems, specifically including the imaging system, the document management system and the various eServices systems etc. Any redevelopment and/or replacement of these systems are the subject of a separate project. However the interface mechanisms between LifeLink and the non-core systems **ARE** within scope.

(e) Data extraction and cleansing of historical data from the legacy system. However import of the cleansed data during the implementation stage **IS** in scope.

4.2 SOLUTION CHARACTERISTICS

The overarching characteristics required of the solution (aside from the Business and Technical requirements provided in detail) are:

(a) Data Driven

It is of primary interest that this solution can be largely maintained through configuration rather than code amendment where it is possible and logical to do so (see Chapter 1).

(b) Customisable

It is required that the solution is designed in a modular approach with building blocks allowing for future enhancements, for example, using modern architectural principles such as Service Oriented Architecture (SOA). This is explained in some detail in Chapter 5

(c) Usable

The User Interface for the solution is required to be intuitive and interactive where logical to enhance business usage.

(d) Reliable, Scalable, Responsive

The solution must possess robustness characteristics for satisfactory operation within the Registry environment.

(e) Current Technology Standards

The solution must adhere to current industry standards. For example, interfaces and integration should be defined using XML based Web Services technologies.

4.3 PROJECT ACCOMMODATION

The Principal has established premises close to the Registry dedicated to the LifeLink Project. It is expected that the Contractor will work in these premises during the Project Initiation, Architecture and Design, and Deployment stages. The Principal assumes that development or package amendment will take place at the Contractor's premises, however any requirement for accommodation on the Registry's or Principal's premises in addition to these stages should be noted in the response, as well as use of the Principal's resources.

The LifeLink project will provide photocopier, telephone, email and office facilities for work on site at the LifeLink Project during the specified stages.

The Contractor and their staff and sub-contractors must not provide services to any other clients whilst on Project premises.

A Virtual Private Network (VPN) link will be implemented to facilitate exchange of data between the Contractor and the LifeLink project.

4.4 THE PROJECT TEAM

It is proposed the Principal will provide the following resources (the Project Team) to be available to assist the Contractor in delivering the project:

ROLES	COMMENTS
Business Project Owner	Provides business requirements and ensures that the project delivers products and outcomes that meet user requirements.
The Principal's Project Manager	Provide the overall project management for the project and the management of the Contractor.
Technical Coordinator	Assist in the clarification of the technical architecture and the quality assurance of the technical architecture and deliverables provided by the Contractor. Assist with the installation of software in production
Web Sphere Specialist	Assist in the clarification of any Websphere issues and the installation of the system to Websphere environments.
Database Analyst (DBA)	Install the application into the production and development environments. The Contractor must provide all other DBA services.
Data Migration Developers	Provides data migrated from production for testing against the system functionality to ensure fit between migrated data and system functionality.
Business Analysts / Testers	To assist in the clarification of the system requirements. To conduct User Acceptance Testing of the delivered software

The Principal will provide a Quality Assurance team (QA team) to be involved in the review of the Contractor's deliverables. The QA team will report to the Principal's Project Manager.

4.5 SECURITY OF INFORMATION

The Contractor will have access to a great deal of sensitive and confidential information. They will be required as part of the contractual agreement to agree to the Principal's security policies and confidentiality undertakings, which can be provided upon request.

4.6 PROJECT MANAGEMENT

The Contractor shall provide project management services for the planning and delivery of the project. The Contractor's project management resources will work in conjunction with the Project Team to establish clear objectives and achieve planned deliverables.

The project will use the Principal's Project Management Methodology, AGility, for the project management of the project. AGility is based on Prince2.

Tenderers are required to provide a proposed project delivery methodology in line with the stages and minimum set of deliverables defined in this document.

Tenderers are required to provide a clearly defined proposal for their project management approach and details of the proposed toolsets for issues, risk and communications management.

The project will be governed through an incumbent management structure consisting of a Project Steering Committee, a Project Working Group and Project Team. The Contractor shall play an active role at the Working Group and Project Team level, with representation at the Steering Committee on request by the Principal's Project Manager.

The Contractor's Project Manager(s) must report weekly to a Project Management Committee and on a day-to-day basis to the Principal's Project Manager.

A Steering Committee will oversee the project. The Principal's Project Manager will report to the Steering Committee in regard to project issues, exceptions and progress. The Contractor's Project Manager may be asked to attend Steering Committee meetings on invitation by the Principal's Project Manager.

The Steering Committee will consider all Change Requests for the projects and the completion of project stages.

4.7 SOFTWARE DEVELOPMENT APPROACH

Tenderers are required in the response to this RFT to provide a clearly defined proposal for their system development approach. As well as defining the methodology and approach, this must include information detailing the software development toolsets proposed such as IDEs, automated build tools and test products, to be applied in the development of the solution.

4.7.1 Test Tool and Severity Definition

The Principal uses Quality Centre for the planning and scripting of its User Acceptance Testing (UAT). The Contractor shall access Quality Centre for the update of defect resolution.

The Principal requires that the following defect severity definition be used for the definition of defects during the system development and warranty periods.

SEVERITY	DESCRIPTION
5 – Low	The impact of the defect to business is minimal to zero. The defect repair can be in the warranty period or determined to not be resolved at all.
4 – Medium	The defect is an irritant which should be repaired but which can be repaired after more serious defects have been fixed. Workarounds are available and/or the functionality does not support 1 - Urgent / commonly used business functionality. A fix should be delivered as soon as possible.
3 – High	The impact of the defect can be mitigated with short-term workarounds. e.g. the system functionality can be bypassed for 2-3 days before severely impacting business processes. A fix should be delivered within 5 days.
2 – Very	System use is severely impacted with limited workarounds available. e.g.

SEVERITY	DESCRIPTION
High	the system functionality can be bypassed for less than 8hrs before severely impacting business processes. The defect impacts 1 - Urgent / commonly used business functionality. A fix should be delivered in less than 3 days.
1 – Urgent	The defect is impacting all or 2 - High components of the system making it impossible to use. No workarounds are available and testing cannot continue until the defect has been repaired. The system cannot go-live with these defects outstanding. Examples include, but are not limited to, extensive database corruption, server crash or where immediate business needs require a specific function be available for use. A fix should be within 24-hrs.

4.8 PROJECT STAGES

The project is to be conducted according to the following stages:

STAGE	DESCRIPTION
Stage 1	**Project Initiation**
Stage 2	**Project Execution**: Detailed Architecture and Design
Stage 3	**Project Execution**: Build and System Testing
Stage 4	**Project Execution**: User Acceptance Testing
Stage 5	**Project Execution**: Deployment
Stage 6	**Project Execution**: Warranty Support
Stage 7	**Project Closure**
	Ongoing System Support and Maintenance

The objectives for each of the stages are specified in the following sections. The minimum set of deliverables to be produced within each of the stages is defined in section 4.9 Deliverables.

4.8.1 Project Initiation

During this stage, the Contractor will develop a project plan / schedule for the whole project and a detailed schedule for the next stage, Detailed Architecture and Design. The requirements for access to the Principal's resources must be agreed with the Project Team and scheduled.

4.8.2 Detailed Architecture and Design

During this stage, the Contractor will validate and expand on the high-level user requirements, and document the detailed technical requirements, architecture and design of the system.

Performance, capacity projections, quality criteria and service level agreements for the system will be documented.

The deliverables constructed during this stage must be provided to the Project Team for progressive review and approval. At the completion of the stage all the deliverables must be packaged in a final report and the stage findings and recommendations must be presented to the Project Steering Committee.

It is also required that the Contractor develop an Implementation Strategy covering any requirement for staging of system functionality.

The Contractor is required to provide a physical database layout at this stage providing the migration team with a target database for their migration activities.

4.8.3 Build and System Testing

During this stage, the Contractor is required to amend / build / test the required system software, migration, online help and documentation.

The system must include a gate to receive the historically migrated data.

Integration with the imaging system, payment systems, eRegistry systems, the Certificate Validation Service and all output/input functionality such as Certificate production and core reports are required to be complete in this stage.

The Principal requires that the following outcomes from this stage be released gradually and as early as possible during this stage:

- **Application Framework** - The Application Framework will provide an initial view of the solution build. It will demonstrate the capabilities of the UI including navigation and the core technical components of the proposed solution such as use of workflow, rules engine, etc.
- **Data Migration Sociability Testing** - A core set of historical data migrated from the legacy system will be provided for ongoing sociability testing against the system. The Contractor is required to import and test the data to ensure that the system can support the format of the historical data. This will be an iterative test and the test results may either result in system or data migration amendments.

The Contractor is required to document the system, including the following documents:

- User Guide
- Configuration documentation
- Programmers Guide
- Service Desk Admin and Support Guides
- On Line Help.

The Contractor is required to provide a training plan and training material.

The Contractor is also required to conduct a system test, including integration, performance and functional testing. A test strategy, plan and scripting is required. Weekly reporting on error count from the test is required as well as a Test Report/Certificate at the conclusion of each test.

A Test Report/Certificate detailing test outcomes and demonstrating readiness for UAT must be provided by the Contractor for review and signoff prior to commencement of UAT.

4.8.4 User Acceptance Testing

During this stage, the Project Team will conduct UAT of the system. The Contractor is required to support the testing by rectifying errors and assisting with any queries that the Project Team may require when conducting the testing.

The Contractor is required to import a sample set of migrated data to be used by the Project Team during the UAT stage.

The Contractor is required to provide the necessary documentation to define the required configuration for the UAT environment.

4.8.5 Deployment

During this stage, the Contractor will train the Principal's users and support staff in the use, operation and support of the system.

The system will be deployed into the production, disaster recovery and training environments. System deployment will be the responsibility of the Contractor assisted by the Principal's technical staff.

Skills transfer to the Principal's relevant IT Staff will be planned and actioned.

A detailed Implementation Plan will be developed by the Contractor during the Build and System Testing stage and will require approval by the Principal prior to commencing the implementation.

The migration of the data into the production system will be executed.

4.8.5.1 *Tenderer Responsibility for Data Migration*

The Contractor will be responsible for the final stage of the migration process, loading the migrated data into the LifeLink production environment.

The Contractor will undertake a mapping between the holding repository and the LifeLink database.

The Contractor will migrate the cleansed data from the holding repository to the LifeLink database.

The Contractor will test and verify the accuracy and integrity of the data and the mappings.

The migration will be undertaken in two stages:

- The bulk of data captured as part of the first stage of the data migration project.
- The residual data captured between the first stage and the proposed cutover date.

The successful migration of historical data will form a key acceptance criterion for the LifeLink system.

4.8.6 Warranty Support

The Contractor will provide a warranty period for 3 calendar months from the Actual Acceptance Date (AAD) of the software.

During this period any severity defect identified will be addressed and the warranty period will be extended until no severity level 1 to 3 defects are identified for a period of one consecutive month.

4.8.7 Project Closure

During this stage the Contractor will conduct project closure, providing the Principal with a Project Closure Report.

The Contractor’s access to the Principal’s resources will be removed, files will be archived, etc.

4.8.8 Ongoing System Support and Maintenance

Following the Project Closure, the Contractor shall provide ongoing system support and maintenance.

When requested, the Contractor shall provide quotations for system enhancements at the rates set out in the Price Schedule.

4.9 DELIVERABLES

The Contractor should provide the following deliverables as part of this RFT. However, the Tenderer may propose additional or different deliverables in Part C of the response to this RFT.

PROJECT INITIATION STAGE
Project Plan and Schedule
Schedule of required access to the Principal’s and Project staff
ARCHITECTURE AND DESIGN STAGE
Requirements: a validation of the requirements detailed in this RFT
Detailed Requirements: including technical requirements and non functional requirements

Design: functional, data, object, interface, security, user access, component modules, reporting, etc
Technical Architecture (technical architecture and integration with the Principal's environment)
Detailed Technical Specifications
Physical Data Model (database layout)
Capacity projections
Draft Service Level Agreement
Implementation Strategy
Test Strategy
BUILD AND SYSTEM TESTING
System Software executable and source code
Data Migration Support
Online help
System, Performance, Data Migration and Integration Test Strategy
System, Performance, Data Migration and Integration Test Plan and Scripts
System, Performance, Data Migration and Integration Test Execution
System, Performance, Data Migration and Integration Test Reports
User Guide (for each of the main workgroups)
Configuration documentation
A programmer's guide detailing the main software components and their inter-relationship, specification for each interface, physical data model with data dictionary, etc
Training plan and material
The Principal's Service Desk and System Administration Guide and Procedures
System Support Manual (incl. operational, help desk and administration guidelines)
USER ACCEPTANCE TESTING
Deployment release notes (eg for each software release)
Issue resolution software and documentation releases
DEPLOYMENT STAGE
Handover to ISB Support Team, the Principal's Service Desk, end users, etc
Training
Deployment Plan (implementation plan)
WARRANTY SUPPORT STAGE
Amendment of any defects
PROJECT CLOSURE STAGE
Closure Report
PROJECT MANAGEMENT
Status Reporting (weekly)
Issue Management

Risk Management
Exception Report
Change Management

Note that any deliverables defined as required by the ProcureIT contract (see Part D of this RFT) also apply to the project.

The Contractor must conduct the following major activities on the project:

(a) Requirements Analysis.
(b) System Architecture Modelling and Specification.
(c) System Design.
(d) Documentation.
(e) Coding and Unit Testing.
(f) Integration, performance and System Testing.
(g) Support of the Project Team's User Acceptance Testing.
(h) Project Management.
(i) Quality Assurance.
(j) Support for data migration and test of migrated data.

4.10 Quality Assurance

The Principal requires that the following severity defect levels be met at the conclusion of project stages:

TEST STEP	1 – URGENT	2 – VERY HIGH	3 – HIGH	4 – MEDIUM	5 – LOW
Project Execution: Build and System Testing (inc integration and performance testing)	0	0	3	20	50
Project Execution: User Acceptance Testing	0	0	2	10	25
Project Execution: Warranty Support	0	0	0	0	5

These severity defect levels represent the maximum number of defects acceptable at the conclusion of each of the project stages.

The Principal requires that 5 days be scheduled for the review of the Contractor deliverables. Five days will also need to be scheduled for the approval of deliverables.

4.11 Skills Requirements

The Contractor shall be required to supply a range of skills for the project, including the following:

(a) Extensive expertise in the area of software application implementation, this must include:

   (i) Project management, estimation and planning skills;
   (ii) Business analysis skills, including familiarity with the system requirements and design;

(iii) System Implementation skills;
(iv) Technical, data and application architecture skills;
(v) Database Administration skills;
(vi) Technical skills in modern development tools; and
(vii) Unit, system, performance and integration testing skills.

(b) Delivery of system implementations according to the system delivery life cycle proposed in this RFT.

(c) Excellent communication and advocacy skills.

(d) Reporting and Presentation skills.

4.12 AGREEMENT

The agreement governing the project is the NSW Department of Commerce Contract ProcureIT (Part D of this RFT)

Upon conclusion of the tender process the Principal will sign a contract with the Successful Tenderer, which may include the following terms:

- Public Liability to the value of at least $10,000,000;
- Professional Indemnity Insurance to the value of at least $5,000,000;
- Financial securities equalling up to 80% of the contract value (see Part D, Clause 4.2 and Schedule 7);
- Liquidated damages of 10% of contract value should the Contractor be more than 20% late in the delivery of the agreed professional services; and
- Development, testing, training and disaster recovery environments come at no additional license cost to the Principal.

Otherwise the terms listed in the Official Order included in the ITS2036 panel contract user guide applies. The official order template is attached to the document for Respondents to confirm its terms or advise of any issues.

CHAPTER 3 – BUSINESS REQUIREMENTS

5 PURPOSE

The purpose of this chapter is to specify the functional, operational and other business requirements of a computerised system needed to support the business processes of the Registry.

6 REGISTRY STRUCTURE AND ORGANISATION

The Registry is organised into the following divisions and business units:

- Registrations;
- Client Services;
- Fraud Minimisation; and
- Executive.

Each unit is responsible for specific aspects of the Registry's business functions and operations.

6.1.1 Registrations Division

- **Registrations**

  The Registrations section is responsible for the capture of event information and safeguarding the integrity of data at all stages of the process. Parents, hospitals, funeral directors, marriage celebrants and other organisations supply information about events to the Registry. The information is supplied in paper form or lodged electronically. Birth notifications from new parents are submitted on paper and then outsourced to a bureau for data entry before being electronically transferred to the Registry's computer system. Up to 99% of death notifications are lodged electronically onto the Registry's web site by funeral directors. Marriages are lodged either electronically or by paper. Marriage notifications lodged on paper are data entered into the system. Once all of the information is loaded in the computer system the data is verified by Client Service Officers. The data is then stored securely, yet readily available, for provision to clients upon request. Throughout its operations the Registrations section ensures all statutory and legislative requirements under the Births, Deaths and Marriages Act 1995 and the Marriage Act 1961 are met.

- **Amendments**

  The Amendments team provide advice and assistance to clients seeking amendment to Registry records, ensuring consistency with legislative requirements, Registry policy and guidelines. They are responsible for investigating and processing Change of Name and Change of Sex Applications and other amendments to records where appropriate and consistent with legislation to ensure Registry records are accurate and complete. The Amendments team provide specialist advice to staff, clients and other interested parties on the change of name, amendment and adoption processes and legislative requirements to meet their specific needs. They process payments through POS and print Certificates for Applications received.

- **Marriage Services**

  Marriage Services are responsible for conducting interviews in relation to the lodgement of the Notice of Intended Marriage (NOIM) for marriages being conducted at the Registry. Their responsibilities include performing marriages at the Registry and processing all fees and associated paperwork for those marriages. They ensure all legislation in relation to the Marriage Act, 1961 and other associated legislation is strictly adhered to and granting of dispensations. Marriage Services also process transfers of NOIM to and from marriage celebrants outside of the Registry.

- **Adoptions**

  The Adoptions team conduct intensive searches of births, deaths and marriages for searches of birth parents, relinquished children and sibling searches. The Registry issues information affected by adoptions in accordance with the Adoption Act 2000 and the Births, Deaths and Marriages Registration Act 1995. The Adoption Act allows adoptees to access their original birth certificate (before adoption) and for birth parents to search for information on their relinquished child, adoptive details, marriage details and possible death details with consideration to any vetos in place. The Registry will provide results of the information and certificates where appropriate. The Adoptions team is also responsible for registering new adoptions from a Supreme Court Order of Application.

- **Registration Development Services**

  Registration Development Services are responsible for a core part of the work of the Registry in following up on unregistered events in order to get them registered and in processing late registrations. The team is also involved in informing and educating the community and stakeholders about their obligations regarding the registration of events.

6.1.2 Client Services Division

- **Point of Sale (Counter)**

  The Point of Sale team is responsible for face-to-face general enquiries from the public and other government agencies regarding applications and registrations. This team assesses customer eligibility for requests for access to information, enters customer details into a Point of Sale (POS) system and accepts payments by credit card, EFTPOS cheque and cash. The system allocates a unique identifier to track each application. Counter staff members search the database for requested records and produce certificates and Birth Cards through a secure printing process and issue these to the public. Counter staff members are also responsible for conducting individual end of day POS balance functions and team balance reporting.

- **Call Centre (BDM Call)**

  The Registry has an inbound call centre as a first line to clients. BDM Call answers a wide range of enquiries from the general public. If a call operator is unable to assist a client then a notification is sent, via a CRM system, to a team within the Registry to investigate. This team responds via the CRM system to BDM Call, who then informs the client of the outcome. BDM Call answers approximately 1500 calls per day.

- **Mail Room**

  The Mail Room operators record and assess application details received by mail or fax. Operators process transactions into the POS system, and provide an individual cashiers balance report, and daily group banking report at the end of each day to meet financial and audit requirements. The system captures sufficient details for each transaction for the Registry to instigate certificate printing generate required letters and provide a comprehensive tracking system for applications.

- **Print Room**

  The Print Room produces certificates that are printed from various sections of the Registry's Sydney office. Operators designate which printer will be used. After quality checking for data integrity certificates are posted and dispatched, as well as all outgoing mail collected from across the Registry's Sydney office. The Print Room also transcribes pre 1856 records (church records) and converts records from image to digital format for printing when required. All applications that are non compliant and certificates that are found with errors like spelling, incorrect data or incorrect postal details are returned to the relevant sections for amendment or correction.

  This section also produces commemorative certificates to be packaged and posted.

- **Support Unit**

  The Support Unit receives notification via a CRM system of complex customer enquiries that are unable to be resolved by BDM Call. These enquiries are investigated by interrogation of the application details as well as the registration database. Operators check printing details, file notes and application details to assist with enquiries. An answer is returned to BDM Call to finalise the enquiry with the client.

- **Research**

The Research team accepts requests for information. They conduct the required queries in the database reporting the results in spreadsheet form or produce certificates. They receive payment through account customers, cheque and credit card and produce monthly statistical reports for Australian Bureau of Statistics and other government agencies. The Research team is also responsible for conducting research projects for medical institutions, universities, funeral directors, police and other government departments.

- **Regional Services**

  The Registry provides a range of services through its regional offices in Newcastle and Wollongong and its shop front in Parramatta (due to open in late 2007). These services include processing Applications, printing and issuing Certificates and creating Registrations and Amendments.

6.1.3 Fraud Minimisation

- **Fraud**

  The Fraud Unit manages external requests from government, law enforcement agencies and commercial entities to confirm the validity of certificates presented as identification outside the Registry. It also manages requests from the Registry to other bodies to confirm ID presented to the Registry. The Fraud Unit investigates any internal matters, which may be sensitive in nature or suspected breach of practice.

6.1.4 Executive Unit

- **Marketing**

  Marketing develops, implements and monitors the Marketing Plans/Activities and Marketing Implementation Strategies for the Registry to achieve business objectives and contribute to the positive positioning of the Registry in the media, amongst stakeholders and in the general community. In addition Marketing is also responsible for Direct Mail Campaigns, Research, development and marketing new products, services and/or initiatives to meet specific market needs and enhance profitability. Marketing manages all non-technical aspects of the Registry website, ensuring it is current, user-friendly, presents an image consistent with the Registry's business needs and objectives and is appropriately used as an effective business and information tool.

- **Finance**

  The Finance team manages the Registry's financial activities, including the development of strategic financial directs, preparation of the annual budget estimates, forecasts for annual financial statements, the collection of Goods and Services Tax (GST) tracking and recording of input credits; and preparation of annual financial statements, to ensure effective management for account customers.

- **Administration**

  The Administration unit deals with a multiplicity of matters relating to the general administration of the Registry and its premises. For example, the supply of stores, office machinery and other assets, asset accountability and deletion, form printing, waste and secure document disposal, cleaning, travel arrangements, petty cash and major purchases for operational and capital projects. As the Registry owns its head office building, the unit is also responsible for the maintenance and upgrading of all building and mechanical functions such as plumbing, electricity, lighting, lifts, air-conditioning, security arrangements and systems, and fire and emergency systems. Accordingly, the unit manages a wide range of service supplier contracts.

7 PROCESSING REQUIREMENTS

7.1 PROCESSING OVERVIEW

The main role of the Registry is to register life events occurring in New South Wales accurately and securely in perpetuity, ensuring their integrity and confidentiality. This includes the registration of births, deaths and marriages and official changes of name and sex.

The key processes that support these activities are:

- The receipt of **Notifications** from authorised parties notifying the Registry of life events.
- The **matching** of two or more Notifications received to substantiate life events.
- The **Registration** of verified life events.
- The processing of **Applications** and **Payments** for Certificates or other services offered by the Registry
- The production of **Certificates**.

The Registry is responsible for the administration of the Births, Deaths and Marriages Registration Act, 1995 and the Commonwealth Marriages Act, 1961 for the state of NSW. The legislative requirements imposed by these acts and additional regulatory requirements contribute to the complexity of the compliance and entitlement checking and validation processes required in the Registry.

Registry transactions are divided into restricted and unrestricted information. Access to restricted information is protected by the stringent application of identity and entitlement policies. However, in the interests of historical information, access to the following transactions is available to anyone:

- Births that occurred over 100 years prior to the date of application;
- Deaths that occurred over 30 years prior to the date of application
- Marriages that occurred over 50 years prior to the date of application.

A list of current Notification, Application and Registration types has been provided in Business Transaction Types. Projected transaction volumes for the year ending June 07 have been listed in Transaction Volumes.

7.2 ACTORS

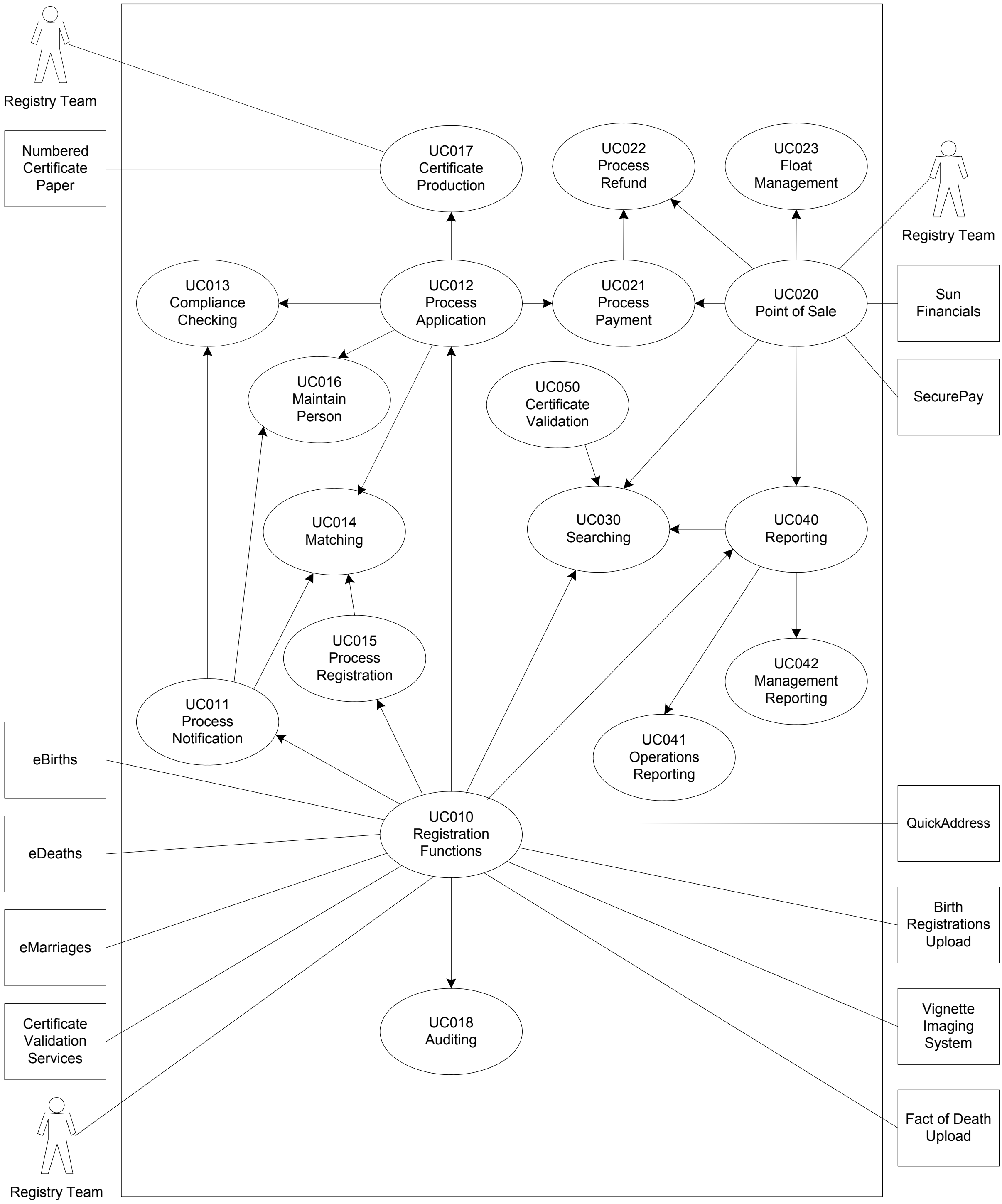
ROLE	DESCRIPTION
Registry Team	Registry team members from any one of the Registry's offices.
System Administrator	Role responsible for administering the system configuration and maintenance functions.
eBirths	A web-based application for (public) Hospitals to submit birth Notifications to the Registry.
eDeaths	A web-based application for Funeral Directors to submit death Notifications to the Registry.
eMarriages	A web-based application used by Marriage Celebrants to send marriage Notifications to the Registry.
Registry.Connect.Deaths	A CD based application for Funeral Directors to send death Notifications to the Registry. Available for Funeral Directors who do not have adequate on-line access.
Registry.Connect.Marriages	A CD based application used by Marriage Celebrants to send marriage Notifications to the Registry. Available to Celebrants who do not have adequate on-line access.
CVS	Certificate Validation System. Used by interstate registries to validate certificates issued by the NSW Registry. Also used by NSW Registry to validate documents issued by interstate registries.
NCP	Numbered Certificate Paper system. Manages inventory and the tracking of uniquely pre-numbered certificate

	paper.
Sun Financials	The Registry's core financial application.
SecurePay	Online payment gateway used by the Registry to process credit card payments for Applications processed.
QuickAddress	An address management application used to verify addresses against the latest Australia Post data.
Fact of Death (Upload)	A list of deaths that occurred interstate within Australia. Received periodically from the Tasmanian Registry of Births, Deaths and Marriages.
Birth Registration (Upload)	Registration details of new births received daily from Data Processing Bureau.
Celebrant Register (Upload)	A list of registered celebrants, received periodically from the Federal Attorney General's Department.
Vignette (Tower)	An Image Document Management application used to capture images of paper based source documents such as Notifications and Application forms.

7.3 SUMMARY USE CASES

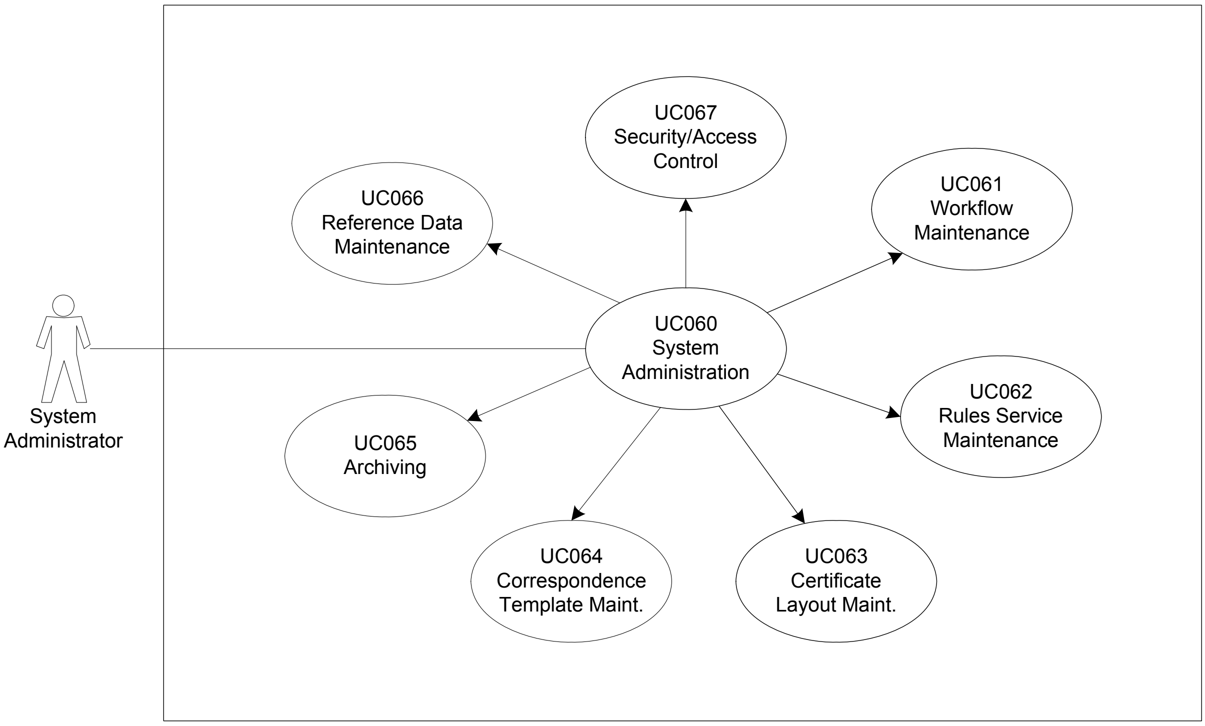
7.3.1 LifeLink Registry Use Cases

The diagram below illustrates the Use Cases for the core Registry activities.



