Economic analysis of reform options for the eConveyancing market

Australian Registrars' National Electronic Conveyancing Council

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nous

Nous Group acknowledges Aboriginal and Torres Strait Islander peoples as the First Australians and the Traditional Custodians of Country throughout Australia. We pay our respect to Elders past and present, who maintain their culture, Country and spiritual connection to the land, sea and community.

This artwork was developed by Marcus Lee Design to reflect Nous Group's Reconciliation Action Plan and our aspirations for respectful and productive engagement with Aboriginal and Torres Strait Islander peoples and communities.

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Contents

Acronyms

Acronym / term	Full term
ACCC	Australian Competition and Consumer Commission
APRA	Australian Prudential Regulation Authority
API	Application Programming Interface
ARNECC	Australian Registrars' National Electronic Conveyancing Council
AusPayNet	Australian Payments Network
CBA	Cost benefit analysis
CPI	Consumer Price Index
ECNL	Electronic Conveyancing National Law
ELN	Electronic Lodgment Network
ELNO	Electronic Lodgment Network Operator
ESB	Enterprise Service Bus
FTE	Full-time equivalence
IOC	Interoperability Operational Committee
IPART	Independent Pricing and Regulatory Tribunal
LR	Land Registry or Land Registrar
MCA	Multi-criteria analysis
MOR	Model Operating Requirements
MPR	Model Participation Rules
NPV	Net Present Value
PEXA	Property Exchange Australia Limited
PMS	Practice Management Software
RBA	Reserve Bank of Australia
RELNO	Responsible ELNO
RITS	Reserve Bank Information and Transfer System
SRO	State Revenue Office
USO	Universal Service Obligation
WACC	Weighted Average Cost of Capital

Executive summary

Context for reform

Electronic conveyancing or eConveyancing allows instruments and documents needed for property transactions to be electronically prepared, signed, settled and lodged with the relevant land registry. eConveyancing operates under the Electronic Conveyancing National Law (ECNL), a national law applied or enacted in each State and Territory.

There are currently two Electronic Lodgment Network Operators (ELNOs) operating in the Australian market. The first ELNO, Property Exchange Australia Limited (PEXA), was initially established as a government-owned service provider and then privatised in 2019. A second ELNO, Sympli Australia Pty Ltd (Sympli), entered the market in 2018.

PEXA holds approximately 99 per cent market share. This is largely because the current arrangements make it difficult to have meaningful competition. As PEXA's platform does not interoperate with other ELNOs, a transaction can only occur if all parties use the same Electronic Lodgment Network (ELN). As PEXA was the first ELNO, most practitioners[1] and financial institutions subscribe to PEXA, meaning that most transactions continue to take place on its platform. This is known as a network effect. In the absence of competitors who are able to gain a foothold in the market, PEXA has limited incentive to innovate, reduce prices, or respond to stakeholder concerns, as identified by the Australian Competition and Consumer Commission (ACCC) in 2019.[2]

For the past five years, the eConveyancing market, led by Australian Registrars' National Electronic Conveyancing Council (ARNECC), has been pursuing interoperability reform to address the market structure and network effect challenges that are restricting competition.

Previous ARNECC analysis in 2019 identified that a 'Direct connect' model of interoperability was preferred.[3] This model would require existing ELNOs to connect directly to each other, allowing each subscriber[4] in a transaction to use a different ELN, thereby overcoming the current network effects that support PEXA's ongoing dominant market position.

In recent years, ARNECC progressed development of the technical and regulatory regime for a Direct connect model of interoperability, however, this work was paused in 2024 due to significant issues raised by the banking industry. These included concerns about functional equivalence, unclear functional requirements, and potential impacts on settlement success rates, with these matters being beyond the remit of states and territory governments to address effectively.

Given these challenges, it was determined that a more current assessment of the economic rationale for interoperability is needed, including an assessment of different technical model options, to identify an appropriate path forward.

Options for reform

ARNECC engaged Nous Group (Nous) to conduct an economic analysis of various eConveyancing market reform options. This will help to inform decision-making on the path forward for reform.

The seven reform options, which combine market models defined by ARNECC, are:

- **Option 1: Direct connect** requires that ELNOs connect with each other via application programming interfaces (APIs), allowing information sharing between ELNs in a transaction such that subscribers can

[1] A practitioner refers to a licensed professional—a solicitor, lawyer, or licensed conveyancer—who manages the legal process of property transfer.
[2] ACCC, Report on e-conveyancing market reform, December 2019.
[3] ARNECC, Addressing market power in electronic lodgment services, September 2020.
[4] A subscriber is an individual or entity authorised under the ECNL to use an ELN for lodging and settling property transactions electronically.

choose their preferred ELNO for any transaction. Which ELNO is responsible for sharing transaction information with the banks, land registries, and state revenue offices (SROs) would differ for each transaction.

- **Option 2: ESB between ELNOs via Direct connect** builds on Direct connect by adding an Enterprise Service Bus (ESB) which is a central messaging system that acts like a switchboard and allows ELNOs to share transaction information without building a new connection to every ELNO in the market.
- **Option 3: Central ESB via Direct connect** builds on Direct connect by adding an ESB, but the central switchboard also allows banks, land registries, revenue offices to avoid new connections for any additional ELNOs which join the market.
- **Option 4: Hub-ELNO** creates two markets for eConveyancing: a wholesale market with a regulated monopoly (the Hub-ELNO, assumed to be PEXA), and a subscriber-facing retail market with competition in customer-facing eConveyancing services. The Hub-ELNO connects with retail ELNOs, which subscribers could choose to use independently of other participants in the transaction.
- **Option 5: Practitioner-choice requires** ELNOs to share transaction information so subscribers can choose their preferred ELNO but retains PEXA as the ELNO which links with banks and other back-end infrastructure.
- **Option 6: Direct connect via Practitioner-choice implements** Practitioner-choice temporarily before establishing full Direct connect interoperability.
- **Option 7: Monopoly regulation** introduces further price and access regulation if competition fails to develop, with implementation assumed to occur within 24 months of a decision to proceed.

These reform options are assessed against the status quo, a current state baseline which assumes the existing eConveyancing market situation with two ELNOs, no interoperability and restricted competition continues into the future.

Direct connect, ESB between ELNOs, and Practitioner-choice are considered distributed interoperability models because some or all infrastructure connections are distributed across ELNOs.

Summary of findings

This economic analysis found that three options were expected to deliver net benefits compared to the status quo. These are Direct connect - either via Practitioner-choice (option 6) or directly (option 1) — and monopoly regulation (option 7).

- **Option 1: Direct connect** has the greatest estimated net benefits but includes greater risk both of reduced benefits if competitive market outcomes are not effective, or greater benefits if innovation and efficiencies are strong.
- **Option 6: Direct connect via Practitioner-choice** has slightly lower estimated net benefits than Option 1 and involves greater implementation complexity but may deliver benefits more quickly than full direct connect interoperability.
- **Option 7: Monopoly regulation** is expected to provide moderately lower net benefits compared to Option 1 and 6, but these benefits would be more certain, and the overall costs are lower than the interoperability options.

There are several uncertainties which create challenges in identifying a preferred option. While these uncertainties cannot be reasonably factored into this analysis, they should be considered in any decision on the path forward. These uncertainties include:

- the level of competition that exists in the market in the short to medium term
- the size of the market outcomes (i.e. price and service quality) delivered by competition, particularly if the market model is a duopoly
- the level of cooperation from market participants

- whether banks will build additional connections to support the objectives of interoperability.

Importantly, even if Option 1: Direct connect can be achieved within the timelines assumed for this analysis, there is a risk that the ability for it to deliver competitive outcomes in the long-term may not be achievable due to the time and costs involved. This would result in the significant estimated benefits from competition not being achieved, even if the market has a level of contestability in the short term. This provides an alternative case for monopoly regulation (option 7), or Option 6 if a Practitioner-choice interim model could be established swiftly. However, Option 6 still presents implementation risks as it requires two concurrent technical builds, with the possibility that the Practitioner-choice model becomes the end state if the subsequent implementation of Direct connect falters.

The remaining four options were assessed to be worse, or no better, than the status quo for the following reasons:

- **Option 2: ESB between ELNOs via Direct connect** and **Option 3: Central ESB via Direct connect** would be worse than the status quo because while these options may provide similar benefits to other interoperable options, they also involve significant interoperability costs combined with costs to government to build the ESB and costs to other participants to connect to it.
- **Option 4: Hub-ELNO** would be worse than the status quo because it incurs both significant interoperability costs and costs to setup additional regulation, but the benefits are expected to be smaller than other interoperability options.
- **Option 5: Practitioner-choice** would be no better than the status quo as it would incur some interoperability costs for ELNOs, banks and subscribers, while any price reduction benefits would be smaller as they are restricted to a small proportion of eConveyancing transactions only (i.e. non-bank elements of transactions, including lodgment).

The remainder of this executive summary provides an overview of the methodology for this analysis, the specific benefits and costs estimated, and a list of further considerations.

Methodology

The economic analysis of the seven options combined qualitative assessment with quantitative analysis of benefits and costs into a multi-criteria analysis (MCA). This approach reflects the complexity of quantifying several benefits and enables them to be incorporated qualitatively. Quantitative estimates of benefits and costs used a 20-year timeframe from FY2026, with all values expressed in present value terms using a seven per cent real discount rate.

Three categories of benefits were quantified: consumer price savings from improved cost efficiency, improved participant outcomes from platforms which are faster and simpler to use, and market resilience from avoided settlement delays. Further benefits in the forms of improved service quality and market competition were also considered qualitatively where benefits could not be quantified.

Quantified costs estimated both upfront and ongoing expenditure across market participants, including technology development, integration, testing, training, and regulatory oversight. The analysis used a structured bottom-up approach to estimate the upfront costs and change in ongoing costs for each participant group in the eConveyancing market. The complexities of implementation were also assessed qualitatively.

Information sources included:

- confidential financial information from ELNOs
- operational performance data from PEXA
- eConveyancing transaction volumes from ARNECC
- consultation inputs from practitioners, land registries, state revenue offices, banks, and independent economic and policy bodies
- publicly available datasets from the ABS and APRA

- public reports and submissions regarding the eConveyancing market.

Benefits of reform options

Benefits of improved price competition

Price competition benefits would arise through two distinct mechanisms depending on the reform option. Firstly, under competitive models (Options 1, 2, 3, 5 and 6), interoperability would eliminate network effects and enable ELNOs to compete on price and service quality. The analysis applied the current price differential between Sympli and PEXA to subscribers' transactions that may switch to the lower-priced platform over time. Analysis assumed that changes in ELNO market share would follow a logarithmic growth curve, reaching competitive equilibrium by FY2046. This is a proxy for price competition benefits that may arise from a combination of relative price reductions by both ELNOs as competition and efficiency improves. Secondly, under the regulatory options (Options 4 and 7), price savings would be derived from formal price controls using a 'CPI minus X' framework with an illustrative two per cent efficiency factor, applied once to all transactions.

The scale of estimated price benefits varied substantially across options (see Table 1). Options 1, 2, 3 and 6 would deliver the highest estimated savings at $66 million to $67 million in present value terms, driven by full market competition enabled through interoperability. Option 7 (monopoly regulation) would generate an estimated $57 million through regulatory price controls, while Option 4 (Hub-ELNO) is estimated to deliver $52 million as competition would remain confined to the retail layer. Option 5 (Practitioner-choice) produces the smallest estimated benefit at $25 million because competition applies only to non-bank elements of transactions. The additional price benefits under Option 6 reflect competition beginning slightly earlier through the Practitioner-choice transition path.

Table 1 | Consumer price savings by option over FY2026-46 ($m, present value 2025)

Option	Price savings
Option 1: Direct connect	66
Option 2: ESB between ELNOs via Direct connect	66
Option 3: Central ESB via Direct connect	66
Option 4: Hub-ELNO	52
Option 5: Practitioner-choice	25
Option 6: Direct connect via Practitioner-choice	67
Option 7: Monopoly regulation	57

Benefits of improved service quality

Two potential service quality benefits from market reform were estimated: improved participant outcomes and strengthened market resilience.

Improved participant outcomes reflect the benefits of platforms becoming faster and simpler for users. The analysis assumed that users who switched to Sympli would save one minute per transaction.[5]

Quantified service quality benefits differ based on how competitive the market is. As shown in Table 2:

- Options 1, 2, 3 and 6 would generate an estimated $34 million in participant time saving benefits through full interoperability that would encourage innovation and service differentiation. Option 4 would produce

[5] Sympli's usability testing demonstrated 45 per cent reduction in average processing time and 68 per cent fewer clicks for core transactions compared to PEXA.

lower estimated time saving benefits of $9 million because competition would be limited to the retail-layer.

- Option 5 would deliver an estimated $10 million in time saving benefits because competitive benefits would apply only to non-bank elements of transactions.
- Option 7 is not expected to generate any participant time saving benefits as the monopoly structure does not create the competitive pressures that would encourage service improvement.

Resilience benefits capture the benefit to consumers of avoiding delayed settlement rollover to the next day due to ELNO unreliability. This was estimated based on the existing rates of platform outages due to PEXA systems.[6] This benefit differs based on how competitive or well-regulated the ELNOs responsible for the connections with banks, SROs, and so on, are.

The resilience benefits are small and range from zero under Option 5 where there is no competition for bank elements of transactions and no increased regulation of settlements being delayed to the next day, through to an estimated $1.1 million for monopoly regulation because where further regulatory capacity would allow for improvements in reliability incentives. Most competitive models would deliver an estimated $0.6 million in benefits through distributed infrastructure that reduces single points of failure.

Table 2 | Service quality benefits by option over FY2026-46 ($m, present value 2025)

Option	Participant outcomes	Market resilience	Total
Option 1: Direct connect	34	1	**35**
Option 2: ESB between ELNOs via Direct connect	34	1	**35**
Option 3: Central ESB via Direct connect	34	1	**35**
Option 4: Hub-ELNO	9	1	**10**
Option 5: Practitioner-choice	10	0	**10**
Option 6: Direct connect via Practitioner-choice	34	1	**35**
Option 7: Monopoly regulation	0	1	**1**

Related but distinct expected improvements which are hard to quantify were also considered as service quality benefits, including the strength of the incentive to innovate, whether national single points of failure for property transactions would be created or eliminated, and the ease of securing data.

Options which introduce competition would be expected to deliver the strongest service quality and also deliver stronger innovation. However, introducing competition using standards or via an ESB may also restrict innovation by limiting what elements businesses are able to change.

Option 1: Direct connect and Option 6 are expected to improve market resilience because infrastructure is better distributed across ELNOs, eliminating national single points of failure. However, their redundant connections reduce the security of data in transit, and duplicated workspaces also increase data storage exposure.

Option 7: Monopoly regulation would likely result in less innovation, though it would achieve the best security outcomes by minimising data storage and transmission across organisational boundaries. This benefit comes at the expense of creating a single point of failure for the national eConveyancing property system.

[6] Existing outages due to system failures with other participants such as banks and titles offices are assumed to be unaffected by the reforms

Impact on market structure and competition

This analysis also considered market structure and competition, reflected in the extent to which an option may incentivise new ELNOs to enter the market and increase competition, facilitate market adaptation including the ability and need to coordinate the market to make further changes where needed, and provide transparency for participants and regulators.

Options with full interoperability between ELNOs (Options 1, 2, 3, and 6) would largely eliminate network effects and reduce barriers to entry for new ELNOs, though Direct connect models are expected to impose higher fixed costs through multiple connection requirements. The central ESB model (Option 3) and Direct connect (Option 1) would enable the strongest competitive market structure, combining low entry costs and market transparency at the cost of resilience and creating a single point of failure.

While quantitative benefits and costs are modelled on a two ELNO market, qualitative analysis considers benefits that may arise if further ELNOs were to enter the market. However, based on analysis of current market dynamics, this is considered unlikely, given the size of the market and the high costs associated with establishing and operating an ELNO.

Monopoly regulation (Option 7) would deliver efficient coordination because there would be a single monopolist with little coordination required, but would fail to reduce barriers to entry.

Costs and complexity of reform options

Costs for implementation and operations

Upfront costs include the technology development and integration testing, operational and training adjustments, and the costs to setup new regulatory functions where relevant to an option. Ongoing costs include technical maintenance, compliance, and governance activities.

Table 3 provides an overview of these costs across the various options. The highest estimated costs were for Option 3: Central ESB via Direct connect ($151 million) and Option 2: ESB between ELNOs via Direct connect ($122 million), with the higher costs driven by government expenditure to build an ESB, and the additional upfront costs to land registries, banks, and SROs to build and test a new connection with the ESB. In comparison, Option 1: Direct connect has a total estimated cost of $85 million, driven primarily by upfront and ongoing costs incurred by banks and the technology and operational costs borne by ELNOs.

Table 3 | Total estimated cost by option over FY2026-46 ($m, present value 2025)

Option	Upfront cost PV	Ongoing cost PV	Total cost PV
Option 1: Direct connect	42	44	**85**
Option 2: ESB between ELNOs via Direct connect	52	71	**122**
Option 3: Central ESB via Direct connect	79	72	**151**
Option 4: Hub-ELNO	23	61	**83**
Option 5: Practitioner-choice	22	20	**42**
Option 6: Direct connect via Practitioner-choice	47	44	**91**
Option 7: Monopoly regulation	3	47	**50**

Option 5: Practitioner-choice ($42 million) and Option 7: monopoly regulation ($50 million) were estimated to have the lowest implementation and operational costs. Practitioner-choice costs would arise from ELNO technology development and operational adjustments, subscriber switching costs, and the cost for the regulator to complete interoperability reforms. These costs are comparatively low because the model avoids

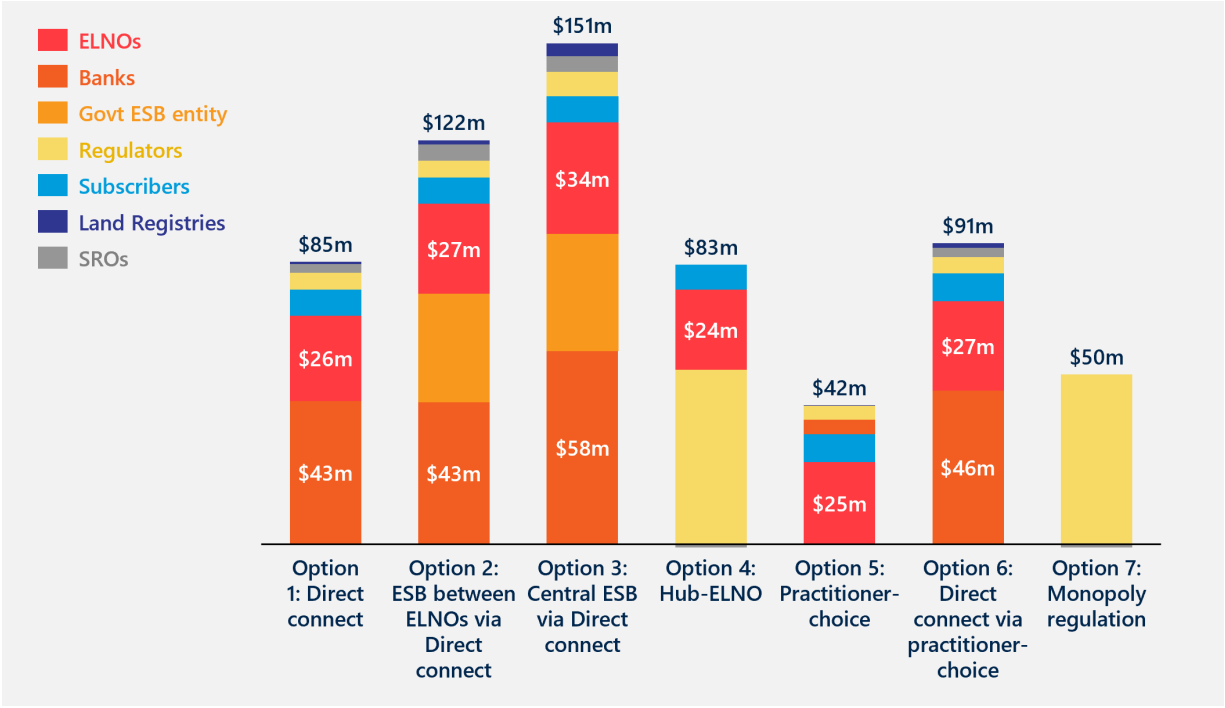
most material integration and operational costs for banks. The largest cost for Option 7: monopoly regulation is establishing and operating additional regulation, though it remains less costly than other options because it avoids the building, testing, and integration costs associated with interoperability.

Figure 1 presents the total estimated implementation and ongoing costs for each option, disaggregated by stakeholder group, over the period FY2026 to FY2046. The results show that financial institutions (banks) are expected to bear the largest share of costs, ranging from $43 million to $58 million, under Options 1, 2, 3 and 6,. This reflects the significant interoperability development effort that would be required, including technology build activities, system integration, organisational change, testing and ongoing maintenance.

Under Options 2 and 3, an ESB entity (which is assumed to be government owned) would also incur significant expenditure, costing an estimated $33 million and $35 million respectively. These options would involve building and operating an ESB, which would require upfront investment in technical design, development, infrastructure, testing and ongoing operational costs.

Under Options 4 and 7, eConveyancing regulators would incur the highest overall costs, with estimated costs of $53 million and $50 million respectively.[7] These options require significant upfront effort to establish a dedicated regulatory regime and ongoing expenditure to oversee market conduct, pricing, access arrangements, compliance and consumer safeguards. As a result, regulatory costs dominate the total cost profile under the Hub-ELNO and monopoly regulation options.

