

In Confidence

Office of the Minister for Land Information

Chair, Cabinet Government Administration and Expenditure Review Committee

Modernising Landonline – Update October 2021

Proposal

1. This paper updates Cabinet on progress Toitū Te Whenua Land Information New Zealand (LINZ) has made on modernising Landonline, New Zealand's central register of survey and title information.

Executive Summary

2. In October 2018 Cabinet approved a Programme Business Case for the modernisation of the Landonline technology system used by surveyors and conveyancers to conduct all land transactions.
3. The programme was expected to cost \$128.2 million and take five years to complete. LINZ is managing the programme as an in-house build using primarily NZ ICT resources. Work began on 1 April 2019 after a mobilisation phase.
4. At 31 August 2021, the programme:
 - 4.1. was continuing to progress the rebuild of Landonline's core IT systems
 - 4.2. was driving uptake of four Search and Notices products that have introduced significant improvements to how the public and registered customers interact with Landonline
 - 4.3. had released 22% of the expected value the programme will deliver through new services and functionality
 - 4.4. had spent \$35 million (30% of the modelled cost) and was operating within budget
 - 4.5. is confident it can manage delivery challenges that have placed the programme into Amber status, including the impact of recruitment and retention risks arising from tight IT job market conditions.
5. Financial approvals to date (April 2019 and August 2020) are expected to maintain activity to June 2022. LINZ will seek financial approvals from joint Ministers in February 2022 (including authority to draw down a further tranche of Crown contingency funding available to the programme).

Background

6. In October 2018 Cabinet approved a Programme Business Case for modernising Landonline [GOV-MIN-0078 refers]. Work began on the modernisation programme, known as the Survey and Title Enhancement Programme (STEP), on 1 April 2019. The current Landonline system is expected to be retired in 2024.
7. Landonline is the technology system that provides the record of land ownership, maintains the official record of property boundaries, and is used by all land surveyors and conveyancers to conduct land transactions. The system underpins private property rights, in which New Zealand is ranked as one of the best in the world.
8. Confidence in property rights and accurate land information are critical for New Zealand's economy and trusted reputation nationally and internationally.
9. Landonline (introduced between 1999 and 2002) is reaching the end of its life.
 - 9.1. Ensuring the platform's security is increasingly difficult, and the core software language is not recommended for use in new development.
 - 9.2. Users need particular software to access Landonline and it only works on certain identified computers and operating systems.
 - 9.3. Landonline is expensive to maintain and cannot be easily adapted to meet changing requirements – for example, implementing legislative changes or keeping up with the modern day-to-day practices of surveyors, conveyancing professionals and territorial authorities.
10. STEP's objective is to deliver a flexible and modular technology platform for survey and title services that will:
 - 10.1. remove risks to Landonline and the Crown arising from the aging IT platform that could impact the security and integrity of the system
 - 10.2. significantly improve the quality and range of survey and title services LINZ provides to its customers
 - 10.3. improve productivity and information flows by providing automatic system-to-system links – for example, STEP will provide potential for greater integration with the Māori Land Court's Māori Land Information System by enabling direct transfer of data and more streamlined processing of transactions affecting Māori land. STEP is already providing information to territorial authorities to assist them to have accurate information (paragraph 16)
 - 10.4. make property information more accessible to the public and decisionmakers.
11. The Programme Business Case envisaged STEP as both a technology rebuild and key driver of organisational change that will see LINZ take a flexible, customer-centric approach to the work it does for New Zealand. STEP will ensure LINZ has strong and secure technology foundations that are continually modernised to meet future needs without again having to rebuild core systems.

12. STEP's \$128.2 million capital cost is funded from LINZ capital reserves of \$32.9 million and a repayable Crown capital injection of \$95.4 million drawn from \$103 million contingency funding allocated to the programme in Budget 2018. The operating costs of providing survey and title services through Landonline are recovered from fees charged to users.
13. Cabinet earlier noted progress updates in November 2019 [GOV-19-MIN-0058] and May 2021 [DEV-21-MIN-0097].