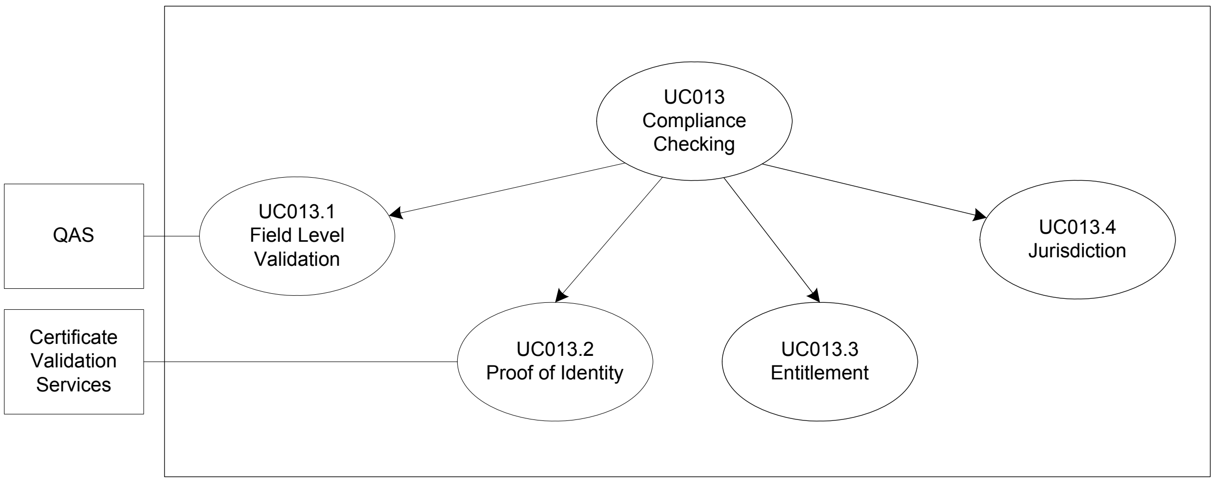
7.3.2 LifeLink System Administration Use Cases

The diagram below illustrates the key System Administration Use Cases.



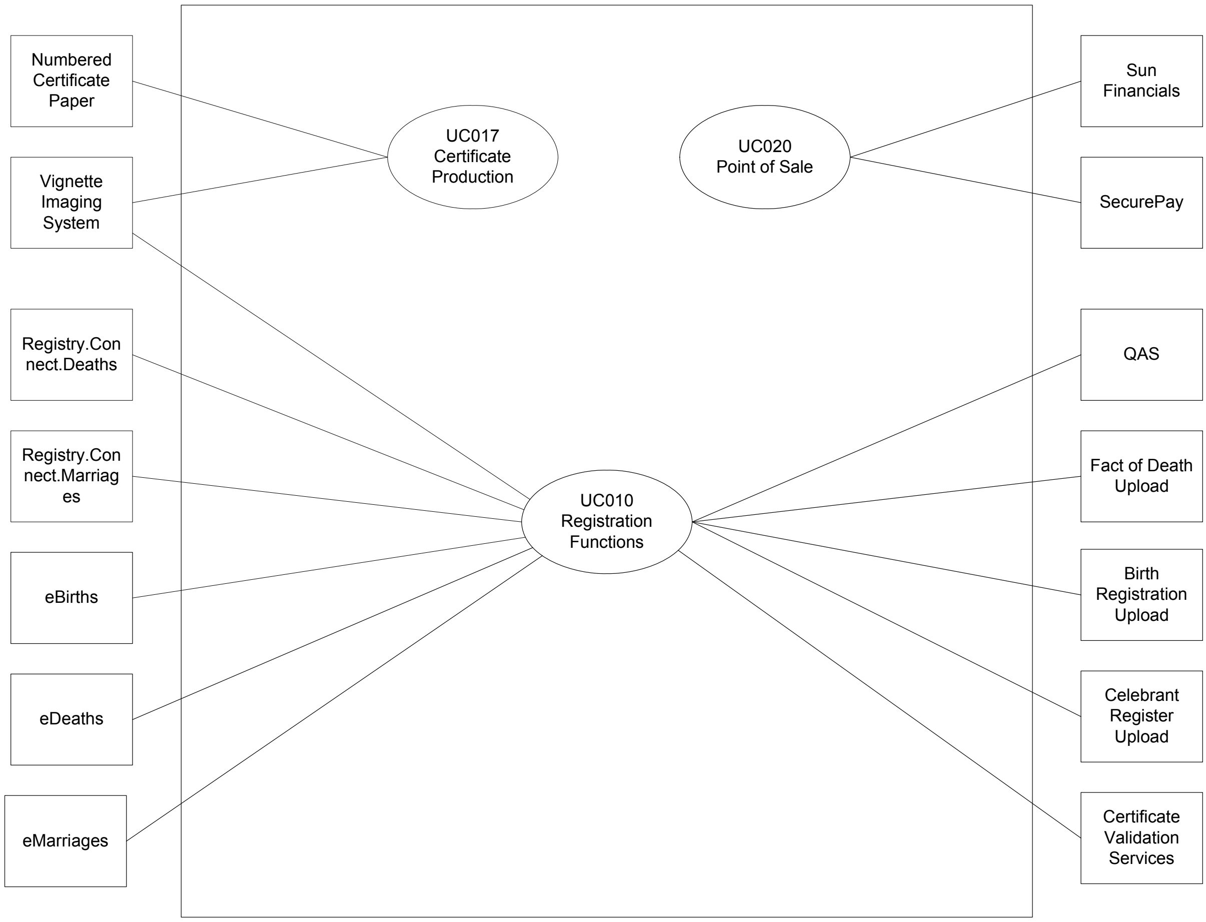
7.3.3 Compliance Use Cases

The diagram below illustrates the Use Cases that form the Compliance Checking function.



7.3.4 eRegistry Use Cases

The diagram below illustrates the interaction of external systems with key Registry Use Cases.



7.4 USE CASE DESCRIPTIONS

The following descriptors introduce the functionality covered by each of the Use Cases.

ID	USE CASE	DESCRIPTION
UC010	Registration Functions	Notifications, Applications and Registrations will be created and amended in the system. Applications and Notifications will use matching functionality to determine whether Registrations can be created and/or Certificates produced. Requests can be manually entered into the system or received electronically.
UC011	Process Notification	Notifications are sent to the Registry by acknowledged external sources advising details of life events to be registered. On receipt, a Notification will be validated for compliance, matched with other Notifications for the same event and matched with any existing Registration for the event. If not received electronically, Notifications will be scanned and the image captured.
UC012	Process Application	Applications are submitted to the Registry requesting products or services and will be validated for compliance and matched with appropriate Registrations. If not received electronically, the Applications will be scanned and the image captured.
UC013	Compliance Checking	Notifications and Applications will be checked for compliance with validation consisting of the following: • Field Level Validation (see UC013.1) • Proof of Identity (see UC013.2) • Entitlement (see UC013.3) • Jurisdiction (see UC013.4)
UC013.1	Field Level Validation	Field level validation will be applied to Notifications, Applications and Registrations according to rules maintained in the LifeLink Rules Service.
UC013.2	Proof of Identity	Proof of Identity (POI) requirements for each Notification and Application type will be defined as rules in the LifeLink Rules Service.
UC013.3	Entitlement	Entitlement, a person's (or corporation's) right to access specific Registry information, will be defined as rules in the LifeLink Rules Service.
UC013.4	Jurisdiction	The jurisdiction of a Registration will be validated against rules maintained in the LifeLink rules service.
UC014	Matching	Matching will include matching two or more Notifications to create a Registration and/or matching a Notification or Application to an existing Registration.
UC015	Process Registration	Registrations are created when multiple compliant Notifications are matched together. Registrations record life events such as births, deaths and marriages. Amendments to Registrations, such as change of name or change of sex, may be recorded as a superceding Registration or an endorsement on an existing Registration.
UC016	Maintain Person	Maintenance of Person entities and supporting Relationship entities that will define the participants in

ID	USE CASE	DESCRIPTION
		a Life Event.
UC017	Certificate Production	Generation of Certificates and other Registry products. These will include standard and commemorative Certificates, Birth Cards and Result of Search Certificates.
UC018	Auditing	User and system activities, including date, time, user details and action, to be recorded for auditing purposes. Access to enquire and report on audit information available to authorised users.
UC020	Point of Sale	The processing of monies tendered for products and services provided by the Registry
UC021	Process Payment	The receipting of payments for products and services, received electronically, over the counter, via mail and fax.
UC022	Process Refund	The processing of partial and full refunds of payments made.
UC023	Float Management	Management of cash floats at point of sale workstations.
UC030	Searching	Searching functionality including partial matches and probabilistic searches.
UC040	Reporting	Extraction of ad-hoc queries and regular reports. Access will be dependent upon the user profile.
UC041	Operations Reporting	Extraction of ad-hoc and regular operational and transactional reports, managing day-to-day business.
UC042	Management Reporting	Extraction of ad-hoc and regular managerial reports supplying trend analysis.
UC050	Certificate Validation	The validation of Certificates in response to external queries from interstate registries. External queries received via Certificate Validation Services (CVS) application.
UC060	System Administration	System configuration and maintenance activities. Maintenance functions to be available to authorised, non-technical users.
UC061	Workflow Maintenance	Configuration of workflow rules and escalation paths by authorised, non-technical users. Set triggers for alerts to users and actions, defines escalation paths and provides task monitoring.
UC062	Rules Service Maintenance	Configuration of business and validation rules by authorised, non-technical users.
UC063	Certificate Template Maintenance	Maintenance of certificate layouts by authorised, non-technical users.
UC064	Correspondence Template Maintenance	Maintenance of correspondence templates by authorised, non-technical users.
UC065	Archiving	Archive secondary transactional data (not Registration data), such as audit trails.
UC066	Reference Data Maintenance	Maintenance of reference data and other configuration data by authorised, non-technical users.
UC067	Security/Access	Maintenance of roles based security matrix by

ID	USE CASE	DESCRIPTION
	Control	authorised, non-technical users.

8 FUNCTIONAL REQUIREMENTS

8.1 REGISTRATION FUNCTIONS (UC010)

Registration functions are the core activities performed by the Registry and provide the entry point for all inputs into the Registration process.

Notifications and Applications may be received electronically via an external system, over the counter, by mail or by fax. LifeLink will be required to interface with a number of external systems to receive these requests.

ID	DESCRIPTION
UC010.1	The system should provide an upload facility to update a list of Marriage Celebrants from a file provided by the Federal Attorney General's Department. This function would need to do a comparative check on Celebrants before loading.
UC010.2	The system should provide a function to manually maintain the list of Marriage Celebrants.
UC010.3	The system should provide a function to query Registrations from a CVS request. The system should respond with a positive or negative response.
UC010.4	The system should provide a function to store and retrieve images seamlessly in the Vignette Imaging System.
UC010.5	The system should provide a facility to upload Birth Registration details from an authorised Data Processing Bureau.
UC010.6	The system should provide a facility to query the Quick Address System (QAS) to validate addresses and accept overrides by the operator.
UC010.7	The system should provide the facility to update a Birth Registration with details of a corresponding Death from the Fact of Death Upload.
UC010.8	The system should provide the facility to accept Marriage Notifications from the eMarriages system.
UC010.9	The system should provide the facility to accept Death Notifications from the eDeaths system.
UC010.10	The system should provide the facility to accept Birth Notifications from the eBirths system.
UC010.11	The system should be able to accept a Notification or Application that has been manually entered by the Registry Team.

8.2 PROCESS NOTIFICATION (UC011)

Notifications are notices submitted to the Registry by acknowledged sources, providing details of a registrable Life Event. Examples include:

- Birth Notifications – received from place of birth (public or private hospitals, independent midwives)
- Death Notifications – received from funeral directors, coroners
- Marriage Notifications – received from religious or civil celebrants.

(Refer to Business Transaction Types for a list of current Notification types).

ID	DESCRIPTION

ID	DESCRIPTION
UC011.1	The system should assign a unique Notification Id to each Notification created in LifeLink.
UC011.2	Where required, the system should capture an external reference number (issued by an external system) against a Notification.
UC011.3	On receipt of a new Notification or an amendment to an existing Notification from an external system the Notification details should be validated for compliance against the LifeLink Rules Service.
UC011.4	The system should return the Notification Id and a status to the user when LifeLink has received the Notification from an external system.
UC011.5	When a Notification fails validation against the LifeLink Rules Service an appropriate error message should be sent back to the external system so the user can amend the data before resubmitting the Notification.
UC011.6	When a Notification contains a subject's address details the system should validate the address by accessing Quick Address or some other external address list.
UC011.7	The system should support real time data entry and batch uploads of Notifications.
UC011.8	External parties should be able to query Notifications that they have submitted previously. These requests for information should be validated for compliance rules such as entitlement. For example, Funeral Directors are only able to access Death Notifications that they have submitted for a period of 2 months from the date of registration of the death.
UC011.9	The system should provide a Notification maintenance function for authorised Registry users to create, amend and/or enquire on Notifications.
UC011.10	An authorised Registry user can reject a Notification. The system should force the user to enter a Reason Code describing the reason the Notification was rejected.
UC011.11	Manual Notification forms will be scanned into the external imaging application. The LifeLink system should capture a unique Image Id as the link to the Notification image in the external imaging system.
UC011.12	The system should prevent a Notification from being amended once it has passed the compliance validation.

8.3 PROCESS APPLICATION (UC012)

Applications are requests for products or services submitted to the Registry by clients. Clients may be members of the public, organisations or government agencies. Examples of Applications include:

- Application for Death Certificate – manually or electronically submitted by Funeral Directors on behalf of the deceased's family
- Application for Birth Certificate – manually or electronically submitted by parents of the child.
- Application for Family History Certificate(s) – submitted by members of the public via the Registry web site (public records only).

(Refer to Business Transaction Types for a full list of current Application types).

An Application generally includes a service fee and is submitted to the Registry with payment. The Application provides the key link between the Point of Sale transaction details recording the payment and the Registration information that is the subject of the Application.

ID	DESCRIPTION

ID	DESCRIPTION
UC012.1	The system should provide an Application maintenance function for appropriately authorised Registry users to create, amend and enquire on Applications.
UC012.2	The ability to make amendments to Applications should be available to authorised users only and the system should force a Reason Code to be entered to capture the reason for making the amendment.
UC012.3	The system should assign a unique Application Id, the date received and the date created to each Application created.
UC012.4	On receipt of an Application from an external system the system should validate the Application data against the business rules defined in the LifeLink Rules Service. If the Application requires a payment the payment flag should be validated indicating that SecurePay has successfully processed a payment from the external system.
UC012.5	When an electronic Application fails data validation an error message should be sent back to the external system so the user can amend the data before resubmitting the Application.
UC012.6	If an Application received from an external system fails data validation it should not be retained in LifeLink. The Application should only be created when the correct details are resubmitted from the external system.
UC012.7	When an Application contains a subject's address details the system should validate the address by accessing Quick Address or some other external address list.
UC012.8	An Application may implicitly include a Notification. For example, an Application to Change a Name includes a Notification for a Registration. The system should automatically create the appropriate Notification on receipt of a valid Application in this case.
UC012.9	An Application may be cancelled at any time prior to the printing of a Certificate.
UC012.10	The system should support the real time data entry of Applications and the batch upload of Applications from external systems.
UC012.11	If not received electronically, the original Application form should be scanned into the external imaging application and the image reference linked to the Application details entered by the user in LifeLink.
UC012.12	If the Application is for a Birth Card the counter staff will photograph the Applicant and capture an image of their signature. These images will be stored in the external imaging application and an Image Id captured in LifeLink to provide a link back to these images.
UC012.13	External parties should be able to query Applications that they have submitted electronically. The system should validate the access a user has to Applications using the LifeLink Rules Service.
UC012.14	The system should capture a Channel Code against each Application created with selection available from a list of valid Channel Codes (eg Mail, On-line, Fax).
UC012.15	The system should capture a Campaign Type against each Application created with selection available from a list of valid Campaign Types (eg School Campaign, Bridal Fair Campaign, None).
UC012.16	On completion of processing Applicant and Registration details for an Application the system should provide a seamless integration for the user to enter payment details into the Point of Sale function.

8.4 COMPLIANCE CHECKING (UC013)

Compliance checking is a critical function of LifeLink, ensuring all legislative, regulatory and procedural requirements regarding the management of Registry information are met.

Compliance rules can be grouped into the following categories:

- Field Level Validation
- Proof of Identity
- Entitlement
- Jurisdiction

Non-compliant Notifications and Applications will require appropriate escalation according to workflows defined in the LifeLink Workflow Service.

Periodic changes to legislation, departmental policies and guidelines and changing demands for consumer products will dictate changing requirements. In order to facilitate a user configurable and reusable set of business rules it is envisaged that a rules service, or some similar data driven function, be implemented as part of the LifeLink solution (referred to as the LifeLink Rules Service).

In addition to reducing ongoing software modifications a rules engine that will be available to be called by applications outside of LifeLink (eg eRegistry) will ensure a consistency of validation across all areas of the business.

ID	DESCRIPTION
UC013.1	Business rules defining the compliance rules required for each event type should be maintained in the LifeLink Rules Service.
UC013.2	The system should validate POI documents for an application according to the business rules defined in the LifeLink Rules Service.
UC013.3	Document numbers such as drivers licence numbers and passport numbers should be captured against the application as part of the POI process.
UC013.4	The provision of external system verification of these document numbers should be included.
UC013.5	If a compliance validation fails (either manual or automated) details of the failure should be captured and the record flagged for escalation using the Workflow tool.
UC013.6	Comments and/or a reason code should be able to be captured against a record that has failed compliance validation.
UC013.7	A Notification or Application that has failed compliance validation should not be able to be processed further until escalated and assessed by an appropriately authorised user.
UC013.8	Any POI documents supplied should be scanned into the external image system and a link created to the relevant application in LifeLink.

8.5 MATCHING (UC014)

The Matching process will have two components:

- Matching 2 or more compliant Notifications together to create a new Registration
- Matching an Application or Registration Amendment to an existing Registration.

Generally a minimum of two compliant Notifications must be received and validated for an event in order to create a Registration. For example, a standard Birth Registration will require a Notification from the hospital where the birth occurred (or midwife or other witness in the case of a home birth) and a Notification from the parents of the child.

ID	DESCRIPTION
UC014.1	The system should have an automatic matching process to check all

ID	DESCRIPTION
	compliant (and unmatched) Notifications against all other Notifications of the same type (eg birth, death).
UC014.2	For Applications and Registration Amendments the system should have an automatic process to match the Application or Amendment to the appropriate existing Registration.
UC014.3	Matching algorithms will vary for different life events and transaction types and the algorithms may be subject to change over time and should therefore be configurable by an authorised System Administrator.
UC014.4	If a match is not found the system should check the business rules defined in the LifeLink Rules Service to determine whether follow up is required. For example, if a Birth Notification from a hospital has been received but the matching Notification from the parents has not yet been received and it is more than 60 days from the date of birth of the child, and the child has not been registered as deceased, then follow up would be required.
UC014.5	When a partial match is found and the business rules indicate manual intervention is required the system should display a list of possible matches, with drill-down functionality, from which a user may select a Registration or Person.
UC014.6	When an Application or Registration Amendment has been matched to a Registration the system should record the Registration Id on the associated Application or Amendment.

8.6 PROCESS REGISTRATION (UC015)

Registrations are created when multiple compliant Notifications are received.

Additionally, Registrations may be amended for reasons such as a change of paternity on a Birth Registration or to correct an error on the original Registration. A Registration amendment is generally processed in response to the receipt of an Application from the subject of the Registration or some other participating party.

ID	DESCRIPTION
UC015.1	The system should automatically process a Registration or Amendment when a Notification and/or Application has passed all validation and compliance checking and, where required, has been matched with associated Notification(s).
UC015.2	When creating a new registration the system should automatically assign a unique Registration Id.
UC015.3	Registration Maintenance and Enquiry functions should be provided in order for authorised Registry users to create, maintain and enquire on Registrations. The ability to add Reason Codes and details for amendments should be included.
UC015.4	The system should provide the facility for an authorised Registry user to add an endorsement to a Registration, selected from a list of valid endorsement types. The user should be forced to enter an appropriate Reason Code and details.
UC015.5	Registration amendments such as Change of Paternity on a Birth Registration should be recorded within the system as an endorsement on an existing Registration.
UC015.6	The system should, in addition to creating Registrations such as a Change of Name, create the appropriate endorsement on the associated Birth Registration.
UC015.7	On a Change of Name Registration the system should preserve the original

ID	DESCRIPTION
	name of the person as at birth registration.
UC015.8	The system should provide a facility to flag a Registration as cancelled, as in the following examples: • A fraudulent Registration; • A bigamous Marriage Registration; • A duplicate Registration; • A Reason Code and description should be attached.
UC015.9	The system should provide a facility to automatically flag a Registration as superseded, as in the following examples: • The original Birth Registration on registration of an Adoption; • The original Birth Registration on registration of a Change of Sex. Any Certificate associated with a superseded Registration will also be considered as superseded.
UC015.10	Cancelled Registrations and superseded Registrations should be visible to authorised Registry users only, such as the Fraud or Adoptions teams.
UC015.11	On displaying a Birth Registration the system should automatically check for a matching Death Registration and indicate on screen that the Person is deceased.
UC015.12	The system should provide the facility to flag a Person or Registration as a 'Person of Interest' where required.
UC015.13	Upon receipt of a valid Supreme Court Notification the system should create an Adoption Registration and mark the original birth Registration as superseded.
UC015.14	For an Adoption Registration the system should mark the pre adoption Registration as 'superseded' in addition to creating the new, post adoption Registration.
UC015.15	When the original birth registration for an Adoption has been marked as superseded the system should also mark all linked Person and Relationship records accordingly. Certificates printed after an adoption is processed should not include the adopted child as previous issue.

8.7 MAINTAIN PERSON (UC016)

A key concept of LifeLink will be the 'Person Centric' approach to accessing data. A Person entity will represent any key party or participant in a Notification, Application or Registration. Life Events will be associated with a Person. In turn, a Person may be associated with one or more Life Event(s).

Different Notifications, Applications and Registrations will have different types of parties, the most important of which will be the subject Person.

The system will NOT assign a unique identifier to a Person entity. This is a policy decision to ensure compliance with community privacy obligations. The uniqueness of a Person will be determined by a concatenation of 5 pieces of data on a person: Surname, Given Name, Date of Birth, Place of Birth and Mother's Maiden Name. This definition of uniqueness may cause potential mismatches and failed matches.

In conjunction with maintaining Person entities the system will also maintain Relationships. Relationship entities will define the relationship between parties to a life event. For example, a Birth Registration will include the relationship between mother and child, father and child, sibling(s) and child. A Birth Registration may also include less significant relationships such as attending medical practitioner and child or witness and child.

ID	DESCRIPTION
UC016.1	All system access to Person data will require searching on the 5 data items that define the uniqueness of a Person. In some instances where a full match is not found a searching algorithm to find partial matches with an option for manual intervention by a Registry user may be required.
UC016.2	Business rules defined in the LifeLink Rules Service should identify the course of action required if a partial match is found.
UC016.3	If a partial match is found on a Person search the system should verify against the LifeLink Rules Service whether the Notification/Application/Registration should create a new person or escalate to an appropriate Registry user for manual intervention.
UC016.4	In some circumstances matches will not be able to be completed automatically and the system should provide a manual matching function that includes listing 'potential' or partial matches and enabling an authorised Registry user to complete potentially complex searches.
UC016.5	Business rules should be defined in the LifeLink Rules Service identifying the types of parties on a event that require a supporting Person entity. For example, a birth registration may require Person entities to be created and/or updated for the subject and the subject's parent's registrations but not for the attending midwife and witness.
UC016.6	Before creating a new Person record the system should search for an existing Person, according to the business rules defined in the LifeLink Rules Service.
UC016.7	The system should assign a type to Person records, subject to business rules defined in the LifeLink Rules Service, indicative of the completeness of the data associated with that Person.
UC016.8	Adoptions are a unique life event whereby the system should be able to create a new Person entity on receipt of a compliant Adoption Notification. The pre Adoption Person entity will remain, complete with pre Adoption Relationships, and a new Person entity created with post Adoption Relationships defined. A Relationship will define the link between the two Persons.
UC016.9	The system should provide a maintenance function for authorised Registry users to create and make amendments to Person records. For example, if a workflow process was escalated to a team leader due to the receipt of an unmatched Notification and an investigation revealed an issue with the data (such as a typing error) that was not appropriate to refer back to the Notifier the Registry user should be able to amend the Person details.
UC016.10	The system should provide a Person enquiry function for authorised Registry users to view details about a Person and, with the appropriate access levels, associated Life Events and Relationships.
UC016.11	Business rules determining the types of Relationships to be created for each Life Event should be defined in the LifeLink Rules Service.
UC016.12	The system should automatically create the appropriate Relationships as defined by the rules in the LifeLink Rules Service.
UC016.13	When a partial match on a Person entity is found when searching for existing Persons and Relationships the system should create a workflow process to escalate to a nominated Registry user.
UC016.14	The system should be able to control user access to view Relationships by Relationship Type. For example, a Registry user at the front counter may be entitled to search for and view pre Adoption and post Adoption Person details for an individual but will not be entitled to see the Relationships linking the two Person entities.

ID	DESCRIPTION
UC016.15	The system should provide a Relationship maintenance function for authorised Registry users to manually maintain Relationships.
UC016.16	The system should provide a Relationship Enquiry function for authorised Registry users to enquire on a person's existing Relationships.

8.8 CERTIFICATE PRODUCTION (UC017)

Certificates are printed on pre-numbered certificate paper the control and inventory movement of which is managed by the Numbered Certificate Paper (NCP) system.

Commemorative certificates and reference copies of certificates are not printed on pre-numbered paper but are printed on appropriate paper with watermarks included in the printed image.

Images are currently stored in an image application called Tower. It is anticipated that this will remain the image repository for LifeLink with integration functionality allowing users to call up the images from within LifeLink.

ID	DESCRIPTION
UC017.1	The system should support printing of all recorded Life Events. For example full Birth, Death and Marriage Certificates; Single Status Certificates; Birth Cards; Change of Name Certificates; Certificate Extracts; Adoption Certificates; Image Certificates; church records and results of searches (see Certificates).
UC017.2	The layout of different Certificates should include full graphical functionality including unlimited fonts, graphics, barcodes and watermarks.
UC017.3	The system should determine the layout of a Certificate (including Results of Searches, Birth Cards, reference copies, etc) and printer destinations using business rules defined in the LifeLink Rules Service.
UC017.4	The system should allow a Registry user to create print requests to print Certificates from compliant Applications, capturing details such as Application Number, Registration Number, User Id, Date, Time and Certificate Type.
UC017.5	The system should display the Certificate on screen in a printable layout prior to creating a Print Request to allow a user to view and verify the Certificate. The screen display should be in the same format as the printed version but should also include an additional watermark or some other mechanism to prevent screen printing or screen scraping, whereby Certificate printing security may be bypassed.
UC017.6	The system should not allow a Registry user to print a Certificate when they have made amendments to the Registration.
UC017.7	Print requests should be able to be batched by Registry user.
UC017.8	Print requests should be able to be configured to be released manually or automatically dependent on the configuration of the user submitting the request.
UC017.9	Authorised users (eg Print Room staff) should be able to release batched print requests on behalf of another user.
UC017.10	Batched print requests should be configurable to print in postcode or product order.
UC017.11	Printer destinations on Print Requests should be able to be amended by an authorised Registry user prior to being released to the printer.
UC017.12	When a Certificate is printed and the delivery method on the associated Application indicates Registered Mail the system should automatically print the address on the back of the Certificate.

ID	DESCRIPTION
UC017.13	For Registered Mail deliveries the system should provide the ability to scan a barcode to read the Registered Mail number to store against the Application.
UC017.14	When a print request has been released for printing the system should automatically capture the date and time stamp of printing and the User Id of the user who released the print request.
UC017.15	On successfully printing a Certificate an image of the Certificate (front and back) should be scanned, creating a log in the NCP application. The NCP application should then send the unique Certificate number back to LifeLink, which should be captured against the original Application and Registration.
UC017.16	If a Certificate fails quality checking the system should enable a user to print a reference copy of the Certificate or Result of Search on plain paper and with the appropriate watermark.

8.9 AUDITING (UC018)

Auditing provides a mechanism to track each user's actions as they use the system.

ID	DESCRIPTION
UC018.1	The system should maintain audit trails for all transaction types including record creation, updates, workflow, enquiries and Certificate printing requests as required.
UC018.2	The types of transactions for which audit trails are created should be configurable by the Business Administrator.
UC018.3	An audit record should always include a date and time stamp, a user id, a transaction type (eg update or enquiry) and a subject (eg registration and/or application number). In the case of an amendment the audit record should also include the before and after values at a field level.
UC018.4	In addition to audit reports, the system should provide an enquiry function to search on and view audit history details.

8.10 POINT OF SALE (UC020)

Point of Sale (POS) manages the processing of payments received by the Registry, the management of cash floats at POS workstations and the processing of refunds.

Point of Sale transactions are attached to Applications.

ID	DESCRIPTION
UC020.1	The system should prevent POS users from being logged onto more than one POS session concurrently.
UC020.2	The system should support the configuration of Products. Products should be fully maintainable by an authorised Registry user and should include a unique Product Code, a description, a status flag (active/inactive), a price, a tax code and relevant GL account information.
UC020.3	The system should support Product Codes being activated, deactivated (providing no unprocessed Applications exist) and reactivated by an authorised Registry user.
UC020.4	The system should support Delivery options being configured and maintained, including active/inactive flag, price and tax type.
UC020.5	The POS should provide a function to create a journal file of all transactions processed at the point of sale for a selected date range. The system should provide the functionality to select only those transactions that have not previously had journals created. This function should be available as a batch

ID	DESCRIPTION
	job to be run either ad hoc or on a nightly schedule in order to automate the transfer of journals to the financial application.
UC020.6	A Chart of Accounts upload function should be available to load valid General Ledger (GL) account combinations into the POS system. Account details will be assigned to each Product Code to provide default values for journals generated by the POS application.
UC020.7	The POS functionality should be able to operate as a stand-alone function to continue receipting payments if the main LifeLink application is down.

8.11 Process Payment (UC021)

The Process Payment function covers the receipting of funds at the Counter, via mail and fax and electronically to pay for products or services. Where payments are receipted at the Counter, float management processes will account for daily takings. Refunds will be issued where appropriate and subject to authorisation.