Figure 1 | Total estimated cost per option per stakeholder group over FY2026-46 ($m, present value 2025)



Implementation complexity

While the complexity and risk of implementing an option is often correlated with the cost of that option, there are several factors that cannot be monetised but should inform the potential difficulty of successful implementation. These include technical scope, expected length of implementation, and the level of expected stakeholder resistance to each option. Practitioner-choice and Monopoly regulation are considered to be relatively low complexity due to reduced technical scope (particularly for banks). Direct connect also presents a moderate level of implementation complexity; although the technical build is relatively contained, it requires bilateral integration between ELNOs and may face resistance from those stakeholders concerned about system changes and impacts on existing infrastructure. The most complex options are expected to be ESB between ELNOs via Direct connect and Central ESB via Direct connect because of the significant technical

[7] Cost estimates reflect the activities required, but they are assigned to any particular eConveyancing regulator.

and organisational change required for most stakeholders to implement the options, as well as potential stakeholder resistance.

Determination of the preferred option

Three options are estimated to realise net benefits

The estimated total quantified costs, benefits and net benefits of each option are shown in Table 4. The estimated total benefits are similarly large for full interoperability options (Option 1,2,3,6), with benefits estimated at over $100 million over the twenty-year timeframe. Relatively smaller total benefits are estimated for Option 4,5 and 7 (respectively $61 million, $35 million, and $58 million).

The net benefits are largest for Option 1: Direct connect ($16 million). The benefits of full competition are expected to offset the costs incurred by banks and others with key infrastructure connections.

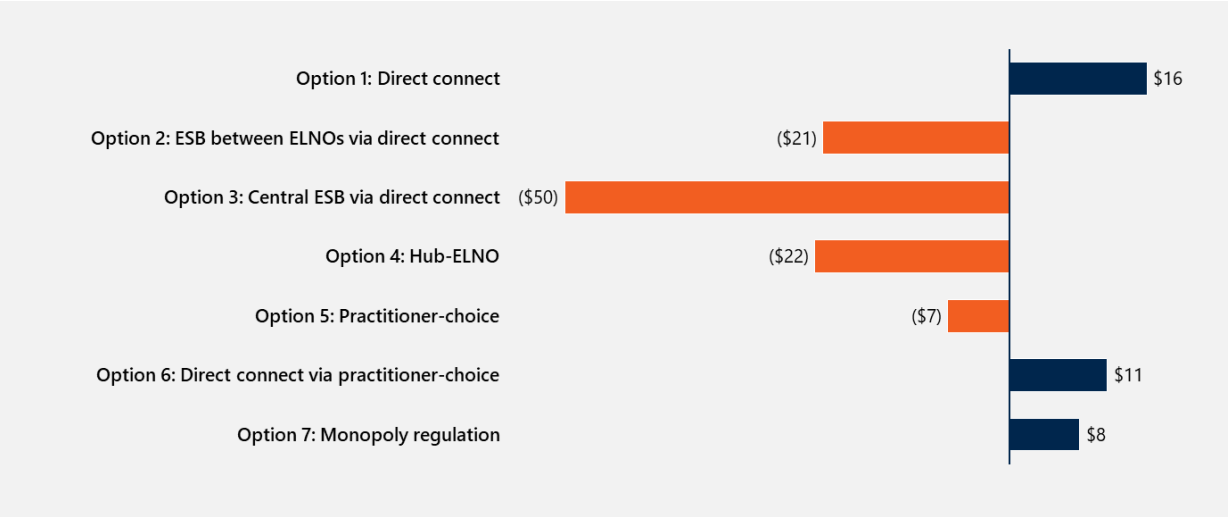
Option 6: Direct connect via Practitioner-choice and Option 7: Monopoly regulation follow closely behind, seeing modest positive net benefits, with $11 million and $8 million respectively.

Table 4 | Total costs, benefits and net benefits across options over FY2026-46 ($m, present value 2025)

Option	Total cost	Total benefits	Net benefits
Option 1: Direct connect	(85)	101	**16**
Option 2: ESB between ELNOs via Direct connect	(122)	101	**(21)**
Option 3: Central ESB via Direct connect	(151)	101	**(50)**
Option 4: Hub-ELNO	(83)	61	**(22)**
Option 5: Practitioner-choice	(42)	35	**(7)**
Option 6: Direct connect via Practitioner-choice	(91)	102	**11**
Option 7: Monopoly regulation	(50)	58	**8**

Figure 2 also presents net benefits across options, with the least net benefits (or greatest net costs) estimated for Option 3: Central ESB via Direct connect (-$50 million), driven by the significant cost to government to build the ESB itself, and the cost to banks, land registries, and SROs to build and test additional infrastructure. Option 2: ESB between ELNOs via Direct connect also sees significant net costs (-$21 million) because it also requires government costs to establish the ESB, however it avoids the costs of additional connections for most stakeholders compared to Option 3.

Figure 2 | Net benefit across options over FY2026-46 ($m, present value 2025)



Net benefits are sensitive to assumptions, but option rankings remain broadly stable

The benefits for interoperable options are highly sensitive to three key assumptions:

- **Price efficiency**. Based on the methodology applied, a price increase by Sympli of more than 1.8 per cent, relative to PEXA's price, would eliminate the net benefits of competitive models (Options 1–3, 5–6). However, it is important to note that lower relative prices by PEXA would produce similar or larger benefits and therefore retain the net benefits. For example, if Sympli's price increased by more than 1.8 per cent, but increased competition put downward pressure on PEXA's pricing, net benefits would be expected to be realised. For monopoly regulation options (Options 4 and 7) realising net benefits would depend on achieving prices 2 per cent below CPI growth through cost regulation (on the basis that prices under the status quo would increase by CPI only). Net benefits are highly sensitive to pricing assumptions because the total revenue in the market is large compared with the estimated costs in this analysis.
- **Market share**. Based on the methodology applied, if the non-incumbent ELNO captures less than 42 per cent market share by the end of the 20 year analysis period (without a competitive price response from PEXA), Direct connect would no longer deliver positive net benefits. However, if there is a price response by PEXA due to the increased competition, Direct connect would continue to deliver positive net benefits even if the non-incumbent ELNO was unable to capture at least a 42 per cent market share
- **Time savings**. If subscribers achieve two minutes of savings per transaction (rather than one), Direct connect's net benefits triple and most options become viable. If no time savings materialise, only monopoly regulation delivers positive net benefits.

Net benefits are moderately sensitive to assumptions on ELNO and bank interoperability cost and regulatory operational costs. Significant underestimation would be required to alter the net benefit conclusions for Option 1: Direct connect, while some underestimation of costs for Option 6 and 7 could change respective net benefit conclusions.

While net benefit estimates are sensitive to assumptions—particularly around benefits—most options share proportional exposure to these changes, so option rankings remain broadly stable across scenarios tested. For example, if service quality benefits prove higher than estimated, Options 2–4 could see improved results, but Option 1: Direct connect would likely remain the most beneficial. Given this sensitivity, decision-makers should place greater weight on the relative ranking of options rather than the absolute magnitude of net benefits.

MCA finds three options are more beneficial than the status quo

As outlined above, while there are clear estimated benefits of varying size for reform options, results are sensitive to changes in assumptions, and other key benefits and the complexity of implementation cannot be

quantified. Therefore, a MCA decision tool was applied to provide structured guidance for determining the preferred option: the option which has the greatest expected ability to provide the highest net benefits.

There are two cost criteria (implementation & ongoing costs, and implementation complexity) and three benefit criteria (consumer price savings, service quality, and market structure & competition). The weightings for cost criteria sum to 50 per cent, and the weightings for benefit criteria sum to 50 per cent. Each option and criteria combination is scored on a -5 to +5 scale. Table 5 presents the weightings for each criterion and the MCA scores for each option.

MCA finds Option 1: Direct connect to be the preferred option with a score of 0.5, followed by Option 6: Direct connect via Practitioner-choice (0.3) and Option 7: Monopoly regulation (0.1).

Table 5 | MCA criteria, weightings, scores and total weighted score by option

	Benefits			Costs		
	Consumer price savings	Service Quality	Market structure and competition	Implementation & ongoing costs	Implementation complexity	Total weighted score
Weightings	*20%*	*15%*	*15%*	*30%*	*20%*	**100%**
Status Quo	0	0	0	0	0	**0.0**
Option 1: Direct connect	3	3	3	-2	-2	**0.5**
Option 2: ESB between ELNOs via Direct connect	3	2	2	-3	-3	**-0.3**
Option 3: Central ESB via Direct connect	3	2	3	-4	-4	**-0.7**
Option 4: Hub-ELNO	2	1	1	-2	-4	**-0.7**
Option 5: Practitioner-choice	1	1	1	-1	-1	**0.0**
Option 6: Direct connect via Practitioner-choice	3	3	3	-2	-3	**0.3**
Option 7: Monopoly regulation	2	1	0	-1	-1	**0.1**

Option 1: Direct connect (0.5 MCA score) is accompanied by more risk than other positively scoring options, and this risk is both upside and downside risk, driven by a critical dependency on uncertain outcomes such as the persistence of strong price competition, and the market remaining competitive until interoperability is implemented. Direct connect is assumed to be implemented by July 2028.

Option 6: Direct connect via Practitioner-choice (0.3 MCA score) largely shares the features and limitations of Direct connect with the exception that competition benefits can be delivered sooner for some elements of transactions if the model can be delivered on the assumed timeline. This option has slightly increased implementation complexity because two market models must be successively implemented. The smaller benefits of **Practitioner-choice (0 MCA, -$7m net benefit)** show that the Practitioner-choice market model should be considered an interim step on the way to Direct connect.

Option 7: Monopoly regulation (0.1 MCA score) is a relatively lower cost and lower risk option which creates a benefit through greater direct regulation of the market, sensitive to the assumption that the regulator can create lower prices than would otherwise be the case, and that PEXA can find modest efficiencies to achieve these. It is also more robust to uncertainties around possible competitive dynamics. However, a reduction in

the contestability of the market could incentivise adverse monopoly behaviour by PEXA. The analysis assumes this model could be operational after December 2027.

ESB models and Hub-ELNO are less preferable options

Option 4: Hub-ELNO (-0.7 MCA score) combines relatively low benefits, including a significant net cost (i.e. negative net benefit), and a likely complex implementation and market design process in order to divide the market appropriately into wholesale and retail segments. It therefore receives the equal lowest weighted MCA score.

Option 2: ESB between ELNOs via Direct connect (-0.3 MCA score) and **Option 3: Central ESB via Direct connect (-0.7 MCA score)** are substantially more costly than the status quo. ESB between ELNOs provides similar benefits to Direct connect by establishing interoperability but hinders innovation with a more rigid market structure than Direct connect and is more complex and costly to implement. A Central ESB is similar, and while it supports market accessibility for any new ELNO, it has the highest cost and implementation complexity of any of the options.

Pursuing a Central ESB directly rather than via Direct connect may deliver a different result. However, there are two reasons to think that pursuing this option has less merit. Firstly, while the ESB market model was designed to minimise the cost incurred by all participants upon the entry of a new ELNO, it is unlikely that a sufficient number of ELNOs will enter the market to recoup the cost of initially building it (see Appendix A). Secondly, while it would avoid costs that are duplicated by first pursuing the Direct connect market model, it would not avoid some key costs required to develop interoperability itself. Nonetheless, this alternative option was not within the scope for this analysis.

Further considerations

This economic analysis identifies a choice between an end state of Direct connect (via Practitioner-choice or directly) or moving to monopoly regulation. Competition-based and regulation-based models reflect fundamentally different views on addressing monopoly power in digital platforms. Competition-based models rely on market forces to drive efficiency, innovation and price discipline, often accepting more complexity and uncertainty to do so. Monopoly regulation-based models use government oversight to achieve price efficiency and service standards, accepting reduced innovation incentives and permanent regulatory oversight costs.

While Direct connect is the preferred option under the economic analysis, the optimal option is the one that best aligns with the reform's objectives. Furthermore, there are four uncertainties that a decision on the appropriate reform option must consider, but which are challenging to reflect in an economic analysis.

1. **Uncertainty about the level of competition in the market.** Faster reform implementation would improve the chances of the market remaining competitive. The Practitioner-choice model can be established more quickly because they require less technical work or coordination across multiple parties. Direct connect and ESB models require extensive integration work across ELNOs, financial institutions, land registries and SROs, extending implementation timelines to three to five years.
2. **Uncertainty regarding the size of market outcomes delivered by competition**. Different reform options carry different types of risk, and government must consider how much uncertainty it is willing to accept. Direct connect offers the highest potential benefits but these estimated benefits rely on more competitive prices and/or market share shifting away from PEXA. Monopoly regulation delivers more predictable outcomes because prices and service standard could be better controlled through regulation, but it also removes the competitive pressure that can drive efficiency improvement over time. Choosing between these options depends on the relative value placed on certainty versus potential upside: interoperability models involve higher execution risk with greater potential benefits, while monopoly regulation models offer more immediate stability with fewer opportunities for competitive gains.
3. **Uncertainty around the level of cooperation provided by market participants**. The cooperation of key market participants will continue to play a key role in enabling, slowing, or stopping the pursuit of interoperability market reforms. Direct connect, as well as other interoperability reforms, require

sustained cooperation between competing ELNOs, major financial institutions, and multiple government agencies to coordinate on regulation, agree on standards, build connections, and maintain interoperability. Success depends on commercial parties acting in the market's long-term interest rather than protecting their commercial positions. If there is confidence that coordination and potential conflicts can be managed, reform should favour a distributed interoperability model. If there is uncertainty about achieving sustained cooperation, reform should consider options with stronger regulatory settings.

4. **Uncertainty around whether banks will build additional connections.** While the analysis assumes that banks will make the operational and technical changes required to enable Direct connect in a way that maintains service standards and is functionally equivalent, there are limited existing incentives or regulatory requirements to ensure this outcome. While a substantial portion of subscriber price benefits are expected to be realised by banks, they still face more than an estimated $40 million in additional infrastructure and development costs. As these banks have already achieved significant savings by moving from paper conveyancing to electronic conveyancing, they may have limited incentives to incur these additional costs unless they perceive there are commensurate benefits.

1 Background to eConveyancing market reform

For over five years the eConveyancing market, led by ARNECC, has been pursuing interoperability reform to address market structure challenges and support improved competition in the market.

ARNECC engaged Nous to estimate the economic costs and benefits of various eConveyancing market models and therefore reform options, including the status quo, models of interoperability between ELNOs and other stakeholders, and further monopoly regulation of ELNOs. This will aid decision-making on the path forward for national interoperability reform that was paused in 2024.

1.1 The need for eConveyancing market structure reform

eConveyancing allows instruments and documents needed for property transactions to be electronically prepared, signed, settled and lodged with the relevant land registry. eConveyancing operates under the Electronic Conveyancing National Law (ECNL), a national law applied or enacted in each State and Territory, and which provides for Operating Requirements and Participation Rules. ARNECC is the body responsible for the development and maintenance of the national regulatory framework and is made up of each State and Territory's land titles Registrar or their nominee. Under the ECNL, ELNOs provide a national Electronic Lodgment Network (ELN) that enables professionals such as conveyancers, lawyers and financial institutions which subscribe to that network to undertake eConveyancing on behalf of their customers.

The initial ELNO, established and owned in 2010 by state governments and since renamed as PEXA (Property Exchange Australia Limited), and initially controlled by state governments to ensure price control and consumer protection, requiring all parties involved in e-conveyancing processes to use its platform. The legal framework allows other private companies that are approved by the Registrar(s) to become ELNOs, and a second ELNO, Sympli Australia Pty Ltd (Sympli), entered the market in 2018. State governments sold their stake in PEXA in 2019, privatising the firm in a deal that led to its initial public offering (IPO) in 2021. eConveyancing mandates began to be progressively introduced by state and territory governments from 2016.

During this time, the Australian Competition and Consumer Commission (ACCC)[8], raised concerns about the ability of the existing market structure to promote competition and support consumer accessibility. The design of eConveyancing currently requires transacting parties in a multi-party transaction to be on the same platform. This creates a 'network effect' as well as multi-homing costs and coordination challenges which are described below:

- **Network effects:** The value of an ELNO lies in its ability to coordinate an eConveyancing transaction between several parties involved in that transaction. The transaction can only occur if all parties involved in the transaction have access to the platform that is facilitating the transaction. Because most practitioners and financial institutions already subscribe to PEXA (particularly in jurisdictions with mandatory eConveyancing), and there are at least some minimal multi-homing and coordination costs, this makes PEXA's services more valuable and certain.
- **Multi-homing costs**: Practitioners who wish to use multiple ELNOs face additional costs including ongoing transaction fees, record keeping, compliance obligations, staff training, digital certificates, and reduced familiarity with alternative user interfaces. These costs discourage practitioners from subscribing to multiple platforms. Even if only some subscribers face high multi-homing or switching costs, this can drive outcomes across the market in accordance with the network effect.[9]
- **Coordination challenges**: Without interoperability, parties cannot independently select their preferred ELNO for multi-party transactions but instead must agree to a single ELNO on which to conduct a

[8] ACCC, Report on E-conveyancing market reform, December 2019.

[9] Open digital signing certificates are technically compatible across platforms and are already in use for other electronic lodgement systems. The extent of their use across ELNOs is unclear. ELNOs recommended some digital certificates are transferrable, but not all. These factors indicate that digital certificates represent a material switching cost for practitioners.

transaction. This places parties with strong preferences in the position of effectively choosing the ELNO for all other parties or requires a negotiation process that can create friction in settlements.

Therefore, as of the first half of 2025, PEXA holds a 90 per cent market share in conveyancing and approximately 99 per cent market share in eConveyancing, with expectations that its market share will gradually increase to 100 per cent.[10,11] This network effect has hindered Sympli from establishing market share (its eConveyancing market share is one per cent) and has deterred other firms from entering the market. The ACCC has noted that if "PEXA's market dominance [remains] unchallenged or unconstrained over the longer term, it will have few incentives to innovate, to pass through efficiencies (which in a competitive market would incentivise lower prices), or respond to stakeholder concerns with its operations."[12]

Consequently, interoperability reform has been pursued to remove network effects and establish a sustainable and competitive market structure.

1.2 Status of interoperability reform

To address market design challenges and improve market competition, ARNECC progressed development of the technical and regulatory regime for interoperability, the process by which two ELNs connect to enable subscribers using different ELNs to complete an eConveyancing transaction. Interoperability reform is intended to support a sustainable and competitive market structure for eConveyancing and mitigate the structural challenges of the significant market power and network effect currently concentrated in PEXA. For more than five years, work has been underway to develop the technical and regulatory regime for interoperability. Interoperability differs from price regulation and multi-homing, which allows users to hold multiple ELNO subscriptions without requiring interoperability.

Prior economic analysis in 2020 identified that interoperability was preferred over price regulation and multi-homing to support a more competitive market structure. ARNECC had also started pursuing interoperability reform around that time. Since then, the preferred technical model to be adopted to facilitate interoperability has been a 'Direct connect' model, with a potential future transition to an Enterprise Service Bus (ESB) model where interoperable ELNOs exchange data using application programming interfaces (APIs) in accordance with a common data standard.

Other interoperability models have also been raised by stakeholders and reviews – these are introduced in Section 3 of this report. Given uncertainties in interoperability, including its costs, another reform option of monopoly regulation has been canvassed as an option for market reform.

In September 2023, pilot eConveyancing transactions were successfully undertaken in an interoperable system between PEXA and Sympli. However, there have been numerous challenges that have delayed the reform progressing beyond this point, including:

- Uncertainty on the functional requirements necessary to deliver a functionally equivalent interoperable system for financial institutions and participants (compared to the status quo) in part due to confidentiality claims from PEXA.
- Concerns from the banking industry about the lack of functional equivalence and potentially substantial costs involved for them to accommodate an interoperable system.
- Limitations to previous economic analysis given the technical and regulatory models for interoperability had not been settled at the time of analysis meaning several assumptions in relation to the benefits of reform, the costs of development, as well as ownership and governance arrangements are outdated.
- Limitations on regulation of eConveyancing, including the scope and resourcing of existing governance arrangements.

As a result, the interoperability reform program was paused in 2024. To reduce uncertainty, a functional requirements review for Direct connect was conducted by ARNECC to provide greater clarity on the approach

[10] PEXA, FY 25 Results, August 2025, p 6.
[11] Roy Van Keulen, Undervalued ASX share showing progress in global efforts, *Morningstar*, 27 July 2025 (accessed 22 August 2025).
[12] ACCC, Report on e-conveyancing market reform, December 2019, p 5.

to the technical model, and to enable more current analysis of the costs involved in establishing interoperability using Direct connect.

Separately, there are several ongoing Parliamentary inquiries relevant to the eConveyancing market.

- The Parliament of NSW established the *Select Committee on Competition Reforms in Electronic Conveyancing* on 25 June 2025 to inquire into and report on competition reforms in eConveyancing[13].
- The Commonwealth Parliament of Australia's Senate Standing Committee on Economics' inquiry into Micro-competition opportunities, established on 12 February 2025, with a report issued in November 2025.[14]

These inquiries are expected to report findings that may influence the ease of implementation of various interoperability reforms, as well as identify potential changes to regulatory powers of either ARNECC or registrars.

1.3 Purpose of this economic analysis

Given the challenges encountered to date, a more current assessment of the economic rationale for interoperability, including across technical model options, is critical to the identification of the best path forward to address market competition problems.

This economic analysis considers the alternative market models for Australia's eConveyancing system, including estimating their potential costs and benefits against the current status quo. Building on ARNECC's functional requirements review, the analysis aims to help ARNECC understand which models have the potential to effectively serve the Australian eConveyancing market by delivering improved competition in prices and service quality and resilience at a viable cost and feasible implementation.

Market models assessed in this report are distinct from options. Each model describes a potential end-state for the eConveyancing system, while an option involves a transition from the status quo to a different market model, and possibly via another model as an intermediate stage.