Progress to 31 August 2021

14. Since 1 April 2019 LINZ has been delivering value to customers and the public. Progressive value delivery, with user involvement and feedback throughout the process, is a feature of the Agile methodology the programme is using. The programme has:
 - developed and released four new property search and property transaction notification services ("Search" and "Notices")
 - begun the build of the new flexible and modular technology platform
 - received support for the modernisation programme by closely involving the Landonline user community through all stages of development.
15. At 31 August 2021 the programme:
 - had released 22% of the value the programme expects to deliver through new services and functionality
 - had spent \$35 million (30% of the modelled cost) and was operating within budget
 - status was moved from Green to Amber in June 2021 while a number of delivery challenges were worked through (paragraphs 20 to 22). Amber status reflects the programme's confidence that emerging challenges can be managed.

Search and Notices

16. The uptake of the new Search and Notices services has increased markedly. These services are designed to improve access to property information, streamline aspects of the conveyancing process, and provide territorial authorities and banks with accurate and timely notifications of property transactions for rating and mortgage registration purposes.
 - 16.1. Registered web search: a modern web-based search application allowing registered Landonline customers to search for and purchase products such as a title record from any device (in use by 35% of customers by volume, compared with 20% in March 2021).
 - 16.2. Public land record search: a web-based service offering easier and cheaper public access to property information, for example, a land title or survey plan. Use of the service has exceeded expectations since its launch on 1 February

2021. A 78 percent increase in new customers has been recorded and LINZ expects 100,000 land record orders by December 2021 at the current rate (compared with the 7,000 orders anticipated by the 2018 Programme Business Case).

16.3. Notice of Change of Ownership: a new service that provides automated notifications to territorial authorities when a property transaction is completed, enabling accurate updating of rating information. Now in use by 17 of 67 territorial authorities (up from four in March 2021) and 60 percent of conveyancers in participating regions. The target for onboarding all councils is March 2022.

16.4. Notice to Mortgagee: a new service that sends automatic notifications to participating financial institutions when a mortgage is registered on a title. It is in use by 10 financial institutions, up from three in May, with full uptake by major banks targeted for June 2022.

Core system rebuild

- 17.** The rebuild of the Landonline's core technology systems, which is being carried out in approximately 40 initiatives (blocks of work), will modernise survey and title transaction functions, introduce new customer support functions, and transfer the Landonline database of property information to the new technology platform.
- 18.** Progress continues to be made on the foundational initiatives started in August 2020. This includes first steps towards modernising survey and title transaction functionality, conversion of Landonline's database of property information, development of customer support services and "business rules" that, for example, ensure survey transactions comply with regulatory standards. One of seven initiatives started in August 2020 has been completed.
- 19.** Two pilots of new survey and title functionality, which rely on the new system, have begun. One allows conveyancers to conduct mortgage discharges and the other enables surveyors to digitally capture survey data in the new system.

Delivery challenges being managed

- 20.** Transitioning Landonline's database of property information to the new platform has been delayed to April 2022. An independent review of the transition strategy confirmed the approach being taken and recommended more time be allowed to improve the management of the risks associated with the transition. Delaying this complex and crucial aspect of the programme does not affect the overall programme delivery timeline or cost.
- 21.** Current IT job market conditions have affected programme workforce retention and recruitment, which is impacting overall delivery. Replacing people in some roles is challenging. Similarly, recruiting for a planned increase in people is challenging. Factors influencing the market include fewer overseas applicants and competition from other IT projects including other government programmes. Attractive remuneration for contractors is also drawing away people who sought security of a permanent role in 2020. Forty percent of the current programme workforce are

contractors and LINZ is likely to take on more contractors in response to current market conditions. One mitigation and benefit is that LINZ is seeking to employ more IT people in Christchurch rather than relying solely on the Wellington market.

22. Foundational work on modernising title transaction processes is progressing well but will take five months longer and cost \$5 million more than the original high-level estimate developed 18 months ago. This increase is manageable within the overall budget. There is a high degree of confidence in the re-estimated cost as it is informed by a much greater understanding of the work required than was possible when originally estimated. Work on other initiatives has so far broadly tracked to estimates but this is being tested as part of a planned re-estimation of all programme costs (discussed below).