ID	DESCRIPTION
UC021.1	The system should accept multiple forms of payment for a single Application.
UC021.2	The system should be able to accept a single payment for multiple Applications.
UC021.3	The system should be able to accept multiple forms of payment. Eg Cash, Cheque, Money Order, EFTPOS, Credit Card (Visa, MasterCard, American Express).
UC021.4	When searching on Applications the system should allow the user to drill down to POS transaction details associated with a selected Application.
UC021.5	The system should allow more than one Application to be processed in the same POS transaction.
UC021.6	The system should interface with SecurePay/SecurePOS to process Credit Card and EFTPOS payments.
UC021.7	The system should include an interface with a cheque reader for processing payments received by cheque.
UC021.8	When a payment is processed the system should request the Registry user confirm that the payment amount to be receipted matches that calculated by the system.
UC021.9	When the receipt amount differs from that calculated by the system the system should allow the receipting of the new amount with appropriate Reason Code and comments.
UC021.10	The system should calculate and display the change amount due when a cash payment amount is entered.
UC021.11	The system should capture payment and authorisation details with a link to the original Application to support full or partial refunds.
UC021.12	The system should enforce the selection of a valid Product Code for every POS transaction.
UC021.13	Some Registry products are subject to GST and others are not. The system should automatically calculate the tax amount due on each Product ordered based on the tax type assigned to the Product.
UC021.14	Postage should be calculated automatically based on the Delivery Method and Postage Options entered on the Application.
UC021.15	The system should automatically calculate the total amount owing based on Product Codes, Quantities Ordered and Delivery Method.

ID	DESCRIPTION
UC021.16	The system should provide an option to generate a tax invoice detailing the amount(s) and form(s) of payment used and how the receipted amount is allocated according to the Application.
UC021.17	The option to reprint a tax invoice including an appropriate “Duplicate Invoice” watermark should be available.
UC021.18	The system should produce an alert if an Applicant or a subject of an Application has been flagged as a Person of Interest.
UC021.19	On successful processing of a payment the associated Application should be assigned a status indicating that it has been paid in full.

8.12 PROCESS REFUND (UC022)

The processing of partial and full refunds of payments made.

ID	DESCRIPTION
UC022.1	If a customer requests a refund the system should allow an authorised Registry user to search for the original Application prior to entering the request for a refund into the system.
UC022.2	On creating a request for refund the system should force a Reason Code to be entered against the request. The Reason Code should be selected from a list of valid values. The system should also provide the facility for notes to be added to the refund.
UC022.3	The system should support full and partial refunds.
UC022.4	The system should support refunds of all payment types. Eg Cash, Credit Card, Direct Credit, Cheque.
UC022.5	Requests for refunds are escalated for appropriate approval using the workflow functionality.
UC022.6	The system should allow a request for refund to be rejected by an authorised user. A Reason Code, selected from a list of valid values, and comments should be entered describing why the refund was rejected.

8.13 FLOAT MANAGEMENT (UC023)

The management of cash floats at point of sale workstations throughout the Registry.

ID	DESCRIPTION
UC023.1	The system should allow a Registry user to log into and out of the POS workstation at any time of the day. The daily float for a POS workstation should be cashed up only once at the commencement of the first cashiering session for the day.
UC023.2	The Interim Balance Report should be able to be run on demand at any time of the day and should include payments received from any Registry user that took payments on that workstation since the daily float was initiated.
UC023.3	The Interim Balance report should force a user to enter all monies received in the POS workstation by payment type. Eg Cash, Cheque, EFTPOS.
UC023.4	The system should force a user to run the Interim Balance Report prior to logging out of the workstation.
UC023.5	The system should force a user to enter a Reason Code and Comments against any payment types with discrepancies.
UC023.6	The system should provide a Bank Lodgement Report summarising cash by denominations as well as totalling cheques and money orders to be banked.

ID	DESCRIPTION
UC023.7	The system should provide an End of Day Balance Report to be run at the end of each days processing on each POS workstation.
UC023.8	The system should force the user to enter all monies received in the POS workstation during the day by payment type. Eg Cash, Cheque, EFTPOS.
UC023.9	The system should automatically reconcile monies entered against the calculated end of day balances for each POS workstation and print the reconciled End of Day Balance Report.
UC023.10	The system should force a user to enter a Reason Code and Comments against any payment types with discrepancies on the Interim Balance Report and the End of Day Balance Report.
UC023.11	The system should provide an End of Day Balance Report to be run by an authorised Registry user across all POS workstations in a POS team. This report should only be able to be run after End of Day Balance Reports have been run and finalised for each POS workstation within the POS team.
UC023.12	The system should force the authorised Registry user to enter all monies received by the POS team for the day by payment type. Eg Cash, Cheque, EFTPOS.
UC023.13	The system should reconcile monies entered against the calculated end of day balances for the POS team and print the reconciled End of Day Balance report by POS workstation.
UC023.14	The system should force an authorised Registry user to enter comments against each payment type for any discrepancies for the POS team between the monies entered and the calculated end of day balances.
UC023.15	The Interim and End of Day Balance Reports should, once finalised, only be able to be amended by an authorised Registry user with appropriate Reason Codes and Comments.

8.14 Searching (UC030)

Searching provides the ability to search for Applications, Notifications, Registrations, Certificates, etc, including additional information linked to each transaction.

ID	DESCRIPTION
UC030.1	The system should provide fuzzy searching capabilities including probabilistic and phoenetic searching.
UC030.2	The system should include drill-down functionality enabling a user to select a record from the results of a search and view the selected record in further detail, including any associated POS transactions.
UC030.3	The system should provide the option to resort the results of a search into a different sort order.
UC030.4	The system should support 'Person Centric' searching whereby a user can select a Person and search for all Life Events, Registrations and Applications associated with that Person.
UC030.5	The system should provide the option to search on a Notification, Application, Registration or Person using a wide range of fields and combinations of fields when a user is searching for a difficult to find record.

8.15 Reporting (UC040)

Reporting requirements for the LifeLink application will include a combination of standard, pre-defined parameter driven reports and ad hoc reports.

Reporting will cover both operational and management reporting requirements.

A list of sample reports has been included in Reports.

ID	DESCRIPTION
UC040.1	The system should allow parameter based reporting with any default values being configurable by a Business Administrator.
UC040.2	The system should allow reports to be output to the screen, to a printer or to a file.
UC040.3	Selected reports should include the ability to output names and addresses in a mail merge format so that authorised users can create mail outs.
UC040.4	The system should provide the ability to run scheduled and ad-hoc reports.
UC040.5	Report viewing and report generation functions should be able to be restricted by user and/or user group security.
UC040.6	The system should provide the functionality for authorised, non-technical users to create their own reports.
UC040.7	The system should provide approximately 50 bespoke reports for those reports run on a routine basis. A sample of these reports is included in Reports.

8.16 CERTIFICATE VALIDATION (UC050)

The Registry receives electronic requests from various external government agencies to validate Certificates issued by the Registry. The Certificate Validation Service (CVS) is an application that manages these queries and returns responses to the external agencies.

The Certificate Validation Service is also used by the Registry to validate Certificates issued by registries in other states.

ID	DESCRIPTION
UC050.1	The system should accommodate requests from CVS to validate Certificate numbers and sending corresponding 'yes'/'no' responses back to CVS.
UC050.2	The system should be able to send a query to CVS regarding a Proof of Identity document from another registry (eg a Birth Certificate from Victoria or a Marriage Certificate from Queensland). The system should accept a 'yes'/'no' response back from CVS indicating whether the Certificate is valid.

8.17 SYSTEM ADMINISTRATION (UC060)

System Administration and maintenance activities will be available to authorised, non-technical users.

ID	DESCRIPTION
UC060.1	The system should provide navigation shortcuts throughout the application.
UC060.2	The system should provide context sensitive help throughout the application. Help text should be maintainable by an authorised Registry user.
UC060.3	The system should provide the functionality to broadcast messages to a group of users or all users informing them of system changes, process changes, legislation changes, pertinent news, etc.
UC060.4	The system should enable an authorised Registry User to define printing information against a User Id. This should include printer lists for each type of Certificate and flags indicating whether the User has the authority to override these printers, whether the User has the authority to release their own Print Requests, etc.
UC060.5	The system should provide a batch scheduling facility to automate the running of jobs and generation of reports, configurable by an authorised System Administrator.

8.18 WORKFLOW MAINTENANCE (UC061)

Authorised, non-technical users will maintain the configuration of workflow rules and escalation paths.

ID	DESCRIPTION
UC061.1	The system should provide the functionality for an authorised Registry user to divide users into strict levels of authority with clearly defined roles and levels of authorisation for each transaction type.
UC062.2	The system will require the ability to escalate system events between users with appropriate levels of authority and provide detailed task-monitoring facilities.

8.19 RULES SERVICE MAINTENANCE (UC062)

Authorised, non-technical users will maintain configuration of business and validation rules.

ID	DESCRIPTION
UC062.1	The system should provide the ability to define business and validation rules without the need to change program code.
UC062.2	The system should provide the facility to assign override authority to specific Users or User Groups for each business rule defined.

8.20 CERTIFICATE LAYOUT MAINTENANCE (UC063)

Certificate layouts will be maintained by authorised, non-technical users.

ID	DESCRIPTION
UC063.1	The system should provide the facility to maintain Certificate and Product layouts.
UC063.2	The layout of different Certificates should include full graphical functionality including unlimited fonts, graphics, barcodes and watermarks.

8.21 CORRESPONDENCE TEMPLATE MAINTENANCE (UC064)

Correspondence templates will be maintained by authorised, non-technical users.

ID	DESCRIPTION
UC064.1	The system should provide the facility to maintain correspondence templates.

8.22 ARCHIVING (UC065)

Although core transactions such as Life Events and Persons may never be archived, there will be a requirement to archive data such as audit details on a scheduled basis. This requirement will include the facility to cleanse and reinstate data to and from external storage.

ID	DESCRIPTION
UC065.1	The system should provide a set of archiving tools to enable different types of data to be archived (and/or reinstated) from the database according to a defined archiving schedule.

8.23 REFERENCE DATA MAINTENANCE (UC066)

Reference Data Maintenance functions provide the facility to maintain reference data and other configuration data by authorised, non-technical users.

ID	DESCRIPTION

ID	DESCRIPTION
UC066.1	All lists of valid values should be data driven in the system and configurable by an authorised Registry user. Reference data values should include a status and date and time of change of status of any value.
UC066.2	The system should provide system administration access to enquire on and maintain all entities in the data model.

8.24 SECURITY/ACCESS CONTROL (UC067)

Security and Access Control provide the facility to maintain user profiles, groups and privileges.

ID	DESCRIPTION
UC067.1	The system should require all users to log in with a valid User Id and Password.
UC067.2	The system should support a roles based security matrix where User Groups can be defined and Users can be assigned to one or more User Groups at a time.
UC067.3	The system should support individual Users and/or User Groups being granted access to individual functions within the system.
UC067.4	User access to functions should be definable into create, update, delete, enquire subsets.
UC067.5	The system should be able to restrict access to selected fields such as address details on Applications for selected Persons (such as celebrities).
UC067.6	The system should be able to restrict access to selected records for restricted viewing by selected User Groups only. For example, access to Relationships defining the link between pre and post Adoption Registrations should be accessible by the Adoptions Team only.

9 BUSINESS TRANSACTION TYPES

The transaction types listed below are the standard business transaction types currently processed by the Registry. These transactions are categorised as:

- Notification types
- Application types
- Registration and Amendment types

NOTIFICATIONS
Birth Notification - Place of Birth (from public hospitals, private hospitals, independent midwives)
Birth Notification - Parents
Death Notification - Cause of Death (from hospitals, medical practitioners, coroners)
Death Notification - Body Disposal (from Funeral Directors, Crematoria)
Marriage Notification - Notice of Intended Marriage (NOIM) (from Marriage Celebrants)
Marriage Notification – Marriage Celebrant
Adoption Notification - Court Order from the Supreme Court

APPLICATIONS
Application for a Birth Certificate

Application for a Death Certificate
Application for a Marriage Certificate
Application for a Birth Card
Application for a NSW Single Status Certificate
Application for a Section 50 Search
Application for a Family History Certificate (Public Records only)
Application for a Replacement Change of Name Certificate

REGISTRATIONS & AMENDMENTS
Birth Registration
Death Registration
Marriage Registration
Change of Name Registration
Change of Sex Registration
Adoption

10 CERTIFICATES

The Registry currently produces the types of Certificates listed below.

BIRTH CERTIFICATES
Birth Certificate – Standard
Birth Certificate – 'Harbour'
Birth Certificate – 'Booties'
Birth Certificate – 'Nursery'
Birth Certificate – 'Gum Blossom'
Birth Certificate – 'Handprint Blue'
Birth Certificate – 'Handprint Pink'
Birth Certificate – 'Feet'
Birth Certificate – 'Feet' (No Parents Details)

DEATH CERTIFICATES
Death Certificate – Standard Certificate
Death Certificate – 'Rose'
Death Certificate – 'Sunset'
Death Certificate – 'Genealogical'
Death Certificate – 'Family History'

MARRIAGE CERTIFICATES
Marriage Certificate – Standard
Marriage Certificate – 'Cut the Cake'
Marriage Certificate – 'Diamond Rings'

Marriage Certificate – ‘Holding Hands’
Marriage Certificate – ‘Marriage Rings
Marriage Certificate – ‘Rose’
Marriage Certificate – ‘Waratah’

OTHER CERTIFICATES/DOCUMENTS
Birth Card
Single Status Certificate
Section 50 Certificate
Result of Search Certificate

11 TRANSACTION VOLUMES

Listed below are the transaction volumes for the financial year 2006/2007 and projected volumes for the financial year 2007/2008.

TRANSACTION TYPE	2006/2007	2007/2008 (Projected)
Registrations	**200,959**	**196,389**
Birth Registrations	90,778	87,418
Death Registrations	45,750	45,823
Marriage Registrations	38,568	37,952
Change of Name Registrations	22,968	22,837
Will Registrations[*]	2,895	2,359
Product Applications	**527,976**	**533,911**
Commemorative Birth Certificates	57,813	
Standard Birth Certificates	215,153	
Other Birth Products	19,890	
Commemorative Death Certificates	544	
Standard Death Certificates	58,539	
Other Death Products	33,842	
Commemorative Marriage Certificates	10,100	
Standard Marriage Certificates	77,032	
Other Marriage Products	22,922	
Change of Name Products	25,430	
Other Products	6,711	
Birth Card Sales	**2,835**	

[*] Will Registrations are out of scope for LifeLink.

12 REPORTS

The reports listed below are indicative of the types of reports required as part of the LifeLink solution.

NOTIFICATION REPORTS
Notifications Report (a list of matched and/or unmatched notifications received).

REGISTRATION REPORTS
Change of Name Report – a list of Change of Name Registrations with selection by Person, date range.
Late Birth Registrations (a list of births not registered more than a selected number of days - currently 60 - since a birth notification was received).
Multiple Marriages or Changes of Name (by selected date range)
POI Report (Proof of Identity details used for a Registration or Application).
Unauthorised Celebrants Report (a list of unauthorised celebrants for the Registry to follow up with formal registration).
Registrations/Amendments by Reason Code
Marriage Registration Exceptions Reports (Section 12, Shortening of Time, Stat Decs)
Under 18 Deaths (a list of under 18 year old registered deaths by date range).
Sibling Deaths Report

APPLICATION REPORTS
Applications (by Date range, Application Type, Product Code, User Id)
Applications not meeting Guarantee of Service
Applications with no Certificate Report
Certificates Printed Report
Birth Cards Printed Report
Applications by Campaign Type Report
Applications by Channel Code Report
Applications by Reason Code Report

POINT OF SALE REPORTS
Payments Report (by Product Code, by POS Workstation, by Registry User, by Location, etc)
Transaction Listing (by date range, by Payment Method)
Number of Refunds Completed (for a selected date range)
Average POS Processing Time (by Application or by Product Code)
Interim Balance Report
End of Day Balance Report
Bank Lodgement Report
Underpayments/Overpayments by Applications Report (by date range)
GL Detail Report (listing journals against Application payments processed)

FRAUD MINIMISATION REPORTS
Replacement Certificates Printed Report
Change of Name Report where Applicants not Born in NSW
Change of Name Report where More Than One Change of Name in Past 12 Months
Change of Name/Marriage Report where more than a selected number of Changes of Name have been requested
Certificates Printed, Amended and Reprinted Report
Bigamous Marriage Report

SALES REPORTS
Monthly report on the volume, revenue and rolling 12-month trend by product code.
Utilisation Rates by Access Channel

AUDIT REPORTS
Audit report – audit trail with selection by date range, user id and subject (person).

External Bodies Reports
Australian Bureau of Statistics Report (Registered Births, Deaths and Marriages for previous month)
Registered Deaths by Date Range, Age of Death (for distribution to Australian Institute of Health and Welfare, Australian Cancer Council, Roads and Traffic Authority)
Registered Deaths (by Professional Code, Date Range) for distribution to professional bodies such as the Australian College of Veterinary Scientists, the Royal Australian College of Physiotherapists

13 CORRESPONDENCE

The following types of correspondence are samples of those currently issued by the Registry and provide an indicative list of the correspondence that will be required at the various escalation points identified throughout the business requirements.

STANDARD LETTERS FOR REGISTRATIONS
Amendment to the Birth Registration, and the Fee required
Birth Confirmation
Both Parents’ signatures and/or witnesses are required
Father’s Signature is required
Mother’s Signature is required
Witness Mother’s Signature
Witness Father’s Signature
Return Incomplete Change of Name
Home Birth Detail Required
Late Registration ID Reminder Letter
Unregistered Birth Under 1 Year
Late Unregistered Birth

STANDARD LETTERS FOR AMENDMENTS AND ADOPTIONS
Amendment Confirmation letter
Change of Name Requirements
Recording Father's Details on the Birth Registration
Amendment Evidence
Amendment Refusal
Adoption Supply Authority Required
Advance Notice Confirmation
Adoption Identification
Birth Father
Veto Confirmation
Veto Withdrawal Confirmation

STANDARD LETTERS FOR APPLICATIONS AND FINANCIAL CORRESPONDENCE
Refund
Release Death Data
Birth Card Enclosed
Fees Payable Family Court
Debtors Letter
How to Supply POI
Certificate Applications for other Australian States
Certificate Applications for International
Bank Account Declined Letter
Certificate Insufficient Funds Payments
Credit Card Declined
Credit Card Expiry
Incorrect Credit Card Details
Applicant has not signed application
No fee letter ID supplied/not supplied
Overseas personal cheque received instead of International bank draft
Solicitor Letter stating who they act for and Law ID Card Number
Faxed Id not Legible
ID and/or authority required
Applicant provided key card as payment
Marriage Certificate applied for before the marriage has occurred
Incomplete Application Form
Event Occurred Overseas

14 EXTERNAL INTERFACE POINTS

The interface points listed below provide a summary of integration and external interface functionality required as part of the LifeLink solution. Current interface requirements are detailed throughout the business requirements identified in the body of this document.

Future interface requirements are not current requirements and therefore out of scope, but are listed as an indication of the future direction in which it is anticipated LifeLink will develop.

14.1.1 Current Interface Requirements

NAME	DESCRIPTION	ON LINE/BATCH	SOURCE SYSTEM	DESTINATION SYSTEM
eBirths	Birth Notifications from external parties submitted to LifeLink. Queries on existing Notifications submitted to LifeLink and result of searches sent back to eBirths.	On Line	eRegistry/ LifeLink	LifeLink/ eRegistry
eDeaths	Death Notifications from external parties submitted to LifeLink. Queries on existing Notifications submitted to LifeLink and result of searches sent back to eDeaths.	On Line	eRegistry/ LifeLink	LifeLink/ eRegistry
eMarriages	Marriage Notifications from external parties submitted to LifeLink. Queries on existing Notifications submitted to LifeLink and result of searches sent back to eMarriages	On Line	eRegistry/ LifeLink	LifeLink/ eRegistry
Birth Registration Upload	Birth Registrations entered by Data Processing Bureau need to be entered into LifeLink daily	Batch	Data Processing Bureau	LifeLink
Registry.Con nect .Deaths	Death Notifications received from funeral directors	Batch	eRegistry/ LifeLink	LifeLink/ eRegistry
Registry.Con nect.Marriag es	Marriage Notifications received from celebrants	Batch	eRegistry/ LifeLink	LifeLink/ eRegistry
Family History Applications	Members of the public via the Registry web site can submit Family History Applications.	On Line	Registry Web Site	LifeLink
GACS Enquiries and Applications	Courts, in their capacity as Government Access Centres, can submit Enquiries and Applications via the on-line Courts application	On Line	On Line Courts/ LifeLink	LifeLink/ On Line Courts
CVS (Incoming Query)	Queries from external government agencies are sent to CVS, which will in turn send a query to LifeLink to search for a record. LifeLink will respond with a yes/no response.	On Line	eRegistry/ LifeLink	LifeLink/ eRegistry
CVS (Outgoing	For registrations outside of NSW recorded at other state	On Line	eRegistry/ LifeLink	LifeLink/ eRegistry

NAME	DESCRIPTION	ON LINE/BATCH	SOURCE SYSTEM	DESTINATION SYSTEM
Query)	Registries, LifeLink will initiate queries to send to CVS with interstate document details. LifeLink will receive a yes/no response back from CVS.			
Numbered Certificate Paper (NCP)	NCP will update LifeLink with the Certificate Number (from the pre-numbered paper) for LifeLink to capture against the Application and/or Registration.	On Line	NCP	LifeLink
SecurePay	Validates credit card payments for Applications received through the mail room or by fax	On Line	LifeLink/ SecurePay	SecurePay/ LifeLink
QuickAddress (QAS)	Called when entering or amending a person's address. Validates addresses and formats into Australia Post format	On Line	LifeLink/ QAS	QAS/ LifeLink
Fact of Death Upload	A list of interstate Death Registrations from Registries around Australia. Uploaded to match interstate deaths against NSW Birth Registrations.	Batch	Tasmanian Registry	LifeLink
Fact of Death Download	A list of NSW Death Registrations provided for inclusion in the Fact of Death list that is distributed to interstate Registries throughout Australia.	Batch	LifeLink	Tasmanian Registry
Account Balance Upload	Takes account balances from Sun Financials for uploading into LifeLink. Balances used for credit checks when processing payments for account customers. Upload to be run nightly.	Batch	Sun Financials	LifeLink
GL Journal Upload	Nightly journal upload to transfer daily POS details to ledger in Sun Financials.	Batch	LifeLink	Sun Financials
Chart of Accounts Upload	An upload to be run periodically to load valid chart of account combinations into LifeLink. These account details are assigned to Product Codes that will generate the GL journals from POS transactions.	Batch	Sun Financials	LifeLink
Celebrant Register Upload	Takes a file of registered celebrants, received periodically from the Federal Attorney General's	Batch	Federal Attorney General's Department	LifeLink

NAME	DESCRIPTION	ON LINE/BATCH	SOURCE SYSTEM	DESTINATION SYSTEM
	Department, and updates registered celebrants list in LifeLink. (NB Celebrants are also able to be manually loaded into LifeLink so upload would need to do a comparative check on each celebrant before loading.)			

14.1.2 Future Interface Requirements

The interfaces described below are NOT current requirements, and are therefore out of scope, but are indicative of the future direction it is anticipated LifeLink will take.

Name	Description	On Line/Batch	Source System	Destination System
Document Validation Service (DVS)	Service to validate documents other than Registry documents (eg RTA drivers license, passport).	On Line	LifeLink - eRegistry	eRegistry - LifeLink
Solicitor's Register Upload	A list of solicitors from the NSW Law Almanac, received periodically.	Batch	NSW Attorney General's Department	LifeLink
Medical Practitioner Register Upload	A list of medical practitioners registered in NSW, received periodically.	Batch	NSW Medical Board	LifeLink
Midwife Register	A list of registered midwives in the state of NSW, received periodically.	Batch	Nurses and Midwives Board, NSW	LifeLink

15 FUTURE DIRECTIONS

The requirements identified below are NOT current requirements and therefore out of scope, but are indicative of the type of future directions it is anticipated LifeLink will take.

- The system should provide the ability to interface with an Interactive Voice Recognition (IVR) system.
- The system should provide a seamless interface to send and receive messages (eg SMS, Cisco Unity, fax from/to PC).
- The system should use OCR/ICR technology to automate the capture of data on Application forms.
- The system should be capable of interrogating external systems to verify Notification details using the external system reference. Consistency with external system references will enhance the matching process considerably.
- The system should include an on-line cheque validation function when the functionality becomes available from the Registry's nominated banking partner.
- The system should interrogate secondary systems to validate Medical Practitioners and Solicitors details.
- The system should include the provision for loading batches of payment details with Applications if the Registry was to outsource the processing of Application payments received by mail.
- The system should support full integration with a Records Management System (currently TRIM).

CHAPTER 4 – BUSINESS PROCESS FLOWS

16 PURPOSE

This chapter describes the business process flows proposed to support the key activities of the NSW Registry of Births Deaths and Marriages (the Registry).

It is anticipated that validations and business rules for each process will continue to be captured as the design progresses and will, at the end of the design phase, represent a complete set of business rules to be implemented. The validations and business rules identified in this document are indicative only and are not exhaustive.

17 STRUCTURE

A high level flow diagram illustrating major proposed processes is provided in section 18 Major Proposed Process – LifeLink, followed by a more detailed description of each process in sections 18.1 Complete Notification to 18.9 Review Person Relationships inclusive.

Each process has been defined with the following attributes:

- Brief Description
- Goals
- Precondition
- Assumptions
- Workflow
- Validations
- Business Rules

Validations are checks performed by the system resulting in a pass or fail result. Failed validations will result in an alert or some other form of error message being displayed to the user. In contrast, business rules have been defined as checks performed by the system that, if failed, will result in some form of escalation and/or manual intervention.

18 MAJOR PROPOSED PROCESS – LIFELINK

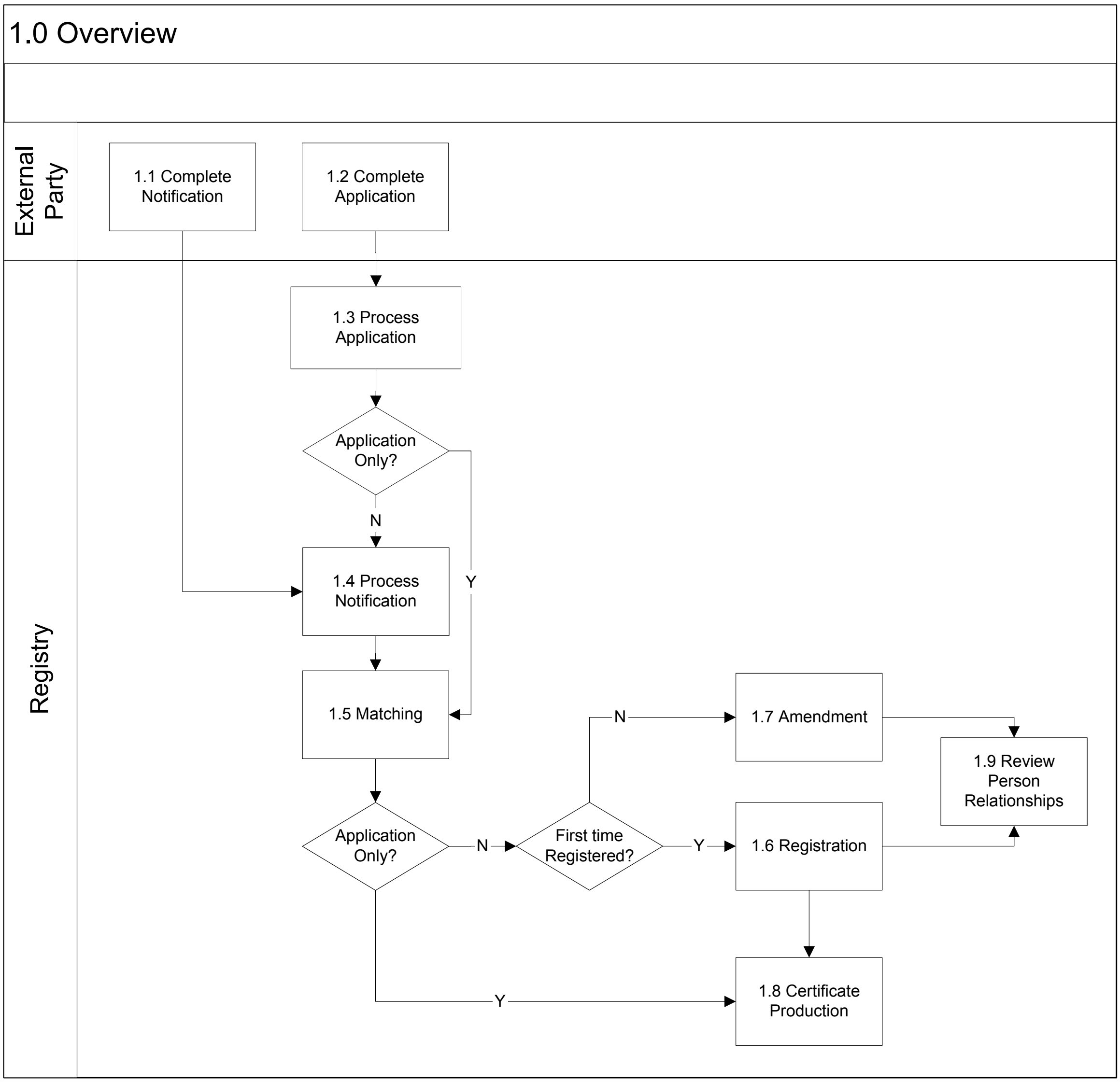


Figure 1: Major Processes – LifeLink

18.1 COMPLETE NOTIFICATION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.1.

18.1.1 Brief Description

External parties are able to submit Notifications to the Registry either through external systems or via manual forms. These systems capture the data, provide some validation and lodge the Notification with the Registry, which the Registry acknowledges. This process is out of scope for the LifeLink system, however, the acknowledgement of the Notification, field validation and the facility to query on the Notification once it has been acknowledged, is in scope.

Customers of the Registry are also able to manually complete Notification (Registration, Amendment, Court Orders etc) forms to submit details to the Registry. This is a manual process that occurs outside of LifeLink.

18.1.2 Goals

The process allows external parties to provide the data for the Notifications either electronically or using manual forms. When Notifications are received electronically the process saves Registry staff from having to data enter details from Notification forms and provides external users with a reference to liaise with the Registry or perform a query on the status of their Notification.

Where manual Notification Forms are received, they are submitted for use in the system.

18.1.3 Precondition

The external party has access to all the relevant details of the Event to be notified.

Appropriate Notification forms are available from the Registry (eg. Birth Registration form).

18.1.4 Assumptions

Once a Notification has been submitted through web services, the Notification can be queried through the web services.

Amendment Notifications can be received via manual forms only. Faxes are acceptable.