Additionally, given expected challenges with quantifying the full range of expected benefits of interoperability and inherent challenges to implementation, this analysis combines cost-benefit analysis with multi-criteria assessment (MCA). This incorporates relevant qualitative analysis in a MCA decision tool to show which option could be expected to provide the highest net benefits (the preferred option).

The analysis also considers distributional impacts, showing how costs and benefits may flow to different stakeholder groups including ELNOs, financial institutions, subscribers, Land Registries, SROs and consumers. This recognises that effective market structures should enhance overall social welfare and ensure consumers benefit from market improvements.

This analysis excludes consideration of potential legal implications associated with any interoperability option, beyond the direct implications of interoperability implementation.

[13] Parliament of NSW, Select Committee on Competition Reforms in Electronic Conveyancing, (accessed 20 August 2025).
[14] Parliament of Australia, Micro-competition opportunities, 12 February 2025 (accessed 20 August 2025).

2 Options for reform

Market models describe a point in time market structure with specific ELNO technology or regulatory settings within the eConveyancing system. Each model is described in Section 2.1.

Transitions between these market models, including the status quo, form the 'options' for this analysis. Key assumptions specific to options (such as timeframes) are discussed in Section 2.2. An understanding of the market models is foundational to understanding the options presented in this analysis, as the market models themselves are not assessed. Rather, options are assessed.

2.1 Market models

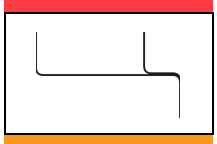
There are seven market models selected by ARNECC that are being considered in this analysis. These models have been investigated to varying degrees by eConveyancing stakeholders before and during the development of the technical and regulatory regime for interoperability. The models are:

1. Status quo
2. Direct connect
3. ESB between ELNOs
4. Central Enterprise Service Bus (ESB)
5. Hub-ELNO
6. Practitioner-choice
7. Monopoly regulation.

An overview of each model is provided in this section, including:

- **Introduction and background** to the model that includes how it has been developed and where it has been previously assessed.
- **Technical diagram** of the market model, depicting the relationships between participants, ELNOs, and financial institutions for an eConveyancing transaction. A legend for the diagrams is provided in Table 6.
- **Assumptions** describe technical, governance, and implementation assumptions which are material to the outcomes of the analysis or to their interpretation.

Table 6 | Legend for model technical diagrams

Icon	Description
Land registry	Red boxes describe a legal organisation, entity, or participant within the eConveyancing transaction system. Collectively, these participants are defined as 'institutional participants'.
	Lines depict an information exchange that is directly facilitated by the market or system for the purpose of completing a lodgment, settlement, or other transaction.
PEXA or Sympli	Orange boxes depict the boundary of the ELNO.
Subscriber	Navy boxes outline the subscribers to the ELN.
Vendor	Grey boxes indicate the consumer in the eConveyancing transaction system.

Universal understanding and assumptions made for all market models

The following assumptions are applied in the consideration of each market model:

- The categorisation of eConveyancing transaction types considered in the analysis include Mortgages, Caveats, Discharges, Transfers, Transmissions, and secondary and residual transaction types.
- The activities involved in an eConveyancing transaction continue to fall broadly into four phases: Lodgment, Payment, Settlement, and Reconciliation.
- eConveyancing regulation is made nationally and administered by state and territory governments, and the Universal Service Obligation (USO) as specified in Model Operating Requirement 5.2 will be assumed to continue to apply in each of the market models, unless otherwise stated.[15] This will include the recognition that these service requirements may be "reasonably staged in accordance with[in] the [ELNOs] Business Plan."[16]
- Unless otherwise stated, data standards in all market models, including data standards for interoperability, and frameworks for generating residual documents are governed by NECDS Ltd under the same arrangements that are currently in place. While the benefits of open data standards have been considered as part of the MCA, the cost of their development has been considered a sunk cost, and their ongoing cost potentially immaterial to the CBA.
- Other regulatory and self-regulatory arrangements such as the Australian Financial Services Licence regime, and the eConveyancing Payments Industry Code developed by Australian Payments Network (AusPayNet) are assumed to be ongoing and developed appropriately.

eConveyancing regulation is made nationally and administered by jurisdictions

The eConveyancing system is governed by the ECNL, which is implemented by separate legislation in each state or territory. The ECNL gives ARNECC powers to develop the national Model Operating Requirements (MOR) and Model Participation Rules (MPR) that are implemented in each jurisdiction as Operating Requirements and Participations Rules respectively, with compliance and enforcement undertaken by the relevant state or territory Registrar.

The fee-approval framework in Model Operating Requirement 5.3(e) is also administered by the Registrar in each state or territory.[17] Under the framework, an ELNO must first seek and receive approval from the relevant Registrar before implementing new fees or changing existing ones. Prices are not directly set by the MOR, but Registrars are required to ensure they do not exceed the percentage increase in the Consumer Price Index (CPI) unless ELNOs request a pricing change that it would be unreasonable to withhold approval of. ELNOs are expected to support their pricing proposals to Registrars with sufficient cost and operational justification.

2.1.1 Status quo

The status quo model is the current eConveyancing market model operating at the time of this assessment and is the 'baseline' for analysis. Under the status quo, two ELNOs operate independently in Australia, with connections to subscribers, banks, land registries, and revenue offices, and without technical interoperability between their platforms. To complete a transaction, all participants must use the same ELN, the selection of which is driven by the responsible subscriber.

For multi-party transactions - which comprise 80–85 per cent of all eConveyancing settlements - all participants (buyers, sellers, financial institutions, and their respective representatives) must use the same ELNO. There is no established protocol for determining which ELNO should be used when different parties have subscribed to different platforms. In practice, transactions default to PEXA due to its larger subscriber base. A technical diagram depicting this model is provided in Figure 3.

[15] ARNECC, Model Operating Requirements Version 7.1, February 2025, p28.
[16] ARNECC, Model Operating Requirements Version 7.1, February 2025, p28.
[17] ARNECC, Model Operating Requirements Version 7.1, February 2025, p31.

As a result of this market structure, the eConveyancing market, through the Model Operating Requirements, is price regulated with annual fee increases capped to inflation via the CPI, maximum allowable amounts for certain services, and a fee-approval process set out by MOR 5.4. However, this price cap does not address whether base fee levels reflect competitive market pricing.

This results in PEXA holding approximately 99 per cent market share, with Sympli holding the remaining one per cent. Under this model, it is assumed that the network effect will remain, in that PEXA continues to hold significant market share, and that Sympli is the only other ELNO in the market. It is also assumed that the status quo continues to operate into the future with two ELNOs in the market.

Key model assumptions

Technology and integration

- None, as no technological or integration changes needed.

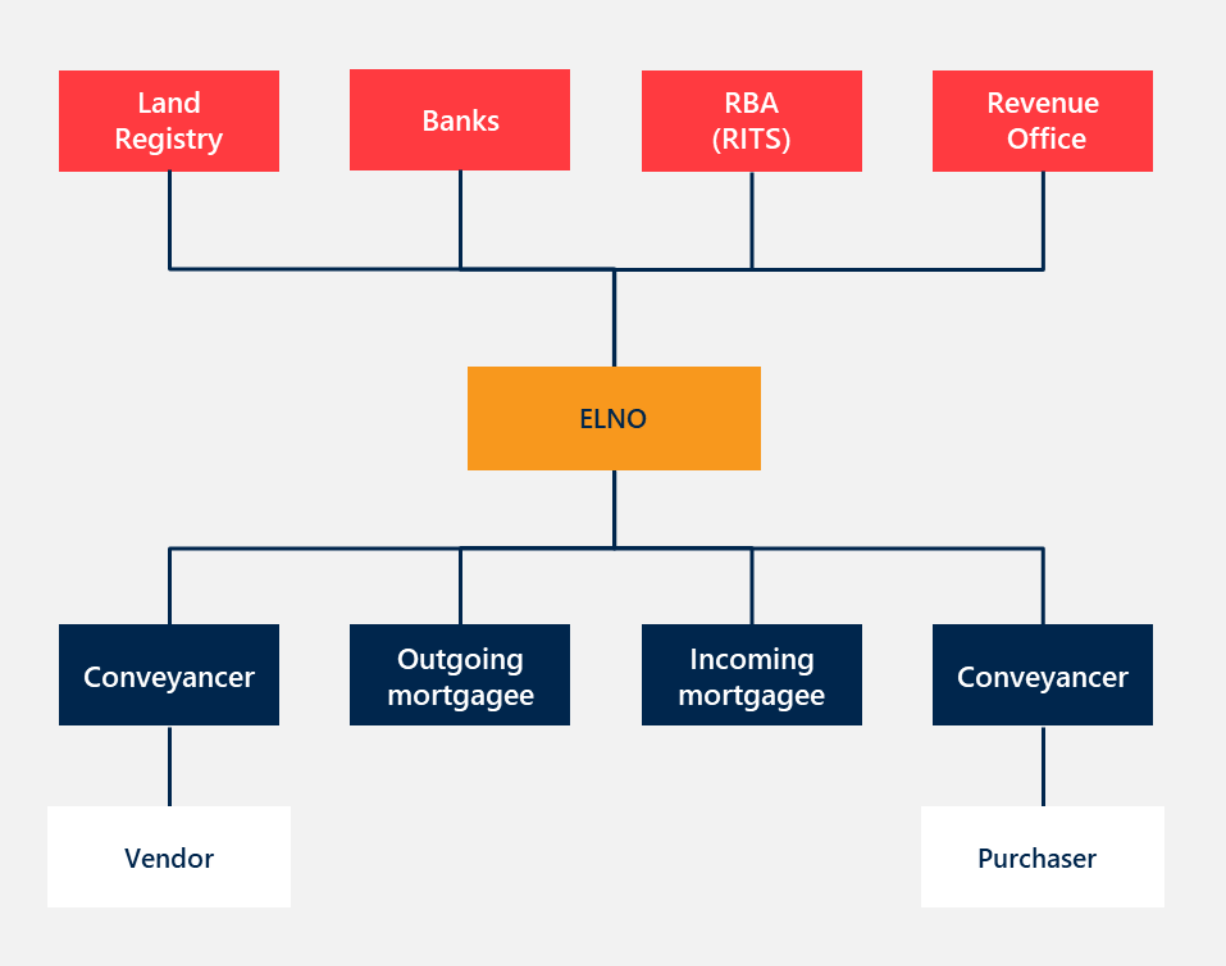
Governance and regulatory settings

- It is assumed that ARNECC and state and territory Registrars will continue to waive compliance with interoperability indefinitely under the status quo. Under section 18A(1) of the ECNL, an ELNO must in accordance with the Operating Requirements, establish and maintain Interoperability between the ELN operated by the ELNO and each ELN operated by another ELNO. Under section 18A(2), the Registrar may waive compliance with the Interoperability Requirement.

Implementation considerations and timeframes

- None, as the status quo is currently implemented.

Figure 3 | Technical diagram for the status quo market model



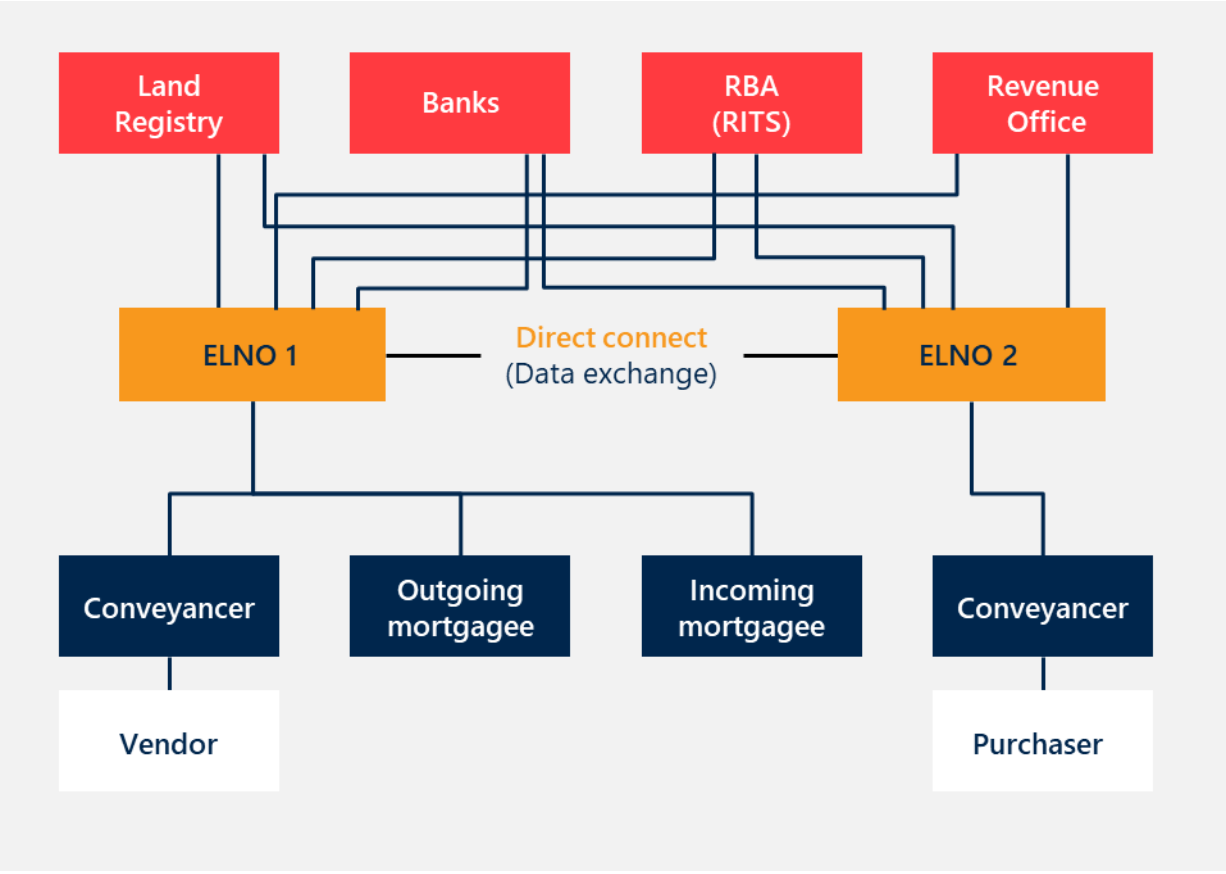
2.1.2 Direct connect

The Direct connect market model would deliver interoperability between ELNs, which allows subscribers to select an ELN independently of other subscribers. Each ELN would be capable of independently exchanging information with the land registry, revenue office, Reserve Bank of Australia's (RBA) Reserve Bank Information and Transfer System (RITS), and financial institutions. This means each of these bodies would have the infrastructure necessary for communicating with each ELN in the market. Alternative names for this model in the past include 'Direct Interoperability' and 'Bilateral Interoperability'. A technical diagram depicting this model is provided in Figure 4.

To ensure that there is a clear responsibility for executing a transaction and communicating with the public bodies and financial institutions, one ELNO would be designated the 'Responsible ELNO' for any given transaction. While there are several possible methods for selecting the Responsible ELNO, it is assumed that it will be determined by 'system rules' as was the case in the most recent Preliminary Report of the Interoperability review.[18] It could also be randomly selected or determined by the responsible subscriber (usually the incoming mortgagee). Where one ELNO is always responsible, this is a core tenet of other market models (the Hub-ELNO or Practitioner-choice market models).

Additionally, a 'workspace' would be distributed across the responsible ELN and the participating ELNs, with each ELN maintaining and updating their own workspace[19]. In this digital environment, all parties would collaborate to prepare documents, enter financial details, verify funds, and complete settlement and lodgment. This would be slightly more complex than a central workspace, but it would also be more robust to the responsible ELN failing, or intermittent communication between ELNs.

Figure 4 | Technical diagram for the Direct connect market model



[18] Interoperability Review Preliminary Report, October 2024, p. 9.
[19] A workspace is a secure, shared digital environment within an ELN where all parties to a property transaction collaborate. It enables document preparation, financial settlement, and lodgment of dealings with land registries.

While the technical diagram shows an example of a transaction with two ELNOs, this market model allows for one or more ELNOs to be involved in a transaction. Direct connect was initially designed as an intermediate model, with the intention to later transition to an ESB model if a competitive market with more than three ELNOs developed. This is based on analysis in the 2019 Independent Pricing and Regulatory Tribunal (IPART) Review[20] which showed that the capital costs of the Direct connect model were lower or on par with other models until four or more ELNOs entered the market. However, stakeholder feedback has suggested that Direct connect is now seen as a desirable end-state under the assumption that the Australian eConveyancing market can only likely sustain up to two ELNOs (see Appendix A for further analysis on the sustainable number of ELNOs).

Key model assumptions

Technology and integration

- A 'Responsible ELNO' coordinates the transaction, while 'Participating ELNOs' receive and send updates.
- Each ELNO maintains its own side of the ELNO-to-ELNO APIs.
- All workspace data required for collaboration is exchanged through the APIs.
- APIs are scaled to serve all jurisdictions and 12 financial institutions, and all transaction types.[21]

Governance and regulatory settings

- Note that while the need for additional changes to the Model Operating Requirements (MOR) and ARNECC's role in dispute resolution remain uncertain, these have been assumed to be (unless otherwise stated) unchanged for this analysis.

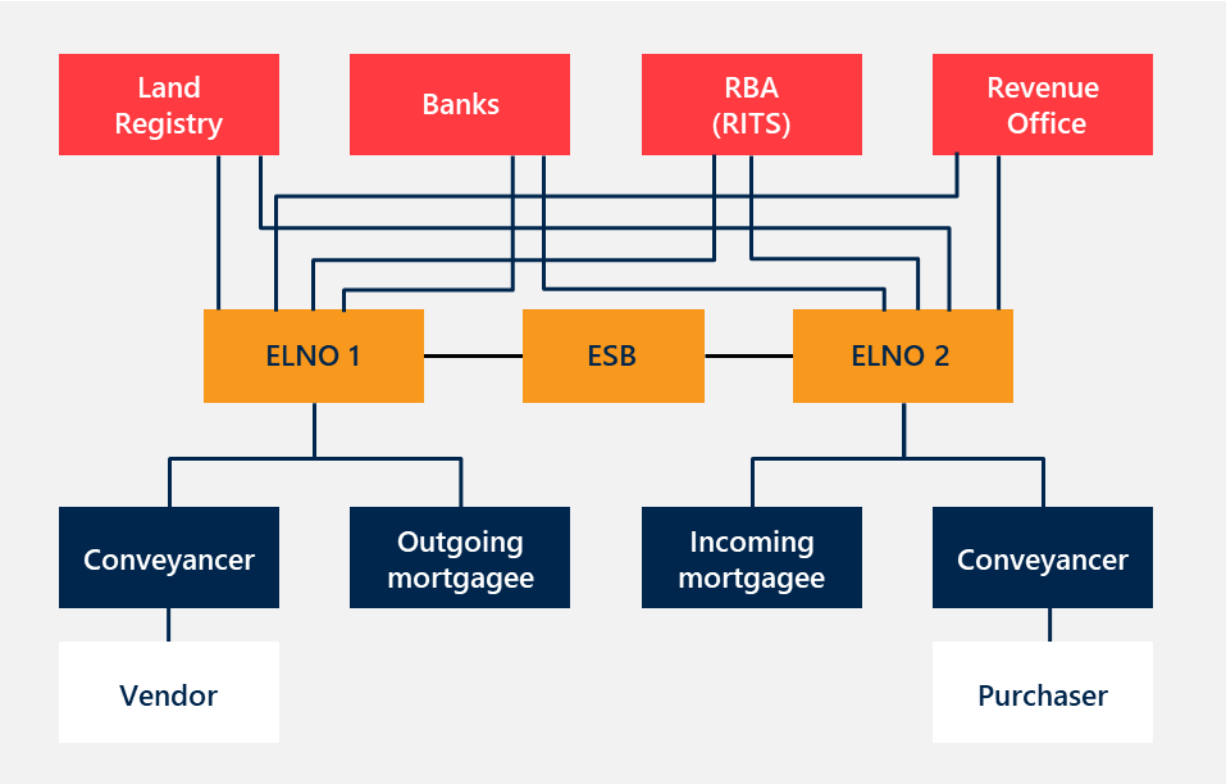
2.1.3 ESB between ELNOs

An ESB model would establish interoperability between ELNOs by using an intermediary service that handles routing, transformation, and message delivery.[22] ELNOs would integrate with this service through a common set of open APIs, XML Schemas (XSD), and WSDL definitions. These integration standards would also have been designed to support the Direct connect model and central ESB model.

In the 'ESB between ELNOs' model, the ESB would not store transactional data but act as a messaging conduit, supporting functions such as protocol switching, routing, guaranteed & secure delivery, transformation, service binding, security, load balancing, monitoring and audit functions. Each ELNO would retain a direct relationship with primary actors such as land registries, revenue offices, and RBA's RITS systems. A technical diagram depicting this model is provided in Figure 5. This model has also been known as the 'Information hub model' or 'Phased ESB' in previous reports.[23] [24]

[20] IPART, Review of the pricing framework for electronic conveyancing services in NSW, November 2019.
[21] AECOM 2019 assumes ELNO was designed to serve 3 markets and 10 financial institutions. The eConveyancing 2023 Update, assume ELNOs must scale to serve 5 jurisdiction and 12 financial institutions.
[22] Some documentation refers to this ESB as an "Integration Platform as a Service" or iPaas, and notes that it is cloud-based. These are considered implementation details for the purposes of outlining market structure.
[23] AECOM, Estimating costs of electronic conveyancing services in NSW for IPART, November 2019, p 31.
[24] ACCC, Report on e-conveyancing market reform, December 2019, p. 6.