Planned re-estimation of programme costs

23. At this stage LINZ is confident that the programme can be delivered within the original \$128.2 million funding envelope approved by Cabinet in 2018. LINZ has begun updating all previous high-level estimates to confirm this position ahead of a capital funding drawdown request to joint Ministers in February 2022. Previous high-level estimates included a \$12 million contingency for higher costs.
24. Previous high-level estimates for the core system rebuild were made before development teams were recruited. Their expertise based on what has been learned in the last 18 months will help inform updated estimates. Probable additional cost pressures resulting from the recruitment and retention risks will also be factored in. The re-estimation work and resulting financial reforecast will be completed by December 2021. LINZ will inform joint Ministers as this work progresses and I will update Cabinet in April 2022.

Value Delivery

25. LINZ estimates value delivery by assigning value points to each STEP initiative. To date the programme has delivered 22% of the value the programme is expected to generate, up from 17% in May 2021. The updating of new services and functionality launched is also a demonstration of the value the programme. As expected, value delivery has slowed while the programme team is focussed on building the foundations of the core system. Value delivery is expected to increase from mid-2022 when survey and title transaction functionality (based on the new core system) will begin being rolled out to customers.

Benefit realisation

26. LINZ is monitoring and tracking progress realising benefits anticipated by the Programme Business Case. Benefits fall under four categories:

26.1. Reduced risk to business continuity and confidence (45% of total benefits) by eliminating reliance on legacy software to protect the availability, security, integrity, and reliability of Landonline. This will be fully realised when all Landonline users are using the new platform (expected by 2024). The database migration in 2022 will eliminate one major area of risk. Also, about 2500, or 20%, of Landonline's 12,500 users are "search only" customers. At

present half of this customer group have moved to the new platform. LINZ is working to move the remaining search only customers off the old system.

26.2. Improved ability to meet customer and policy needs (30%) by improving processes and LINZ's ability to respond quickly to customer needs, as well as improving accessibility and quality of information. Standards that ensure ease of accessibility and use are built into all new products and services. For example, new web-based land record search services for registered users and the public are accessible on any device. Twenty percent of public users are accessing property information on a mobile device.

26.3. Improved productivity (15%) by enabling automatic system-to-system links. The release of the Search and Notices services has enabled 75% of the \$119 – \$143 million of estimated monetised benefits to begin being realised. The benefits are primarily generated by productivity gains because the correct data is automatically provided without anyone else needing to be involved.

26.4. Economic value (10%) – this is the longer-term, broader economic value to NZ that will be derived from: maintaining a secure, reliable, and efficient Landonline; the productivity gains achieved through high uptake; and the additional value being derived from property information being available.

Risk and Assurance

27. Three quality assurance reviews have been undertaken since May 2021. This included external independent reviews of the database migration strategy (discussed in paragraph 20) and the IT architecture processes. The recommendations from the reviews are being implemented.
28. The third (internal) review focused on programme delivery. This resulted in changes in operational support, leadership capacity, reporting metrics, standardisation of tools used by development teams, and clarifying roles and responsibilities.
29. The programme's independent quality assurance advisors have noted improved planning processes and greater certainty in delivery of work (which is a crucial part of accurate costing of initiatives). Their most recent report (September 2021) said successful delivery of the programme appears likely provided delivery risks such as recruitment and retention were not allowed to materialise into issues that threatened delivery. This rating is based on the Government Chief Digital Officer's assessment ratings for Government IT programmes.
30. An independent Treasury-led Gateway review due to be conducted in October 2021 will assess the programme's performance against the Programme Business Case and the likelihood of delivering benefits and outcomes.

Stakeholder engagement

31. LINZ continues to engage widely with a range of stakeholders, including property lawyers, cadastral surveyors, territorial authorities and key data organisations, and attending events as sponsors, speakers, and participants.