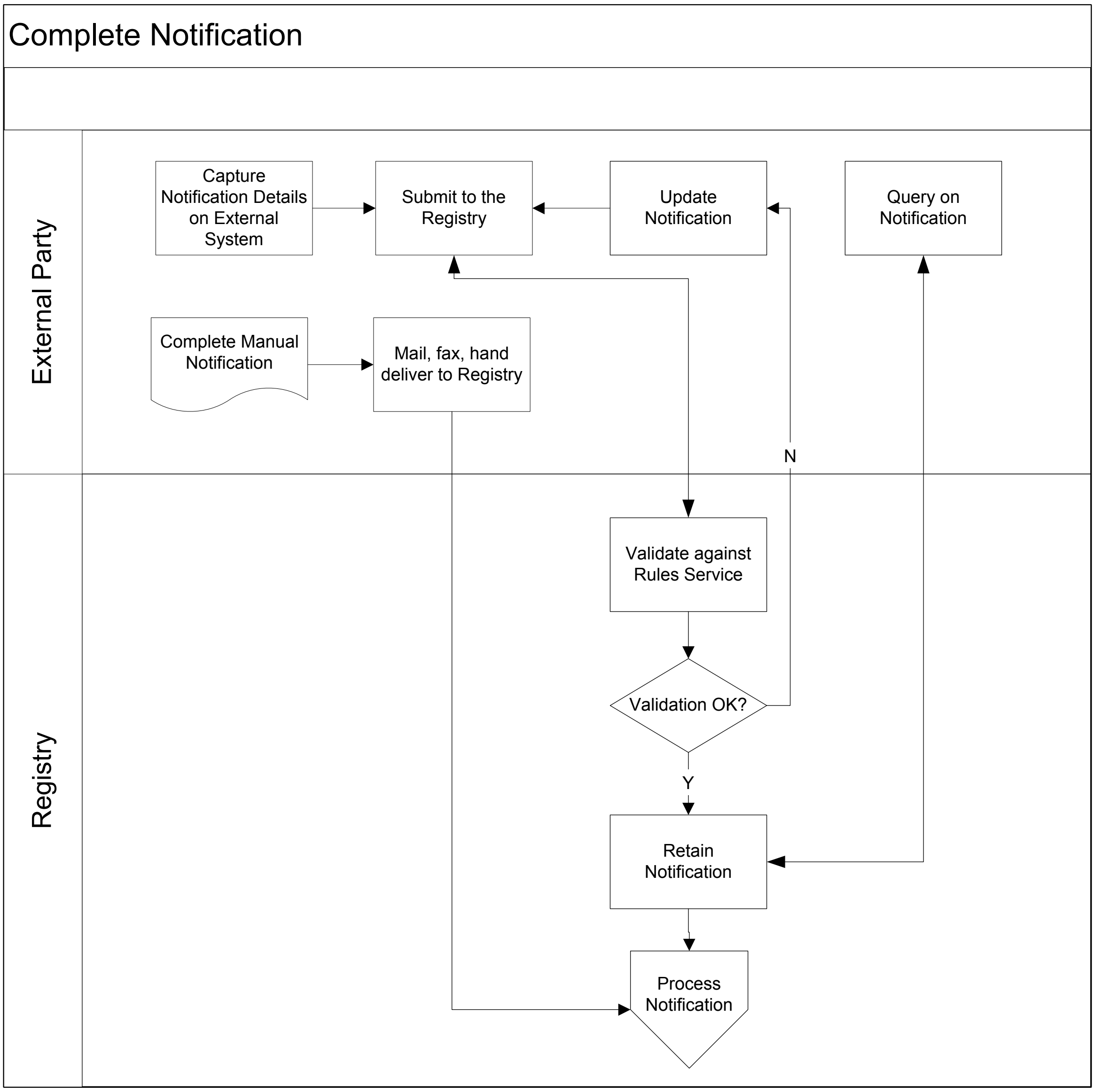
Any updates to the field validations in the LifeLink system for Notifications are to be replicated on a timely basis in the external systems.

The external system validates the Notification using the LifeLink Rules Service, selecting those validations that are pertinent to the type of Notification being captured.

Birth Notifications received by mail are data entered by a Data Entry Bureau into their own data entry system. The Rules Service validates these Notifications against less stringent rules than those for other Notification Types, as the Data Entry Bureau will not be able to resolve any field omissions.

Details requested on the manual Notification Forms replicate system and interface details.

18.1.5 Workflow



18.1.5.1 Capture Notification Details

Notifications can be entered through web services. When entered, the external system validates the Notification details against the LifeLink Rules Service. Validations that fail will provide appropriate feedback to the external user to amend the data. The Notification cannot be submitted to LifeLink until all field validations for that Notification Type have passed.

Batch uploads of Notifications (eg. Birth Notifications from the Hospitals - Public and Private) are also validated against the LifeLink Rules Service. Notifications cannot be submitted until all Validations for that Notification Type are passed.

18.1.5.2 Submit Notification

Once LifeLink has received the Notification, the system will respond with a unique identifier and a status that the external user can use to refer to the Notification.

18.1.5.3 Query on Notification

External parties can query on Notifications that have been submitted via web services. Only the submitter of a Notification can query on that Notification. Additional business rules will also determine the accessibility of Notifications submitted.

The query allows the External Party to get updates on the status of the Notification.

18.1.5.4 Update Notification

Where LifeLink has rejected a validation, the external party is able to update the Notification and resend to LifeLink to be validated again. Updates are identified when the External Party submits the LifeLink reference back to the system as part of the updated Notification.

Where an update is received for a Notification that has already passed compliance validation (see 18.6 Registration), then the update will be rejected. A new Notification would be required instead.

18.1.5.5 Validate against Rules Service

When LifeLink receives Notifications, they are run against a series of validations to achieve a minimum standard for the data fields on the Notification. Where the Notification passes these rules, the Notification is retained by the system. Where the Notification is rejected by the rules service, the Notification is sent back to the issuing system with a corresponding email to the External Party. A record of the receipt of the Notification is retained for audit and fraud minimisation purposes.

18.1.5.6 Retain Notification

Where Notifications pass the Rules Validation, the Notification is retained by the system and able to progress through to compliance validation. All versions of the Notification (that pass the Rules Service) are retained as evidence of a Notification from the External Party.

18.1.6 Exceptions

Notifications received in person at the counter are entered into the LifeLink system by the Registration Team through the corresponding web interface (eg. eDeaths) or directly into LifeLink.

Where the Notifier is unable to submit a Notification through web services (eg due to non compliant Notification), the Notifier should contact the Registry (via the Registry Call Centre) for advice on how to complete the Notification. Suggestions will include: making the Notification compliant or having the Registry enter the Notification into LifeLink directly.

18.1.7 Post condition

Notification has been loaded into LifeLink from external systems and the Notification ID and status has been issued to the external party. Query is submitted to LifeLink.

Details are available to be entered into LifeLink for processing. The physical Forms of Notification are scanned, filed by Notification ID and referenced back to the data entered Notification.

18.1.8 Validations

Process Ref	Description
Validate against Rules Service	The system identifies the External Party submitting the Notification by their identifier. Examples include: Funeral Director id, Marriage Celebrant id.
Validate against Rules Service	The system must validate each Notification received against the Rules Service for that Notification Type.
Validate against Rules Service	The system must reject any Notification that does not pass the field validation Rules Service for that Notification Type.
Validate against Rules Service	The system must reject a Notice of Intended Marriage (NOIM) that is received prior to the date of marriage.
Validate against Rules Service	The system must check for duplicate Notifications. The system must highlight where an exact Notification has been resubmitted to the Registry and highlight as an exception to a nominated Registry user.
Validate against	The system must calculate the age of siblings listed on Birth Notifications

Process Ref	Description
Rules Service	received from parents and compare with the ages supplied by the parents.
Validate against Rules Service	The system must check that the marriage details of parents (date, place, etc) and children match with those shown on the Birth Registration FOI, if the parent's marriage took place in NSW.
Validate against Rules Service	The system should check that any previous issue (children) listed on the FOI are of the current relationship (both parents).
Query on Notification	The system must allow the same External Party who submitted the Notification to search for that Notification.

18.1.9 Business Rules

Process Ref	Description
Complete Manual Notification	Notifications that are unable to be accepted electronically due to significant non-compliance may be eligible for manual data entry at the Registry (eg. age of bride or groom is less than 18 years).
Submit to Registry/ Query	Error handling (transmission errors) for responses to queries and acknowledging receipt of Notification will be managed by LifeLink.

18.2 COMPLETE APPLICATION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.2.

18.2.1 Brief Description

External parties are able to submit Applications to the Registry through external systems or by completing a manual Application Form, which is mailed or delivered personally to the Registry. External systems capture the data, provide some validation and lodge the Application with the Registry, which the Registry acknowledges. Data capture via external systems is out of scope for the LifeLink system, however, the acknowledgement of the Application, field validation of the Application and any queries on the status of the Application, is in scope.

18.2.2 Goals

The process allows external parties to submit Applications electronically using external systems or manual forms. When Applications are submitted electronically the process saves Registry staff from having to enter data from the Application forms and provides the external users with a reference number to use when liaising with the Registry regarding the Application.

18.2.3 Precondition

The external party has access to all the relevant details of the Event for the Certificate. For Applications submitted through external systems, payments are successfully paid through the SecurePay system. (SecurePay will not allow the transaction to be finalised unless the payment was successful) or the Applicant has an account with the Registry.

Requests for Family History Certificates can be received with or with out corresponding Registration Numbers.

Appropriate Application Forms are available from the Registry as required.

18.2.4 Assumptions

Once an Application has been submitted through web services, the Application can be queried through the web services. Web services will respond via email to the External Party to confirm the Application has been received, provide a unique identifier and a status.

The external system validates the Application using the LifeLink Rules Service, selecting those validations that are pertinent to the type of Application being captured.

When Funeral Directors and Marriage Celebrants lodge Applications electronically the external system will process any credit card payments using SecurePay, prior to LifeLink receiving the Applications. Some Funeral Directors have accounts with the Registry and if they submit an Application for payment on account the external system will not process the payment before sending the Application to LifeLink. On receiving such an Application for payment on account LifeLink will perform a credit check against the account balance and accept or reject the Application accordingly.

External System Applications will be re-lodged from scratch if they are rejected through the data validation service.

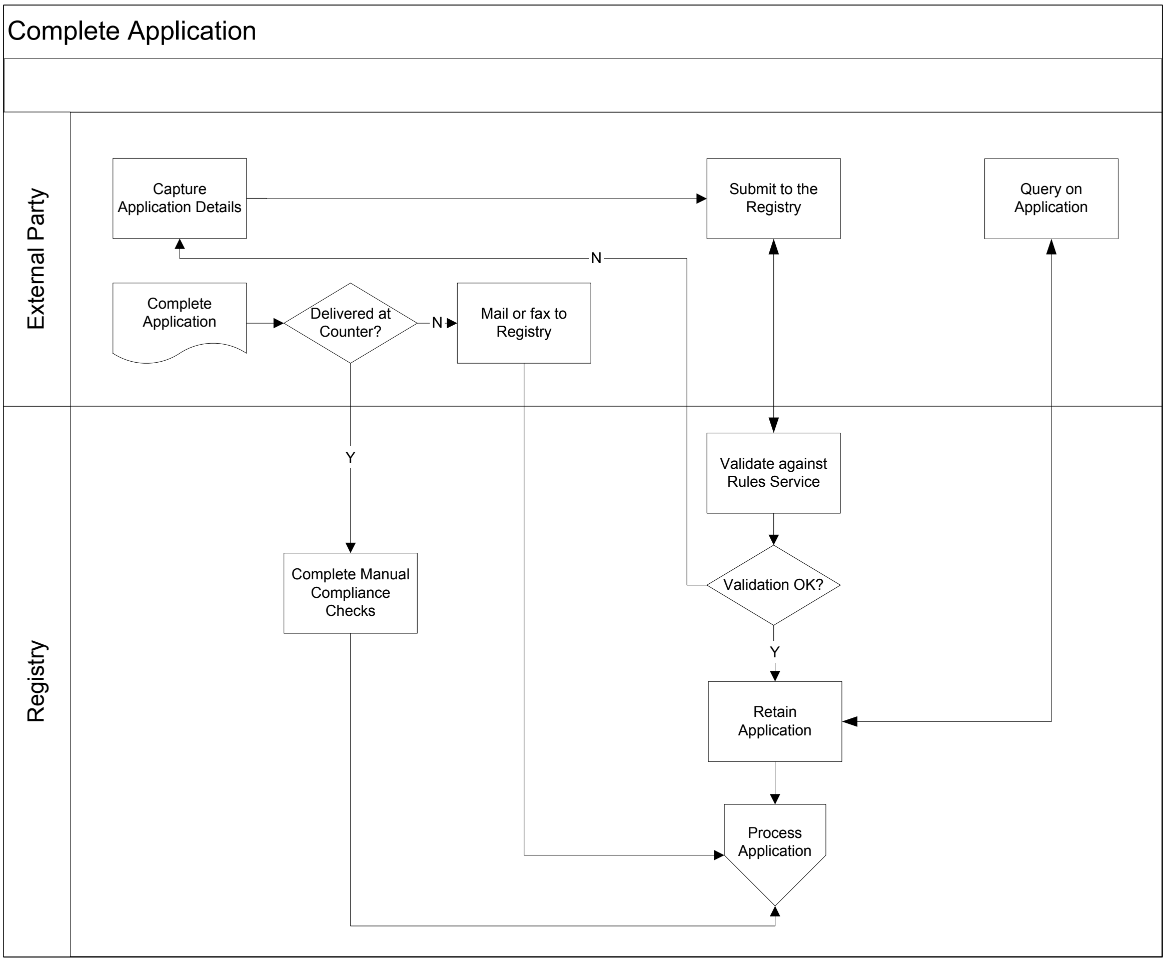
Applications are split from the Notification (logically if not physically) so that Applications can be rejected but Notifications can be registered as required.

The Rules Service will check all field validations to ensure data received is well formed with all fields completed in a satisfactory format.

Details requested in manual Forms replicate system and interface details.

Error handling (transmission errors) when receiving details from external systems will be managed by the external systems.

18.2.5 Workflow



Note: There is no 'Update Application' as the whole Application is resent where the Application fails field validations. The assumption is that the web service ensures that field validations are passed before any payment is processed, as such, those Applications retained in the system will be well formed, complete and not required to be updated.

18.2.5.1 Capture Application Details

Applications can be entered through web services. When entered, the external system validates the Application details against the LifeLink Rules Service. Validations that fail will provide appropriate feedback to the external user to amend the data. The Application cannot be submitted to LifeLink until all nominated validations have passed.

Batch uploads of Applications (eg. Death Certificate Requests from Funeral Directors) are also validated against the LifeLink Rules Service. Applications cannot be submitted until all Validations for that Application Type and External Party are passed.

18.2.5.2 Submit Application

Once LifeLink has received the Application, the system will respond with a unique identifier and a status that the external user can use to refer to the Application.

18.2.5.3 Validate Against Rules Service

When LifeLink receives Applications, they are run against a series of validations to achieve a minimum standard for the data on the Application. Where the Application passes these rules, the Application is retained by the system. Where the Application is rejected by the rules service, the Application is sent back to the issuing system with a corresponding email to the External Party. A record of the receipt of the Application (with the resulting reason for failure) is retained for audit and fraud minimisation purposes.

18.2.5.4 Retain Application

Where Applications pass the Rules Validation, the Application is retained by the system and able to progress through to Process Application (18.3 Process Application).

18.2.5.5 Query on Application

External parties can query on Applications that have been submitted via web services. The query is for the status of the Application and can be provided to the Applicant for a period as determined by a system parameter.

18.2.5.6 Complete Application

The Applicant completes the Application form and submits to the Registry.

18.2.5.7 Mail or Fax to Registry

Manual Applications can be received via mail or fax as well as over the counter.

18.2.5.8 Complete Manual Compliance Checks

Counter Staff manually complete compliance checks for Applications prior to entering onto the system. This speeds up customer service by highlighting areas of non-compliance to the person at the counter. Items manually checked are the same as the systematic checks applied: Proof of Identity, Entitlement and whether the event is registered in NSW.

Applications can still be receipted pending an outstanding item of compliance. For example, a Customer may only have 2 items of identification, but the Counter may escalate the Application to an appropriately authorised user for authority to process the Application on the proviso that the Certificate is not issued until the outstanding identification is provided.

18.2.6 Exceptions

Applications received in person at the counter are manually entered into the LifeLink system by Registry staff. (See 18.3 Process Application).

Where the Applicant is unable to submit an Application through web services, the Applicant should contact the Registry (via the Registry Call Centre) for advice on completing the Application.

18.2.7 Post condition

Application has been loaded into LifeLink from external systems and the Application ID and/or query response has been issued to the external party. Guarantee of Service can begin to be counted from the 'Date Received'.

18.2.8 Validations

Process Ref	Description
Validate Rules Service	The system must confirm that Account Holders (eg. Funeral Director/CentreLink/DoCS) have sufficient credit balance prior to accepting the Application. If the credit check fails, the Account Holder must submit payment via credit card.
Validate Rules Service	The system must validate for time limits on Application queries. Where the validation fails, the system must respond with why the Application cannot be queried.
Validate Rules Service	Funeral Directors and Marriage Celebrants can only apply for Certificates relating to Registrations they have submitted to the Registry. Note that time limits will apply for these parties to apply for Certificates after the Notification has been submitted (eg. a Funeral Director can only apply within 2 months of the date of Registration), as defined in the Access to Information Procedure.
Validate Rules	The system must allow an Application to be processed where the credit limit for a Funeral Director cannot be confirmed due to the unavailability of

Process Ref	Description
Service	the Financial System.
Validate Rules Service	The system must validate each Application against field validations for that type of Application.

18.2.9 Business Rules

Process Ref	Description
Submit to Registry	Applications that are unable to be accepted electronically due to significant non-compliance may be referred to the Registry's Call Centre for advice on completing their Application.
Submit to Registry/ Query	Error handling (transmission errors) for responses to queries and acknowledging receipt of Application will be managed by LifeLink.
Complete Compliance Checks	Manual Applications are verified for the following: Proof of Identity (proof that the Applicant is who they say they are); Entitlement (rules about who is eligible to receive a Certificate); and whether the Event is registered in NSW.
Complete Compliance Checks	When applications are received at the counter, the Counter will confirm that the Application has been completed correctly. If not, the counter staff will assist the Applicant to correct the form.
Complete Compliance Checks	When applications are urgent, an urgent mark is manually stamped on the Application Form and the Application Receipt.

18.3 PROCESS APPLICATION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.3.

18.3.1 Brief Description

This process covers the receipting of funds (point of sale) to pay for certificate production received at the counter and via mail. Where payments are receipted at the counter, float management processes will account for the daily takings.

All Applications, including those received through web services, can be searched for and managed to achieve compliance. Refunds can be issued as appropriate.

18.3.2 Goals

Payment processing receipts and matches the cost of service against the type of certificate requested. It also manages and confirms the compliance validation for each Application against a defined series of business rules.

18.3.3 Precondition

External systems process payments for Applications prior to submitting the Applications to LifeLink. These external systems use SecurePay to validate the success or failure of a payment and send advice of a successful payment to LifeLink with the Application details. For requests for a Certificate LifeLink will not accept an Application from these external systems until the payment has been successfully processed.

When a Customer is at the counter, the Cashier can process the credit card, cash, cheque, EFTPOS or money order payment through the relevant payment gateways and verify the correct amount has been received. When a payment is received through the mail, the payment is attributed to the application it is attached to.

Compliance Validation rules have been implemented.

18.3.4 Assumptions

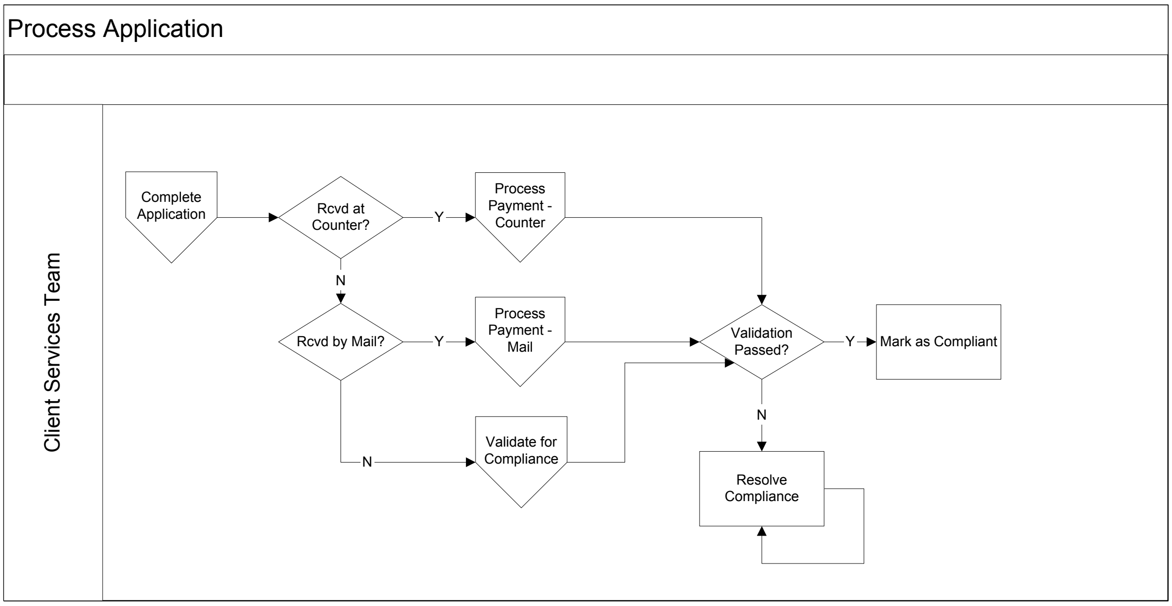
Payment processing may occur prior to the receipt of any Notifications. This may occur, for example, when there is a request for a Death/Marriage Certificate but the Funeral Director/Celebrant has not yet lodged the Notification or the Notification has been rejected based on the Rules Validation.

Sufficient detail can be captured about the parties on the Application to match Persons to any existing Persons.

Photographs and signatures are captured and stored as part of the Birth Card application process.

18.3.5 Workflow

18.3.5.1 Process Applications



Any manual Applications received are data entered into the system by the Client Services team. These are validated against the same rules engine as for 18.2 Complete Application, to ensure the data/fields on the form are valid. Note that: Guarantee of Service will begin to be counted from the 'Date Received'.

Applications are then checked for compliance. Applications which are submitted that are incomplete, non compliant with entitlement, have insufficient payments or where no corresponding registration is found, involve client contact to resolve the compliance matter. Customer contact can be either written (letter or email) or phone. In some cases the customer contact will be from system-generated correspondence. Details of all contact should be recorded with the Application. A refund may be the outcome of this process.

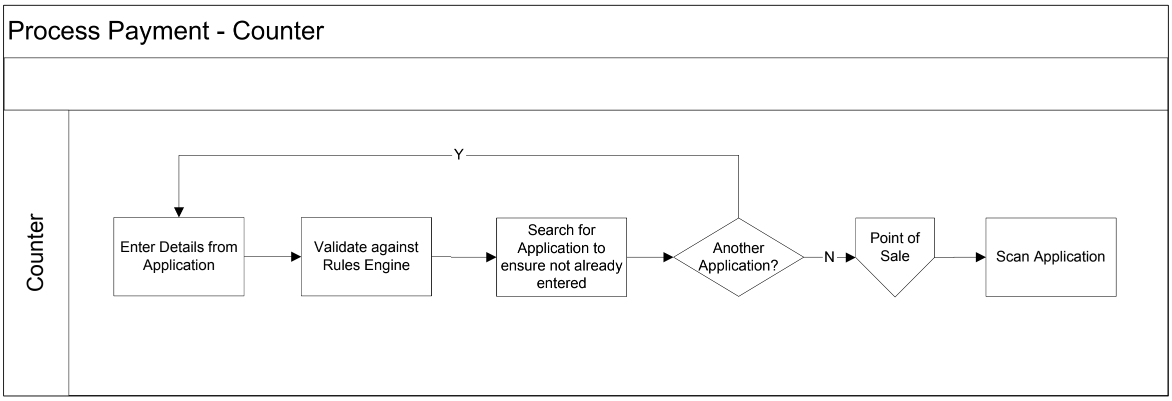
All correspondence sent to the Applicant regarding the Application should be scanned into the image application with an Image Id linking the image with the associated Application in LifeLink.

Under some circumstances, Applications that are deemed not compliant with the Entitlement Rules may need to be accepted after following an escalation path to the delegated authority. An authorised Registry officer may need to override the business rules on an Application. On overriding business rules the authorised Registry user must enter an appropriate Reason Code indicating why the override was necessary.

When Applicants have an inactive Account with the Registry (they are expired Account Holders), the event they are notifying can still be registered, but a Certificate cannot be issued until the certificate has been paid for.

Once all outstanding compliance matters have been resolved, the Application is ready to move into the Matching process – see 18.5 Matching.

18.3.5.2 Process Payment – Counter



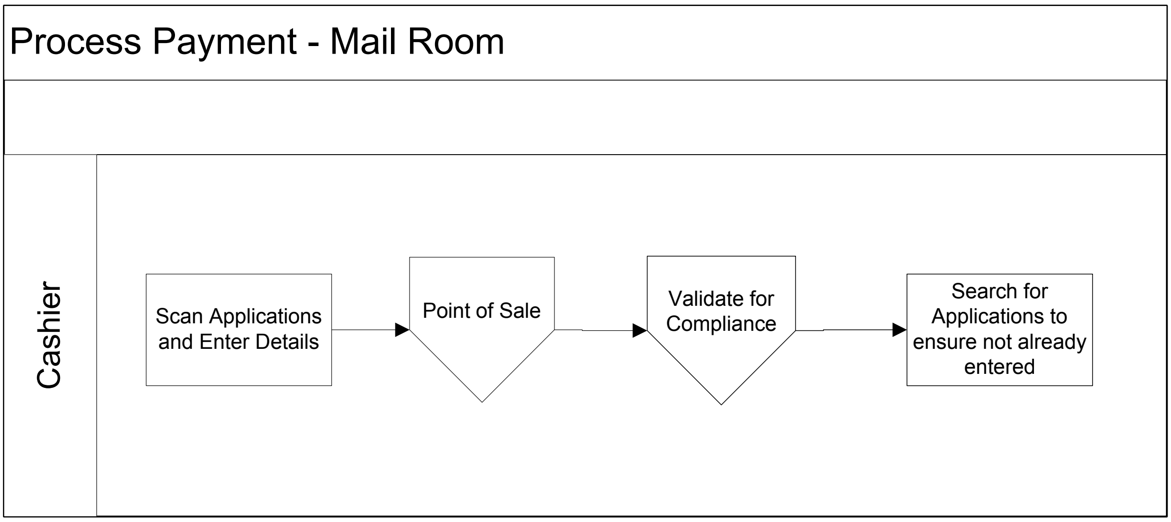
Applications received at the counter are data entered by the counter staff after the initial verification of the legitimacy of the Applicant. All details entered into the system are validated against the Rules Engine to ensure that data is well formed and complete. The system will then search to ensure that the Application is not a duplicate entry for one already being processed. If the system detects an apparent duplicate Application the user will be asked to confirm if it is a duplicate record or not.

Registry staff at the counter are then able to process cash, cheque, money order, EFTPOS and credit card payments for Certificates and services. Amounts received over the counter are entered through the Point Of Sale system and recorded against the applicable Application. The system will provide advice to the counter on any appropriate cash ‘change’ and allow multiple methods of payment for the one Application.

The Application is then scanned into the image application to retain an image of the form submitted at the counter. An Image Id is retained in LifeLink linking the image to the Application details.

Where the Application is for a Birth Card, counter Staff will photograph the Applicant and capture an image of their signature. These details are also linked to the Application and the Subject of Record.

18.3.5.3 Process Payment – Mail Room



Mailed and Faxed Applications are data entered in the Mail Room at the Registry. They are scanned on receipt and the scanned image is linked to the Application. The Application Form is sent for filing.

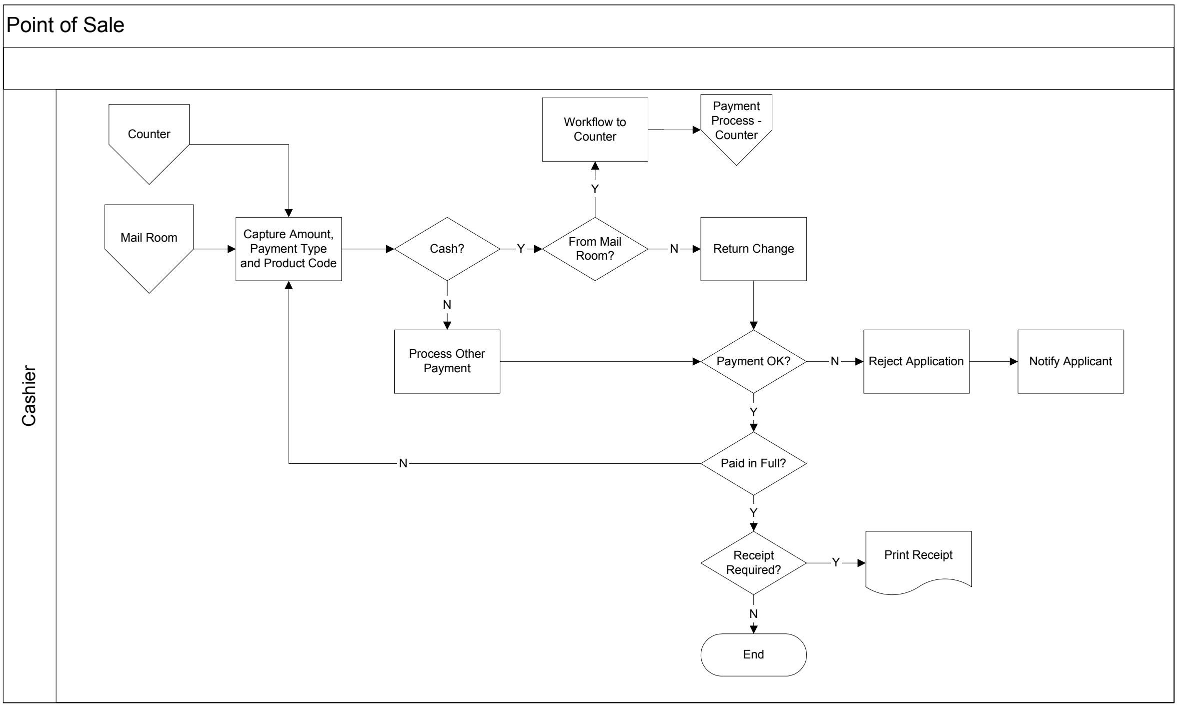
Applications received at the Mail Room are scanned and in the payment processed prior to verification of the Applicant through the Point of Sale system. This ensures compliance with the Public Finance and Audit Act.

When paid, the Application is validated for compliance against the Rules Engine. This confirms Entitlement, Proof of Identity, whether the Event was registered in NSW and whether the Applicant is known or new to the Registry.

The Application is then checked against all other Applications to ensure it is not a duplicate entry. Where a duplicate is found the Application should be escalated to an authorised user to approve the Application to be refunded to the Applicant.

Note: The Registry may decide to outsource the scanning, data entry and point of sale processing of Applications. If this occurs, then a file may be imported with this information in order to validate for compliance.