Figure 5 | Technical diagram for ESB between ELNOs market model



Key model assumptions

Technology and integration

- A "thin" ESB infrastructure is assumed for this model, limited to standardised message routing, validation, and audit functions between ELNOs, and to exclude operational integration with financial institutions and any corresponding intellectual property.
- ELNOs retain full control of subscriber interfaces, settlement and lodgment execution, and registry connections, with ESB providing an interoperability layer only.
- Neutrality towards any government technology choice for ESB development.

Governance and regulatory settings

- An ESB will be jointly owned and managed by one or more government agencies, with mandatory neutrality and non-discrimination provisions for ELNOs. It is assumed that a federal or state government agency would establish and manage the ESB for the sake of economic analysis, but no assumptions are made in relation to which agency.[25]
- A lighter-touch oversight model would be sufficient given the limited ESB functionality with conformance testing requirements. Because of this, it was assumed that no material changes to existing governance arrangements would be required for processes such as operating procedures, change controls and security practices. Contracts between connected parties would support oversight.
- No access regime[26] would be required as an ESB does not constitute wholesale infrastructure provision.

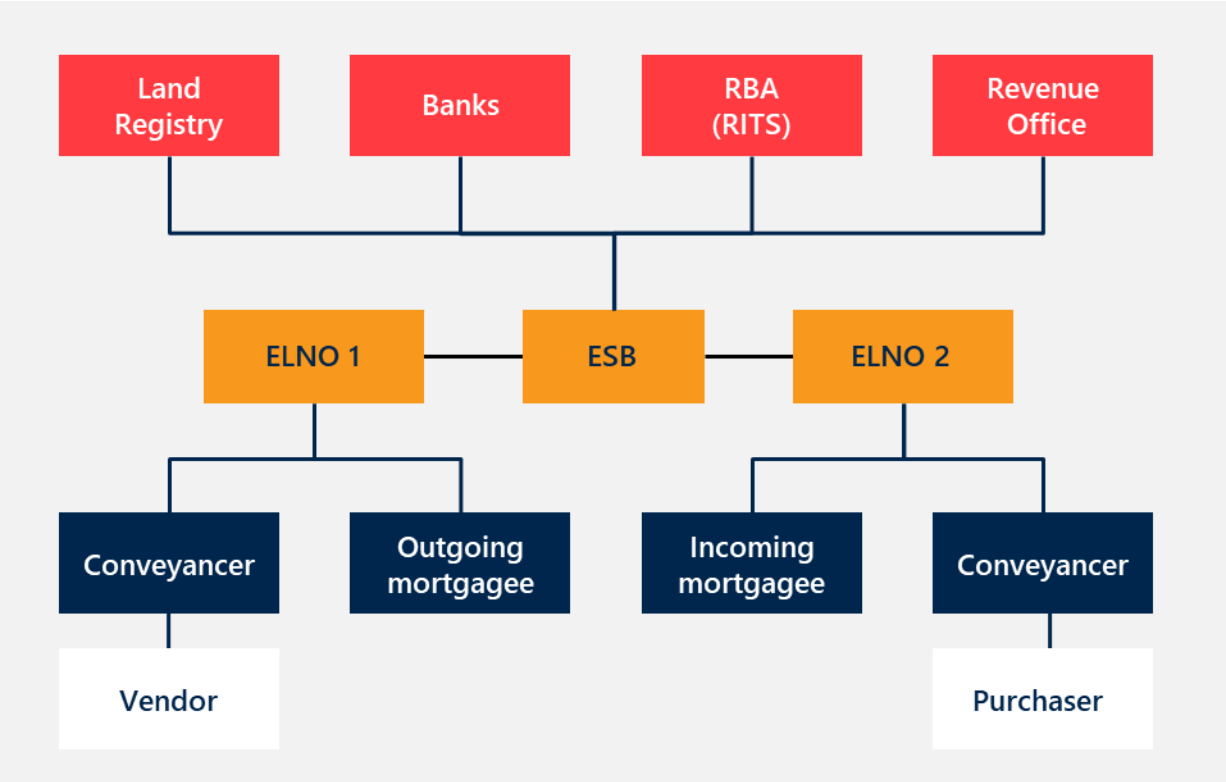
[25] Private ownership of an ESB remains possible, although such an arrangement would require regulatory oversight and would introduce additional public administration costs. ARNECC has advised that, for the purposes of this analysis, government ownership should be assumed.

[26] An access regime is a regulatory framework that governs how entities can access essential infrastructure or services. It sets out terms, conditions, and oversight mechanisms to ensure fair, transparent, and non-discriminatory access for market participants.

2.1.4 Central ESB

The central ESB model envisions a market with an entity for routing, transformation and message delivery known as an ESB[27] that functions as an intermediary between all parties, not only ELNOs. This is designed to promote competition while also avoiding the need for multiple connections between ELNOs, government bodies, or financial institutions. The benefits of an ESB become more significant compared with a Direct connect model as the number of ELNOs increases. A technical diagram of this model is provided in Figure 6.

Figure 6 | Technical diagram for the Central ESB market model



This model has also been known as the 'Hub model', a 'Big Bang ESB', and an 'Infrastructure Platform as a Service'. It is assumed that as per the 'Big Bang ESB' in the *Identifying a Preferred Technology Model to Support a National Interoperable eConveyancing Marketplace* (The Archer report), the implementation of the Central ESB would be delivered in one go from Direct connect through to a Central ESB with all infrastructure attached directly.

The Archer report outlined a phased approach to introducing an ESB beginning from a Direct connect market model. First, ELNOs would transition their connections to one another to connections via an ESB, which is the ESB between ELNOs model. Once this was established, government bodies and financial institutions maintaining multiple connections with ELNOs could each progressively migrate to one connection with the ESB. This approach was designed to deliver ELNO interoperability quickly while allowing flexibility for broader ecosystem integration over time, though some stakeholders argued all parties should connect from the outset.

Key model assumptions

Technology and integration

- A "thin" central ESB infrastructure is assumed in this model, limited to standardised message routing, validation, and audit functions, and to exclude operational integration with financial institutions and any corresponding intellectual property.

[27] Some documentation refers to this ESB as an "Integration Platform as a Service" or iPaas, and notes that it is cloud-based. These are considered implementation details for the purposes of outlining market structure.

- Neutrality towards any government technology choice for ESB development.
- The central ESB will serve as the single integration point for financial institutions, land registries, SROs, and future ELNOs to connect to the electronic lodgment network.
- ELNOs retain full control of subscriber interfaces, settlement and lodgment execution, and registry connections, with ESB providing an interoperability layer only.
- Model assumes ESB carries only standardised events without business logic, minimising implementation complexity and ongoing governance requirements.

Governance and regulatory settings

- An ESB will be jointly owned and managed by one or more government agencies, with mandatory neutrality and non-discrimination provisions for ELNOs. It is assumed that a federal or state government agency would establish and manage the ESB, however no assumptions are made in relation to which agency.[28]
- A lighter-touch oversight model would be sufficient given the limited ESB functionality with conformance testing requirements. Because of this, it was assumed that no material changes to existing governance arrangements would be required for processes such as operating procedures, change controls and security practices.
- No access regime would be required as the ESB does not constitute wholesale infrastructure provision.

2.1.5 Hub-ELNO

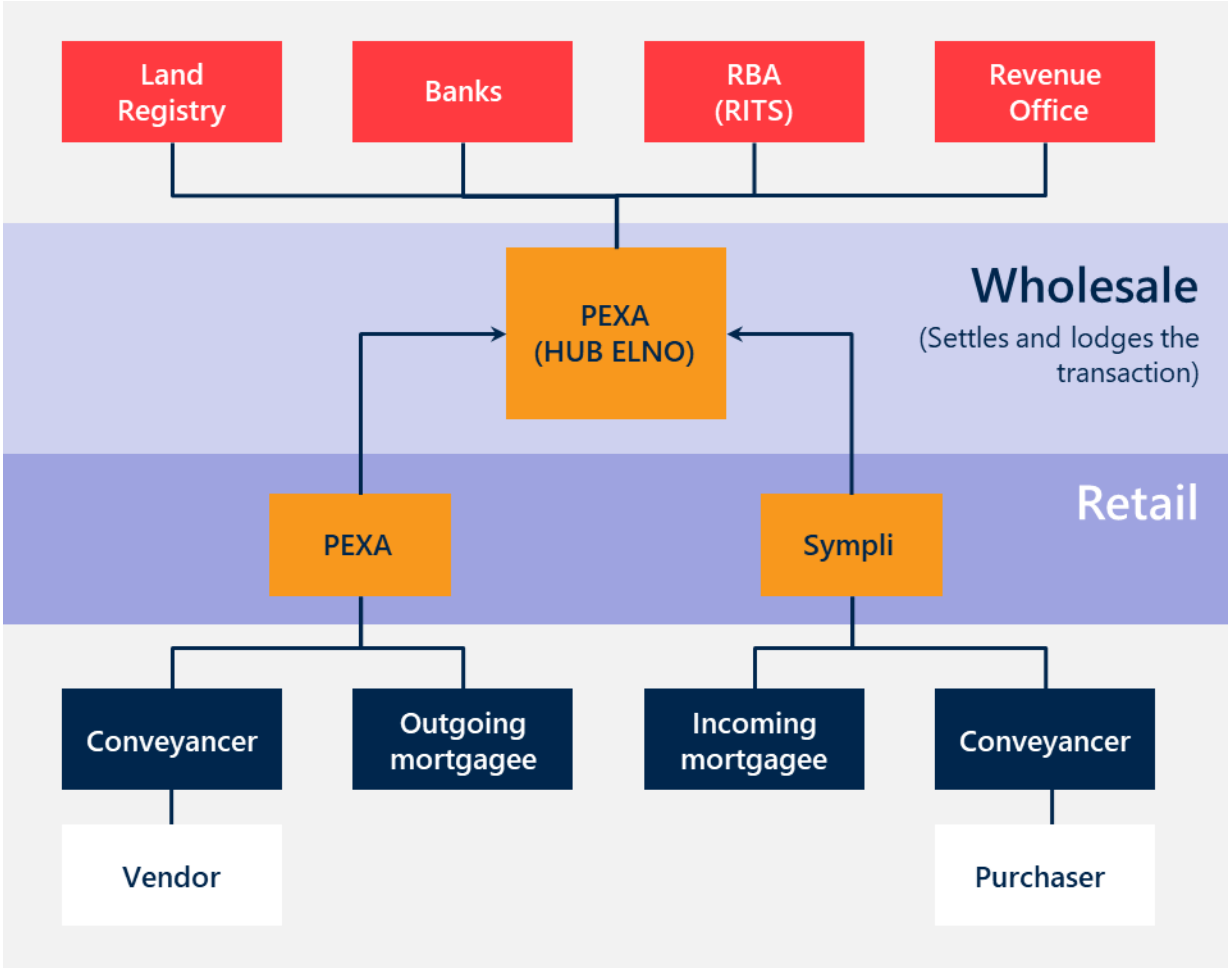
A Hub-ELNO market model would create two markets for eConveyancing services: a wholesale market with a regulated monopoly (the Hub-ELNO)[29], and a subscriber-facing retail market with competition in customer-facing eConveyancing services. This would allow financial institutions and government bodies to maintain their existing connections with ELNOs, while promoting some competition in a second market. This model has also been known as the 'Infrastructure ELNO,'[30] 'Full (or central) hub,'[31] 'Wholesale-retail', or 'Access Regime' model.

The Hub-ELNO model would designate a single ELNO as a 'Hub-ELNO' which owns connections with land registries, banks, the RBA, and revenue office. This Hub-ELNO would then communicate with various retail ELNOs, which subscribers could choose to use independently of other participants in the transaction. These retail ELNOs would compete by offering different user interfaces and customer services. A technical diagram depicting this model is provided in Figure 7. Given the current state of the eConveyancing market, it is assumed that PEXA would be the Hub-ELNO for the purposes of this analysis.

This market model assumes the creation of a wholesale service that is regulated by one or more government bodies, such as the collection of regulators that comprise ARNECC, though with further regulatory capability, or a similar monopoly regulation framework. The regulatory body would set prices on a cost basis and apply a productivity dividend. The framework would also provide incentives for continued investment. It is assumed that PEXA would be broken up, as markets such as telecommunications function with some organisations providing both retail and wholesale services.

[28] Private ownership of an ESB remains possible, although such an arrangement would require regulatory oversight and would introduce additional public administration costs. ARNECC has advised that, for the purposes of this analysis, government ownership should be assumed.
[29] Appendix B of the 2024 NSW Productivity Commission Market Study provides a description of a wholesale service which could be appropriate for regulating the wholesale provider.
[30] ACCC, Report on e-conveyancing market reform, December 2019, p 6.
[31] ACCC, Report on e-conveyancing market reform, December 2019, pp 6-7.

Figure 7 | Technical diagram for the Hub-ELNO market model



Key model assumptions

Technology and integration

- The Hub-ELNO provides all settlement and lodgment channels used by all ELNOs.
- Integration requirements are outlined in accordance with the Infrastructure ELNO model, as detailed in the AECOM (2019) report.[32]
- Function requirements for Direct connect are the technical basis for a wholesale-retail ELNO connection.

Governance and regulatory settings

- The wholesale layer, or Hub-ELNO, manages all core connection channels required for financial settlement and lodgment orchestration. It is also responsible for connectivity with land registries and revenue offices, inter-ELNO routing and validation, and the provision of wholesale data products needed to enable competition. [33]
- The retail layer consists of the Sub-ELNOs, which remain responsible for their subscribers. ELNOs provide the subscriber-facing workspaces and user experience, along with practice management software (PMS) integrations, document preparation, onboarding and support services, and value-added features such as analytics. Consistent with IPART's framing, each ELNO continues to manage its own subscriber relationships, while the designated Responsible ELNO (RELNO) executes lodgment and settlement where required.[34]

[32] AECOM, Estimating costs of electronic conveyancing services in NSW for IPART, November 2019.
[33] This aligns with NSW PEC's access regime features
[34] IPART, Review of the pricing framework for electronic conveyancing services in NSW, November 2019.

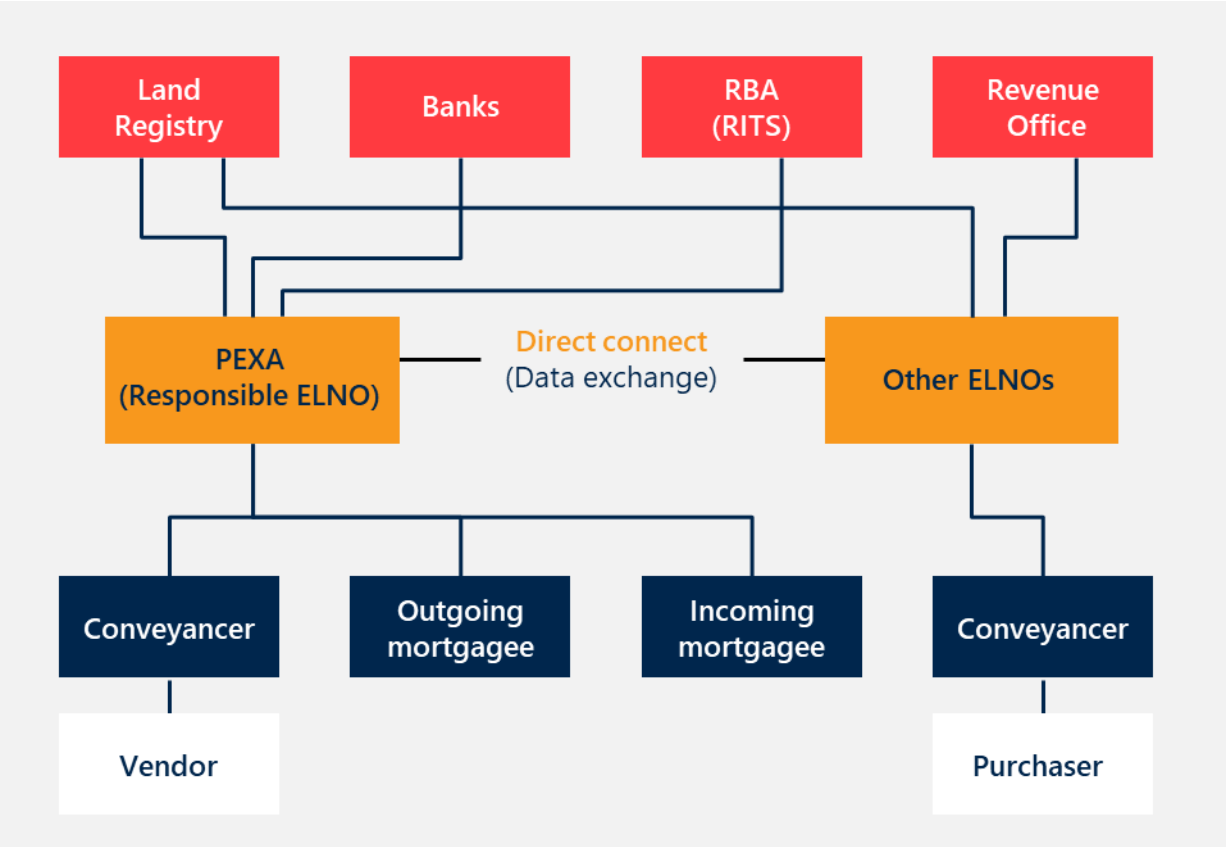
- The Hub-ELNO would be required to have full legal separation of the hub entity from the entity offering retail services.
- The Access regime would be implemented as recommended in NSW Productivity Commission report from 2024.[35]

2.1.6 Practitioner-choice

The Practitioner-choice model, proposed by Sympli, is a step towards the Direct connect model, but where the interoperable model for transactions always allocates the role of the Responsible ELNO to PEXA. This means that practitioners (solicitors and conveyancers) can independently select an ELNO, while at the same time financial institutions, the RBA, land registries and revenue offices can continue using existing PEXA infrastructure. A technical diagram depicting this model is provided in Figure 8. This model has also been called the 'practitioner-first' model.

Sympli proposed the Practitioner-choice model in May 2025 for the purpose of delivering competition and choice "as soon as possible" and with a view to ultimately moving to a Direct connect model. It has been designed to avoid the challenges that have slowed or halted the development of a full Direct connect model.

Figure 8 | Technical diagram of the Practitioner-choice market model



It is worth noting that if a Practitioner-choice structure became permanent, it could be desirable to introduce a more thorough regulatory regime which would lead to it resembling a Hub-ELNO market model. It is possible to frame the model that has been proposed in terms of Sympli and other participant ELNOs acting as 'retailers' with PEXA operating as both a 'retailer' and 'wholesale' provider.

[35] NSW Productivity and Equality Commission, eConveyancing market study, June 2024, pp 51-54.

Key model assumptions

Technology and integration

- Connection between PEXA and other ELNOs is based on existing and new APIs (per the Direct connect model).
- The implementation must satisfy 55 additional functional requirements beyond the original interoperability scope.[36]

Governance and regulatory settings

- Practitioner-choice can be implemented under existing regulatory framework.

2.1.7 Monopoly regulation

The monopoly regulation market model is technologically the same as the status quo market model, with no interoperability, and assumes there is one ELNO operating in the market. However, it differs from the status quo in that it considers a market where a government regulator undertakes greater regulation of market outcomes, beyond more than price regulation. This seeks to address issues of a monopoly market in the absence of an interoperable solution.

A 2019 ACCC report recommended more comprehensive monopoly regulation if the monopolised market continued, but strongly emphasised that monopoly regulation is "complex, timely and costly" and represents a "sub-optimal result" compared with competition.

It is assumed that regulation would be similar to access regimes in markets such as telecommunications, electricity, and stock markets, with adjustment for a digital market such as eConveyancing. This could include regulations in line with the ACCC's recommendations and considerations in its previous reports.[37] The technical diagram for this model is provided in Figure 9.

Key model assumptions

Technology and integration

- No technological or integration changes needed, and there is no ELNO interoperability.