32. The Landonline user community remains actively involved as system improvements are tested, piloted and released. This involvement has extended to a willingness to promote uptake of new services, a recent example including a senior conveyancer who promoted new web search services to colleagues in a video available on the LINZ website.
33. The Notice of Change of Ownership service was runner-up for an award recognising successful collaboration between government agencies and local authorities. The Taituarā Local Government Professionals Award commended the collaboration achieved with Tauranga City Council when piloting the service in 2020, and the transformation of how solicitors notified councils and LINZ of ownership changes through “a single seamless process that promoted efficiencies in the land sale process and the integrity of the land transfer and property tax systems.”
34. LINZ was a sponsor of both the recent Local Government NZ and Survey and Spatial New Zealand conferences where the opportunity was taken to showcase new services.

Consultation

35. The following agencies have been consulted on the contents of this paper: The Treasury, Office of the Government Chief Digital Officer, and Ministry for Business Innovation and Employment. The Department of Prime Minister and Cabinet and Te Kawa Mataaho Public Service Commission were informed.

Financial Implications

Expenditure to date

36. Approximately \$35 million in capital expenditure had been spent by 31 July 2021 since November 2018. This is 30% of the programme’s modelled capital cost (at the 50th percentile) of \$116 million. \$29 million of the capital expenditure has been funded from LINZ capital reserves.

Expenditure type (\$m)	Full programme		Spend to date (since Nov18)		21/ 22 year to date		
	Approved funding (QRA 85)	Modelled cost (budget)	Actual	% of Modelled cost	Actual	Budget	Var
Capital expenditure	128.2	116.2	35.4	30%	2.0	2.2	0.2
Operating expenditure	18.7	23.8	7.4	31%	0.5	0.7	0.2

* STEP operating expenditure includes associated overhead allocated costs but excludes depreciation expenditure

LINZ will seek ongoing capital funding in early 2022

37. LINZ has received approvals from joint Ministers to draw on \$60.4 million of capital funding available for the programme. Originally expected to maintain the programme until December 2021, lower expenditure means approved capital funding will now maintain programme activity to mid-2022. A request to joint Ministers for funding to maintain the programme until mid-2023 will be made in February 2022.
38. The later funding request will ensure it takes into account the re-estimation of the size and cost of the remaining initiatives needed to complete the programme, which

is underway, and the potential impact of recruitment and retention issues on programme delivery timing.

Survey and title fees

39. The cost of the Survey and Title Enhancement Programme programme is to be recovered by fees paid by Landonline users. On 14 June 2021, Cabinet confirmed decisions on new fees for LINZ survey and title services [CAB-21-MIN-0218]. These new fees will come into force on 1 February 2022.

Legislative, regulatory, human rights, population, or climate change implications.

40. This paper does not contain proposals with legislative implications or require inclusion of a regulatory impact analysis. Nor does it contain proposals with implications for human rights, populations, or climate change policy.

Proactive Release

41. I propose to publish this Cabinet paper on the LINZ website, subject to redactions as appropriate under the Official Information Act 1982.

Recommendations

The Minister for Land Information recommends that the Committee:

1. **note** that on 31 August 2021 the Landonline rebuild is within budget and remains on track for delivery in financial year 2023/24;
2. **note** that uptake of new Landonline services released to date by the modernisation programme has been strong;
3. **note** that in June 2021 the programme's status was moved from Green to Amber while the issues of re-estimation of the programme's cost were worked through given the pressures on recruitment and retention and the increased cost of the foundational work on transacting titles;
4. **note** that financial approvals from joint Ministers (Land Information, Finance, and Digital Economy and Communications) in April 2019 and August 2020 will maintain programme activity until mid-2022;
5. **note** that a planned re-estimation of the size and cost of the remaining work needed to complete the programme is being completed;
6. **note** that LINZ will seek further financial approvals from joint Ministers in February 2022;
7. **invite** the Minister for Land Information to provide a further update to the Cabinet Government Administration and Expenditure Review Committee by the end of April 2022.

Authorised for lodgement
Hon Damien O'Connor
Minister for Land Information

Proactive Release