18.3.5.4 Point of Sale

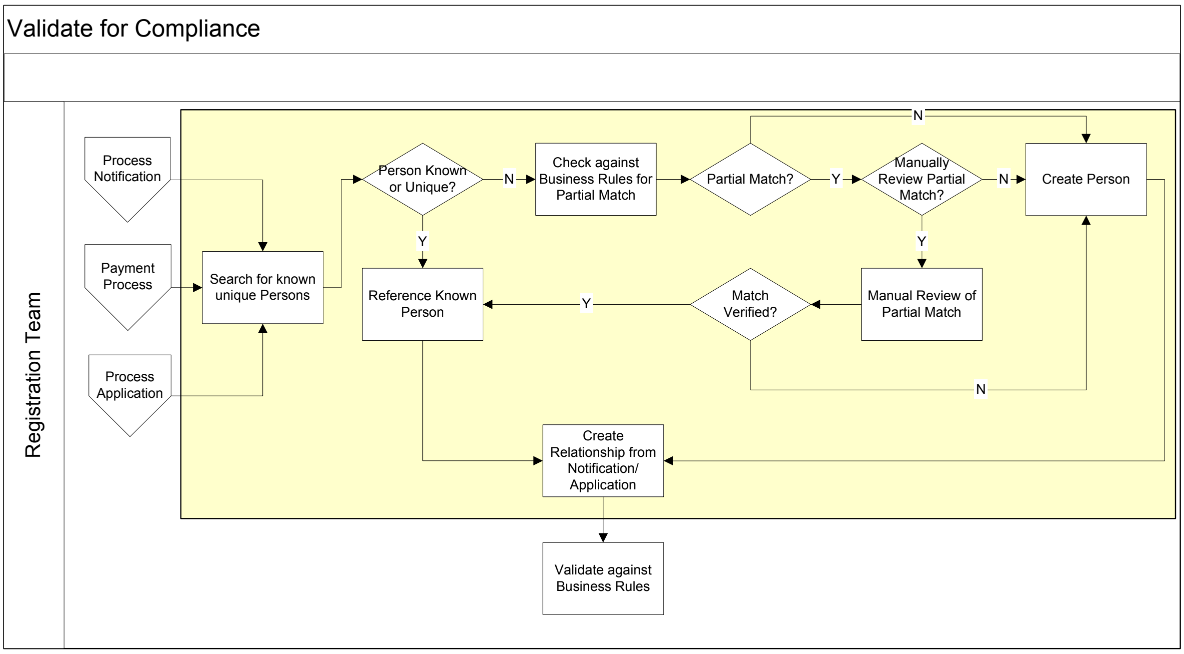


Registry staff in the mailroom and counter are able to process cheque, money order, EFTPOS and credit card payments for certificates. Cash payments can only be processed at the Counter.

Where a payment is rejected (eg for failed credit card transaction) the Applicant is notified by a system-generated letter so they can submit alternative payment.

Receipts are issued for all payments received at the counter, and on request when processed in the Mail Room. A Tax Invoice will be generated on request.

18.3.5.5 Validate for Compliance



As part of checking for compliance, the system will determine whether the Registry knows the Persons on the Application. The system will search set criteria about a Person and compare to its Person records. Where the Person is known, the existing Person will be referenced on the Application. Where the Person is not known, the Person will be created as a new Person. Any Persons referred to on the Application will then have relationships created to represent their participation relative to other Persons on the Application. For example, the Subject of the Record/Registration and the Applicant would have the following relationship created for an Application: Applicant for Subject of Record.

The system will have the capacity to determine Full and Partial Matches. The Rules Engine will manage the rules that determine a full or partial match. Examples include: full match – exact match on five data items used to determine Person uniqueness; partial match – eg. exact match on 4 data items that determine uniqueness and a probability match on the fifth item.

The system will allow the Registry to nominate whether ‘Partial’ matches can be manually reviewed. This will allow the Business to manage the overhead of manually intervening on the decision to create a person. The Registry may need to have some teams manually review partial matches, whilst others do not. For example, Client Services may manually review, whilst Registrations may not.

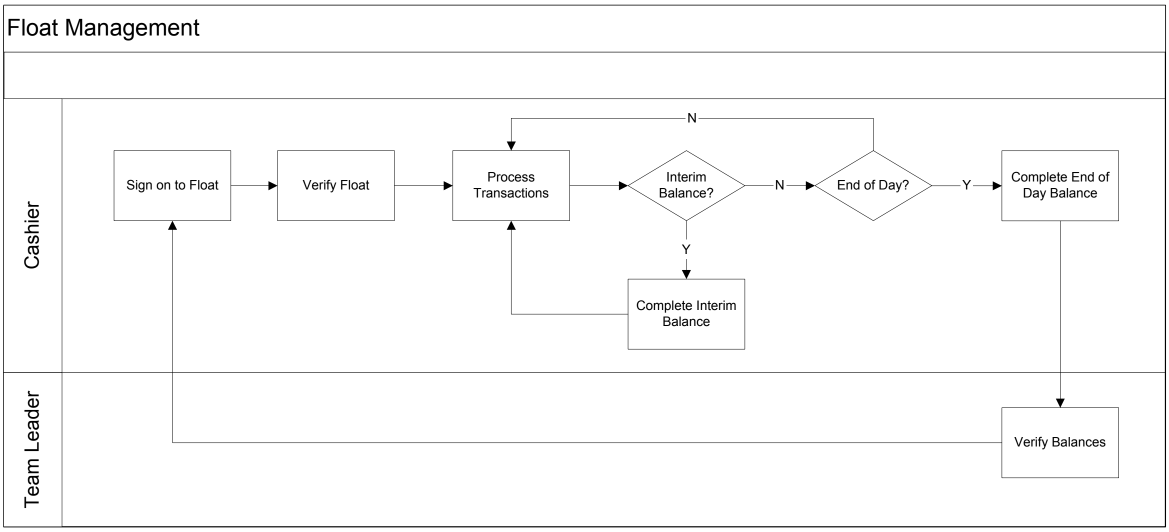
When Parties are created from an Application, relationships are also created between the Parties. Only those relationships derived from the Application are recorded. Examples of relationships would be: husband of, wife of, child of, applicant of, etc.

The relationship of ‘Applicant to Subject’ is particularly important to the Registry. It allows analysis of regular clients who purchase Certificates and potential fraud and entitlement.

Applications will then be validated against a series of Business Rules and Validations in the LifeLink Rules Service for compliance. These rules will change according to the type of Application (eg. Birth Card Application, Single Status Application, Death Certificate Application etc). Where the Application has no corresponding Registration, the Rules Service will determine the appropriate course of action. For example: issuing a ‘No Trace’ Certificate.

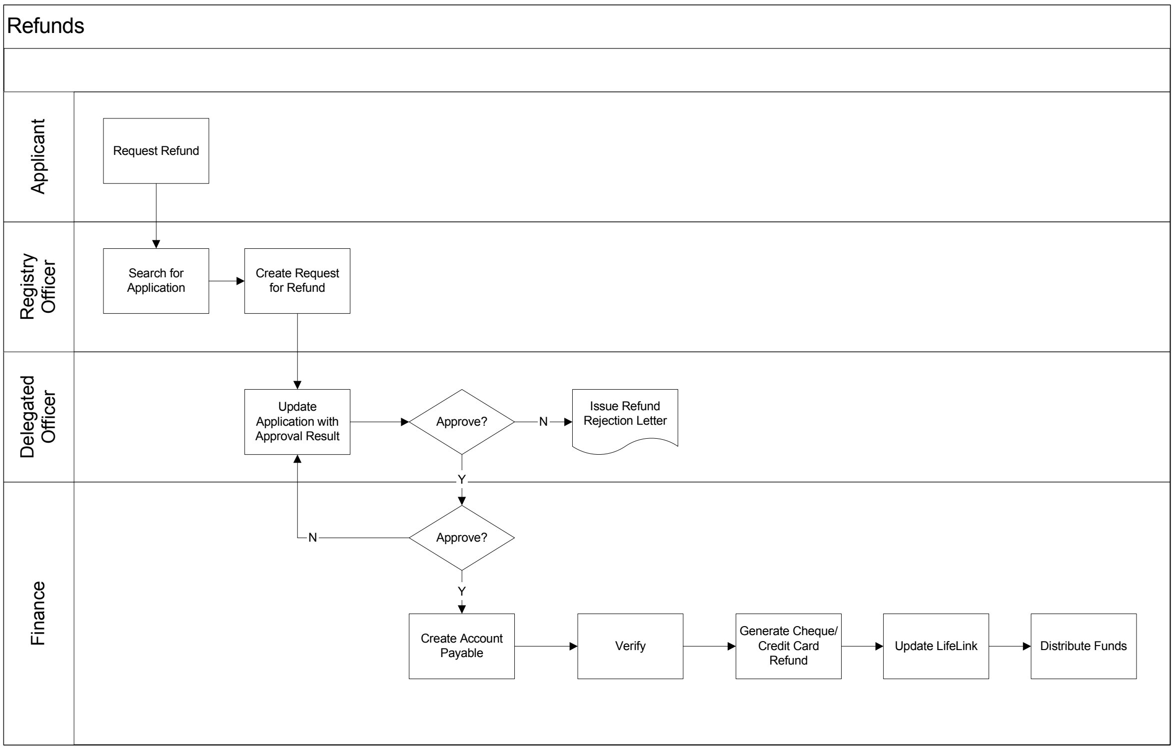
If successfully validated against the Rules Service and therefore compliant, the Application is eligible to be used in the matching process (see 18.5 Matching).

18.3.5.6 Float Management



Counter staff are assigned a float at the start of their session on the counter. Management of the float is the responsibility of the counter staff. Multiple staff can use the same float throughout the day; however, they are accountable for the balance of the float for the period they are logged in. Staff will be forced to run an interim balance prior to handing over the float to a new staff member. Interim balances may be run throughout the day to confirm the float as part of the daily activities and users will be forced to run an end of day balance prior to logging out at the end of the day.

18.3.5.7 Refunds



On occasion, refunds can be issued to Customers. This may occur if Guarantee of Service times are not met, when overpayments are received etc. Refunds are issued at the discretion of the Registry and linked to the original Application. This relationship limits the amount that can be refunded to the amount that was receipted for the Application, or a subset of that amount. The refund is deducted from the general ledger account for the product code where it was originally credited.

The Applicants current address must be recorded against the 'Request for Refund' as the details may have changed since the details of the original Application were recorded.

18.3.5.8 Search

Registry staff need to be able to search for and access Applications, regardless of compliance status. Restrictions exist on search results so that certain fields are suppressed under specific access conditions. Examples would be the suppression of addresses when the record is for a celebrity.

18.3.6 Exceptions

Customers are able to register events without submitting an Application to purchase the relevant Certificate. Registration is at no cost to the Customer.

Authorised officers may waive payments for some Products or Certificates (using appropriate Reason Codes). Examples may include Death Certificates following natural disasters.

Where the Change of Name Application is going to be rejected and sent back to the client, any funds attached are not recorded in the Point of Sale system. They are issued directly back to the client on the same day.

Where payments are received in the mail without any attached Application but the Customer can be identified the payments are returned to the Customer without being receipted. If the Customer cannot be identified the payments are entered on a manual register outside of LifeLink.

18.3.7 Post condition

There has been an allocation of funds against the Application and the relevant Product Codes. Guarantee of Service for the Applications can begin once Applications are compliant. The Guarantee of Service will cease each time non-compliance is determined. When compliance is attained, the Guarantee of Service will be started again.

18.3.8 Validations

Process Ref	**Description**
Validate Compliance – Entitlement	Rules exist around who is entitled to which Certificates. The system checks these, which vary in complexity. Examples include: Births: checking whether the Applicant is recorded as deceased when applying for their Birth Certificate; confirming an adopted Person is over 18 before issuing their original birth certificate and there is no veto in place. For Marriages, only the bride or groom can apply for their marriage certificate. If both parties are deceased, their children are entitled to apply for one. If the Marriage occurred more than 50 years ago anyone can apply for the Certificate. For Deaths, the Funeral Director can apply for the Certificate within 2 months of the Date of Registration of the death. In all cases the system will provide the ability for an authorised user to override the entitlement rules to manage exceptions.
Validate Compliance – Entitlement	There are no entitlement rules for the Applicant where the Application is submitted with the Birth Registration Form (Notification) within 60 days of the Date of Birth of the child. When not submitted with the Registration Form, the Certificate can be issued to the Applicant where the Applicant is a person named on the certificate.
Validate Compliance – Entitlement	The Marriage Celebrant on the Notification can request the Marriage Certificate for a period of up to 2 months from the Date of Registration of the marriage. After that period, only the bride and groom can apply for their marriage certificate. If both parties are deceased, their children are entitled to apply. Where the children are deceased, the grandchildren are entitled to apply.
Validate Compliance – Entitlement	The Funeral Director on the Notification can request the Death Certificate for a period of up to 2 months from the Date of Registration. After that period the certificate can be issued to anyone named on the Certificate.
Validate Compliance – Entitlement	Children under 12 years of age cannot apply for their own Birth Card. Their Parent or Guardian must accompany and agree to the child applying for the Birth Card.
Validate Compliance – Entitlement	Birth Cards can only be issued if the Applicant’s birth is registered in NSW.
Validate Compliance – Entitlement	Registrations which are older than the following from the ‘Date of Event’ are exempt from entitlement rules: births more than 100 years old, marriages more than 50 years and deaths more than 30 years old. (The number of years applicable will be a system configurable setting.)
Validate Compliance – Entitlement	An adopted person (over 18) is entitled to receive (subject to the Adoption Act) their pre-adoption birth certificate, and their adopted birth record, and any prescribed information relating to their birth parents held by the Registry, and any prescribed information relating to a sibling or an adopted brother or sister held by the Registry.
Validate Compliance – Entitlement	An adopted person who is less than 18 years of age is not entitled to receive his or her pre-adoption birth certificate or prescribed information except with the consent of his or her surviving adoptive parents and surviving birth parents (as shown on the pre-adoption birth certificate or adopted person’s birth record), or the Director-General of DoCS if there

Process Ref	Description
	are no surviving adoptive parents or birth parents (as so shown) or if they cannot be found or if there is, in the opinion of the Director-General of DoCS, any other sufficient reason to dispense with their consent.
Validate Compliance – Entitlement	An adopted person is not entitled to receive any prescribed information held by the Registry unless the adopted person produces to the Registry an authority authorising the information source to supply the prescribed information issued by the Director-General DoCS. All Adoptees must go to DoCS for authorisation for any pre-adoption information. This ensures there are no vetos currently in place.
Validate Compliance – Entitlement	An adoptive parent is entitled to receive (subject to the Adoption Act) their adopted child's pre-adoption birth certificate, the adopted birth record, and any prescribed information relating to their adoptive child, until that child turns 18 years. After this, they will require that child's consent before they receive entitlement to that information.
Validate Compliance – Entitlement	The mother and father are entitled to a Birth Certificate if they are listed on the Birth Registration.
Validate Compliance – Proof of Identity	When Applications are presented to the Registry, the system will verify any identification submitted on the Application. For example, where a driver licence number is submitted, the system will interface to the RTA to confirm the licence is valid and current. Where verification cannot be determined on line, the system will allow for manual verification.
Validate Compliance – Proof of Identity	If the Applicant is applying for their own certificate, it can be issued to the Applicant if they provide three appropriate forms of identification. If not applying for their own certificate, the Applicant will need to provide further information such as: a letter giving permission from the person on the certificate or their parent, including address, daytime phone and signature; three copies of identification of the person giving permission; three copies of their own identification.
Validate Compliance – Proof of Identity	The system should check Funeral Directors and Marriage Celebrants against an external source to verify the parties are active. Authorised Registry users should be able to enter non-authorised Celebrant details.
Validate Compliance – Proof of Identity	Solicitors need to show a letter on letterhead identifying their firm and Solicitors Card (showing identification) for validation to authorise a request for a Certificate, as defined in the Solicitors Access Policy.
Validate Compliance – Proof of Identity	The system should check for Applicants who are a nominated as 'Persons of Interest'. Any matches should be highlighted to a nominated Registry person.
Validate Compliance – Proof of Identity	When applying for a Birth Card, the Parent/Guardian must provide three copies of their own identification. If the Applicant is over 12 years of age they must provide three forms of their identification. Guardians need to show proof of guardian-ship. This can be demonstrated, for example, by a letter from the Minister, paperwork from DoCS, Court Order, dependency under a Commonwealth ruling (eg names appearing on Health Card).
Validate Compliance – Event in NSW	When Application details are entered, the system should search for a corresponding Registration. If found, the Registration Number is recorded on the Application. If not found the registration may be a late registration or not yet registered, so may be referred to the Registration Development Team, or may be waiting for the corresponding Notification to be processed.
Validate Compliance –	The system must validate where an Applicant applies for their own Birth Certificate where the Subject of Record is marked as deceased. This will

Process Ref	Description
Proof of Identity	highlight a potential fraudulent attempt to access a record. This situation should be escalated to a nominated Registry User.

18.3.9 Business Rules

Process Ref	Description
Scan Application	The Registry intends to image all Applications, retain the image in perpetuity and dispose of the physical form.
Mark as Compliant	Guarantee of Service for Applications begins from the 'Date Received' for the Application. If the Application is deemed not compliant, the Guarantee of Service is ceased until compliance is achieved.
Validate Compliance – Entitlement	When applying for a Birth Card, Applicants must apply in Person and be required to pass the shared secrets test.
Validate Compliance – Proof of Identity	When applying for a Birth Card (or a replacement), identification that includes the current address is required but can be overridden by an authorised user.
Validate Compliance – Business Rules	The Photo and Signature of the Birth Card Applicant are stored at the Registry for 6 years to prevent fraud.
Validate Compliance – Business Rules	Where no Registration Details are found for an Application, a 'No Trace' Certificate is generated and issued to the Applicant.
Validate Compliance	Override authority for validations and Business Rules exist for escalating authorities, eg. Team Leader.

18.4 PROCESS NOTIFICATION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.4.

18.4.1 Brief Description

All Notifications received are automatically validated for compliance against business rules and legislation. Registry Staff manually review Notification data entered into external systems that is validated by the system as not compliant. In order to complete the compliance verifications, the system searches for the Persons nominated on the Notification to determine whether they are known to the Registry. If known, the system references the existing Person, if not known, they are created. Relationships are established between all Persons/Parties on the Notification. Registry staff are able to search for Notifications, regardless of the compliance status and data enter new Notifications as required.

18.4.2 Goals

This process allows Registry staff to data enter new Notifications and concentrate on resolving Notifications that are not compliant by automatically confirming their compliance against business rules and validations. It also confirms and creates Persons as appropriate and creates relationships between the various Parties specific to that Notification.

18.4.3 Precondition

External users are able to submit notification details to the Registry using external systems. Some examples include: Registry.Connect (Connect.Marriages, Connect.Deaths, Connect.Courthouses), eParents, eMarriages, eDeaths and eBirths. These systems have done initial validations on data entered and issued Notification Identifiers for each Notification submitted once transferred into LifeLink. Other Notifications are manually received.

18.4.4 Assumptions

External systems that capture data for the Registry, eg. Registry.Connect (Connect.Marriages, Connect.Deaths, Connect.Courthouses), eParents, eMarriages, eDeaths, eBirths, will be interfaced to the LifeLink system, not absorbed into the LifeLink system.

Birth Notifications that are data entered by an external organisation (data processing bureau) will be entered into the Parents web interface (yet to be agreed).

Any external systems re-development will be completed in readiness for LifeLink. This re-development is outside of scope for this tender.

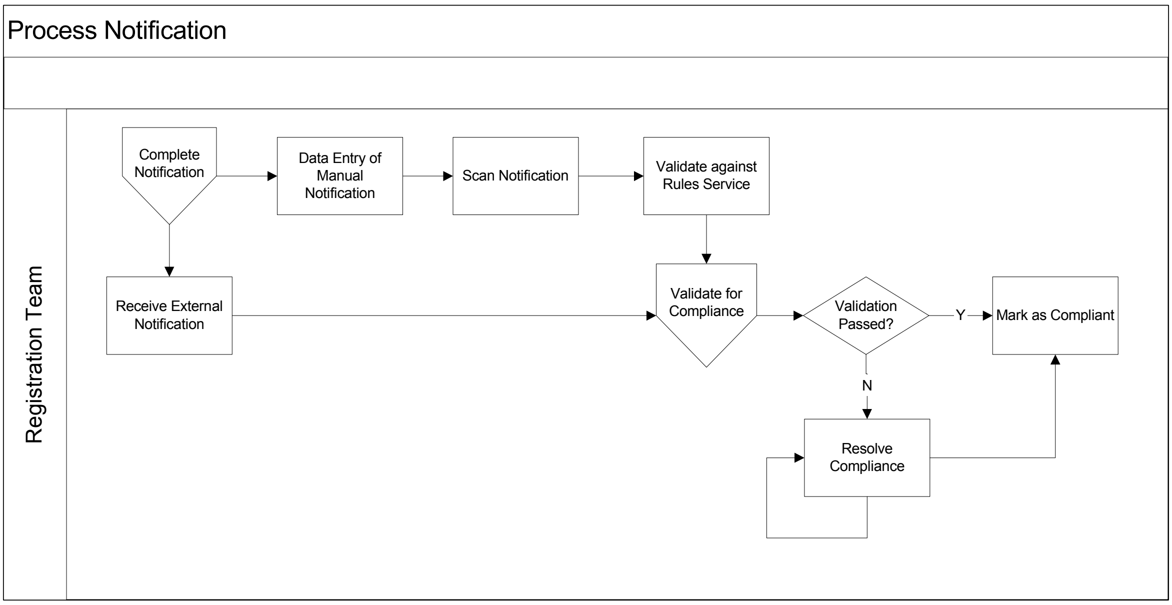
Sufficient detail is captured about the parties on the Notification to match Persons to any existing Persons.

Notifications received from external systems will not be re-validated using the same validations on receipt into LifeLink. The external systems will all use the LifeLink Rules Service to validate the Notifications to ensure data is well formed.

If Fathers are to submit a separate Notification on the birth of a child, the Notification from the Mother needs to indicate that the Notification from the Father is pending.

Sufficient detail can be captured about the parties on the Application to match Persons to any existing Persons.

18.4.5 Workflow



18.4.5.1 Data Entry of Notification

There are instances where Notifications need to be entered manually into LifeLink. Examples of when these arise are: when insufficient Notification details are known (eg. pending outcomes from the Coroner); details are faxed and need to be data entered; forms are received at the counter and need manual entry (eg Birth Registration Forms) or overseas events to be registered in the NSW Register.

A very small number of Funeral Directors have exemptions from notifying the Registry electronically of Deaths. The Registrations Team manually enters these.

The Amendments Team at the Registry will scan amendment Notification Forms into LifeLink. Any related Application Form is entered by the Amendment Cashiers.

18.4.5.2 Scan Notification

Mailed or faxed Notifications that are data entered by the Registration Team are scanned and the scan is linked to the electronic Notification.

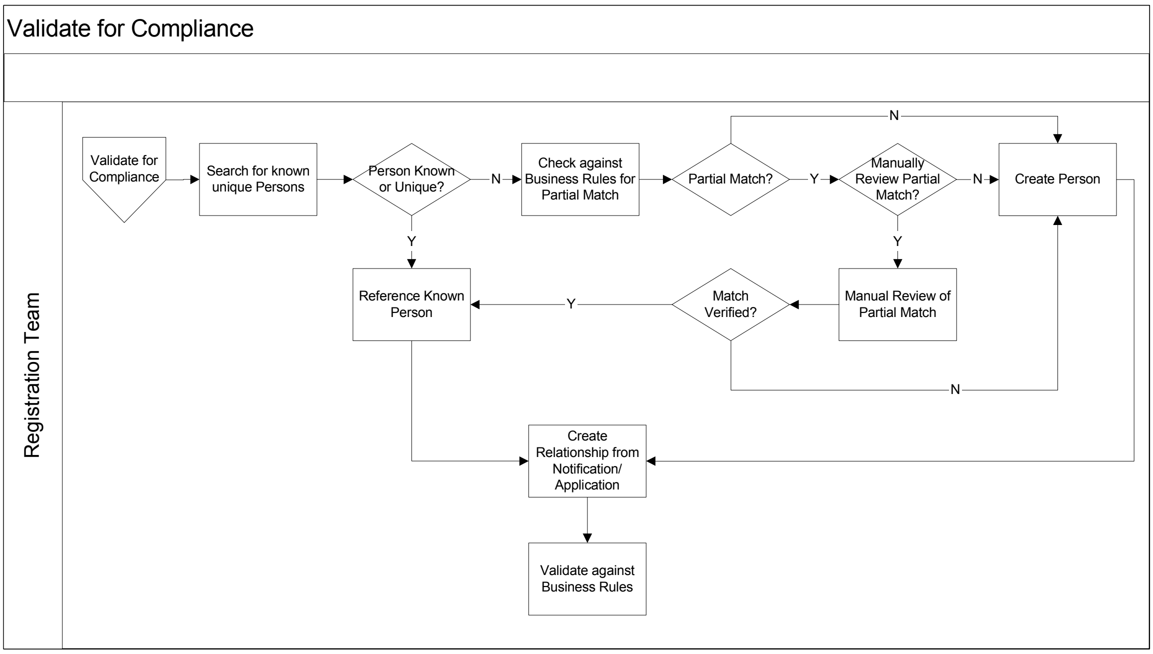
18.4.5.3 Validate Against Rules Service

Manual Notifications are checked against the same LifeLink Rules Service field validations as Notifications that are received through the web interfaces.

18.4.5.4 Receive External Notification

See 18.1 Complete Notification.

18.4.5.5 Validate Notification for Compliance



As part of checking for compliance, the system will determine whether the Registry knows the Persons on the Notification. The system will search set criteria about a Person and compare to its Person records. Where the Person is known, the existing Person will be referenced on the Notification. Where the Person is not known, the Person will be created as a new Person. Any Persons referred to on the Notification will then have relationships created to represent their participation relative to other Persons on the Notification. For example, the birth mother of a child and the child would have the following relationship created for a Birth Notification: Mother of Subject of Record.

The system will have the capacity to determine Full and Partial Matches. The Rules Engine will manage the rules that determine a full or partial match. Examples include: full match – exact match on five data items used to determine Person uniqueness; partial match – eg. exact match on 4 data items that determine uniqueness and a probability match on the fifth item. (This may occur when a Death is notified and the deceased is notified as Jim Citizen, when they are already known to the Registry as John Citizen.)

The system will allow the Registry to nominate whether ‘Partial’ matches can be manually reviewed. This will allow the Business to manage the overhead of manually intervening on the decision to create a person. The Registry may need to have some teams manually review partial matches, whilst others do not. For example, Client Services may manually review, whilst Registrations may not.

Notifications will then be validated against a series of Business Rules and Validations in the LifeLink Rules Service for compliance. These rules will change according to the type of Notification (eg. Birth Notification, Death Notification, Notice of Intended Marriage, Court Order etc). Once validated and therefore compliant, the Notification may be eligible to be used in the matching process.

18.4.5.6 Mark as Compliant

Once all outstanding compliance matters have been resolved, the Notification is ready to move into the Matching process – see 18.5 Matching.

18.4.5.7 Resolve Compliance

When Notifications are received which fail compliance validations in LifeLink, they are reviewed by a Registry Officer. Examples of these include: marriages where the parties are under 18 years (and no court order is present); or have not given one month and one day notice of intent to marry; or notifications with incomplete information (eg. Birth Notifications that have been data entered by the Data Processing Bureau).

The system provides a report/shared workflow to designated team members to nominate exceptions with the failing compliance issue highlighted. Exceptions are divided up by Event Type. There may be multiple steps in the process to resolution where the Registry officer is required to escalate action or authorisation from other members of the Registry until the matter is resolved. Once assigned, it should be clear who is accessing the Notification and the Notification should be locked from other users until the edit is complete.

The Registry Officer reviews the Notification, records the outcomes of any follow up on the Notification (recording a summary of phone calls, letters sent etc) and resolves the issue by updating details that support the Notification. Note: The Notification itself is not updated as this represents evidence of an Event.

All correspondence sent to the Informant regarding the Notification should be made read only once attached to the Notification.

18.4.5.8 Search for Notification

Registry staff can enquire on Notifications. Search criteria must be available on every field including: Notification ID, Event Type, Person Names, Date of Event, Date of Receipt (by LifeLink), Date of Birth, Source of Notification (eg. web services), Informant details.

Search results will be restricted according to access and control rules eg. pre-adoptive Notifications will not be accessible by all staff. Further, some Notifications will have restricted fields. This may be used to prevent staff from seeing some Notification details, eg. address and contact details for Celebrities.

18.4.6 Exceptions

Guarantee of Service for Death Notifications occurs from the date of matching for Notifications (see 18.5 Matching).

18.4.7 Post condition

Notifications are compliant. The Guarantee of Service can begin for Notifications, calculated from the ‘Receipt Date’ of the Registration Form. The Guarantee of Service will cease each time non-compliance is determined. When compliance is attained, the Guarantee of Service will be started again.

18.4.8 Validations

Process Ref	Description
Validate Compliance – Proof of Identity	When Notifications are presented to the Registry rules should determine if identification is required and, if so, the system will verify any identification submitted with the Notification. For example, where a drivers licence number is submitted, the system will interface to the RTA to confirm the licence is valid and current. Where verification cannot be determined on line, the system will allow for manual verification.
Validate Compliance – Business Rules	The Births, Deaths and Marriages Act allows the Registry to reject Birth Notifications where the suggested child names are prohibited names. The system should check whether the new subject name appears in a prohibited names list and, if so, the Notification should be referred for compliance resolution. Names cannot be: obscene or offensive, unreasonably long, consist of symbols without phonetic significance in the ‘English’ language, practicably established by repute or usage, or are contrary to the public interest. Names must be in English alphabetical characters and not include diacritical marks, eg. é, ǿ.
Validate Compliance – Business Rules	The system should check for Persons on Notifications who are a nominated as ‘Persons of Interest’. Any matches should be highlighted to a nominated Registry Team.

Process Ref	Description
Validate Compliance – Business Rules	The system should allow the Notification of Death Events where the deceased was a resident in NSW. Where the death occurred outside NSW, approval by the Registrar is required with an override by an authorised Registry user including comments. If a Court Order exists, approval by the Registrar is not required.
Validate Compliance – Business Rules	All death registrations must be completed by electronic lodgement, unless the registration is the subject of a Coroners Order or the submitting Funeral Director is subject to an electronic lodgement exemption.

18.4.9 Business Rules

Process Ref	Description
Receive External Notification	The system should allow for both batch and real time receipt of Notifications from external systems.
Validate for Compliance – Business Rules	Both birth parents should sign the Birth Registration Form. Where only the Mother signs the Form, the Father cannot appear on the Registration or the Certificate unless in special circumstances such as the Father being deceased. In these circumstances approval by the Registrar is required with an override and comments by an authorised Registry user.
Validate for Compliance – Business Rules	Parents of multiple births must complete one Registration Form per child.
Search for Notification	The system should allow the searching for Coroners Orders on details such as name of deceased, date of birth, last place seen alive.

18.5 MATCHING

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.5.

18.5.1 Brief Description

A minimum of two compliant Notifications must be received and validated for the same event in order to create a Registration. This process examines each Notification to determine whether there are two (or more) that can be used to create a Registration.

Applications are matched to a Registration in order to produce a Certificate.

18.5.2 Goals

The process aims to find corresponding Notifications and Persons for an Event or the corresponding Registration for an Application.

18.5.3 Precondition

Compliant Notifications, Applications and completed Registrations are available.