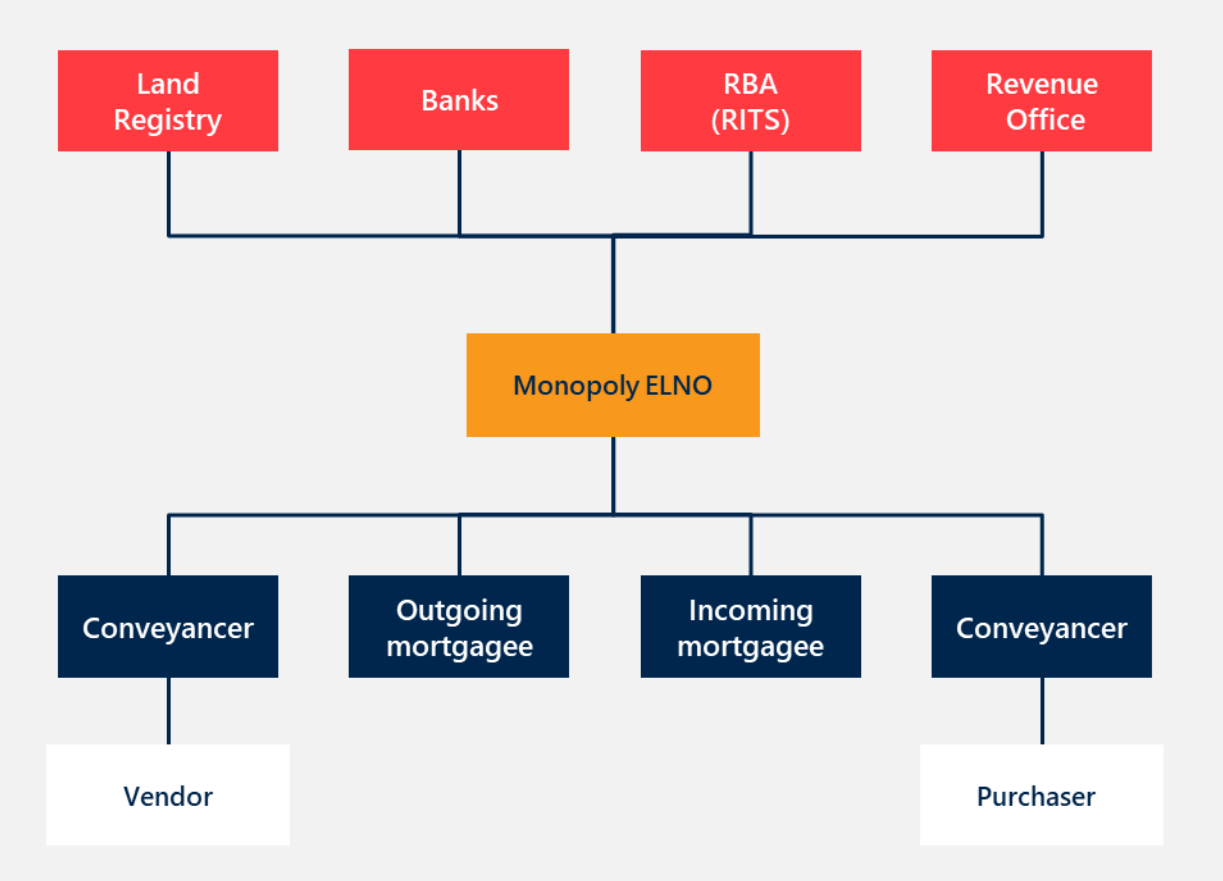
Governance and regulatory settings

- This model would only be implemented if an actual monopoly exists. That means that no further contestable ELNOs enter the market, and that only one ELNO operates in the market in the future.
- Regulatory regime administered by the appropriate government entity, for example ARNECC or a new regulator.
- It is assumed that robust compliance obligations, an enforcement framework, and vertical integration concerns are addressed or developed per ACCC suggestions - "If a monopoly model is adopted by industry then regulators will need to develop an appropriate regulatory regime, including robust compliance obligations and enforcement framework and address vertical integration concerns"[38]
- The monopolist is obligated to interact with all participants on equal terms and to provide non-discriminatory access to all users, including downstream uses such as conveyancers.
- An effective regulatory regime will enforce compliance and standards, including powers to direct ELNOs and to impose pecuniary penalties and infringement notices for non-compliance, and civil court orders to compel compliance.
- ELNOs and its subscribers will have access to independent dispute resolution and arbitration mechanisms at minimal cost to regulators.

[36] As advised by ARNECC on the basis of the functional requirements review; Successful implementation would require addressing the regulatory issues that previously impeded interoperability.
[37] ACCC, Report on e-conveyancing market reform, December 2019.
[38] ACCC, Report on e-conveyancing market reform, December 2019, p8.

- Price regulation that determines the efficient economic costs of eConveyancing, with a regulatory price cap on ELNO services, applying a weighted average price cap arrangement that requires ELNOs to reduce prices over time (in real terms) to reflect the underlying economic costs of providing the services as well as ongoing cost savings from productivity improvements. The pricing would be monitored by an appropriate regulator with a 5-year review period.
- Prices for new ELNO(s) services based on recommendations of an independent body.[39]
- It remains unclear if vertical separation would go further than existing separation provisions in the MOR. The ACCC has previously expressed the view that the "preferred regulatory structure is complete vertical separation between an ELNO and upstream and downstream providers"[40]. Nonetheless, this is expected to be immaterial to the analysis.

Figure 9 | Technical diagram for monopoly regulation market model



2.2 Overview of reform options

Reform options comprise potential transitions from the status quo to one or more of the market models. Seven future reform options to the market have been considered. These options were identified by ARNECC for economic assessment:

- status quo
- option 1: Direct connect
- option 2: ESB between ELNOs via Direct connect
- option 3: Central ESB via Direct connect

[39] ARNECC, Note to Nous group ARNECC response to question raised on cost/benefit analysis, 21 August 2025.
[40] ACCC, Comment on *ARNECC Issues Paper: Review of the Separation Regime in Operating Requirement 5.6*, 11 October 2024.

- option 4: Hub-ELNO
- option 5: Practitioner-choice
- option 6: Direct connect via Practitioner-choice
- option 7: Monopoly regulation.

2.2.1 Status quo

The status quo represents the continuation of the current market structure with no further regulatory action or technical build to facilitate interoperability or otherwise address market concentration in the eConveyancing sector. This option serves as the baseline against which all other market models are assessed.

The status quo scenario assumes that all existing ELNOs continue to operate in the eConveyancing market. If that were not to be the case in practice, it would change the relative net benefits of the other models compared with the status quo. This would be as a result of the change in the competitive environment.

2.2.2 Option 1: Direct connect

Under Option 1, it is assumed that full implementation of the Direct connect model would be achieved by July 2028. This timeframe is based on the original interoperability implementation schedule, adjusted to reflect the current pause in the national interoperability program and include an additional year to account for potential increases in project scope.[41] These scope adjustments enable factoring in of outcomes of the functional requirements review and from potential inclusion of additional technical features, such as integration of payment rail functionality.

The assumed completion date represents a balanced view of practical delivery timelines, reflecting both the technical complexity of system development and the coordination required between ELNOs, regulators, and state-based authorities.

The Direct connect model establishes direct interoperability links between ELNOs, enabling secure exchange of transaction and lodgment data between platforms. While the model could feasibly support the entry of additional ELNOs in the future, for the purposes of this analysis, the assessment assumes a market consisting of the two existing operators, PEXA and Sympli. This assumption reflects current market conditions and the absence of confirmed new entrants at the time of modelling. It is also supported by market size modelling analysis that considers the costs of establishing and managing an ELN and the relatively small size of the eConveyancing market – see Appendix A for more detail.

Market dynamics are assumed to begin at current market shares. Over time, market share for Sympli is assumed to grow according to a logarithmic adoption curve, representing the pattern typically observed in competitive markets where new entrants initially experience gradual uptake followed by more rapid adoption before reaching a stable equilibrium. The analysis assumes that this transition ultimately results in an even division of market share between the two ELNOs once full interoperability is achieved, and competition stabilises.

2.2.3 Option 2: ESB between ELNOs via Direct connect

Under Option 2, it is assumed that implementation would build upon the completion of the Direct connect model, extending interoperability through the development of an ESB to manage data exchange between ELNOs. The timeframe for implementation reflects this sequencing. It is assumed that developing and operationalising an ESB between ELNOs would require a period equivalent to that needed for Direct connect, plus an additional 24 months for government to establish the necessary technical standards, governance structures, and organisational arrangements for an ESB. This assumption aligns with feedback received from industry stakeholders, who noted that, while the ESB would simplify interoperability in the long term, its establishment would require significant additional coordination and standardisation work.

[41] ARNECC, Interoperability progress update: Timetable for Release to Market, 7 July 2023.

The option assumes that only the two existing ELNOs, PEXA and Sympli, would participate in the eConveyancing market over the assessment period. The ESB between ELNOs is treated as a viable long-term or steady-state solution rather than a transitional model, with the scale of benefits improving as additional participants are added to the network.

The ESB under this option is designed to serve as a standardised message hub that facilitates communication between ELNOs without carrying business logic or decision-making responsibility. By transmitting only structured and validated data events, the ESB is designed to minimise technical and governance complexity while maintaining high interoperability standards. This approach aims to limit operational risk with each ELNO maintaining its own business processes and the ESB designed to provide consistent, secure, and reliable data exchange across the market.

2.2.4 Option 3: Central ESB via Direct connect

Under Option 3, it is assumed that implementation would proceed in two stages: completion of Direct connect followed by the establishment of an ESB. The Central ESB represents a more complex and centralised interoperability framework than the ESB between ELNOs, as it introduces a new shared infrastructure by all participants operated under government oversight. This infrastructure would manage data exchange, authentication, and monitoring functions across all ELNOs and connected authorities.

The total implementation timeframe for this option is estimated at an additional 36 months from the completion of the Direct connect model. This estimate is informed by stakeholder feedback. ELNOs advised that, following the Direct connect stage, an additional 24 months would be required to develop and test the Central ESB infrastructure. A further 12 months has been added to allow for the establishment of the central operating entity and the completion of associated regulatory, and governance processes. For reference, the establishment of NECDS Limited, which involved no technical system build, required approximately three years to become operational. Allowing a similar period plus additional time for system development therefore reflects a realistic implementation timeframe. Nous assumes a central ESB will be fully operational by FY2031 if implementation for Direct connect commences in FY2027.

2.2.5 Option 4: Hub-ELNO

Under Option 4, the transition to a Hub-ELNO model is assumed to require 42 months to achieve full operational implementation. This timeframe reflects the complexity of establishing a wholesale-retail market structure, where one ELNO (PEXA) operates as a regulated wholesale provider as well as a retail service provider and other ELNOs (i.e. Sympli) only function as retail service providers. This timeframe accounts for the time required to develop the necessary technical infrastructure (on the same scale as Direct connect), regulatory frameworks, and governance arrangements to support the model. The Hub-ELNO builds on the core elements of monopoly regulation by introducing a regulated Hub-ELNO to provide network services to retail ELNOs, effectively creating a vertically separated market structure. Nous assumes a Hub-ELNO will be fully operational by FY2029 if implementation commences in FY2027.

Under this option, PEXA would operate as the regulated wholesale provider with monopoly obligations, while Sympli and the retail branch of PEXA would act as regulated retailers offering downstream services to subscribers. This transition would require detailed design of wholesale access arrangement, pricing rules, and service-level standards to ensure that retail ELNOs can operate competitively on a non-discretionary basis. Implementation would necessitate oversight mechanisms to present anti-competitive behaviour and to maintain transparency in pricing and access.

The Hub-ELNO would likely only be implemented if the eConveyancing market was deemed not to be contestable. Introducing this model in a contestable market would likely constrain the second ELNO's operational independence by forcing it into a limited retail role. The timing and viability of this transition therefore depends on an unknown market trajectory.

2.2.6 Option 5: Practitioner-choice

Under Option 5: Practitioner-choice, implementation is expected to occur in a shorter timeframe than the other interoperability options. The Practitioner-choice model would enable subscribers, such as conveyancers

and lawyers, to select their preferred ELNO for each transaction, while maintaining the existing Responsible ELNO framework for lodgment and settlement. This model would introduce some competition at the retail level without requiring full technical interoperability between ELNO systems to the extent of the Direct connect model.

Based on input from Sympli and the functional review, it is assumed that the Practitioner-choice model could be implemented and operational by July 2027, within approximately 12 months of a formal decision to proceed. Sympli advised that significant progress toward Practitioner-choice had already been made prior to the pause in the national interoperability program, and that much of the underlying technical and procedural groundwork remains in place. This existing foundation includes the preliminary design of required interfaces, preliminary testing, and alignment with existing regulatory and compliance frameworks.

The transition to Practitioner-choice would require relatively minor regulatory updates, as current rules already support multi-party participation in lodgment networks with minimal modification. The model's implementation would therefore focus on completing outstanding system configuration and testing rather than developing new infrastructure. However, full implementation will still require additional work, including completion of all standard and residual documents, and a significant expansion of Sympli's operating capacity. ARNECC's functional review also identified further work required to update existing data standards, which would need to be completed alongside system development and testing.

2.2.7 Option 6: Direct connect via Practitioner-choice

Under Option 6: Direct connect via Practitioner-choice, implementation is assumed to occur in two structured phases, beginning with the rollout of the Practitioner-choice model followed by the transition to Direct connect interoperability. The Practitioner-choice phase would be designed as a transitional step, introducing competition at the subscriber level before establishing full interoperability between ELNO systems.

It is assumed that the Practitioner-choice model would be operational by July 2027, with the transition to Direct connect occurring immediately afterward. Sympli advised that no material delay is expected between the two phases, as much of the technical and operational groundwork required for Direct connect could be established during the Practitioner-choice implementation. Interim testing conducted during the Practitioner-choice phase would directly inform and streamline the testing required for Direct connect, effectively providing a cumulative "testing benefit." If this is correct, this means that lessons learned, system validations, and governance structures from the first phase would reduce the complexity and duration of subsequent interoperability testing. Under these conditions, the Direct connect model would be achieved by July 2028.

It is further assumed that APIs would be developed in a modular fashion, with the APIs required for Practitioner-choice forming part of the broader interoperability architecture needed for Direct connect. This approach allows for incremental development and reuse of core system components, minimising duplication of effort and implementation costs.

2.2.8 Option 7: Monopoly Regulation

Under Option 7, the transition to a regulated monopoly is assumed to occur only if competition in the eConveyancing market fails to grow. This option assumes that regulatory intervention would be introduced if there is one dominant ELNO and competitive pressures are insufficient to ensure efficient pricing and service quality. It is unknown what the current timeframe for this trajectory may be. In that scenario, a formal price and access regulation framework could be implemented to replicate the discipline of competition through regulatory oversight.

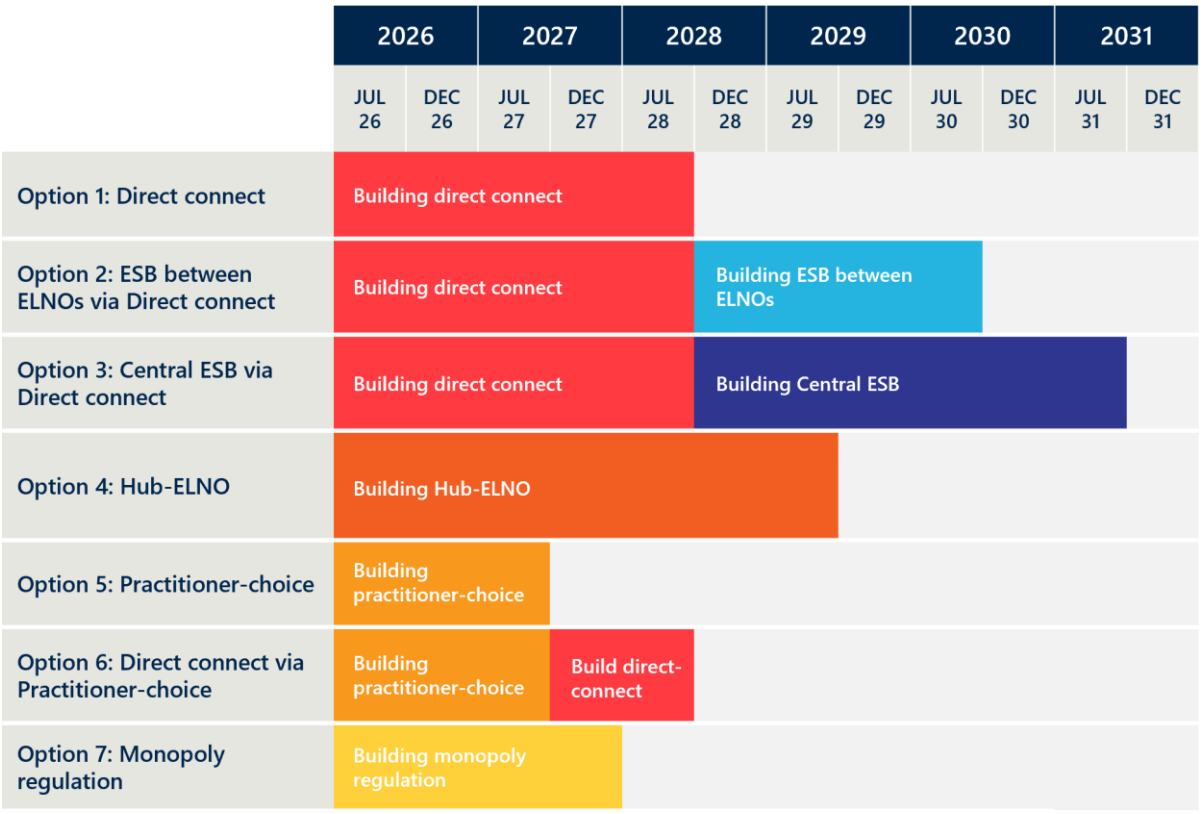
The transition would involve establishing a dedicated regulatory regime to govern the monopoly ELNO, including the development of price-setting methodologies, access conditions, and ongoing compliance and performance monitoring. Implementation would likely require updates to existing regulatory and governance frameworks to support the regulator's new functions. It is assumed that, once a decision is made, the regulatory framework could be fully operational within a 24-month implementation period. Nous assumes, monopoly regulation could commence in December 2027.

2.2.9 Summary of implementation timeframes

A summary of the implementation timeframes for the seven options involving market model changes is presented in Figure 10. These timeframes are proposed based on stakeholder advice on the complexity and scope of the technical interoperability build and integration, and the establishment of any regulatory framework changes.

It shows that Practitioner-choice and Monopoly regulation are the options that could be implemented the earliest, while Central ESB would require the longest implementation timeframe.

Figure 10 | Implementation timelines across all options



3 Methodology

The economic analysis compared seven options to the status quo to assess their market design implications and expected impacts on stakeholders, including quantified and qualitative costs and benefits. A Multi-Criteria Analysis (MCA) decision tool was applied to determine the option that is expected to provide the overall highest net benefits.

This methodology section includes:

- the method for assessing options
- sizing of the eConveyancing market
- approaches to measuring costs and benefits
- limitations of analysis.

A detailed technical methodology for the economic analysis is included in Appendix B.

3.1 Method for assessing options

Multi-criteria analysis was undertaken to holistically inform decision-making, including where the effects of reform are hard to monetise

This economic analysis assesses alternative market models for Australia's eConveyancing system by comparing reform options against the status quo. This is done by quantifying costs and benefits where possible and using these as inputs for a MCA decision tool to provide decision making guidance. This decision-making tool determines the option that is expected to provide the highest net benefits (the preferred option).

A MCA decision tool is valuable for this analysis because it:

- enables the consideration of benefits and implementation complexities that cannot be accurately or robustly quantified
- avoids the risk of false precision that would occur if broad assumptions were applied to monetise the benefits without sufficient and relevant data
- provides a transparent assessment of how each option performs against each of the reform objectives.

The estimates of quantified cost and benefit analyses are incorporated into the MCA to inform three key criteria: consumer price savings, service quality, and the cost of options. This integration allows the MCA to combine the quantified economic impacts from the CBA with qualitative considerations that are also important to decision makers.

Five criteria were identified to assess reform options

Criteria identified for analysis were derived from the Commonwealth Evaluation Toolkit, the terms of reference for this review and principles from the Interoperability Technical Working Group.[42] Each criterion reflects multiple related market design considerations and/or impacts on stakeholder groups, reflecting qualitative and where appropriate, quantitative impacts. The five criteria are:

1. **Consumer price savings:** The degree to which increased competition means eConveyancing services are produced and delivered at the lowest sustainable cost while meeting required standards of quality and functionality, with the benefit passed onto consumers through more efficient prices[43].

[42] The Treasury, Commonwealth Evaluation Toolkit, July 2025; ARNECC, Cost-benefit Analysis – Terms of Reference, July 2025; NSW Productivity and Equality commission, Market failure guide, September 2021.
[43] The cost implications of reform (i.e. interoperability technology implementation) are considered separately in criteria 4, even though these costs would likely be passed on into pricing and affect any overall price effect.

2. **Service quality:** The capacity of the market to deliver reliable, secure eConveyancing services that meet participant needs and evolve over time.
    a. **Participant outcomes:** Refers to the quality, choice, simplicity, and productivity of eConveyancing services. This is an important principle in the eConveyancing market as fees are relatively small compared with the value of the transaction.
    b. **Supports innovation**: Refers to whether the market incentivises the investment, development and adoption of new products, services, or technologies.
    c. **Resilience:** Evaluates the capacity of the market to withstand financial or technological stress and failure, including how the system handles the failure of any one component, and how widespread the effects of those failures may be.
    d. **Security**: Refers to whether the eConveyancing transaction technology system is appropriately hardened for denial-of-service attacks, privacy breaches, and other concerns, as well as the surface area for the transfer and storage of sensitive participant transaction data.
3. **Market structure and competition:** These are criteria which determine if greater benefits will continue to be developed by the market over time.
    a. **Access**: Refers to how low the barriers to entry are that may discourage new participant organisations entering the eConveyancing market as an ELNO.
    b. **Adaptability**: Refers to how well the market can respond to external changes such as technological, social, or regulatory changes.
    c. **Transparency**: Refers to the level of information symmetry in the market, clarity of market rules, pricing mechanisms, and information flows to all participants. Transparency is also important for public trust in critical infrastructure.
4. **Implementation and ongoing cost of the option:** These are the direct, quantified, and material costs to participants in the market as a result of the given change or reform.
    a. **Cost to subscribers:** Estimated as the cost of switching between ELNOs, including training and digital certificate costs.
    b. **Cost to ELNOs**: Estimated largely as the cost of implementing interoperability requirements.
    c. **Cost to banks**: Estimated by looking at the largest material integration and operational costs and changes required.
    d. **Cost to a government regulator:** This cost is material for the two monopoly regulation models, though the method remains agnostic about the government body which incurs these costs.
    e. **Cost to SROs and Land Registries:** SROs and land registries incur costs connecting with ELNOs, or otherwise avoid costs in some models which reduce the number of future connections required.
5. **Implementation complexity**: Considers the complexity to implement the market model, including technology, duration, implementation risk and stakeholder opposition.

Criteria weighting considered the importance of both costs and benefits

MCA allows a decision to be made based on the weighted scores of options for each criterion. The option assigned the highest weighted score is the 'preferred option'. MCA provides a structured, systematic, and transparent framework for comparing options across criteria which are measured or considered in various ways.

Criteria have been weighted to recognise that some are more important for the market than others. Benefit criteria (1-3) and cost criteria (4-5) are each assigned a total weighting of 50 per cent, reflecting that the market and government must balance the potential improvements to market outcomes against the financial and practical burden of implementing reform. Within this framework, each of the criteria have been weighted as shown in Table 7.