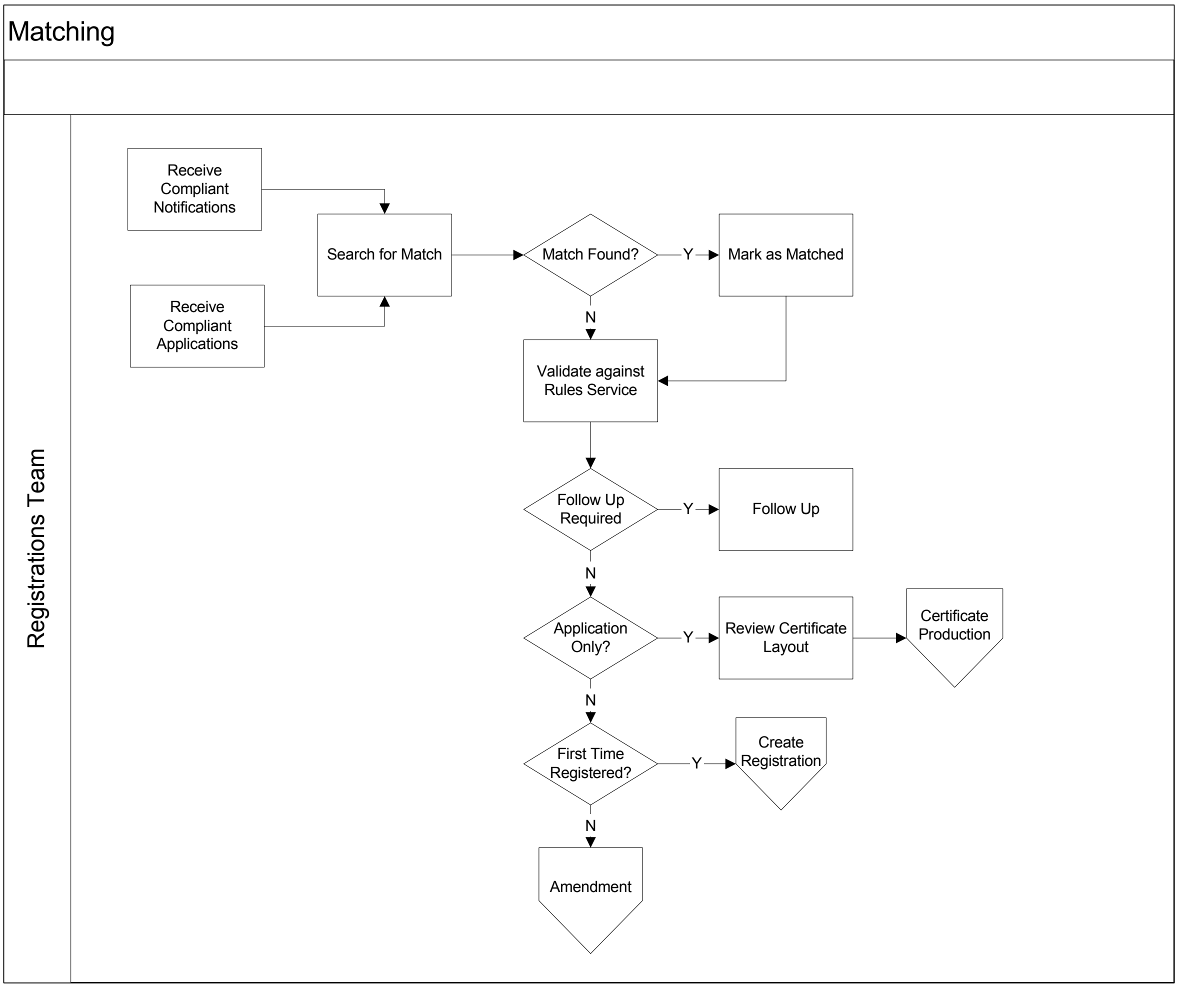
18.5.4 Assumptions

Notifications can remain unmatched for any period of time.

Unmatched Applications can also become a 'Result of Search'.

The Guarantee of Service for Deaths will start when the match has been completed.

18.5.5 Workflow



18.5.5.1 Search for Match

Each compliant Notification should be checked against all other Notifications to determine whether a matching Notification exists in LifeLink.

Where a match is not found, the system should also check the Notification against all Registrations. This will cater for the scenario where additional Notifications are received for an event that is already finalised, for example, the receipt of a final Coroner Order where an Interim Order was used to complete the Registration.

There may be more than two Notifications for the one event, for example, the receipt of notifications of a birth in addition to that from the parents and hospital. Multiple Notifications may be required to satisfy the business rules around when a Registration can be created.

For Applications, each compliant Application should be checked against all Registrations to determine whether a matching Registration exists in LifeLink.

For Amendments, each compliant Amendment Notification should be checked against all Registrations to determine whether a matching Registration exists in LifeLink.

Matches should be determined by a set algorithmic criteria which can be amended over time as the details required on the Notification/Application change.

18.5.5.2 Mark as Matched

When the criteria for a match have been met, the matched Notifications or Applications are cross-referenced by the system to indicate the match.

18.5.5.3 Validate against Rules Service

Where a match was not found, the system reviews the details of the Notification or Application to determine whether the missing Notification/Application requires follow-up. Business Rules will determine when exception processing is initiated and when Notifications and Applications are retained until additional matches are submitted. Examples include: Birth Notification received from the Hospital within the required 7 days, however, the parents have not submitted the corresponding Birth Registration Form within the required 60 days; Hospital has submitted a Medical Cause of Death Certificate but the Funeral Director has not submitted the corresponding Death Notification form within 7 days of disposal of the body.

Where a match was found, there may be insufficient Notifications to create a Registration. In this case, the business rules will determine whether the Notifications remain pending or whether follow up is required.

18.5.5.4 Follow Up

Under some circumstances, manual follow up is required. A workflow should direct these actions to a nominated Registry Team. These may occur where only one Notification has been received and the application is urgent, eg. where a Parent submits a Birth Registration Form prior to notification from the Hospital.

Manual matches for Applications may occur for some Product Types. Examples include: Single Status, Section 50 searches. With these products, there are intensive and more complex search requirements where the result may be a 'Result of Search' certificate.

18.5.6 Exceptions

Birth, Death and Marriage Notifications can remain unmatched for a set period of time. After that time, the missing Notification is followed up either automatically or after a manual review.

Duplicate Notifications will be highlighted as duplicates (see 18.1 Complete Notification). The duplicate is excluded from the matching process.

Adoptions Orders are matched to the original Birth Registration.

Unmatched Applications may result in a 'Result of Search' indicating a 'no trace' (where no corresponding Registration exists).

18.5.7 Post condition

Guarantee of Service for Death Notifications can be started from the 'Date of Matching'. Matched Notifications are ready to create a Registration.

18.5.8 Validations

Process Ref	Description
Check against Business Rules	The system should match the Amendment Notification (Request) to the related evidence for the amendment and the Registration. For example, the Amendment Notification to the Birth Registration Form and the Birth Certificate with the spelling error; DNA results to the Amendment Notification.
Check against Business Rules	The system should match medical certificates (cause of death) and disposal details (cremation or burial) for Deaths, along with Coroners Orders (where appropriate).
Check against Business Rules	The system must compare Birth Notifications received from Parents to Birth Notifications received from Hospitals. Where notifications have been received by parents, but not by the Hospital, then follow-up letters are generated for the Hospital (after 7 days). When the Hospital has notified but the Parents have not, then letters are issued to the Parents (after 60 days).
Check against Business Rules	The system must attempt to match the 'Fact of Death interface' to NSW Births. Where a match is found, the details of the Death Registration in the other State are updated as information (but does not create a registration).
Check against Business Rules	The system must retain Notifications without processing further until matched.
Follow Up	Any rejected Notification Forms which were rejected due to fraud, are referenced to a physical file with an annotation on the electronic record.

18.5.9 Business Rules

Process Ref	Description
Check against Business Rules	The Birth Registration may need to be manually updated where the Registration is pre 1951 and requires conversion from an image in order to be used in the matching process. (Subject to data migration plan.)

18.6 REGISTRATION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.6.

18.6.1 Brief Description

The Registry's key purpose is the recording of registrations for key life events for the people of NSW. This process finalises the Registration to retain in perpetuity.

18.6.2 Goals

To create a new registration.

18.6.3 Precondition

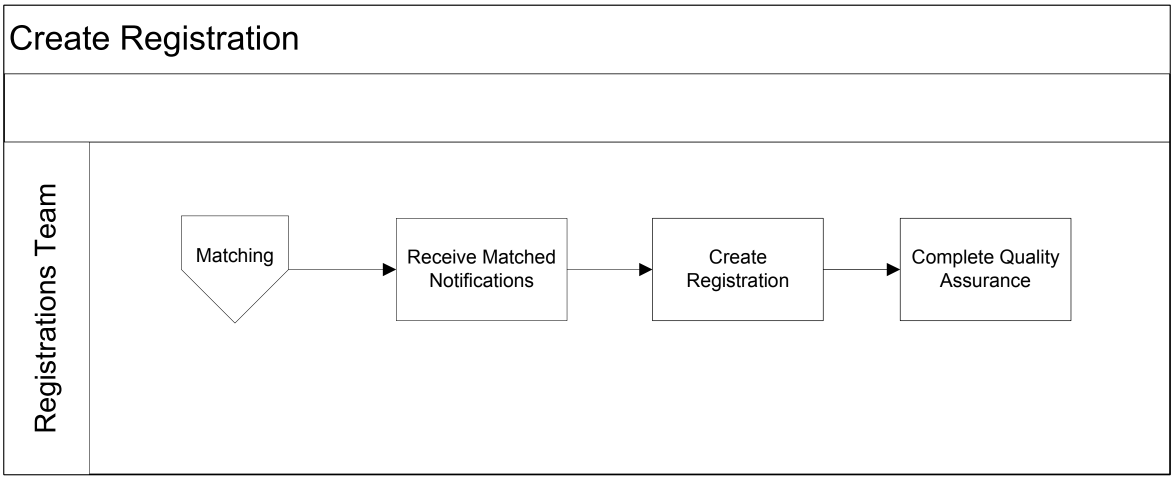
To create a Registration; Matched Notifications are found.

18.6.4 Assumptions

N/A

18.6.5 Workflow

18.6.5.1 Create Registration



Matched Notifications have been checked against all Registrations to check if there are any corresponding Registrations in LifeLink. Where there are no corresponding Registrations, a new Registration can be automatically created. Where a Notification is updating the Registration (eg. on receipt of the final Coroner Order) the system must highlight the Registration is awaiting finalisation by the Registration Team.

When a Registration is created, the relationships of the Persons on the Notifications are updated to show they are known for a Registration.

The Registration is then available for a quality assurance review (eg print preview against the Certificate template). If this is failed, the certificate cannot be released for printing until deemed satisfactory.

Registrations can be marked to prevent editing (amendment) of the Registration. This may be required where the Registration is under investigation or has a decision pending from a delegated authority.

18.6.6 Exceptions

Some Certificates need to be converted from an image to digital format to comply with the Births, Deaths and Marriages Act. Such images may have issues with legibility, or include words such as “illegitimate” which can no longer be issued on Certificates. The details from these images are manually re-entered into the system so a Certificate can be generated.

Some Registrations may be updated through a Court Order, without creating an amendment. These may occur, for example, when the Court issues a final Court Order after an interim Order has been used to create a Registration.

18.6.7 Post condition

Registration has been created or updated (due to Exception). Files have been closed.

18.6.8 Validations

Process Ref	Description
Create Registration	Automatic endorsements should be applied where possible. Eg, endorsement 1683 added where an interim Cause of Death has been lodged.

18.6.9 Business Rules

Process Ref	Description
Complete Quality Assurance	When a Registration is completed, it may be reviewed for quality assurance. The Registration Team can review a print preview of the registration on a Certificate to ensure all details appear as expected.
Complete Quality Assurance	If a Birth Registration is created with no father listed on the Registration, then any older siblings cannot be listed on the Registration/Certificate for the registered child. If there is no relationship recorded, then no other children can be recorded as siblings except for twins.
Conversions	Where the printed Certificate (with image) cannot be read, the original image can be retrieved to confirm the details.
Conversions	Where inappropriate terms are used in the image, these are recorded as '-' on the new Certificate and new Registration entry.
Conversions	For certificates where the date of event was prior to 1856 (the introduction of the registration system), the Cashier will complete searches to determine whether the application is for a baptism record, church record etc. The book it is recorded in is retrieved (even if off-site) and the details entered as a Registration.
Conversions	If a pre 1952 registration is converted, the previous image can no longer be printed. Only the converted version can be issued to an Applicant.

18.7 AMENDMENT

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.7.

18.7.1 Brief Description

The Registry's key purpose is the recording of registrations for key life events for the people of NSW. This process finalises any compliant changes to the Registration (known as amendments).

18.7.2 Goals

To amend a registration.

18.7.3 Precondition

Amendments are requested through a 'Request for Amendment' or Court Order.

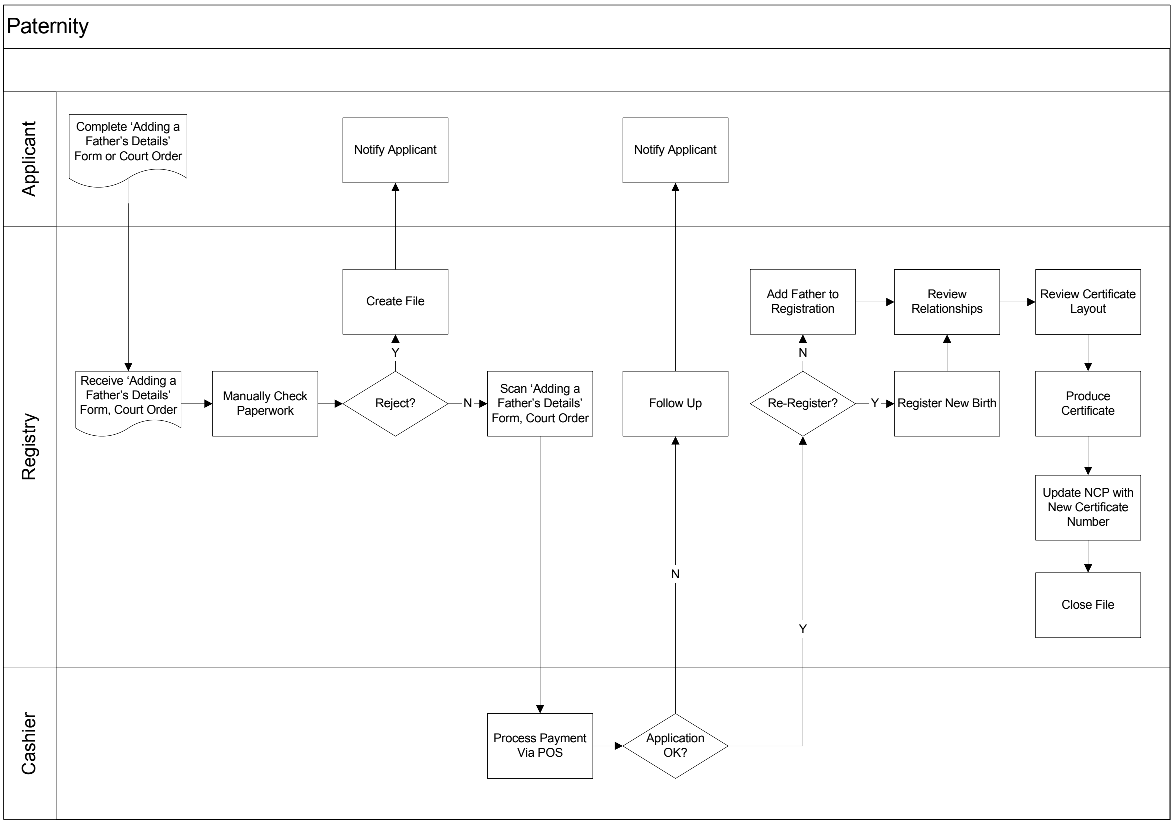
A registration must exist to be amended.

18.7.4 Assumptions

There will be two Person Records (pre adoption and post adoption) created for the same physical Person when a Child is adopted.

18.7.5 Workflow

18.7.5.1 Amend Registration – Paternity



When Paternity is to be added to a Registration, the Amendment Team manually reviews the paperwork received to confirm whether sufficient details have been provided. If insufficient details have been provided the Form is rejected, a file created and the Applicant notified.

Where the Amendment Team is satisfied with the details provided, the details received are scanned and the image attached as an electronic record. Any payment received is processed in the Point of Sale system. This is the same process as used in the Mail Room where an

Application is verified for compliance (eg. Entitlement, Proof of Identity etc) and the monies are receipted. Correspondence is issued to the Applicant where any of those validations fail.

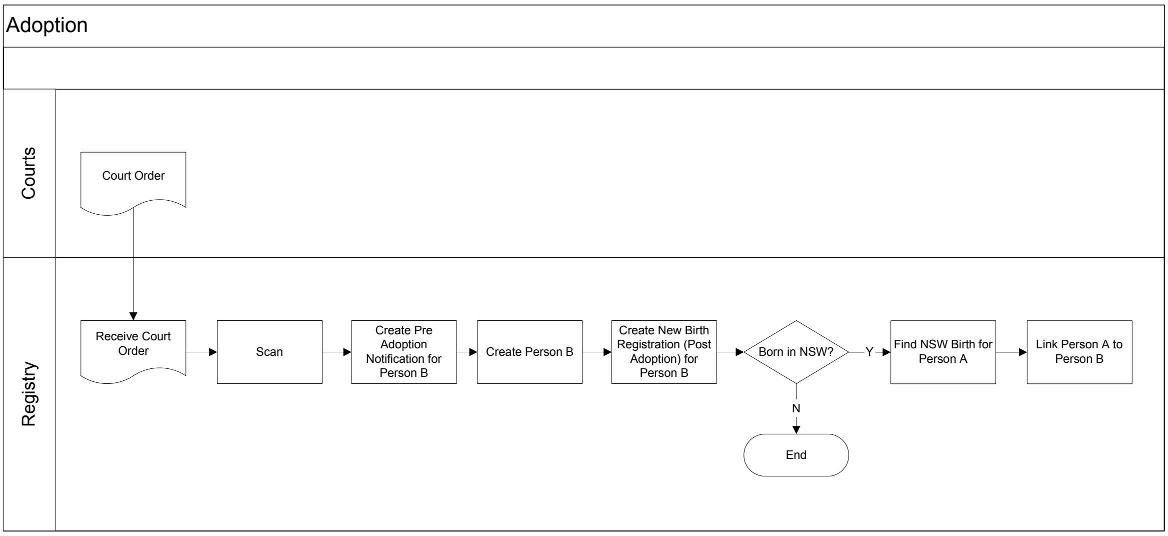
If all of the validations pass, and a new Father is to be added to the Registration, the Registration is updated with the new Parental details (this may involve the creation of a new Person by the system). The new Father will then have a relationship created to associate them to the Registration.

Where the Birth is to be re-registered (this may occur when a paternal swap occurs), the Registration is updated with the new paternal details. This may also involve the creation of a new Person by the system for the new Father. The previous paternal relationship is inactivated and the new relationship is activated. The original birth registration for the previous Father is cancelled.

The new Birth Certificate can then be produced as appropriate. NCP is updated to confirm the new Certificate Number is valid and that the previously issued Certificate has been superseded. An update is then sent to LifeLink with the identifiers for the new Certificate.

Any files created can then be closed.

18.7.5.2 Amend Registration – Adoption

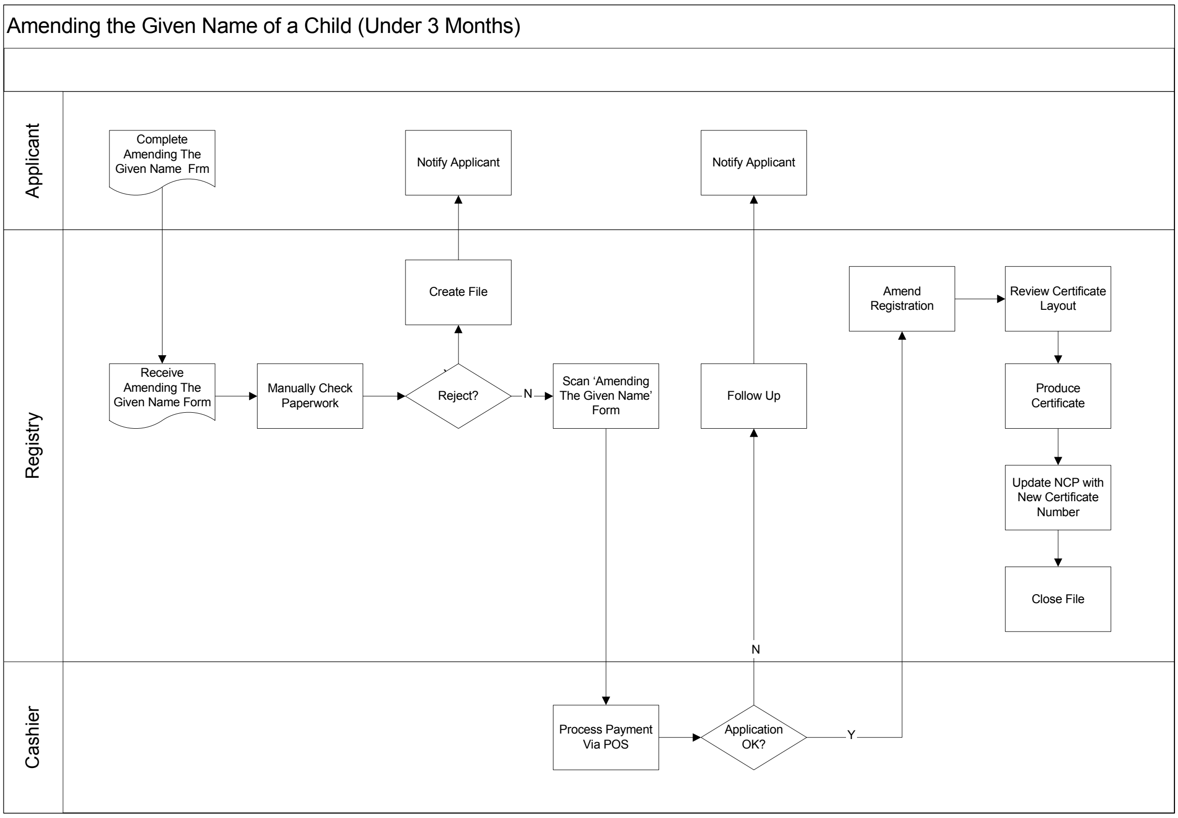


When the Supreme Court issues the Adoption Order to confirm an Adoption, the Registry scans the Adoption Order, which contains sufficient (but minimal) detail to create the Pre Adoption Notification. The scanned image is linked to the Pre Adoption Notification. This represents the relationship between the Adoptive Child and their Birth Parents (or contains sufficient detail to identify the NSW registration) and the Adoptive Child and their new Parents.

In order to create the Pre Adoption Notification, a new Person Record will need to be created for the Child (Person B) and potentially their adoptive and birth parents. The Pre-Adoption Notification is linked to these Persons and so is the new Post Adoption Registration (new birth registration with new parents).

If the child's birth was registered in NSW, the original birth registration is found along with the original Person record (Person A). The original birth is superseded by the new birth registration so Person A will then be linked to Person B to ensure that only authorised users can see this relationship.

18.7.5.3 Amend Registration – Given Name Under 3 months



When the Given Name is to be changed on a Registration of a child less than 3 months, the Amendment Team manually reviews the paperwork received to confirm whether sufficient details have been provided. If insufficient details have been provided the Form is rejected, a file created and the Applicant notified.

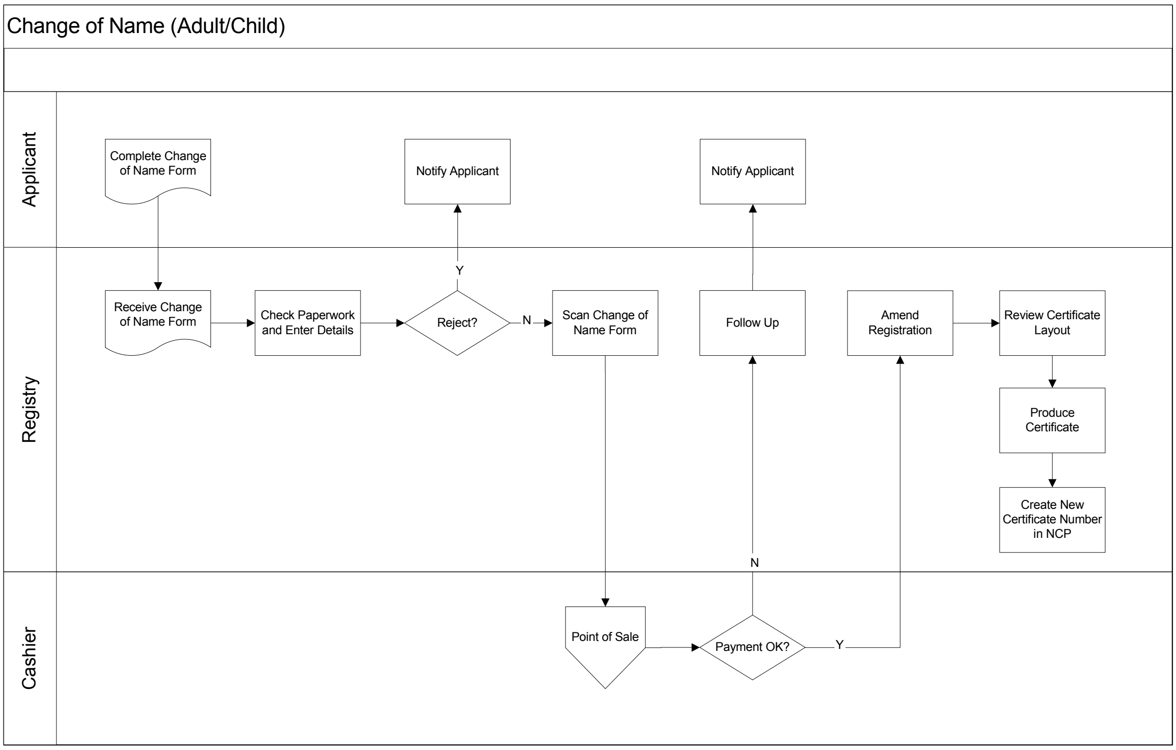
Where the Amendment Team is satisfied with the details provided, the details received are scanned and the image attached as an electronic record. Any payment received is processed in the Point of Sale system. This is the same process as used in the Mail Room where an Application is verified for compliance (eg. Entitlement, Proof of Identity etc) and the monies are receipted. Correspondence is issued to the Applicant where any of those validations fail.

If all of the validations pass, and the Given Name is to be amended on the Registration, only the Given Name can be updated

An updated Birth Certificate can then be produced as appropriate. NCP is then updated to confirm the new Certificate Number is valid and that the previously issued Certificate has been superseded. An update is then sent to LifeLink with the identifiers for the new Certificate.

Any files created can then be closed.

18.7.5.4 Amend Registration – Change of Name



When a name is to be changed on a Registration for a child or adult, the Amendment Team manually reviews the paperwork received to confirm whether sufficient details have been provided. Details are entered into the system to validate the compliance of the Application (this includes: Entitlement, Proof of Identity (including RTA checks), number of Change of Names in the last 12 months).

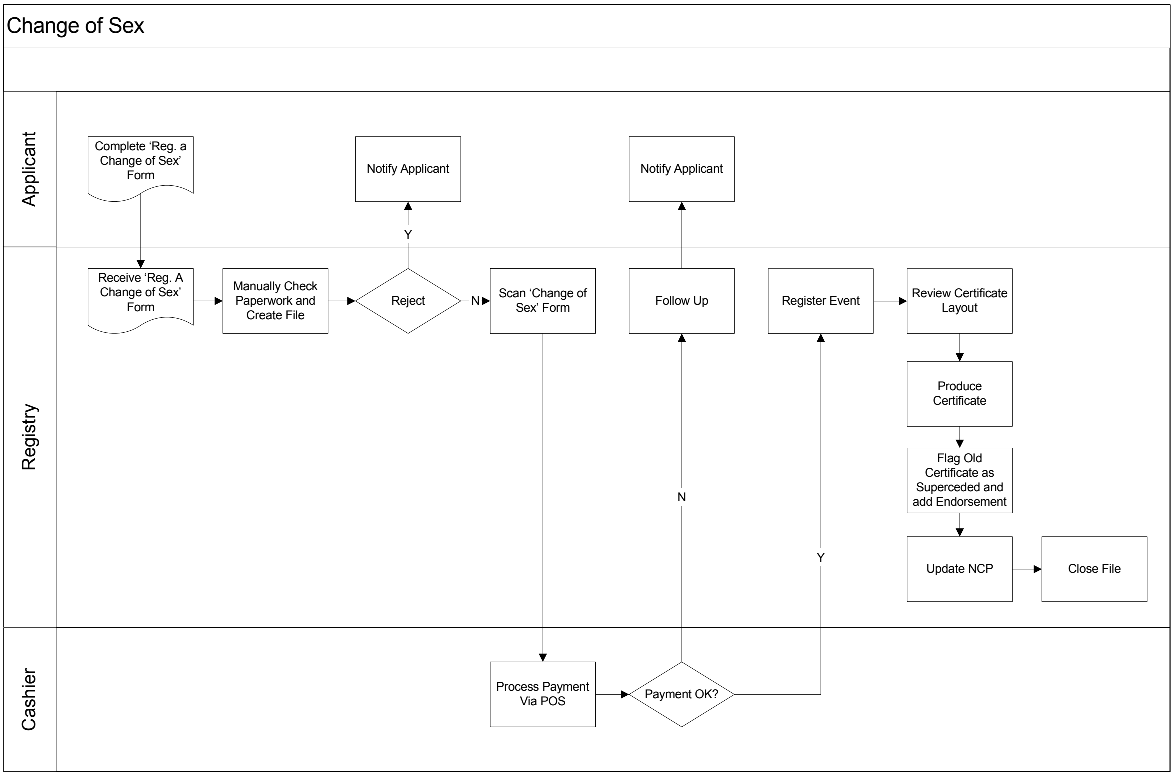
The Amendments Team reviews all details to determine whether the Application is to be rejected. If so, the Applicant is notified.

Where the Amendment Team is satisfied with the details provided, the paperwork is scanned and the image attached as an electronic record. Any payment received is processed in the Point of Sale system. The Applicant is notified where the payment fails.

If all of the validations pass the name fields can be updated. The Change of Name is finalised and flagged to determine whether the Birth Registration is also to be updated. Where the Birth Registration is updated, the name on the Birth Registration must be changed to match that on the Change of Name and the relevant endorsement (containing old name) is created. Where the Birth Name is not updated, an endorsement is added to the Birth Registration.

An updated Certificate can then be produced as appropriate. NCP is then updated to confirm the new Certificate Number is valid and that any previously issued Certificate of the same type has been superseded. An update is then sent to LifeLink with the identifiers for the new Certificate.

18.7.5.5 Amend Registration – Change of Sex



When the Registry receives a Change of Sex amendment request, the Amendment Team manually reviews the paperwork received to confirm whether sufficient details have been provided. If insufficient details have been provided the Form is rejected, a file created and the Applicant notified.

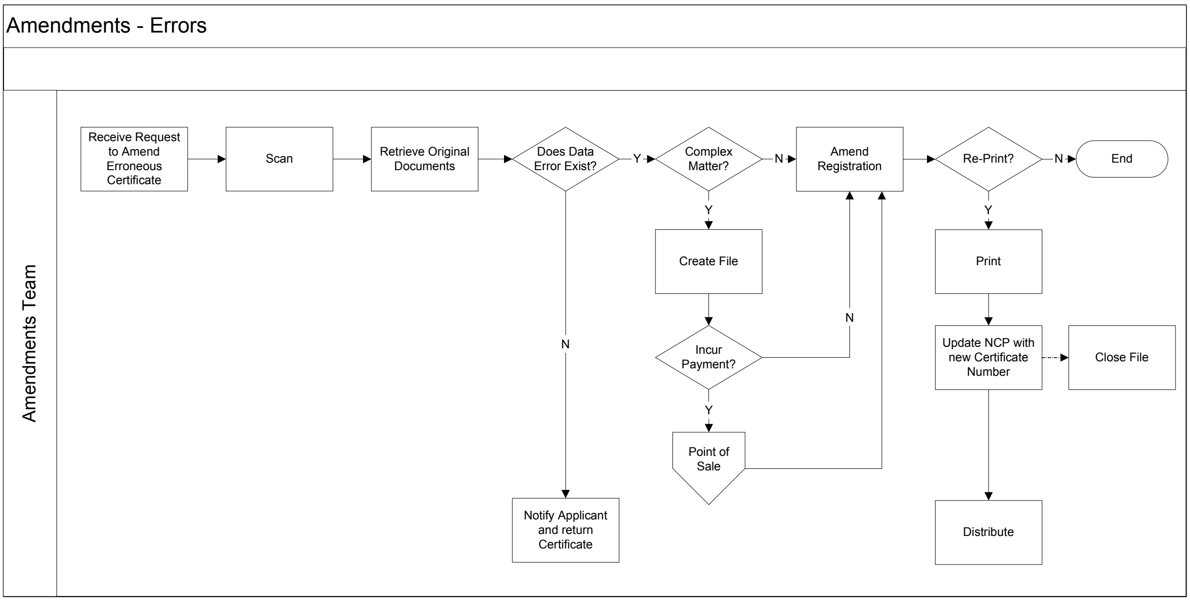
Where the Amendment Team is satisfied with the details provided, the details received are scanned and the image attached as an electronic record. Any payment received is processed in the Point of Sale system. This is the same process as used in the Mail Room where an Application is verified for compliance (eg. Entitlement, Proof of Identity etc) and the monies are receipted. Correspondence is issued to the Applicant where any of those validations fail.

If all the validations pass, and a new Birth Registration is to be created, the event is registered and the Person record is updated with the new gender. The previous Birth Registration is marked as superseded and an endorsement added.

The new Birth Certificate can then be produced as appropriate. NCP is then updated to confirm the new Certificate Number is valid and that the previously issued Certificate has been superseded. An update is then sent to LifeLink with the identifiers for the new Certificate.

Any files created can then be closed.

18.7.5.6 Amend Registration - Errors



When a Request to 'Amend an Erroneous Certificate' is received, the Amendment Team scans the paperwork received and retrieves original registration paperwork to confirm whether an error actually exists. Where the error does not exist (that is the Certificate matches the original Notification details) the Certificate is returned to the Applicant with appropriate correspondence.

Where an error does exist, the Amendments Team reviews all details to determine whether the matter is complex. If so, a file is created and a determination on whether payment is required is made.

Where the matter is not complex, or the payment has been receipted for the change, the registration is amended to reflect the change. Person records may need to be updated, depending on the type of change made.

An updated Certificate can then be produced and distributed if appropriate. This triggers an update to NCP to confirm the new Certificate Number is valid and that any previously issued Certificate of the same type has been superseded. An update is then sent to LifeLink with the identifiers for the new Certificate.

Any files created are closed.

18.7.6 Exceptions

N/A

18.7.7 Post condition

Registration has been updated. Files have been closed.

18.7.8 Validations

Process Ref	Description
	Nil

18.7.9 Business Rules

Process Ref	Description
Reference Copy	Reference copy (white paper) details from registrations and amendments should be able to be generated by staff.
Paternity	Applications can only be made by the biological father of the child.

18.8 CERTIFICATE PRODUCTION

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.8.

18.8.1 Brief Description

The Registry prints Certificates, Birth Cards and Results of Searches. These are issued on Numbered Certificate Paper and Plastic Cards, and distributed to Registry customers.

18.8.2 Goals

The Registry aims to maximise traceability and minimise opportunity for fraud through the use of Numbered Certificate Paper and Birth Cards. The Registry imposes Guarantee of Service turnaround times to ensure items are distributed to customers within the agreed timeframe.

18.8.3 Precondition

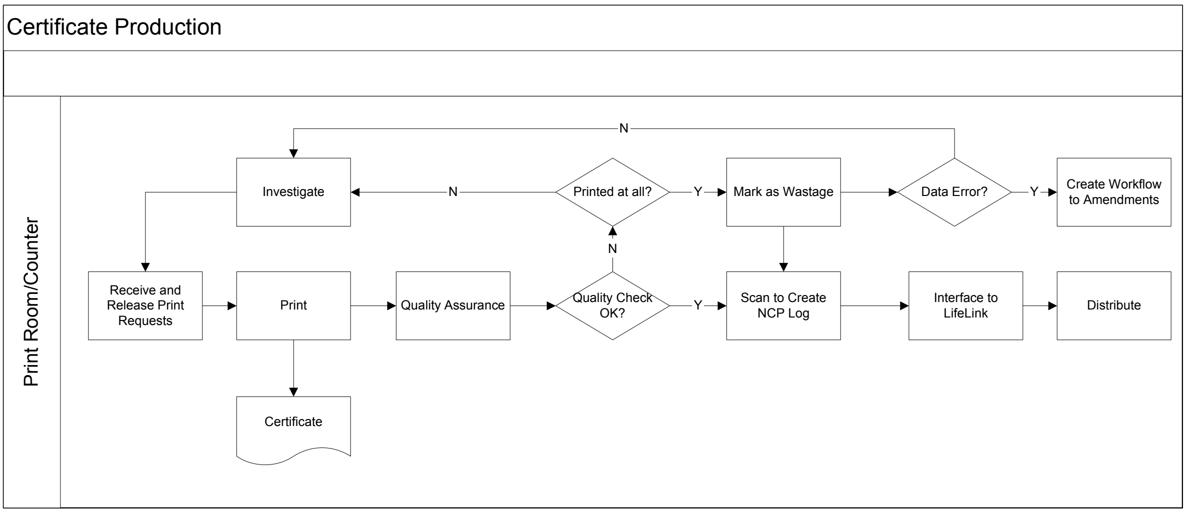
Registration has been completed. Application is compliant.

18.8.4 Assumptions

Numbered Certificate Paper, Commemorative Paper, Plastic Cards and envelopes are available for printing.

LifeLink will assign a unique number to each Birth Card. NCP will capture the unique number for each Standard Certificate. Commemorative Certificates do not have unique Certificate Numbers.

18.8.5 Workflow



18.8.5.1 Receive and Release Print Requests

When Cashiers have receipted a compliant Application, the Application is issued for printing at the counter or in the Print Room. All requests are batched by Cashier.

Certificates are queued for printing based on the user who sent the print job. Printing is divided into Standard and Commemorative print runs. These are split to account for the different types of certificate paper used for these print jobs. Different types of commemorative certificates are available, as well as packages of standard and commemorative certificates.

Print Requests are released in batches by type of Certificate. This ensures that the appropriate paper has been loaded into the trays.

18.8.5.2 Print

Standard Certificates are printed on Numbered Certificate Paper. Each Certificate printed can therefore be assigned to a unique Certificate Number. Each Certificate is given a time and date stamp and referenced to the relevant Application. This is done by printing a series of bar codes on the back of the certificate.

Commemorative Certificates are printed on Commemorative paper. These are not uniquely numbered.

When a Certificate is to be mailed, Applicant details are printed on the back of the Certificate to use with window envelopes. These are grouped together with the Certificate.

Birth cards are printed on plastic cards with details from the Birth Registration, photo and signature captured with the Application.

18.8.5.3 Quality Assurance

When the print is completed, the Certificate/Birth Card is reviewed to ensure it printed at an acceptable level of quality, with all required components for the type of Certificate.

18.8.5.4 Scan to Create NCP Log

After a successful quality check, the Certificate is scanned to create the NCP log. This contains the details of the Application (Application Print Date/Time Stamp, Certificate Number and the Location) to update NCP to enable tracking of the Certificate and to update LifeLink with these important details.

For Birth Cards, as LifeLink assigns the unique identifier, these details are issued from LifeLink to NCP.

18.8.5.5 Interface to LifeLink

NCP responds to LifeLink with a confirmation that the Certificate Number is valid and updates all identifiers.

18.8.5.6 Investigate

Where the quality check was failed and the Certificate did not print at all, the Print Team investigates the reason for the failure. When the issue has been rectified, the Certificate/Birth card is re-queued for printing.

18.8.5.7 Mark as Wastage

When there is an identified problem with the printing, the Numbered Certificate will be marked as wastage. This status is updated in NCP to enable tracking of the Certificate until its destruction. Where the problem relates to a Birth Card, the Card Number is updated in LifeLink as wasted.

18.8.5.8 Create Workflow to Amendments

Where the wastage was caused by a data error, the Team will generate a workflow to the Amendments team to investigate and rectify the error. Amendments are able to print independently of the Print Room/Ground Floor Counter.

18.8.5.9 Distribute

Once a Certificate is printed, it can be either mailed to the Customer or picked up at the Registry. Where the Customer is picking up the Certificate, the Certificate is sent back to the counter to await the Customer. The Certificate is scanned to ensure that NCP is updated with the new location of the Certificate. NCP will then update LifeLink with the Certificate number. Where the Certificate or Birth Card is to be mailed to the Customer, the Certificate/Card is scanned, along with the appropriate Registered Post number to ensure that the identifiers are recorded in LifeLink. The items are then processed through the enveloping machine.

18.8.6 Exceptions

Only Adoptions Officers can request to print Pre Adoption Certificates.

18.8.7 Post condition

NCP is updated with the Application details and the Certificate/Birth Card is distributed to the Customer.

18.8.8 Validations

Process Ref	Description
Print	Pre Adoption Registration details can only be printed on reference paper (white paper).
Workflow to Amendments	The system must allow the tracking of a Certificate that is to be sent to any section.

18.8.9 Business Rules

Process Ref	Description
Release Print Queue	Urgent applications are taken out of the commemorative batches and done separately so they can be issued straight away without creating a batch.
Release Print Queue	The number of Certificates actually printed is compared against the number that was released in that print batch.
Print	A commemorative certificate can be printed by itself, without the need to print the corresponding standard certificate.
Print	Commemorative certificates are sorted into batches of their own type of certificates to enable print runs specific to that paper type.
Print	Print Room, counter and Amendment staff can complete their own printing of standard certificates.
Print	Only standard Certificates are printed on Numbered Certificate Paper.
Print	Birth Cards can only be printed in the Sydney office.
Print	A standard Covering letter accompanies dispatched Birth Cards.
Quality Assurance	After a Standard Certificate has passed quality assurance, it is initialled at the bottom of the Certificate. Note: The business may decide to omit this activity. When the whole batch has been quality checked, those successfully quality checked are put through the enveloping machine.
Distribute	Bundles of envelopes are issued into groups of 50 for mailing.
Distribute	Certificates are mailed back to the Applicant using registered post if the application was received by post or at the counter if required.
Distribute	If certificates are not collected from the counter, or applications remain waiting for follow up in the mailroom, within a 3-month period, then a follow up procedure/workflow is initiated.
Mark as Wastage	Original certificates that are marked as wastage are audited before being destroyed via shredding. NCP is then updated with the date of shredding.

18.9 REVIEW PERSON RELATIONSHIPS

Reference should be made to Figure 1: Major Processes – LifeLink, process 1.9.

18.9.1 Brief Description

When Registrations and Applications are finalised, the relationships of all associated Persons to other Persons can be reviewed.

18.9.2 Goals

This activity aims to highlight any new or updated relationships and determine whether follow up for other Registrations is required.

18.9.3 Precondition

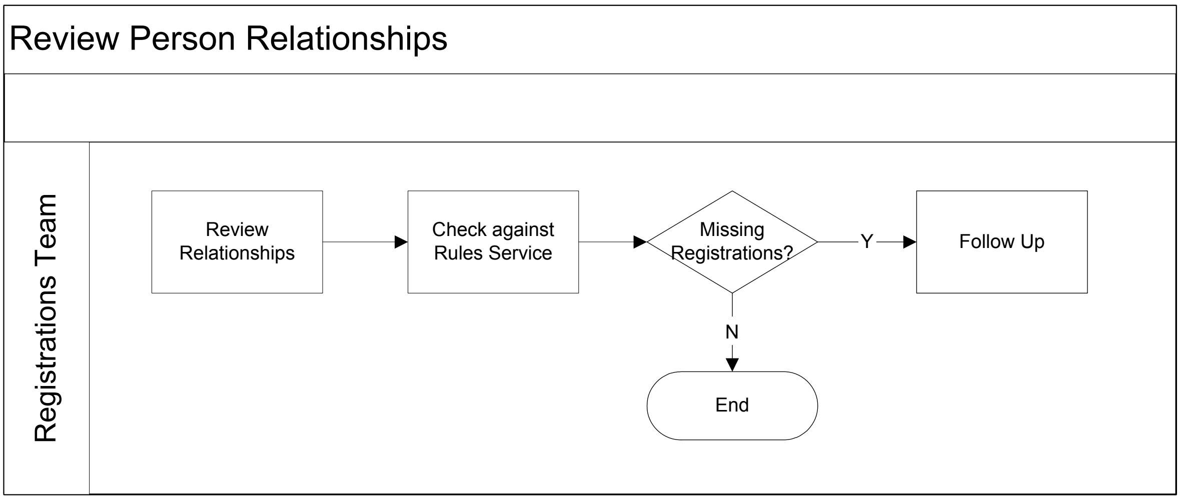
Registration or Amendment has been completed.

18.9.4 Assumptions

Relationships that can be derived from other means (eg use of reporting tools) are not explicitly created in the system.

Application forms may need to be updated to capture additional details if extensive follow up is expected.

18.9.5 Workflow



18.9.5.1 Review Relationships

The Registry aims to have registrations for all Persons with birth, death or marriage events in NSW.

New or amended relationships may be created during the Registration or Amendments processes. Each relationship will be linked to a Person who may or may not be registered.

18.9.5.2 Check against Rules Service

The system will check each Person to determine whether sufficient detail is known to determine whether a registration is missing from the Registry records. For example, a Person who is the birth parent of a registered child may have indicated they were born in NSW. However, there may not be a Birth Event registered for the parent.

18.9.5.3 Follow Up

Where missing registrations are found, follow up action is initiated. This may involve contacting the Persons via correspondence with appropriate Registration Forms attached.

18.9.6 Exceptions

N/A

18.9.7 Post condition

N/A

18.9.8 Validations

Process Ref	Description
Check against Rules Service	When a Death Notification is received, through the Fact of Death file or registered in NSW, the Birth Registration is updated with the notation that the Person is deceased. This helps prevent fraud.
Check against Rules Service	When a Birth Notification is received from the Parents, the place of Birth for the Parents can be checked to determine whether the Parents birth is registered.

CHAPTER 5 – TECHNICAL REQUIREMENTS

19 PURPOSE

This document specifies the technical requirements for the proposed LifeLink application.

20 LIFELINK ARCHITECTURE

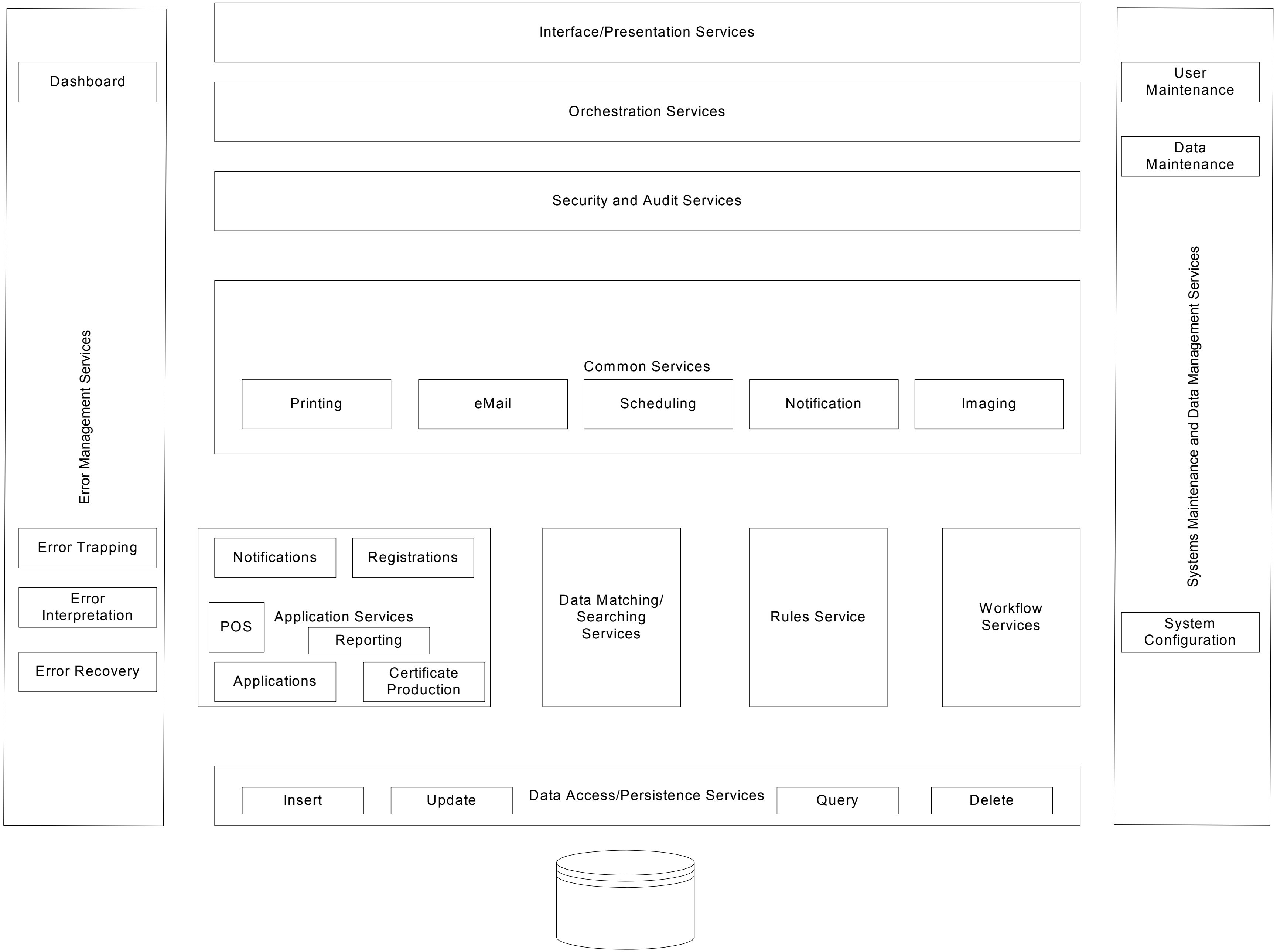
This section describes a conceptual view of the proposed architecture of LifeLink. While some of the terminology used will have parallels to specific implementations of Service Oriented Architectures (for example orchestration is commonly associated with BPEL type systems) it is conceived as implementation independent. That is, Tenderers should propose solutions that they consider would achieve the objectives of the proposed architecture in the most robust, efficient and maintainable manner. Tenderers can propose any combination of products and product components to achieve the desired outcome. For example, the rules service can be implemented within the context of a rules engine or any other compatible container.

The LifeLink architecture is conceived of as series of loosely coupled services to support the requirements of the business processes and the Registry users. Application resources are made available as independent services that can be accessed without knowledge of their underlying implementation in a modular, flexible, scalable, and supportable manner. Each service is likely to be made up of a number of logical operations or transactions and reflect a unit of work. Each service has a specific, structured interface (the service interface), and will return structured responses. Each service is independent of the implementation of any other service such that a service can be removed and/or replaced and the impact will be restricted to the services provided by that service.

20.1 ARCHITECTURAL PRINCIPLES

- **Service Encapsulation, Abstraction and Autonomy** – Services should enclose program elements and logic inside larger, more abstract entities and “hide” the logic from the outside world. Services should have control over the logic they encapsulate but not over the logic residing in any other service
- **Loosely Coupled Services** - A set of loosely-coupled functional services that can be assembled into any required form and minimise dependencies. Services should be outwardly descriptive so that they can be found and assessed via an available discovery mechanisms
- **Service Reusability** - Logic is divided into services with the intention of promoting reuse
- **Composite Services** - Collections of services can be coordinated and assembled to form composite services
- **Service Optimisation** – Each service module is optimised for delivery of that service
- **Service Framework** – The service should be free of implementation details. That is the services can be deployed either locally or remotely without having to program the calling application with implementation details or location of the service.

The proposed architecture is defined in the following diagram:


Interface/Presentation Services
Orchestration Services
Security and Audit Services
Common Services
Printing
eMail
Scheduling
Notification
Imaging
Dashboard
Error Management Services
Error Trapping
Error Interpretation
Error Recovery
Notifications
Registrations
POS
Application Services
Reporting
Applications
Certificate Production
Data Matching/ Searching Services
Rules Service
Workflow Services
User Maintenance
Data Maintenance
Systems Maintenance and Data Management Services
System Configuration
Insert
Update
Data Access/Persistence Services
Query
Delete

20.2 ARCHITECTURE DESCRIPTION

The architecture is seen as a variety of layers (both horizontal and vertical) that contain the service components that comprise the LifeLink application. These layers and component services are described below:

20.2.1 Orchestration Services

This is seen as a series of services that orchestrates service delivery This layer is responsible for managing the overall execution of the business process and orchestrating the services and managing the execution of business process.

The orchestration service would present three types of services;

1. **Orchestration Services for Business Processing** – The specific orchestration required to coordinate business actions and events.
2. **Orchestration Services for Services** – specific services defining the orchestration of other services for example restart the print service after the Error Management Service detected an error.
3. **Orchestration Maintenance** – the capability to add, delete and modify orchestration services

20.2.2 Security Service Layer

While represented as a layer in the architecture, the Security Service can more correctly be viewed as a shell encompassing all services within the LifeLink solution. A service that provides security capabilities including access control and addresses three main areas:

- Authentication: determining the identity of the user interacting with the applications
- Authorisation: determining if a user is allowed to perform a particular action
- Auditing: tracking the actions performed by the users.

Several secondary services are also required such as registration, entitlement granting, and entitlement querying. These features should be provided as a generic framework that can be used and reused by different applications, each with slightly different needs but all having the same basic requirements,

It is highly desirable that the service can be extended to provide Single sign-on (SSO) capability to log in once and be able to traverse from application to application without having to login again

20.2.3 Application Services Layer

This services layer contains the specific business services that distinguish the unique functions and features required by the Registry of Births Deaths and Marriages and defined within the LifeLink Business Requirements Document. This layer should only contain those services and facilities that are unique to the business context of the Registry of Births Deaths and Marriages. In effect, if this layer was replaced with another layer from a different business context and the other services customised for his new context (e.g. workflow) then from the external perspective a new business system would have been created.

The services implemented in this layer are:

- ***Notifications*** – a set of services to receive and process notifications from variety of sources (see Chapter 3, Section 8.2)
- ***Registrations*** – a set of services that process a series of Life event notifications to create a registration and associated person, party and cross reference records (see Chapter 3, Section 8.1)
- ***POS*** – A service that delivers a range of point of sale services (see Chapter 3, Section 8.10). While this is likely to be implemented as a package the interface presented to the other layers is that of a service.

- ***Applications*** – A set of services that process applications for Registry products (see Chapter 3, Section 8.3)
- ***Reporting*** – A customisable service the generates a range of predefined and ad hoc reports (see Chapter 3, Section 8.15)
- ***Certificate Production*** – A customisable service that allows range of tailored certificates to be produced from the system (see Chapter 3, Section 8.8)

20.2.4 Data Matching and Search Services

This service provides a range of sophisticated data matching and search functions. They provide the core services that operate on LifeLink's data holdings to locate, reconcile and resolve discrepancies in the data holdings. (see Chapter 3, Section 8.5, 8.14)

20.2.5 Rules Service

The Rules Service separates business processes from business rules. The rules are exposed as services and processes leverage these services by querying the service when a decision point is reached. The Rule service will allow complicated business logic to be expressed in English-like syntax and edited by non-programmer domain experts and thus provides the flexibility to change rules with changing business requirements. In addition, this rules service is seen in a generic manner such that it can include and be accessed by any business domain independently of LifeLink (eg rules associated with eServices).

The Rules service would present three types of rules.

1. **Business Processing Rules** – specific rules in relation to resolving business actions and events. (See Chapter 3, Section 8.19.)
2. **Service Management Rules** – specific rules in defining how services are orchestrated and interoperate.
3. **Rules Maintenance** – the capability to add, delete and modify rules

20.2.6 Workflow Services

This provides a set of services for coordinating and managing workflow based on some predetermined logic, among one or more actors (Agents). Abstracting and separating the workflow from the application service is designed to insulate the application from changes in the workflow logic.

The Workflow service would present three types of services.

1. **Business Processing Workflow** – specific workflow associated with coordinating business actions and events. (See Chapter 3, Section 8.18.)
2. **Service Management Workflow** – specific workflow that defines the order in which services are instantiated to achieve an integrated business or system process
3. **Workflow Maintenance** – the capability to add, delete and modify Workflow

20.2.7 Common Services

These common services are seen as the interface between the component services and the external environment. They provide access to common range of functions and facilities for example the printing service would provide access to the external printing facilities. The actual implementation of printing would be a function of an existing facility for example as part of the standard windows operating system

- **Notification Service:** single notification service that provides the capability to send notifications through multiple channels to a variety of clients (e.g. users, workflow services, rules service etc. The channels may be SMS, MMS as defined in Chapter 3, Section 14.
- **Email Service** – a form of notification service that allows two-way exchange of messages through a standard POP3 server. This can be implemented as a notification service.

- **Printing** – A common service that directs and streams printed output to an external printing facility that produces the printed output.
- **Scheduling** – A common service that allows other services and/or user actions to be scheduled for future launching.
- **Imaging** – A service that allows images from a variety of repositories to be retrieved, manipulated and stored.

20.2.8 Error Management Services

- **Monitoring Service:** operations staff to monitor platforms and services and proactively resolve issues. Rendered to the operations staff as a “dashboard service”.
- **Exception Handling Service:** mechanism to manage and communicate exceptions.
- **Logging Services:** services used by applications to record and trace errors and activity. Types of message to be logged include debug messages to trace any issues, error or fault logging for diagnostic purposes, and activity logging for audit trail and usage analysis.
- **Error Recovery Service:** A service to recover error conditions and return the system to a normal operational state.

20.2.9 System Maintenance and Data Management Services.

- **User Maintenance** – A service that allows user profiles to be stored and maintained.
- **Data Maintenance** – A service that facilitates the configuration of data types and relationships by a user with a role type of system administrator. (See Chapter 6, Section 33.)
- **System Maintenance** – A service that allows a user with a role type of system administrator to configure and change system configuration settings and variables. Also the entry point to manage rules, workflow and orchestration.

20.2.10 Data services

The persistence layer provided for all services. These services mirror core DBMS services of insert, update, query and delete but expose a common structured interface. All inserts to the database for example, would be processed through the insert service regardless of the type of insert e.g. notification, registration, application etc.

20.2.11 Presentation Services

This services layer is the primary interface between LifeLink and the external environment. As such if provides a variety of presentation services. Its primary role however, is to present and process an XML interface service to eRegistry.

20.3 TECHNICAL REQUIREMENTS

20.3.1 Enterprise Platform

The proposed solution should be compatible with the following enterprise platform:

1	Websphere Application Server 6.1 or later.
2	Oracle 10g or later.
3	IBM HTTP Server.
4	Windows 2003 for File, Print Servers or later.
5	Lotus Domino v6.5 Email Servers running on Windows 2003.
6	LDAP 3 using Oracle Internet Directory (OID).
7	Citrix Presentation Server 4.0.
8	Business Objects XI.

20.3.2 *Standard Desktop Operating Environment*

The proposed solution should be compatible with the following standard desktop operating environment:

1	Windows XP service pack 2.
2	Internet Explorer 6.
3	Microsoft Office 2000.
4	Lotus Notes 6.5.

20.3.3 *Standards*

It is critical that common standards are utilised throughout the development of LifeLink. The services can be defined as the best type for purpose, but the interfaces between containers can be exposed using more open standards (such as those implemented in Web services) to allow for cross-application functionality at the points where it is needed.

1	State Records Act 1998 No. 17 and the State Records Amendment Act 2005 No. 8.
2	NSW Attorney General Website Design Guidelines – Current Version (Issue on Request).
3	NSW Attorney General Information Security Policy – Current Version (Issue on Request).
4	NSW Attorney General Information Security Management System Framework – Current Version (Issue on Request).
5	World Wide Web Consortium Compliance.
6	ISB Policies and Procedures are to be adhered to.
7	The application will follow the SUN recommended coding style available at: http://java.sun.com/docs/codeconv/CodeConventions.pdf.

20.3.4 *Security Management*

The proposed system should support the following security management requirements:

1	LDAP 3 based on Oracle Internet Directory (OID). Authorisation via roles based application authorisation (roles based mapping within WAS). Authentication to be indirect to LDAP via WAS functionality.
2	The application design will allow for the integration of Single Sign On.
3	The system will support multiple user profiles.
4	SFTP to be used for file transfers where required.

20.3.5 *User Interface*

The proposed system should support the following user interface requirements:

1	Dynamic page technology providing and intuitive user interface.
2	Context sensitive online help with provision for easy updating.
3	Provision of GUI maintenance screens for the maintenance of application and system configuration.
4	Consistent navigation methods between screens.

5	Error messages to be presented in ‘business friendly’ format and language.
6	Keyboard and mouse navigation between fields.

20.3.6 Performance

The proposed system should comply with the following performance requirements:

1	24*7 availability
2	The solution should scale to allow for addition of new offices without degradation of service levels. The Registry currently has offices in Sydney, Wollongong and Newcastle with an additional office in Parramatta planned for late in 2007. Rural court houses, acting as Government Access Centres (GACs), will also require user access.
3	The system should be capable of meeting the response times for transactions that are currently being achieved for other Attorney General’s applications, based on similar architecture. Examples of existing system performance are: • Very Simple Transactions – under 1 second response. • 90% Simple Transactions – under 3 second response. • 90% Medium Transactions – under 5 second response. • 90% Complex Transactions – under 10 second response. Further information and performance data will be available via demonstration of existing Attorney General’s applications as required.

20.3.7 Application Integration

The proposed system should support the following integration requirements:

1	Interfaces to external systems should be developed using industry standard technologies that support web services protocols such as SOAP etc.
2	Integration of internal components should be developed using industry standard technologies and result in a consistent and intuitive operation.

20.3.8 Key Solution Components

The proposed solution should consider the following key solution components:

1	It is envisaged that the requirements for Point-of-Sale functionality would be best implemented using modular, configurable components integrated with clearly defined interfaces.
2	It is envisaged that the requirements for Workflow functionality would be best implemented using modular, configurable components integrated with clearly defined interfaces.
3	It is envisaged that the requirements for Reporting functionality would be best implemented using modular, configurable components integrated with clearly defined interfaces.
4	It is envisaged that the requirements for Rules Engine functionality would be best implemented using modular, configurable components integrated with clearly defined interfaces.

CHAPTER 6 - DATA MODEL DESCRIPTION

21 INTRODUCTION

LifeLink is envisaged to be a 'person centric' system where a person who was born, lived and died in N.S.W. would have a single Party Identifier, which is used for all their registrable (life) events.

In simple terms a person/organisation is a party to a series of life events (birth, death, marriage etc). Other parties (persons/organisations) also participate in that life event (for example, mother of child, notifying hospital).

The primary goal of the LifeLink data model is to capture in a structured manner these complex series of relationships and participations. It takes an integrated approach to person/organisation data that facilitates re-use and reduces data entry requirements. For example, a Birth Notification form submitted by one of the parents can include an Application for a Birth Certificate. In this scenario the person who has the role of Mother/Father on the Birth Notification is also the Applicant on the Application for a Birth Certificate (i.e. Product Application). This re-usability of Party data is especially important for people and organisations that have an enduring relationship with the Registry, including Funeral Directors (Organisation Stakeholder), Hospitals (Organisation Stakeholder), Government Access Centres (Agent), Marriage Celebrants (Person Stakeholder) and Midwives (Person Stakeholder).