Table 7 | Criteria weightings

Criteria	Sub-criteria	Weighting
1. **Consumer price savings**	• Net present value of consumer price savings	20%
2. **Service quality**	• Net present value of participant outcomes • Qualitative assessment of innovation • Qualitative assessment of resilience • Qualitative assessment of security	15%
3. **Market structure and competition**	• Qualitative assessment of access • Qualitative assessment of adaptability • Qualitative assessment of transparency	15%
4. **Implementation and ongoing cost of the option**	• Net present value of cost to subscribers • Net present value of cost to ELNOs • Net present value of cost to banks • Net present value of cost to government regulator/s • Net present value of cost to SROs and Land Registries	30%
5. **Implementation complexity**	• Qualitative assessment of implementation timeframe • Qualitative assessment of stakeholder resistance • Qualitative assessment of technical and scope risk	20%

Consumer price savings receives a 20 per cent weighting, reflecting the direct benefits to subscribers and therefore consumers.

Service quality receives a weighting of 15 per cent. It captures the quality of eConveyancing services delivered by the market as a whole. These include the sub-criteria: participant outcomes (economically quantified), innovation, resilience, adaptability and security. While the latter three are harder to quantify precisely, these factors will shape the long-term sustainability and effectiveness of the eConveyancing system.

The **market structure and competition** criteria receives a weighting of 15 per cent. It captures structural features like access and transparency that enable future benefits but do not directly improve outcomes for subscribers today. These are means to an end rather than ends in themselves. A market with low barriers to entry and high transparency should, over time, produce better prices and quality than a market without these features. However, this relationship is less certain and more distant than the immediate effects captured in the consumer price savings and system performance criteria.

On the cost side, the quantifiable **cost** impacts are weighted at 30 per cent and qualitative **implementation complexity** at 20 per cent. The cost of the option aggregates net present value costs across all stakeholder groups – ELNOs, banks, subscribers, government agencies, state revenue offices and land registries. These costs are substantial, well-defined, and largely unavoidable regardless of implementation approach.

Implementation complexity captures the qualitative dimensions that the cost analysis cannot fully represent, such as stakeholder coordination challenges, technical integration complexity, and the implementation risks of reform. Timing and implementation pathways matter significantly to decision-makers and stakeholders, even when the net present value may be similar across options. Stakeholder resistance is important because it has a demonstrated ability to slow or limit the realisation of benefits in this market. This criterion also integrates the differences in uncertainty in each option, as distinct from the standard risk which is already considered implicitly in the risk-adjusted discount rate used in the cost-benefit analysis.[44]

[44] This also accounts for the difficulty in identifying and attributing appropriately differentiated weighted costs of capital for different stakeholders under different market models.

Options were scored on a scale of -5 to +5 for each criterion

The assessment of each option against each criterion is scored using a scale of -5 to +5 relative to the status quo. A score of zero represents no change in impacts against a criterion for that option compared to the status quo. A positive score represents a benefit (or a lower cost) relative to the status quo and a negative score represents an increased cost (or reduction in a benefit) relative to the status quo.

The scoring magnitude reflects the size of the change, with scores of four or five representing large shifts and scores of one or two indicating smaller impacts. For cost criteria, more negative scores indicate higher costs and positive scores indicate savings. This ensures all criteria align directionally, with more positive scores representing better expected outcomes.

The status quo serves as the reference point for analysis. By convention:

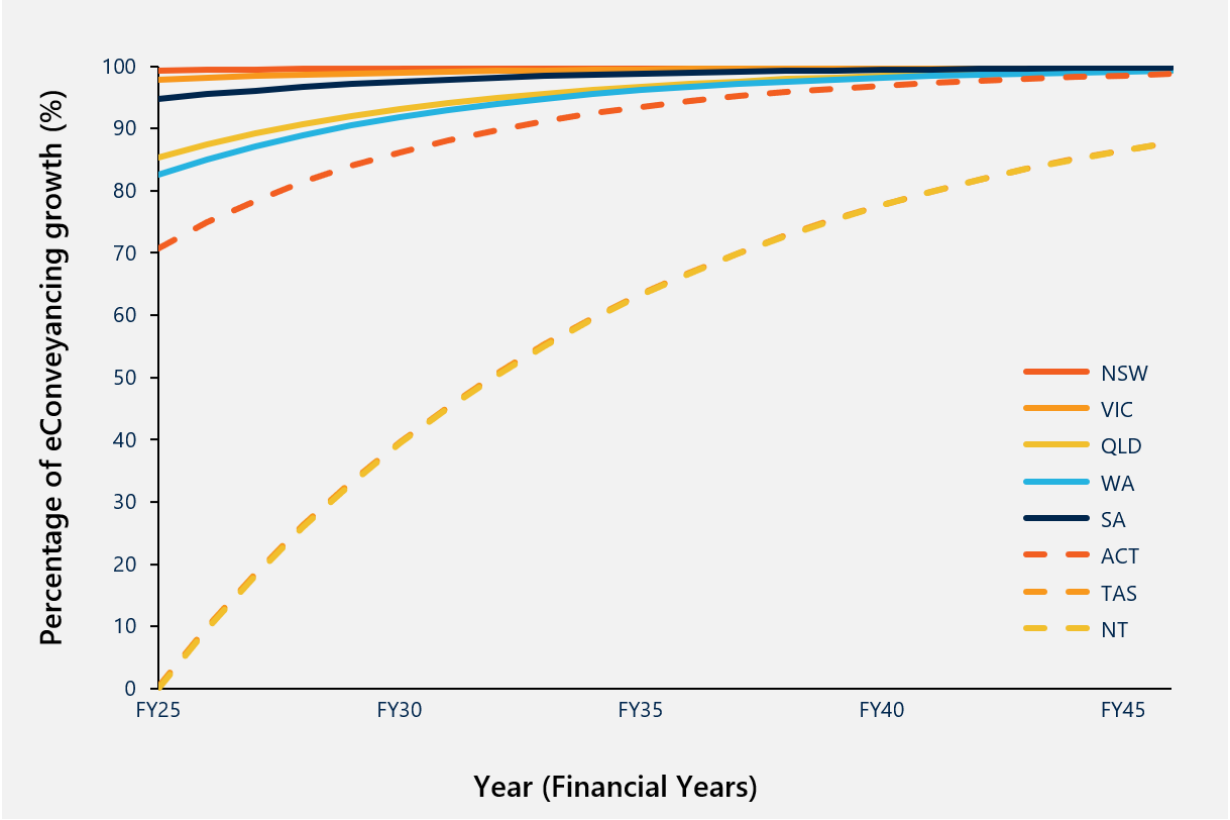
- The status quo is treated such that it has a net present value of $0.
- All status quo scores in the multi-criteria analysis are set to 0 (neutral baseline).
- The impacts of the seven interoperability options are assessed relative to this baseline.

Where analysis determines that an option has a negative Net Present Value (NPV) - meaning the costs exceed the benefits - then maintaining the status quo would be preferrable to the reform option in question.

3.2 Size of the eConveyancing market

The projected size of the eConveyancing market in terms of transaction service volumes is modelled on historical growth assumptions derived from verified registry data supplied by ARNECC (Figure 11). The analysis assumes that total conveyancing activity, comprising both paper and electronic transactions, will grow by 0.2 per cent per year over the assessment period, consistent with the stable long-term trend in property market activity and historical data from FY2023 to 25. Within the eConveyancing segment, the overall market is projected to expand at an average rate of 0.62 per cent per year, reflecting gradual increases in digital adoption and continued migration away from paper-based processes.

Figure 11 | eConveyancing market size across all jurisdictions, FY2025-35



Growth rates are differentiated by transaction type and jurisdiction to reflect the varying maturity of eConveyancing across Australia. Jurisdictions such as NSW, VIC and QLD already have well-established digital conveyancing systems, and their eConveyancing transaction volumes are expected to grow at a slower rate, approaching a saturation point. In contrast, emerging jurisdictions, including TAS, NT and ACT are expected to experience faster adoption as new systems become operational, and users transition from manual to electronic lodgment processes.

The analysis assumes that no jurisdiction will reach full digital adoption, as some transactions will continue to be conducted on paper due to exemptions, technical constraints, or the complexity of certain dealings. As shown in Figure 11, mature states such as NSW and VIC are expected to stabilise at near-total adoption, reaching around 99.99 per cent eConveyancing usage by the end of the assessment period. In newer markets such as NT, digital adoption is assumed to grow quickly following the rollout of PEXA's services in FY2026, with 50 per cent of transactions projected to be electronic by FY2032. These assumptions provide a realistic and evidence-based projection of the market's transition trajectory and form the basis for scaling all cost and benefit estimates in the analysis.

3.3 Approach to quantifying costs and benefits

3.3.1 Cost and benefit framework

This report provides an economic assessment of the relative benefits and costs of alternative interoperability and regulatory reform options for the eConveyancing market. The CBA adopts a whole-of-market and distributional perspective, incorporating both public and private sector impacts of reform options on ELNOs, financial institutions, SROs, land registries, regulators, subscribers, and consumers. Figure 12 provides the framework for the key cost and benefit impacts that can be meaningfully quantified for reform options.

Quantified estimates are described in present value terms using an appropriate discount rate over the assessment period to allow for consistent comparison of options with different timing of costs and benefits. Costs and benefits have been calculated in NPV terms in FY26 dollars, using a 7 per cent discount rate in line with Commonwealth Government recommendations. The analysis throughout this report has been conducted using a 20-year timeframe as a basis, beginning in FY2026. The 20-year timeframe is used as it aligns with the expected operational life of the ELNO exchange assets and provides a balanced view of both short-term and sustained impacts.

The estimation of costs includes both upfront and ongoing components across all participants in the eConveyancing market. Upfront costs include technology development, integration testing, operational adjustments, and regulatory setup, while ongoing costs represent maintenance, compliance, and governance activities. These costs were calculated using a structured bottom-up approach that combines stakeholder data, expert judgment, and established cost parameters such as wage rates, testing durations, and technology maintenance ratios. Where direct information was unavailable, indicative estimates were developed based on stakeholder consultation and benchmarking against comparable digital infrastructure and regulatory systems.

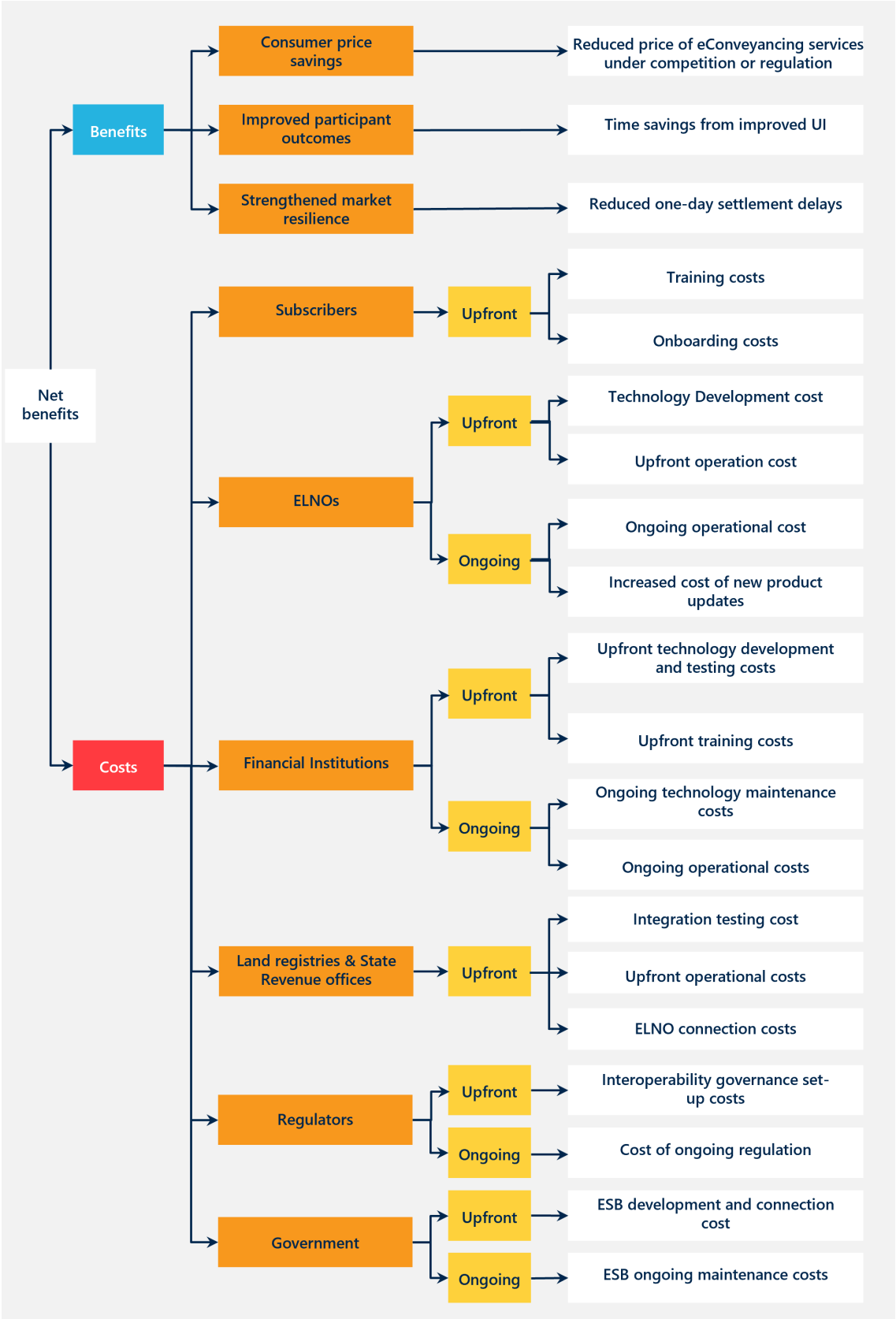
The estimation of benefits measures the economic value of improved efficiency and reliability resulting from interoperability and regulation. The main benefit categories include price efficiency gains from competition or price control, improved participant outcomes through time savings, and enhanced market resilience through reduced settlement delays. Each benefit was quantified by identifying its underlying economic driver, such as reduced transaction costs, shorter processing times, or avoided penalties, and applying these to forecast transaction volumes over the analysis period. All benefits were modelled consistently across market options to ensure comparability.

The analysis draws on multiple sources, including stakeholder data, targeted consultations, desktop research, and Nous expert assessments. Where data gaps existed, Nous applied professional judgment to ensure internal consistency and transparency in estimation. Data sources and detailed methodology are provided in Appendix B.

Key assumptions that influence the net present value of costs and benefits, including the discount rate, assessment period, implementation timelines, market growth, and others, were tested through sensitivity

analysis to examine the robustness of results under alternative scenarios. See section 6.2 for a summary of sensitivity analysis results, and Appendix C for detailed results.

Figure 12 | Cost and benefit framework for quantified impacts



3.3.2 Benefit quantification

The benefits quantified in the CBA represent the estimated (i.e. monetised) economic gains from introducing interoperability and regulatory reform in the eConveyancing market. These benefits are grouped into three main categories:

- consumer price savings
- improved participant outcomes
- strengthened market resilience.

Each benefit reflects a distinct mechanism through which the market can generate value, either by lowering costs, improving quality, or reducing operational risks. The benefits were estimated using quantitative methods that link each driver of change to the projected transaction volumes over the assessment period.

Data inputs were obtained from stakeholder consultations, publicly available data sources including ABS wage data, Australian Prudential Regulation Authority (APRA) Annual home loan volume and analysis undertaken by Nous. Key assumptions were tested in the sensitivity analysis to examine how alternative parameter values influence the overall results.

Consumer price savings

This benefit estimates potential reductions in service costs and therefore prices for subscribers resulting from competition between ELNOs or from price regulation under monopoly regimes. The benefit was estimated separately for the two types of reform options: either competitive models or regulated models (beyond the current regulatory framework).

- **Competitive models (Options 1–3,5,6):** Price efficiency benefits were estimated using the historically informed 7.5 per cent price difference between Sympli and PEXA, illustrative of potential ongoing price under competition. This difference was applied to the types and market shares of transactions that may be expected to migrate to Sympli over time, with market share growth modelled using a logarithmic curve that reflects possible adoption dynamics. The benefit was calculated as the price differential multiplied by the number of transactions modelled to be undertaken on Sympli's platform in each future year.
- **Regulated models (Options 4,7):** Under monopoly regulation and Hub-ELNO models, price changes were derived from a 'CPI minus X' pricing framework. The efficiency factor 'X', set at 2 per cent per annum, factors in the potential ELNO efficiencies under price regulation (see further detail below). The benefit was calculated as the difference between an assumed CPI-indexed price path under the status quo and the 'CPI minus X price' path applied under the monopoly regulation option. These price reductions relative to the status quo were then applied to total transaction volumes.

Key data sources for this modelling included ELNO's confidential financial information, PEXA's public submission to IPART, and eConveyancing transaction volumes provided by ARNECC.

ELNO market share transition

To estimate how the competitive model benefit accrues over time, an assumed gradual transfer of market share from PEXA to Sympli was modelled, with Sympli's lower price assumed to incentivise a proportion of the subscriber market to transfer to it. The transfer follows a logarithmic growth pattern, which reflects how market adoption typically accelerates rapidly in the early years of competition before slowing as the market approaches equilibrium.

In practical terms, Sympli's market share is assumed to increase quickly after interoperability becomes operational, then stabilise as both ELNOs reach equal market positions. By FY2046, the market is assumed to reach a fully competitive equilibrium, where each ELNO holds an equal share of transactions, consistent with IPART's 2023 approach to forecasting transaction volumes[45].

[45] Independent Pricing and Regulatory Tribunal, Interoperability Pricing for Electronic Lodgment Network Operators, June 2023, p 58.

It is important to note that this represents only one possible market share growth scenario, reflecting a fully competitive outcome under reduced network effects. In practice, market behaviour could diverge significantly depending on pricing strategies, subscriber preferences, and switching costs.

To account for this uncertainty, the analysis includes alternative market share scenarios in the sensitivity testing (Section 6.3), examining the economic implications if the assumed competitive balance cannot be achieved. This testing shows that if competitors such as Sympli cannot attain at least 39 per cent of market share within 20 years, the Direct connect model would no longer deliver a positive net benefit. This threshold should not be interpreted as universal. It is specific to the price differential assumed in modelling and would change under alternative competitive behaviours. For example, if PEXA were to reduce its prices in response to competition, the required market share for Sympli for Direct connect to sustain positive net benefits would be lower.

Price savings under competitive options

Interoperability would be expected to reduce prices (relative to the status quo) by encouraging ELNOs to compete for users by innovating, operate more efficiently, and aligning their service fees with the cost of providing those services.

Under Options 1–3, 5 and 6, competition between PEXA and Sympli would deliver consumer price savings across the market. The analysis uses Sympli's projected market share as a proxy for the level of pricing competition. Publicly available pricing information indicates that Sympli currently provides its services at prices approximately 7.5 per cent lower than PEXA's, which has been used as the indicative level of competitive price efficiency benefit across all affected transactions.

The analysis does not explicitly model potential reactive price responses by PEXA. Instead, it uses the observed difference in prices to indicate the likely reduction the market would experience. This approach focuses on the first-order effects of interoperability while recognising the second-order effects, such as strategic pricing responses or broader market adjustments, could lead to higher or lower benefits.

Price savings under monopoly regulation

There is contention across the eConveyancing market as to the efficiency of current prices, particularly that of PEXA given its position of market power, and that it may not reflect efficient cost recovery. For this reason, central economic government agencies often recommend applying a 'CPI–X pricing' framework for additional pricing regulation in a market monopoly situation. This is designed to capture potential cost efficiencies over time. However, in IPART's 2019 review of ELNO pricing, prices were found to be efficient, and this position has been maintained to date[46].

For the purpose of this analysis, Nous assumed that additional price efficiencies could be achieved under a regulated monopoly model for the eConveyancing market. Specifically, the analysis applies an illustrative X-factor of 2 per cent to represent potential cost efficiencies that could be realised through improved productivity, economies of scale, and technological innovation within a mature digital platform. This framework is commonly used in the regulation of utilities in Australia[47]. This assumption reflects a reasonable estimate of efficiency gains achievable under a formal regulatory framework.

The 2 per cent efficiency factor is consistent with the intent of the CPI–X regulatory approach, where the "X" represents the expected annual productivity improvement that allows a provider to deliver services at lower real cost without eroding profitability. For PEXA, this would involve spreading fixed costs across a stable or growing transaction base and leveraging automation to reduce operational expenditure over time. The application of the 2 per cent factor is intended to illustrate the potential consumer price benefits of regulation, rather than to prescribe a specific price adjustment. The output of this analysis is therefore illustrative only and intended to demonstrate the type of efficiency gains that could be captured through enhanced regulatory oversight.

[46] IPART, Review of The Pricing Framework for Electronic Conveyancing Services in NSW, November 2019.
[47] The Treasury, Price Regulation of Utilities, March 2019.

Improved participant outcomes

This benefit quantifies the productivity gains that subscribers are expected to achieve through time savings when using alternative ELNO platforms. Benefits arise under competitive market options, where ELNOs have an incentive to innovate and simplify user processes to attract practitioners and financial institutions.

Estimated gains reflect efficiencies currently offered in Sympli's system usability, workflow efficiency, and integration with other market participants. They reflect current time savings observed for Sympli users compared with PEXA, rather than projected future improvements. The analysis assumes subscribers would experience the same efficiency gains if they transitioned to Sympli today, with no additional enhancements over time.

- The time saving assumption of one minute per transaction (over six-weeks) was derived from usability testing conducted by Sympli and validated through consultation with practitioners.
- The benefit was calculated as the product of time saved per transaction, the number of affected transactions, and the average hourly wage of conveyancing professionals and financial institution staff.
- The number of affected transactions was estimated based on the expected transfer of market share to Sympli under each competitive model.

Key datasets included Sympli's data on baseline information on potential time savings, tested with stakeholders, as well as wage data from Australian Bureau of Statistics (ABS) average earning for professional services dataset (2025).

Assumed time saving benefit

The time saving assumption of one minute, over six weeks, per transaction per subscriber was derived from prior analysis on potential time saving benefits by ARNECC[48]. Usability testing conducted by Sympli, which compared the operational efficiency of its platform against that of PEXA indicated the potential validity in this assumption. The testing focused on real transactions by conveyancers processing Notice of Death, Transmission Application, and Withdrawal of Caveats. Measuring workflow steps, user interactions, and time to complete core tasks.

The test provided the following results, on average:

- 45 per cent reduction on average processing time across the three types of dealing.
- 68 per cent reduction in total number of clicks.

The assumption of one-minute saving represents an indicative estimate of the incremental efficiency gain achievable through platform design improvements.

Strengthened market resilience

These benefits represent the economic value of avoiding settlement delays through improved system reliability and redundancy. It is assumed that as the market becomes more competitive, the reliability of each of the ELNOs improves and creates benefits equal to the delays avoided through fewer ELNO related outages. In models where further regulation is implemented, improved resilience also assumed to be created. These benefits arise when interoperability allows subscribers to continue transacting through alternative ELNOs during outages or when regulation imposes stronger operational and service continuity requirements.

The benefit was estimated using standard contract of sale penalties as a proxy for the cost of one-day settlement delays:

- The number of transactions with one-day delays was obtained from confidential operational data provided by PEXA.

[48] ARNECC, Addressing market power in electronic lodgment services, September 2020, p 38.

- A standard settlement delay penalty rate of 12 per cent per annum[49] [50] was applied to 90 per cent of the mean dwelling price in each jurisdiction to calculate the daily financial impact of delayed settlements.
- The total avoided penalty was estimated by multiplying the daily penalty value by the proportion of delays assumed to be prevented through interoperability.

Key datasets included PEXA operational performance data and mean dwelling prices sourced from ABS Mean dwellings price by states dataset.

Preventable transaction delay volume under interoperability

The portion of delays assumed to be prevented through interoperability considers the share of subscribers who hold active accounts with both PEXA and Sympli under models where both ELNOs can operate as the RELNO. This is calculated based on market share transfer under competition. It is assumed that as the market becomes more competitive, the reliability of each of the ELNOs improves and creates benefits equal to the delays avoided through fewer ELNO related outages. In models where further regulation is implemented, improved resilience also assumed to be created.

Standard delayed settlement penalties

When a property settlement is delayed, the disruption extends beyond financial penalties to a range of practical and emotional challenges for home buyers and sellers. Delays can leave buyers temporarily without accommodation, force sellers to extend bridging finance, and require both parties to reschedule removalists, utilities, and related services often at significant additional cost. These secondary impacts are highly variable and depend on individual circumstances, making them difficult to quantify accurately within a cost–benefit framework.

For this reason, the analysis adopts standard contract penalties as a reasonable proxy for the cost of delayed settlements. In practice, the true economic and social costs of settlement failures could be higher depending on individual circumstances.

3.3.3 Cost quantification

The cost component of the CBA captures the additional expenditure or avoided cost expected to arise under each interoperability and regulatory model in the eConveyancing market. Costs were estimated for key stakeholder groups, including subscribers, ELNOs, financial institutions (banks), land registries and SROs, regulators, and government agencies.

Each cost category includes both upfront and ongoing elements, depending on the type of activity involved. The methodology combines quantitative data provided by stakeholders with information gathered through consultations, desktop research, and professional judgement by Nous. Where detailed financial data were not available, costs were estimated using standardised assumptions for labour inputs, technology development, and maintenance.

Please note that, based on discussions with the RBA, there are not expected to be any material changes in costs for the RBA under any of the options assessed.

Subscribers

Subscriber costs represent the additional expenditure incurred by conveyancers, lawyers, and financial institutions users that need to register and operate on a new ELNO platform as a result of interoperability. These costs include:

- Set-up costs: The purchase of new digital certificates required to securely access additional ELNO platforms, noting some certificates are transferrable, but there are still material switching costs.

[49] Victorian standard penalties rate was used as the proxy, the standard rate is generally determined as 2 per cent per annum plus 10 per cent per annum under the Penalty Interest Rates Act 1983, in addition to any further interest specified in the contract.
[50] Department of Justice and Community Safety Victoria, Penalties and value, July 2025.

- Training costs: The time and effort required for practitioners to familiarise themselves with a new ELNO system.

The set-up cost was calculated as the cost of a non-transferable digital certificate, multiplied by the number of subscribers expected to register on a second ELNO. The training cost was estimated as eight hours of training per subscriber multiplied by the average hourly wage for legal and conveyancing professionals, using wage data from ABS average earning for professional services dataset (2025). The number of affected subscribers was derived from market share projections under each interoperability model.

ELNOs

ELNOs must develop, test, and maintain interoperable systems and their connections with other ELNOs or ESBs. The economic analysis assumes that only two ELNOs exist: PEXA and Sympli. Because their size and the technology they use differs, costs estimates were different for each ELNO. ELNO costs include:

- Upfront technology development costs: Covering API design, build, and implementation; non-functional requirements; security testing; and connectivity with an ESB where relevant.
- Upfront other costs: Covering operational process changes and legal agreement updates.
- Ongoing costs: Covering technology maintenance and ongoing interoperability support activities.

The baseline costs for Direct connect were estimated using stakeholder data, ARNECC's functional requirement descriptions and Nous' assessment of required technical effort, expressed as full-time equivalent (FTE) resources, testing duration, and daily contractor rates.

For other competitive models, cost adjustments were applied based on additional technical complexity, such as connectivity requirements for ESB-based models or reduced integration effort under Practitioner-choice models. Ongoing costs were estimated to be 15 per cent of upfront technology development costs, consistent with industry norms for system maintenance. Additional operational costs were allocated to ELNOs under the appropriate models based on the operational scales of PEXA and Sympli.

Both Responsible ELNO (RELNO) fees and RELNO surcharges are not explicitly modelled, but are not excluded from this model either. This is because these fees and surcharges reflect either the costs incurred by RELNOs that are avoided by participating ELNOs (PELNOs) or the "efficient cost of an ELNO developing lodgment and financial settlement infrastructure".[51] Therefore, the fees are a transfer between the ELNOs that is important to help the market function, but does not appear in the total costs faced by both ELNOs as a stakeholder group in our analysis. In other words, because we have separately estimated efficient infrastructure costs for ELNOs, have aggregated the costs and benefits together for ELNOs in our results, and assume that user prices are efficient, these fees and surcharges do not affect our results.

Financial institutions (banks)

Banks need to develop, test, and then adjust their mortgage operations to integrate well with an ELNO. These costs are expected to be significant due to the complexity of banking systems and their central role in settlement processes. The cost categories include:

- Upfront development costs: Covering new technology build, payment system integration, and API configuration.
- Upfront testing and training costs: Covering resources required to verify interoperability and train staff on dual-ELNO operations.
- Ongoing costs: Covering maintenance, reconciliation, audit, and compliance obligations associated with operating across multiple ELNOs.

Development costs were estimated using data provided by financial institutions, industry peak bodies, and Nous' estimation of integration and development complexity. Testing costs were calculated based on an estimated testing taskforce multiplied by the total assumed effort and then multiplied by wage, while

[51] IPART, Interoperability pricing for Electronic Lodgment Network Operators, June 2023, pp 4-5.

ongoing costs were estimated as a proportion of existing mortgage operation costs, scaled by transaction volume.

The analysis assumes that banks do enough integration with ELNOs to ensure that their service quality is equivalent across all of them. However, it is unclear if existing incentives or regulations will cause banks to do this.

Land Registries and State Revenue Offices

Costs for land registries and SROs arise primarily from system integration, operational change and testing requirements under interoperability. These agencies are responsible for ensuring that lodgment and transaction data from multiple ELNOs can be received and processed accurately. The cost categories include:

- Upfront connection costs: Establishing new ELNO connections or linking to an ESB. Under models where further connections are no longer required, this is considered as an avoided cost.
- Upfront operational costs: Additional administrative and testing efforts to adapt business processes for a multi-ELNO environment.
- Upfront interoperability costs: Integration testing to verify interoperability functionality.

Connection and operational costs were estimated using stakeholder input based on prior connections with ELNOs. Testing costs were calculated based on an estimated testing taskforce multiplied by the total assumed effort and then multiplied by wage. Ongoing costs were assumed to be negligible as transaction volumes and processes are not expected to change materially.

Government regulator

Regulatory costs include interoperability implementation costs incurred by ARNECC under competitive models, and the expenditure required to design, establish, and operate an access and price regulation regime under monopoly regulation or Hub-ELNO market structures. Interoperability implementation cost are estimated using historical ARNECC investments. Costs to regulator under a monopoly regime include:

- Upfront costs: regulatory and policy design, establishment of a regulatory specialist unit, and initial cost and baseline studies.
- Ongoing costs: Economic regulation, compliance and enforcement, market monitoring, stakeholder engagement, and shared services.

Estimates were developed using benchmarking against comparable regulatory regimes such as the ASX clearing and settlement access regime and telecommunications access regulation. A building block approach was taken based on the key regulatory activities, key cost inputs included:

- policy and regulatory design
- regulatory specialist unit
- baseline and cost studies
- ongoing annual costs including economic regulation, compliance, and overheads.

The CBA assumes that a new regulator would be established from first principles, which may overstate costs if existing entities were expanded to take on these responsibilities.

Government (operator of an ESB)

Government costs are expected to be incurred from developing and maintaining the ESB under models that require centralised data exchange between ELNOs and government entities. These costs include:

- Upfront development costs include the design, build, and implementation of the ESB platform, including integration, data management, and security.
- Ongoing maintenance costs include routine platform maintenance, upgrades, and 24/7 operational support.

Upfront development costs were estimated by Nous digital experts based on the functional descriptions in the Glenn Archer Report and ARNECC's functional requirement studies. Testing costs were added to reflect integration between the ESB and connected entities such as ELNOs, banks, land registries, and SROs. Additionally, ongoing maintenance costs were assumed to be 15 per cent of upfront development costs per year.

3.4 Limitations to analysis

The limitations listed below describe key factors that affect the precision, completeness, or generalisability of the modelling of estimated costs and benefits and the associated results. Their inclusion and commentary are important to highlighting the degree of confidence that can be placed in the findings and highlights areas where further access to data, technical specification and definition, target analysis or policy development would improve future analysis.

Several important assumptions have been made as a basis for the calculations with regards to the quantifiable costs and benefits. These assumptions are set out in the methodology and Appendix B. Changes to key assumptions may affect the estimated costs and benefits. Furthermore, where relevant, Nous has indicated the sources of the information but has not sought to independently verify those sources unless otherwise noted.

3.4.1 Incomplete definition of some market models

A key limitation of this analysis is the lack of detailed technical and functional design specification for some interoperability models and uncertainty in future regulatory settings. The scope of interoperability within the eConveyancing market continues to evolve for some models (i.e. Direct connect and Practitioner-choice), while ESB models are reasonably dated and their design has not been progressed in recent years.

A key issue for defining the scope of interoperability is the degree to which an ELNO's internal functionality must be made accessible to achieve interoperability. The fundamental question is whether interoperability requires replicating all the operational functions of PEXA or only facilitating limited data exchange between systems. Without clarity on this key boundary, the practical implementation of interoperability could vary widely, from a narrow interface that enables minimal data sharing to a broad interface that exposes the ELNO's underlying business logic and integration with third-party systems and processes such as those operated by banks.

This lack of definition has significant regulatory and economic implications. A narrow approach would preserve each ELNO's proprietary processes but could restrict the potential for competition and innovation. In contrast, a broader approach requiring the exposure of business logic through extensive Application Programming Interfaces (APIs) would resemble an access regime, where regulated access is provided to essential infrastructure. In such a model, interoperability would effectively enforce a form of vertical separation between ELNO operations and market participation.

Similar patterns can be seen in other digital markets. For example, the social media company X (formerly Twitter) initially provided broad APIs that allowed third-party developers to build applications and analytical tools, expanding the platform's user base. Over time, these APIs were restricted or withdrawn to protect commercial interests, which in turn eliminated many third-party applications. This example illustrates how the breadth of API access directly shapes competition, innovation, and market structure. Without a clearly defined scope for interoperability, it remains uncertain whether the proposed models for eConveyancing represent a limited data exchange mechanism or a broader form of regulated market access. This can have significant implications for the estimated costs and benefits of achieving interoperability.

Uncertainty in future regulatory settings also creates limitations. Stakeholders indicated there is a lack of clarity about how governance and operational responsibilities would be structured under those models involving a central coordinating entity, such as an ESB or Hub-ELNO. It remains unclear who would operate and fund the central entity, how oversight would be exercised, and how different stakeholders would interact with it. Similarly, under models that alter the relationship between ELNOs, such as Practitioner-choice or Hub-ELNO, stakeholders were uncertain about the regulatory framework that would govern these new

relationships, including matters of accountability, liability, and data ownership. This uncertainty limits the ability of stakeholders to provide precise input on costs, risks, and implementation feasibility.

In particular, under option 7: monopoly regulation, no clear regulatory regime has been defined or agreed, and therefore analysis of regulatory costs is assumed to be based on similar costs incurred by tangentially relevant regulatory efforts to oversee similar monopoly or limited competition markets.

3.4.2 Inconsistent understanding of models among stakeholders

A related limitation is that the proposed interoperability models were not consistently understood by stakeholders. Stakeholder interviews revealed varying interpretations of the purpose, technical scope, and practical effect of interoperability, even where the scope was relatively more refined. Some stakeholders indicated that achieving true interoperability would require exposing core business logic through APIs, which would fundamentally alter the current market structure. Others viewed interoperability as a technical data exchange mechanism that could promote competition without materially affecting each ELNO's internal operations. These differing views reflect inconsistent understanding of API scope and function, and differing understanding of the costs.

The inconsistency in stakeholder understanding has also limited the quality and comparability of the information provided to support this analysis. Different interpretations of what interoperability entails resulted in stakeholders providing cost and effort estimates based on fundamentally different assumptions. For example, some ELNOs included extensive system redevelopment and security testing in their cost estimates, while others considered interoperability to involve only incremental adjustments to existing operations. Similarly, financial institutions and land registries interpreted their testing and connection requirements differently depending on how they understood the technical scope of interoperability. This variation in perspective reduced the consistency of the data collected and introduced uncertainty into the comparability of cost inputs across stakeholder groups.

3.4.3 Complexity to determining the efficiency of an ELNO

This analysis discusses *efficiency* extensively, and it is a critical concept underpinning many of the methodological approaches and results. However, the term "efficiency" is used in two distinct ways that carry different implications for interpreting the analysis:

- **Efficiency of prices** means that prices are set so that an ELNO can pay a reasonable return to their investors after paying their costs. This is the type of efficiency that can be reasonably externally estimated given the information available about ELNO capital expenditure and operational expenditure each year.
- **Efficiency of the firm** refers to the firm's internal productivity – whether it produces its services at the lowest possible cost while maintaining current level of quality and output. It is more challenging to make assumptions of this efficiency given the lack of detailed operational information about the firm.

In other words, while prices may be set correctly to enable an ELNO a reasonable return on its capital, it is unclear if an ELNO could reduce its costs while offering the same quality and quantity of service. It is possible that the absence of competitive pressure may lead to higher costs than are in fact necessary. While shareholders seek to maximise the returns from a firm, which normally creates downward pressure on costs, monopolistic rent-seeking behaviour may include pressure to maintain high costs precisely so that regulators do not impose price reductions or more competitive conditions.

The challenge in assessing firm-level efficiency introduces uncertainty into parts of the economic analysis. Most directly, it affects the assessment of the total number of sustainable ELNOs in the market. For example, if PEXA's cost base was higher than what would be achievable under competitive conditions, the analysis may underestimate how many ELNOs the market could realistically sustain. Conversely, if PEXA's costs reflect true efficiency, the market may only be capable of supporting one or two operators.

In principle, benchmarking PEXA's productivity against comparable firms in similar markets could help establish a clearer picture of efficiency. However, eConveyancing markets globally are either nascent or structured differently, limiting the availability of meaningful comparators. As a result, the current analysis relies on financial data and stakeholder consultations rather than direct measures of productivity.

3.4.4 Uncertainty in market share of ELNOs following interoperability

This analysis assumes that a competitive interoperable eConveyancing market would be both efficient and undistorted, with firms reaching equal market shares by the end of the period. This simplified assumption provides a clear and consistent basis for estimating competition-related cost and benefits. However, in practice, market structure rarely achieves perfect symmetry. Digital markets, particularly those characterised by network effect, tends to consolidate around a dominant provider even in the presence of competition.

PEXA's early entry into the eConveyancing market has given it a substantial first-mover advantage, supported by network effects, high switching costs, and user familiarity with its systems. These factors reinforce its market dominance and make it difficult for newer entrants such as Sympli to capture significant market share, potentially even in an interoperable environment. The nature of eConveyancing, where integration, reliability, and workflow consistency are critical, further amplifies these barriers to switching. Subscribers, particularly larger conveyancing firms and financial institutions, may be reluctant to transition to an alternative ELNO due to the operational disruption, retraining costs, and perceived risks associated with changing systems.

The dominance of banks within the eConveyancing system compounds this effect. Bank transactions account for roughly two-thirds of all eConveyancing activity, and the top three banks, each with existing system integrations with PEXA, represent more than half of all banking-related lodgments. These institutions have already structured their internal processes, approval pathways, and risk frameworks around PEXA's platform. As a result, the potential for rapid or substantial reallocation of market share to alternative ELNOs is likely to be limited, particularly in the short to medium term.

The assumption of equal market share also interacts with the static pricing assumption, which is discussed in section 3.4.8. The model currently assumes that PEXA will not alter its prices in response to competition, allowing Sympli to capture market share. In practice, pricing behaviour is a critical determinant of market share transfer in homogeneous service markets. It is likely that PEXA would respond strategically to protect its position, either by lowering its prices to retain subscribers or by other means to retain its existing customer base. Such competitive dynamics would significantly slow the rate of market share transition and could reduce the total benefits attributed to interoperability.

For these reasons, the assumption of equal market share among ELNOs represents a key modelling construct that is not intended to represent a projection of expected market evolution.

3.4.5 Static pricing assumptions limit competition analysis

The analysis assumes static pricing by both ELNOs throughout the modelling period, meaning that neither PEXA nor Sympli changes their prices in response to competitive pressure. This simplification isolates the direct effects of interoperability but does not reflect realistic market behaviour, where incumbents often adjust pricing to defend market share.

In practice, PEXA could lower fees or offer volume-based discounts in response to Sympli's lower pricing, thereby increasing the total price efficiency benefit beyond what is currently estimated. The absence of a dynamic pricing component limits the model's ability to capture the iterative effects of competition over time.

3.4.6 Benefit and cost modelling assumes two ELNOs

Quantitative net benefit analysis was based on a market with only two ELNOs, PEXA and Sympli. This assumption is based on current market dynamics and the limited size of the eConveyancing market (detailed in Appendix A). This is because the market may not necessarily attract additional providers given the high upfront technology development costs of an ELN and significant ongoing capital and operational expenditure required to maintain compliance, security, and service standards. This assumption constrains quantitative analysis by excluding potential long-term market evolution.

However, qualitative analysis considers the benefits of further ELNO entrants. Over time, technological innovation, regulatory intervention, or consolidation within the financial technology sector could change the competitive landscape, introducing new participants or alternative service models. Therefore, analysis assesses each option's potential to support future entry or enable greater competition, even if the current market outlook suggests limited capacity to support additional ELNOs. This ensures that the qualitative

framework recognises the value of openness to future competition, beyond what the quantitative analysis can reflect.

3.4.7 Uncertainty in bank cost estimates

Estimates of bank integration and implementation costs are based on a limited sample of stakeholder responses, as detailed cost information was provided by only a small number of financial institutions. This limited dataset introduces uncertainty into the overall results, particularly because integration costs are highly dependent on each bank's internal system design, digital maturity, and existing level of connectivity with PEXA.

Additionally, much of this information is commercially confidential, preventing sufficient access to inputs and assumptions regarding technology development, testing, and process adaptation. As a result, actual costs could be either higher or lower than estimated.

3.4.8 Systemic risk not quantified

The analysis does not incorporate the potential economic effects of low-probability but high-impact events such as prolonged system outages, cyberattacks, or catastrophic infrastructure failures that could disrupt eConveyancing operations for several days or weeks.

These events could have cascading effects across the property market, financial institutions, and consumers, resulting in losses that grow non-linearly relative to the duration of disruption. Because such events are inherently unpredictable and lack reliable historical data, they are not considered in the quantitative modelling of market resilience benefits.

3.4.9 Innovation benefits not quantified

The model does not quantify potential innovation benefits that could arise from increased competition or interoperability. Innovation in this context includes improvements in system functionality, residual documents automation, data integration, and service quality that enhance overall efficiency. However, these effects are inherently uncertain and cannot be accurately modelled using available data.

Innovation benefits may materialise incrementally or in disruptive bursts, depending on technological progress and market incentives. Because of this uncertainty, innovation is addressed qualitatively rather than through numerical estimation.

4 Benefits of market reform options

The benefits of establishing various models of interoperability or implementing market regulation are significant and broad. Three criteria have been applied to assess the benefits of interoperability or market regulation:

- consumer price savings
- service quality
- market structure and competition.

Direct connect and its hybrid variant (Options 1 and 6) emerge as the strongest performers across all three benefit categories, delivering expected price savings through competition, reducing network effects and maintaining distributed infrastructure for resilience. The fully interoperable architecture creates strong incentives for innovation and transparency, though at the cost of increased coordination complexity and a larger security surface area from proliferated connections.