This approach contrasts with traditional implementations that are event driven. That is, a life event has many participants and while the same parties can participate in other life events there maybe no link between them for example, two birth events with the same parents.

22 CORE STRUCTURES SUMMARY

The Core Structures Summary subject area describes elements that are essential in every area of the LifeLink Data Model. There are two aspects to the Core Summary subject area.

1. The Core Structures Summary shows the three principal information entities in the LifeLink universe: PARTY, EVENT and EVENT PARTICIPATION.
2. In addition, the Core Structures Summary shows 'cross-reference' entities that implement extensive LifeLink business rules about parties, events and event participations.

22.1 PARTY, EVENT AND EVENT PARTICIPATION

22.1.1 Party

A PARTY is a PERSON or an ORGANISATION of interest to the LifeLink system. It includes all the people and organisations that are noted in notifications and registrations, those who make applications for certificates and the like, and other parties who authorise, provide or receive information.

There are different categories of party, which are shown in more detail in the full Core Data Structures subject area. Person categories are denoted as PERSON TYPE and Organisation categories are denoted as ORGANISATION TYPE.

22.1.2 Event

EVENT represents information about the various life events in NSW that the Registry must record, and events related to providing that information. There are three major kinds of Event information in LifeLink:

- Notification that something has occurred (generally someone provides this information to the Registry),
- Registration of its occurrence (the Registry creates this information based on notifications), and

- Point of Sale Applications, which provide an applicant with the information about an Event. The information is provided to the applicant as a Product (eg a birth certificate for a birth registration event).

There are two other kinds of event, which are described in the relevant models.

In LifeLink, 'birth' *per se* is not an event, but 'notification of birth, and 'registration of birth' are events. This reflects the fact that the data that the Registry receives in a notification and the data that it creates in a registration, though much the same must be separately maintained in LifeLink. The separation enables the Registry to differently process many related events, match data between them as required, and to analyse data and link events to parties with increased certainty that its registrations will be correct. The linking of parties to events is called Event Participation.

22.1.3 Event Participation

EVENT PARTICIPATION is a means of recording that a particular PARTY is a participant with a role to play in a particular EVENT. The notion of participation is a key concept in LifeLink – people are only linked to events via a 'participation' recording their role in the event (eg that they are 'in the role of' the Bride in a Marriage Registration, or that they are 'in the role of' the Deceased in a Death Registration). The range of roles that might apply to any participation in any EVENT is defined in EVENT ROLE TYPE.

As well as recording that a party is linked to a particular event, participations also record information about the party within the context of that participation. For example, DECEASED PERSON ON DEATH NOTIFICATION, which links a person to a death notification event, in the role of the deceased, also records the deceased's year of arrival in Australia, and their usual occupation.

22.2 PARTY, EVENT AND PARTICIPATION CROSS REFERENCES

Each of the three major entities has a corresponding cross-reference entity. These cross-reference entities indicate that two entities of the same kind are linked for some reason.

22.2.1 Party Cross References

PARTY X-REFERENCE records that two particular party entities are associated. Usually it is used to show that two party instances actually refer to the same party, where one replaces the other.

An example is for changes of name. In this situation the original party entity with the original name of the person is retained in the system with all its participations, and a new party record with new names is recorded, which is linked to the older/former party. The two are linked with 'change of name' as the reason for linking them. Whenever an old participation is looked up, the new party details can be appropriately applied.

The possible reasons for linking parties are defined by the PARTY X-REFERENCE TYPE entity.

Note: In general, what might seem to be a possible party cross-reference, such as 'Mary is the mother of John' is not modelled as a party cross-reference, but as a participation cross-reference – see section 22.2.3 below.

22.2.2 Event Cross References

EVENT X-REFERENCE records that two events are associated. For example, two particular notifications of Birth ('notification of birth' is a kind of Event) might be received for the same birth, from different sources (the hospital and the mother might forward a notification). The two notifications would both be recorded, and then linked. As another example, the notification of the birth would also be linked to the registration of the birth ('birth registration' is another kind of Event).

The possible reasons for linking events are captured by the EVENT X-REFERENCE TYPE entity.

22.2.3 Participation Cross References

PARTICIPATION X-REFERENCE records a connection between two participations. For example, in a particular birth registration, the participation of the person who is the child (participating as a 'Child born in Birth Registration') can be linked to the participation of the person who is the mother (participating as 'Mother of child in Birth Registration'). This links the mother to the child based firmly on the evidence of their coexistence as participants within a Birth Registration. If a 'mother – child' connection is ever questioned, its basis can be traced back via the participations to the original information held in the underlying events.

The reason for linking participations is defined by the EVENT PARTICIPATION X-REFERENCE TYPE entity.

22.3 EVENT TYPE ROLE

The EVENT TYPE ROLE entity records rules about the types of persons and roles that are valid for a particular kind of event. It binds together instances of the categories PERSON TYPE, EVENT ROLE TYPE and EVENT TYPE – so each instance of EVENT TYPE ROLE represents a valid combination of person type, event role type and event type. For example, an EVENT TYPE ROLE instance might allow that a Person Type 1 (a person type) can be a Child Born (a role type) in a Birth Registration (an event type).

This entity provides LifeLink with rules about how LifeLink works. Adding and deleting instances of these entities can change the rules in force, and thus the behaviour of LifeLink can be changed, without rewriting the system.

22.4 EVENT TYPE CROSS REFERENCES

There are three more cross-reference entities that hold rules:

- EVENT TYPE PARTY X-REFERENCE,
- EVENT TYPE PARTICIPATION X-REFERENCE, and
- EVENT TYPE EVENT X-REFERENCE.

These entities embody another kind of rule, at a different level. The cross references described in section 22.2 above were about linking individual *instances of things*; for example a particular 'notification of intending marriage' event could be linked to a particular 'marriage solemnisation' event. However the Event Type … X-Reference entities are rules about the *kinds of things* that can be linked. Thus, you can link the particular 'notification of intending marriage' event to a particular 'marriage solemnisation' event because there is a rule captured in an EVENT TYPE EVENT X-REFERENCE entity that says you may link these *kinds* of events. Again, by adding and deleting instances of these entities, LifeLink rules can be enforced and its behaviour can be changed without rewriting the system.

23 PARTY

All persons and organisations of interest to LifeLink are represented as Parties. The purpose of this generic representation is to allow LifeLink to have just one instance of any person or organisation in its database, and to reuse information about them wherever it is required. For example, a single person record can be 'reused' by linking to that record as the Mother of Child on a Birth Registration, as the Applicant in a Point of Sale Application for a birth certificate, and as the Bride in a Notification of Intended Marriage.

23.1 PARTIES

The model shows that PARTY has two major categories – a party can be a PERSON or an ORGANISATION. Each of these has its own set of subcategories, and the model shows the pattern is hierarchical; any category can be further classified into lower level categories if required. Person categories are represented as PERSON TYPE and Organisation categories are represented as ORGANISATION TYPE.

PERSON TYPE categories are mainly used to show that the amount of information required about a person is variable depending on circumstances. Which one is required in what circumstance is defined through EVENT TYPE ROLE – see section 22.3 above.

This notion of Person Type enables the business rules in LifeLink to be matched to data collection requirements. For example, one business rule might require that a new birth registration links to a person type 1 (with lots of detail) and another business rule might say that an 1850's birth registration can link to a person type 3 (which has minimal detail). As another example, more information is required for the child on a birth registration than is required for a midwife on the same registration.

ORGANISATION TYPE categories are used to distinguish organisational roles such as agents and stakeholders.

23.2 ADDRESSES

Addresses in LifeLink are also intended to be reusable, and thus the model shows ADDRESS as an entity in its own right that can be linked to parties. Addresses are of a certain type, shown as ADDRESS TYPE (eg an address might be a Street Address). Addresses are linked to a party for particular purposes. The ADDRESS USAGE entity shows exactly who is using what address, and the purpose of that usage is shown as ADDRESS ROLE TYPE (eg the address might be in use as a person's work address).

ADDRESS USAGE has itself two subtypes – when linked to a Party it is a PARTY ADDRESS, or when linked to an Event Participation it is a PARTICIPANT ADDRESS.

24 CORE DATA STRUCTURES

This subject area is a more extensive version of the Core Structures Summary model. The description of the Core Structures Summary still applies, so should be read first. This subject area shows more about events, the main event subtypes, and the main party subtypes.

This model shows there are five EVENT subtypes in LifeLink:

- NOTIFICATION – the notification that a life event has occurred
- REGISTRATION - the registration of its occurrence
- REGISTRATION AMENDMENT - a change of registration details
- POINT OF SALE APPLICATION – an application for products (eg certificates)
- POINT OF SALE ITEM – a product request (requested in an application)

Events have an EVENT STATUS, which is about the event itself, with values such as Current or Cancelled.

Events also have an EVENT PROCESSING STATUS, which is about the workflow surrounding an event, with values such as Received or Incomplete.

25 BIRTH EVENT LIFECYCLE

This subject area addresses data to be recorded for events specific to birth. The model serves to 'flesh out' the core data structures for birth events by showing exactly

- what kinds of birth events there are,
- what kinds of participations can exist for births, and
- what kinds of cross references can exist for births.

25.1 EVENTS

It shows that there are two particular kinds of event within the birth context: BIRTH NOTIFICATION that is a kind of Notification event, and BIRTH REGISTRATION that is a kind of Registration event. BIRTH NOTIFICATION and BIRTH REGISTRATION have further subcategories for particular birth circumstances, such as stillbirth notifications.

25.2 PARTICIPATIONS

As indicated in the core structures model, participations link parties to events. BIRTH NOTIFICATION PARTICIPATIONS and BIRTH REGISTRATION PARTICIPATIONS apply to birth events. For each of these, subtypes are shown. For example, CHILD BORN ON BIRTH NOTIFICATION is a valid kind of participation in the birth context and it serves to link a particular person entity representing the child to a particular event entity representing the birth notification.

25.3 CROSS REFERENCES

25.3.1 Event cross references

The model shows that a birth notification event can be linked to a birth registration event.

25.3.2 Participation cross references

The model shows the many valid participation cross-references for births. For example the cross-reference entity CHILD BORN TO MOTHER REGISTRATION X-REFERENCE indicates that one can link a CHILD BORN… participation with a MOTHER OF CHILD… participation.

26 MARRIAGE EVENT LIFECYCLE

This subject area addresses data to be recorded for events specific to marriage. The model serves to 'flesh out' the core data structures for marriage events by showing exactly

- what kinds of marriage events there are,
- what kinds of participations can exist for marriage, and
- what kinds of cross references can exist for marriage.

26.1 PARTY

A particular kind of party relevant to marriage is MARRIAGE CELEBRANT, which is a subtype of Person.

26.2 EVENTS

The kinds of marriage events are Notice of Intended Marriage, Certificate of Solemnisation, and Marriage Registration.

26.3 PARTICIPATIONS

As indicated in the Core Structures model, participations link parties to events. For Marriage, the kinds of event participations are participations in notifications of intended marriage (represented as NOIM NOTIFICATION PARTICIPATION), participations in notifications of solemnisation (a COMS NOTIFICATION PARTICIPATION), and participations in marriage registration (a MARRIAGE REGISTRATION PARTICIPATION). Each of these has subtypes that spell out the exact kinds of participation available. For example, BRIDE ON NOIM NOTIFICATION enables one to link in the person who is the bride.

Some of the participations have extra information associated with them. For example, a BRIDE ON NOIM NOTIFICATION carries information about the bride's previous marriage(s), such as the year it occurred and the date it was terminated.

26.4 CROSS REFERENCES

26.4.1 Event Cross References

There are a small number of valid marriage event cross-references. For example the MARRIAGE REGISTRATION TO NOIM X-REF links a Marriage Registration to the Notification of Intended Marriage.

26.4.2 Participation Cross References

There are a number of marriage-specific participation cross-references. For example the BRIDE TO FATHER REGISTRATION X-REF links the BRIDE ON MARRIAGE REGISTRATION participation to the FATHER OF BRIDE ON MARRIAGE REGISTRATION participation.

27 DEATH EVENT LIFECYCLE

This subject area addresses data to be recorded for events specific to death. The model serves to 'flesh out' the core data structures for death events by showing exactly

- what kinds of death events there are,

- what kinds of participations can exist for deaths, and
- what kinds of cross references can exist for deaths.

27.1 EVENTS

There are many kinds of notification events in death; the model shows for example CAUSE OF DEATH NOTIFICATIONS (which may be Coronial Orders or Medical Certificates), DEATH NOTIFICATIONS, DEATH REGISTRATIONS, and various DISPOSAL NOTIFICATIONS (eg by burial or cremation).

27.2 PARTICIPATIONS

The types of participations are Death Notification Participations, Cause of Death Notification Participations, Disposal Notification Participations, and Death Registration participations. These all have subcategories to identify the many participations by persons or organisations – as the deceased, the medical practitioner, the coroner, the spouse of the deceased, the father of deceased, the informant, and so on.

27.3 CROSS REFERENCES

27.3.1 Event Cross References

As an example, the Death Registration to COD X-Ref links a Death Registration event to a Cause of Death Notification event.

27.3.2 Participation Cross References

As an example, the Child to Deceased Notification X-Ref links a Child of Deceased on Registration participation to the Deceased Person on Registration participation.

28 ADOPTION EVENT LIFECYCLE

This subject area addresses data to be recorded for events specific to adoption. The model serves to 'flesh out' the core data structures for adoption events by showing exactly

- what kinds of adoption events there are,
- what kinds of participations can exist for adoptions, and
- what kinds of cross references can exist for adoptions.

28.1 EVENTS

The model shows that there are ADOPTION ORDERS, a kind of NOTIFICATION, specific to the adoption context.

28.2 PARTICIPATIONS

The types of participations relevant to adoption events are ADOPTION ORDER NOTIFICATION PARTICIPATIONS, and BIRTH REGISTRATION PARTICIPATIONS. These are all sub-typed to identify the participants before and after the adoption – for example the father of the child prior to the adoption, the father of the child following the adoption, the informant, and so on. Birth Registration Participations (see the Birth Event Lifecycle model) are further categorised with participations that link the pre and post adoption father, mother, and other children of the marriage to the birth registration. This means that a birth certificate can show post adoption information, but allows LifeLink to retain information about earlier participations in earlier registrations – the earlier participations are not deleted.

28.3 CROSS REFERENCES

28.3.1 Party Cross References

The adoption context has a PRE-ADOPTION IDENTITY TO POST ADOPTION IDENTITY X-REF to link the two instances of party that represent the child before and after the adoption.

28.3.2 Event Cross References

As an example, the Adoption Order to Pre-adoption Birth Registration Event X-Ref links an Adoption order event to a Birth Registration event.

28.3.3 Participation Cross References

As an example, the PRE-ADOPTION CHILD TO MOTHER X-REF links the ‘person who is the child in the adoption’ participation to the ‘pre-adoption mother’ participation.

29 CHANGE OF NAME EVENT

This subject area is concerned with applications for change of name and consequent amendment of registrations.

The model serves to ‘flesh out’ the core data structures for change of name events by showing exactly

- what kinds of change of name events there are,
- what kinds of participations can exist for change of name, and
- what kinds of cross references can exist for change of name.

29.1 EVENTS

The model shows that there is a CHANGE OF NAME APPLICATION (a kind of NOTIFICATION event) and a CHANGE OF NAME REGISTRATION specific to the context.

29.2 PARTICIPATIONS

Example participations are as the SUBJECT’S PERSON IDENTITY AT BIRTH ON REGISTRATION, which links, as a participant to this change of name, the person who is named in the original birth registration.

29.3 CROSS REFERENCES

29.3.1 Party Cross References

For change of name, PARTY X-REFERENCES represented as CHANGE OF NAME REGISTRATION X-REFS are created, which link the before and after identities.

29.3.2 Event Cross References

As an example, the CON APPLICATION TO CON REGISTRATION X-REF links the application event to the registration event.

29.3.3 Event Participation Cross References

There are extensive cross references created in a change of name. As an example, the CURRENT IDENTITY TO MOTHER REGISTRATION X-REF links the ‘person now on the new registration’ to the ‘mother on the original birth registration’.

30 AMENDMENT OF EXISTING REGISTRATION

This subject area shows information held in regard to an amendment of a registration.

30.1 GENERAL AMENDMENTS

The model shows that an amendment can update the underlying tables in the LifeLink database. The event of amending is termed a REGISTRATION AMENDMENT event, and it must be linked to the original REGISTRATION event.

- Amendment Item is Database Column and Amendment Type is Table Record show <u>what</u> is to amended,
- Amendment Action Type shows <u>how</u> it was amended, and

- Amendment Reason Type shows why it was amended.

Some amendments are linked to an ENDORSEMENT TYPE. This is a mechanism to attach standardised endorsement text to a REGISTRATION AMENDMENT.

For some kinds of amendment the database record of the Registration is not changed, and a new Registration event must be created. For example Change of sex amendments.

30.2 CHANGE OF SEX AMENDMENTS

As well as describing general amendments, the subject area shows in particular how the information for a change of sex is handled. The Event type applicable to change of sex is APPLICATION TO REGISTER CHANGE OF SEX, a subtype of REGISTRATION AMENDMENT. For this kind of amendment event a new Registration is created.

For a change of sex amendment a new PARTY and new BIRTH REGISTRATION is created. Extra kinds of EVENT TYPE X-REFERENCES are shown in the model, which enable the Application event to be linked to the existing and new birth registration events.

New PARTY X-REFERENCES are created, one to link the party on the application to the new party, and another to link the old party in the old birth registration to the new party on the new birth registration.

31 POS PRODUCT SUMMARY

This subject area summarises information requirements for Point of Sale Applications. There are two halves to the full Point of Sale subject area:

1. The first half deals with applications for products, the nature of products and who is entitled to products
2. The second half deals with the financial transactions and accounting for monies that arise from a point of sale application.

This Summary subject area deals with the Product side of Point of Sale.

31.1 APPLICATIONS

The relevant event is POINT OF SALE APPLICATION. As with everything else, participations are involved. POINT OF SALE PARTICIPATIONS record who is the applicant, and who is the subject (of the POINT OF SALE ITEM, which is the thing applied for in the Application). There might be more than one POINT OF SALE ITEM requested in a POINT OF SALE APPLICATION.

31.2 DATA MATCHING

A requirement of the system is to match a POINT OF SALE ITEM to a REGISTRATION. To assist, a number of data fields called POS MATCHING DATA ITEMS are defined. For any given application the applicant supplies possible values for these fields, the values are shown as POS MATCHING DATA ITEM VALUES. For example the applicant might supply ‘John’ as the value for First Given Name of the person.

31.3 PRODUCTS

Each POINT OF SALE ITEM is a request for a type of PRODUCT. Examples of PRODUCT are ‘birth certificate’, and ‘marriage certificate’. Products are categorised at a higher level as PRODUCT TYPE. Example types are ‘certificate’ and ‘souvenir’. Products have PRODUCT PRICES.

To control misuse, persons purchasing PRODUCTS must sometimes supply some form of identification (such as a passport). The acceptable forms of identity for a PRODUCT are listed as PRODUCT PROOF OF IDENTITY RULES.

31.4 ENTITLEMENTS

Not everyone can apply for everything. PRODUCT ENTITLEMENT RULE holds the rules about who is entitled to a particular product, and the rules are based on EVENT ROLE TYPE, EVENT

PARTICIPATION X-REFERENCE and EVENT TYPE products. Without going into detail, a rule might say that a person is entitled to a commemorative birth certificate for a person if they are cross- referenced as father and son on a birth registration.

32 POINT OF SALE TRANSACTIONS

The Registry has two major business areas – The first is the receipt and formal registration of information about life event occurrences in NSW (births, deaths, marriages), and the second is the production and sale of products describing those events (eg birth cards, marriage certificates, etc). The Point of Sale subject area covers applications and sale of Products. The Printing Queues model described elsewhere covers the actual printing of Products.

Because of privacy and fraud concerns, restrictions are placed on who can apply for particular Products, and those restrictions are set out in this subject area.

Accounting for payments received by the Registry is also covered in this subject area.

32.1 APPLYING FOR PRODUCTS

32.1.1 Products

The model shows that the Registry supplies a range of PRODUCTS (such as a Birth Certificate, or a Marriage Certificate). There are many kinds of products and they are grouped into PRODUCT TYPES. EVENT TYPE PRODUCT links the range of PRODUCTS to the range of EVENT TYPES, to keep track of what kinds of products are relevant for what kinds of events; so for example the data for a standard Birth Certificate [product] will be sourced from a Birth Registration [event type].

32.1.2 Applications for Products

A PARTY applies for products[†]. POINT OF SALE APPLICATION is the application, which can be for one or more POINT OF SALE ITEMS. A POINT OF SALE ITEM is a request for a particular PRODUCT, which is to carry data about a particular REGISTRATION (a kind of EVENT).

The data content and document layout to be used for a Product are defined in a DOCUMENT TEMPLATE. There can be a number of different templates associated with a particular event type (eg for a Birth Registration event a commemorative birth certificate needs a different template to an ordinary birth certificate).

32.2 FEES AND PAYMENTS

32.2.1 Application fees

Fees are charged (usually) for the products requested in an application, the standard amount for each product being represented by PRODUCT PRICE. The PRODUCT PRICE is appropriated towards various GENERAL LEDGER ACCOUNTS through its PRODUCT ACCOUNTING RULES.

32.2.2 Financial Transactions and Payments

The financial transactions resulting from applications are POINT OF SALE TRANSACTIONS. Transactions are categorised by TRANSACTION TYPE as Invoices (RECEIVABLE INVOICES and PAYABLE INVOICES), RECEIPTS and REFUND REQUESTS. A refund request might be refused, and the date and reason for refusal are captured. Each transaction has a STATUS TYPE.

A single transaction might involve one or more applications, for example someone might pay for several applications in one transaction. And a single application might involve several transactions, for example someone might pay for a product (a transaction) and then have it refunded later (another transaction), which is represented by POS APPLICATION TRANSACTION.

A POINT OF SALE TRANSACTION is accompanied by one or more PAYMENTS. For example a person might pay partly by cheque, and partly by cash, and each component is a separate PAYMENT.

[†] More exactly, they are applying for the data from a particular registration, eg their own birth registration, to be supplied to them in a particular product form, such as a commemorative birth certificate.

32.2.3 *Accounting for monies*

The system records two kinds of balances, a CASHIER INTERIM BALANCE, of which there can be many during a CASHIER SESSION (a kind of Workstation Usage), and a POS WORKSTATION EOD BALANCE, taken at the end of each day. Balances are characterised by a form of payment breakdown (using FORM OF PAYMENT TYPE) and a cash denomination breakdown (using CURRENCY DENOMINATION TYPE). Monies to be banked by a Registry location are represented as BANK LODGEMENTS and appropriated to GENERAL LEDGER ACCOUNTS.

32.3 WHO CAN APPLY FOR WHAT

32.3.1 *Entitlements*

To reduce fraud and misuse and for privacy reasons there are restrictions on who can apply for an instance of a Product. The PARTIES to the EVENT are represented by EVENT PARTICIPATIONS. Remembering that an application is a kind of EVENT, the applicants are also represented as EVENT PARTICIPATIONS. Through the concept of cross-referencing various kinds of EVENT PARTICIPATIONS and EVENT PARTICIPATION X-REFERENCES (see the Core Structures Summary model) PRODUCT ENTITLEMENT RULES determine what can be applied for.

For example John, participating as the applicant in a POS Application, is entitled to apply for a Product which presents Birth Registration details if that registration involves John participating as the child born on that registration. But John is not entitled to apply for a similar product where Paul is participating as the child born, unless there is already an X-Reference instance that links say John as parent and Paul as child. Each kind of limitation is recorded as a PRODUCT ENTITLEMENT RULE.

32.3.2 *Matching data items*

The registry collects some details from an applicant so that LifeLink can retrieve the correct records (eg so John Howard the actor does not get a birth certificate for John Howard the prime minister). These details are called MATCHING DATA ITEMS. Different sets of items are needed for each kind of EVENT TYPE PRODUCT. The LifeLink system uses the matching data items to find likely matching events.

32.3.3 *Proof of identity*

To reduce fraud and misuse, parties to an application must provide some proof of their identity. Each PRODUCT has its own PRODUCT PROOF OF IDENTITY RULES. The presentation of a proof of identity is shown as PARTICIPANT PROOF OF IDENTITY, and more than one proof might be required. The proof is of a particular PROOF OF IDENTITY TYPE (eg a NSW driver's licence issued by the RTA).

32.4 CONTACTS

This subject area also shows entities concerned with capturing all the contacts that are made with parties. CHANNEL TYPE indicates the means of contact (eg over the counter, online, or through an agency). PARTICIPANT CONTACT holds data about a contact (eg the date and time). The contact has a link to the EVENT PARTICIPATION that it was in connection with (eg that it was contact with a person who was the 'Mother on Birth Registration').

33 SYSTEM ADMINISTRATION

A significant aspect of the LifeLink data model is the allowance for configuration of data types and relationships by a system administrator. The system administration entities represent the means by which the intentionally generic aspects of the data model are tailored to meet the specific needs of the Registry, whilst allowing some aspects of the system to be altered over time by a LifeLink administrator to meet new business needs.

In short, these entities capture business rules, and can be changed as the business changes.

In database terms, system entities will become tables holding lists of valid values and lists of valid relationships between some kinds of values. All of the system administration entities have date attributes, so that items no longer valid will be retained in the list for reference but can't be used.

33.1 SIMPLE SYSTEM ENTITIES

Simple examples are Country Type, a list of countries in the world, and Marriage Termination Reason Type, a list of possible reasons for termination.

33.2 COMPLEX SYSTEM ENTITIES

A more complex example is the entity called Event Type Participation X-Reference, which is a list of the possible kinds of links between participant types that apply to a particular kind of event. The entity definition includes the following note:

For example, a Birth Notification (Event Type) has a requirement to create a number of interpersonal relationships (i.e. x-references) between pairs of participants:

** Child Born-to-Mother X-Ref.*
** Child Born-to-Father X-Ref.*
** Married Mother-to-Father X-Ref.*
** Child-to-Mother X-Ref (for children of the current relationship)*
** Child-to-Father X-Ref. (also for the current relationship)*
** Child-to-Mother X-Ref. (for children of a previous relationship)*
** Child-to-Father X-Ref. (also for a previous relationship)*

In this case, the 7 types of participant cross references noted in the definition above would become 7 entries in the Event Type Participant X-Reference list.

The administrator could add new item to the list (i.e. new valid kinds of inter-participant links) or delete items as required. For example if the Registry decided it no longer needed to track the children from a previous relationship then those two items above would just need to be end-dated in the list, and cross references of that kind could then no longer be created in the database.

34 PRINTING QUEUES

This data model draws attention to the fact that the printing of documents such as Birth Certificates at a Registry must be carefully managed to eliminate unauthorised and fraudulent use. Data is to be collected that enables accounting for all printed items.

Items to be printed can be printed individually, or can be placed in a print batch. All print items are queued and their progress and printing outcome is recorded.

Printing is closely associated with Point of Sale data, and this model repeats some entities from the Point of Sale subject area.

34.1 USERS AND WORKSTATIONS

Once a POINT OF SALE APPLICATION is processed then a SYSTEM USER, logged into a WORKSTATION, initiates the printing of any requested item as a PRINTING QUEUE ITEM. Note that a particular user logged into a particular workstation is represented as a WORKSTATION USAGE.

34.2 PRINTING

The PRINTING QUEUE ITEM can be sent to print (sometimes one or more times, as printing might not be successful). The entity representing data about each of these attempts to print an item is called NON BATCH PRINTING. Alternatively, the item can be sent along with others into a named PRINTING BATCH; the attempts to print the item as part of a batch are also recorded, represented by the entity called BATCH PRINTING.

35 FILING

This model represents the filing of a document about an EVENT into an electronic or physical file.

Electronic manifestations are stored on the EVENT ELECTRONIC FILE, and physical manifestations are stored on the EVENT PHYSICAL FILE. Any Event may have one or more Event Physical Files and Event Electronic Files.

Physical files might be located in an EVENT PACKET (a physical storage container for files), and the packet will in turn be located in a BDM REGISTRY LOCATION.

36 ALERT AND BLOCK FACILITY

This subject area sets out the information requirements for alerting users and blocking events.

An ALERT is a trigger that implements a warning to all users when data with certain values is entered into the LifeLink database during the processing of an Event. For example an Alert may be set up that warns when a particular name is entered during an application or notification. Blocks refer to Alerts that will stop processing of the relevant event.

Examples of ALERT TYPES include:

- Suspect Name Alert
- Suspect Address Alert
- Change of Name Alert
- Restriction Alert.

An ALERT can be a SYSTEM WIDE ALERT, which applies to any kind of event in which the alert data is encountered, or an alert can be an EVENT SPECIFIC ALERT, which only applies to a single EVENT (eg a particular Birth Registration).

An ALERT can be configured (by setting its 'stop-further-processing-flag') to stop any further processing when the alert is triggered. Further processing will only be permitted if the alert is 'overridden' by an authorised SYSTEM USER, who must enter a SYSTEM WIDE ALERT OVERRIDE or an EVENT SPECIFIC ALERT OVERRIDE.

37 USER RIGHTS AND PRIVILEGES

This subject area is concerned with controlling access to Registry data in the LifeLink System.

37.1 DATA IS ACCESSED BY USERS

SYSTEM USER “represents a person or organisation that will use or have access to the LifeLink system.” System User is the login persona of a PARTY, where PARTY represents for example Registry personnel and stakeholders with online access to data.

37.2 SYSTEM USERS CAN UNDERTAKE FUNCTIONS.

In essence, the model shows that System Users are assigned various person or group roles, and via those roles a user gains access to various system functions.

More exactly:

- System users can be assigned to one or more System User Roles (for personal roles - an example role is ‘registration officer”), or System User Groups (for group roles - an example group is ‘registration group’). The actual set of roles or groups assigned to a particular user are represented as System User Role Member and User Group Member.
- Each of the business functions that can be undertaken in the system is represented as a System Function, which is hierarchical (i.e. a function can have sub-functions).
- Not all personal or group roles can access all functions. The actual functions accessible to a System User Role are represented as User Role Function, with the functions accessible to a System User group role represented as User Group Function.
- Functions can interact with data:
- System Privilege Type represents the possible types of interaction with data in the database – examples are ‘insert or create’, ‘update’, ‘delete’, read’, ‘print’.
- Only some privilege types are associated with any particular function and those allowed are represented as a User Role Privilege (for a User Role Function) and a User Group Privilege (for a User Group Function).

37.3 INTERACTION IS CONSTRAINED TO PARTICULAR DEVICES

The Registry wishes to further constrain users in their interactions with data so that only particular hardware devices can interact with data (for example to restrict what data can be printed on particular printers or updated on particular workstations).

Hardware Device represents such devices, for example a particular printer, laptop computer, or computer workstation (e.g. a point of sale workstation).

The actual privileges associated with a particular Hardware Device are represented as User Role Hardware Privilege and User Group Hardware Privilege.

37.4 INTERACTION IS CONSTRAINED BY LOCATION

The Registry has many locations, and access also depends on location:

- A Hardware Device is located in a Registry Location. One location may be the location of many devices.
- A System User is located in a Registry Location. One location may be the location of many users.
- Although a System User may have many assigned roles, their active roles are restricted depending on their Location.

37.5 ACCESS TO DATA IS AUDITED

On top of all of this, access to data must be audited. SYSTEM AUDIT represents a log of system usage. In essence, a SYSTEM AUDIT will record: Who used what function, through which role, on what hardware device, invoking what privilege, and when, and what data they accessed.