The ESB models (Options 2 and 3) present a different trade-off profile. They reduce potential entry costs in the future and improve auditability through centralised infrastructure, with the Central ESB variant achieving particularly strong transparency outcomes. However, both ESB models introduce single points of failure and require additional regulatory constraints that may limit adaptability, with Option 2 providing minimal benefit unless multiple additional ELNOs enter the market.

Models that introduce monopoly elements, whether wholesale-retail separation (Option 4), partial competition through Practitioner-choice (Option 5), or full monopoly regulation (Option 7) are expected to deliver fewer benefits overall. They limit innovation incentives and competition dynamics, though they do offer simpler coordination and, in the monopoly case, minimal security exposure. Practitioner-choice (Option 5) is particularly limited because competition is confined to non-bank elements of transactions, substantially reducing potential price benefits whilst maintaining most of the access barriers of the status quo.

After a summary of the quantified benefits from the CBA which inform the MCA analysis, the sections below detail how each option performs respectively against the three benefit criteria.

4.1 Summary of quantified benefits

This analysis quantified three types of benefits, falling under two of the three benefit criteria:

1. Consumer price savings
2. Participant outcomes
3. Market resilience.

Table 8 shows estimates that Option 6 would deliver the highest total quantified benefits at $102 million in present value terms, with options 1, 2, and 3 delivering equivalent benefits at $101 million. The additional benefits in Option 6 are due to the Practitioner-choice market model creating competition benefits slightly earlier than options 1 to 3.

In contrast, Option 5 (Practitioner-choice) produces the lowest estimated total benefit ($35 million), with smaller benefits estimated across the three types of benefits.

The largest benefit type estimated across the options is consumer price savings ($66–67million), followed by improved participant outcomes ($9–34 million). Market resilience improvements are estimated to be the smallest of the three estimated benefits ($0–1 million).

Note that all benefits are measured and scored relative to the status quo, which scores zero by definition.

Table 8 | Total estimated present value benefits by option over FY2026-46 ($m, 2025)

Option	Price savings	Participant outcomes	Market resilience	Total
Option 1: Direct connect	66	34	1	**101**
Option 2: ESB between ELNOs via Direct connect	66	34	1	**101**
Option 3: Central ESB via Direct connect	66	34	1	**101**
Option 4: Hub-ELNO	52	9	1	**61**
Option 5: Practitioner-choice	25	10		**35**
Option 6: Direct connect via Practitioner-choice	67	34	1	**102**
Option 7: Monopoly regulation	57		1	**58**

4.2 Consumer price savings

The consumer price savings benefit estimates the lower prices that consumers would be expected to experience as ELNO productivity improves as a result of competition or monopoly regulation. Under monopoly regulation models, formal price controls create consumer price savings and require productivity improvements to be achieved by the ELNO, resulting in prices that more closely reflect efficient costs.

The 2019 IPART Review found that, although the current eConveyancing market was highly concentrated with PEXA holding a majority of the market share, prices were assessed as being consistent with efficient cost recovery. IPART's modelling concluded that PEXA's fees were reasonable across all tested scenarios and comparable to the costs of traditional paper-based conveyancing prior to the mandate. Notwithstanding these findings, given the nature of digital technology solutions with high upfront costs and lower ongoing costs, it is assumed that efficiency gains due to increased competition due to interoperability would be achievable over time as eConveyancing matures and the volume of transactions continues to grow. For further context on the challenges of assessing efficient ELNO expenditure, which are relevant to estimates of consumer price savings, see Appendix B.

Consumer price savings are assessed by considering both the estimated quantified benefit and a qualitative assessment of possible future price savings. Consumer price saving benefits are measured and scored relative to the status quo, in which it is assumed that prices will continue to rise in line with CPI over the 20-year analysis period. All options for reform are expected to deliver additional consumer price savings over the status quo. The status quo scores 0 for consumer price savings.

4.2.1 Summary of quantified benefits across options

Table 9 presents the estimated 20-year consumer price savings (in present values) across options, which range from $24.7 million to $67.0 million over FY2026–46 depending on the option. Option 6 (Direct connect via Practitioner-choice) delivers the highest estimated benefit ($67.0 million), closely followed by Options 1,2 and 3, each at $66.2 million. Option 5 (Practitioner-choice) provides the lowest estimated benefit ($24.7 million), reflecting the expected limited price savings benefits for consumers. Benefit profiles show that benefits for all options are estimated to increase gradually over time, with differences in scale largely determined by the extent of competition and regulation enabled under each option.

Table 9 | Consumer price savings (PV) and benefit profile over time by option FY2026-46 ($m, 2025)

Option	PV ($m)	FY26 to FY46
Option 1: Direct connect	66.2	
Option 2: ESB between ELNOs via direct connect	66.2	
Option 3: Central ESB via direct connect	66.2	
Option 4: Hub-ELNO	52.2	
Option 5: Practitioner-choice	24.7	
Option 6: Direct connect via practitioner-choice	67.0	
Option 7: Monopoly regulation	57.3	

The outlier in terms of the scale of price benefits is the Practitioner-choice option, driven by the limited section of the market (non-bank elements of transactions) in which participating ELNOs would be enabled to compete.

4.2.2 Options 1-3: Direct connect, ESB between ELNOs and Central ESB

Options 1, 2, and 3 all score 3 for consumer price savings, driven largely by the transfer of market share to the competitor ELNO due to its 7.5 per cent lower prices.[52]

This creates estimated consumer price benefits of $66.2 million in present value terms for each of the models over the 20-year assessment period. The benefits are estimated to be the same across these options because the same market competition and price assumptions have been applied.

The cost efficiencies of both ESB models would depend significantly on the number of ELNOs expected in a competitive market. However, in both cases relatively higher market efficiency would be likely with competition keeping prices down and the ESB providing a stable infrastructure layer with cost-based charges.

The two ESB models are differentiated by a higher cost of market entry for entrants in the ESB between ELNOs model (see 4.4) since they must build multiple infrastructure connections rather than one central connection. It is expected this would marginally reduce competition and increase costs. Note that while this is reflected in the score for this criterion, it is not reflected in the implementation or ongoing costs because we assume that only two ELNOs are competing in the market, and that both of these complete all connections under Direct connect.

4.2.3 Option 4: Hub-ELNO

Option 4 scores 2 for consumer price savings, with relatively fewer price benefits as a result of an access regime being implemented for prices charged by the Hub-ELNO.

These benefits are based on the monopoly regulation assumptions. Under this model, competition is confined to the retail layer, its lower barriers to entry are expected to encourage a greater number of retail ELNOs to enter the market.[53]

4.2.4 Option 5: Practitioner-choice

Option 5 scores 1 for consumer price savings, in large part because competition is constrained to non-bank elements of transactions, and no additional access regime is setup to reduce the prices of firms with more market power.

[52] 7.5 per cent lower price is observed through historical ELNO price data, this is illustrative of future potential competitive pricing.
[53] AECOM, Estimating costs of electronic conveyancing services in NSW for IPART, November 2019, p 42.

4.2.5 Option 6: Direct connect via Practitioner-choice

Option 6 scores 3 for consumer price savings for the same reasons as outlined above for Options 1-3, as it would deliver the highest estimated benefit over the analysis timeframe. This is because it would see price saving benefits earlier than Option 1-3.

4.2.6 Option 7: Monopoly regulation

Option 7 scores 2 for consumer price savings.

The estimated price savings for this option are driven by the implementation of an access regime, and an expected reduction in the prices charged by the monopolist by an illustrative amount compared with the status quo. A monopoly model can achieve higher-cost efficiency if supported by an appropriate regulatory framework, including rigorous cost-based price setting, transparency in cost allocation, and periodic independent reviews. Strong oversight would be essential to ensure that prices reflect efficient costs rather than monopoly rents, while still allowing the provider a fair return and resources to maintain quality and invest in service improvements.

4.2.7 Summary of criteria scores across options

Table 10 shows that Options 1, 2, 3, and 6 receive the highest scores of 3, indicating the potential for the greatest consumer price savings benefits among the options. Option 5 (Practitioner-choice) receives the lowest score of 1, reflecting the smallest expected consumer price savings, while Options 4 and 7 score 2, represent moderate benefits.

Table 10 | Consumer price savings benefit scores for options

	Status Quo	Option 1: Direct connect	Option 2: ESB between ELNOs via Direct connect	Option 3: Central ESB via Direct connect	Option 4: Hub-ELNO	Option 5: Practitioner-choice	Option 6: Direct connect via Practitioner-choice	Option 7: Monopoly regulation
MCA Score	0	3	3	3	2	1	3	2

4.3 Service quality

Service quality considers the capacity of the eConveyancing market as a whole to deliver reliable, secure services that meet participant needs and evolve over time. Participant outcomes, innovation, resilience and security, are considered.

Options which enhance market competition (Options 1, 2, and 3) are expected to deliver the strongest participant outcomes, with productivity improvements from enhanced user interfaces and reduced transaction friction.

These models also incentivise innovation by introducing competition, though the scope for innovation becomes increasingly constrained where interoperability standards and ESB architectures impose technical restrictions.

Direct connect (Option 1) is expected to improve market resilience because infrastructure is better distributed across ELNOs, eliminating single points of failure nationally - though this comes at a security cost, as Direct connections multiply both transit risks and data-at-rest exposure through duplicated workspace storage across platforms.

The Hub-ELNO and Practitioner-choice variants (Options 4 and 5) may deliver more modest participant improvements and face similar innovation constraints, with their retail layers incentivised to compete but wholesale or responsible ELNO layers of infrastructure remaining either monopolistic or uncompetitive. Their centralised architectures improve transit security by reducing connection proliferation but introduce single points of failure that undermine system resilience.

A monopoly regulated market (Option 7), with no competition, would see less innovation, though it does achieve the best security outcomes by minimising data storage and transmission across organisational boundaries - a benefit that comes at the expense of cementing a centralised point of failure for the national property system.

The status Quo scores 0 for service quality as the baseline. The effective dominance of one ELNO means that the market structure provides limited incentive for innovation that is experienced by the entire market, particularly with price caps in place and with strong network effects. The current market has high adaptability in operational terms because PEXA's dominant position allows it to implement changes quickly and uniformly across the system.

4.3.1 Summary of quantified benefits across options

The analysis quantified two benefits relating to service quality: participant outcomes (Table 11) and resilience benefits (Table 12). Benefit profiles show that benefits for all competitive options increases gradually over time along with competitor market shares.

Table 11 presents the estimated 20-year service quality benefits (in present values) across options, which range from $0 million to $34.1 million depending on the option. Option 6 (Direct connect via Practitioner-choice) delivers the highest estimated benefit ($34.1 million), closely followed by Option 1,2, and 3, each at $33.8 million). While the market share change driving the outcomes is similar in Option 5 (Practitioner-choice), the benefit only applies to transaction types for which competition exists, reducing the time saving benefit for subscribers. Bank transactions remain uncompetitive, meaning that the reduced benefits to subscribers in Option 5 (Practitioner-choice) largely affects the banks. Option 7 (Monopoly regulation) sees no benefit as a result of no competition.

Table 11 | Participant outcomes (PV) and benefit profile over time by option FY2026-46 ($m, 2025)

Option	PV ($m)	FY26 to FY46
Option 1: Direct connect	33.8	
Option 2: ESB between ELNOs via direct connect	33.8	
Option 3: Central ESB via direct connect	33.8	
Option 4: Hub-ELNO	8.6	
Option 5: Practitioner-choice	10.2	
Option 6: Direct connect via practitioner-choice	34.1	
Option 7: Monopoly regulation		

Table 12 presents the estimated 20-year resilience benefits (in present values) across options, which range from $0 million to $1.1 million depending on the option. Option 7 (Monopoly regulation) delivers the highest estimated benefit ($1.1 million), followed by Option 4 (Hub-ELNO) at $0.7 million, which is closely followed by Option 1,2,3, and 6 at $0.6 million. Option 5 (Practitioner choice) sees zero benefits because bank elements of transactions are not competitive, and greater regulatory capacity is also not introduced.

Table 12 | Resilience benefits (PV) and benefit profile over time by option FY2026-46 ($m, 2025)

Option	PV ($m)	FY26 to FY46
Option 1: Direct connect	0.6	
Option 2: ESB between ELNOs via direct connect	0.6	
Option 3: Central ESB via direct connect	0.6	
Option 4: Hub-ELNO	0.7	
Option 5: Practitioner-choice		
Option 6: Direct connect via practitioner-choice	0.6	
Option 7: Monopoly regulation	1.1	

The relative size of quantified resilience benefits is low, because events attributable to ELNO error are relatively rare at a fraction of the 0.05 per cent of transactions which are delayed, and the cost of a one-day delay, is relatively minor, averaging $260 but depending on the jurisdiction. While more serious delays could have disproportionately larger costs, due to the difficulty of measuring serious but unlikely events, this has not been quantified. The service quality assessment includes consideration of single points of failure including the market share and parts of the transaction for which that single point of failure may be critical.

4.3.2 Option 1: Direct connect

Option 1 scores 3 for service quality, the highest of all options.

The fully distributed architecture of Direct connect would deliver strong participant outcomes through competitive innovation whilst eliminating national single points of failure. However, the potential for a large number of Direct connections would create an increased surface area and therefore risk to data in transit, which is compounded by data being duplicated across ELNOs for interoperable transactions.[54]

4.3.3 Option 2: ESB between ELNOs via Direct connect

Option 2 scores 2 for service quality.

The ESB would have reduced connection complexity compared to Option 1, improving transit security, but would introduce a single point of failure for interoperability that would undermine resilience. Innovation incentives would also be strong through competition, though the interoperability architecture would constrain the scope for differentiation.

The ESB between ELNOs model would reduce switching costs, encourage service differentiation and lower the barrier to entry for new entrants. Innovation would likely to be low in the short to medium term, however if more ELNOs enter the market, competition would likely increase and ELNOs would be incentivised to innvoate. The ESB between ELNOs model would be expected to have similar participant outcomes to the Direct connect model, with slightly more potential for more competition in the market from reduced ELNO interconnection costs once the number of ELNOs increases beyond three.

An ESB between ELNOs would also offer high adaptability for horizontal connections. Because all ELNOs would be linked through the ESB, changes affecting interoperability between them could be implemented quickly and uniformly. However, vertical changes involving institutional participants would be more complex. Each ELNO would maintain its own Direct connections to financial institutions, land registries, and state revenue offices, making adaptability across these interfaces slower and more resource intensive.

[54] This is in line with the Kinetic IT report which found that the status quo and Hub Service models had roughly similar security profiles, and Direct connect differed with a lower score on repudiation, and a slightly better score for denial of service and elevation of privilege risks. Broadly, this assessment appears to be based on the topology of the network, with distributed networks improving resilience and increasing the surface area for attacks, and centralised networks possessing a single point of failure but a reduced surface area for attacks.

4.3.4 Option 3: Central ESB via Direct connect

Option 3 scores 2 for service quality.

The centralised bus would improve transit security by consolidating infrastructure connections but create a significant single point of failure, reducing resilience. Competitive dynamics would still drive innovation, though the centralised architecture would limit the scope for infrastructure-level differentiation.

Central ESB would provide a single technical integration layer that all ELNOs and institutional participants connect to. The result would be simpler processes, less duplication, and more seamless transactions for all user groups, however the Central ESB could be expected to innovate more slowly than private infrastructure, limiting some elements of service quality over time.

It would lower technical barriers for new entrants and enable broader participation, but in the short to medium term competition would still be constrained by PEXA's dominance. Sympli and other new entrants, once connected, would have strong incentives to innovate and compete on user experience, efficiency and functionality.

Adaptability would be strong because changes to interoperability standards or core infrastructure could be implemented centrally and applied across all connected ELNOs. While this would allow for faster execution than a Direct connect model, it would still require coordination with multiple ELNOs for broader service or operational changes, making it less adaptable than a single-ELNO monopoly.

4.3.5 Option 4: Hub-ELNO

Option 4 scores 1 for service quality.

The wholesale-retail split would be expected to deliver modest participant improvements but could constrain innovation because the wholesale layer would remain monopolistic. While retail-level competition between ELNOs could still encourage some service enhancements, innovation in the hub's functionality and processes would likely be limited unless driven by regulation or government ownership.

The hub architecture would create a critical single point of failure whilst providing better transit security than fully distributed models.

Centralised control could deliver high adaptability, particularly when changes affect core interoperability or technical standards, as they can be applied uniformly through the hub. The degree of adaptability would depend on the governance arrangements and decision-making authority vested in the hub operator.

4.3.6 Option 5: Practitioner-choice

Option 5 scores 1 for service quality.

Retail competition would provide some innovation incentive, but the underlying monopolistic infrastructure would limit overall service quality gains. The architecture would improve on Option 4 slightly by allowing the participating ELNO to develop independent infrastructure, though a single point of failure would remain for most transactions.

Under this model, practitioners would gain flexibility to move between networks for some transactions, improving choice. However, this competition is limited to non-bank elements of transactions.

The innovation potential in a Practitioner-choice model would depend on the regulatory framework. If agreements between PEXA and Sympli make switching easy and prevent anti-competitive conduct, competition could drive service differentiation and technology upgrades. Without such safeguards, innovation incentives could be weak.

4.3.7 Option 6: Direct connect via Practitioner-choice

Option 6 scores 3 for service quality. This is in line with the score for Option 1 (Direct connect).

4.3.8 Option 7: Monopoly regulation

Option 7 scores 1 for service quality.

Enhanced market regulation would eliminate competitive pressure, removing both innovation incentive and constraining scope for service improvements. Whilst the monopoly structure would likely deliver the best security outcomes by minimising data proliferation, it would also create a national single point of failure. A monopoly regulated market could be highly adaptable because a single ELNO can implement market-wide changes quickly without the need for inter-ELNO coordination.

Participant outcomes in a Monopoly Regulation model would depend heavily on the regulatory framework and how service quality, usability, and choice are safeguarded. It is assumed that while reasonable levels of service quality and service provision could be maintained, the lack of choice and slower innovation, even under an effective regulatory regime, would limit the improvement in outcomes over time.

A monopoly model is expected to offer minimal incentive to innovate, regardless of regulation. Without competitive pressure, service improvements are likely to be infrequent, reactive, and compliance-driven rather than focused on enhancing user experience or efficiency.

4.3.9 Summary of criteria scores across options

Table 13 shows that Option 1 (Direct connect) achieves the highest service quality score of 3, indicating the strongest expected improvement in service quality. Options 2, 3, and 6 follow with scores of 2, representing moderate gains in service quality. Options 4, 5, and 7 receive the lowest score of 1, suggesting minimal improvement relative to the status quo.

Table 13 | Service quality scores for options

	Status Quo	Option 1: Direct connect	Option 2: ESB between ELNOs via Direct connect	Option 3: Central ESB via Direct connect	Option 4: Hub-ELNO	Option 5: Practitioner-choice	Option 6: Direct connect via Practitioner-choice	Option 7: Monopoly regulation
MCA Scores	0	3	2	2	1	1	3	1

4.4 Market structure and competition

Market structure and competition assess the extent to which an option enables new entrants, facilitates market adaptation including the ability and need to coordinate the market to make further changes where needed, and provides transparency for participants and regulators.

For all options, the current market structure serves as the baseline, as described in section 2.1.1.

Options with full interoperability between ELNOs (Options 1, 2, 3, and 6) would largely eliminate network effects and reduce barriers to entry for new competitors, though Direct connect models impose higher fixed costs through multiple connection requirements. The central ESB model (Option 3) performs strongest overall, combining low entry costs and market transparency at the cost of resilience and creating a single point of failure.

Monopoly regulation (Option 7) would deliver efficient coordination through a single regulated entity but fail to reduce barriers to entry.

4.4.1 Option 1: Direct connect

Option 1 scores 3 for market structure and competition.

Direct connect would likely eliminate network effects by enabling full interoperability, allowing ELNOs to compete on equal footing once they establish the necessary connections. However, the model requires independent bodies to coordinate on technical standards without centralised facilitation, which substantially complicates adaptability to future market or regulatory changes. The distributed nature of the market would deliver strong information symmetry and pricing transparency through competition.

4.4.2 Option 2: ESB between ELNOs via Direct connect

Option 2 scores 2 for market structure and competition.

The ESB between ELNOs model would reduce the cost of market entry by allowing bilateral connection requirements between new ELNOs and existing ELNOs. However, new entrants would still be required to have separate integrations with institutional participants. This arrangement would provide moderate benefit until three or more ELNOs operate in the market, in which case it would begin to significantly reduce the number of connections needed compared with other interoperability models.

This option would provide some coordination benefits but also introduce additional regulatory complexity that would constrain market flexibility, and the ESB could reduce firms' freedom to adapt independently. The model's adaptability would suffer from requiring both ELNO agreement on standards and ESB governance, creating dual coordination challenges.

4.4.3 Option 3: Central ESB via Direct connect

Option 3 scores 3 for market structure and competition.

The central ESB model would achieve the strongest performance on both access and transparency by routing all connections through the central hub, thereby minimising infrastructure costs for new entrants and allowing standards to be established and enforced across the system. The centralised architecture would enable comprehensive data auditing, giving regulators visibility. Like other interoperability models, it would face some coordination challenges, as independent ELNOs must still agree on standards and changes without a single controlling entity.

A Central ESB could minimise upfront integration costs in much the same way as a Hub-ELNO. New entrants connect once to the ESB, which then facilitates interoperability with all other ELNOs and institutional participants. This single integration requirement would reduce the technical and administrative effort for onboarding, lowering capital expenditure for entry, and helping mitigate network-effect barriers.

These strengths would be partially offset by reduced adaptability, as the centralised infrastructure would limit what can be achieved outside the regulatory framework and require coordinated standard-setting amongst competing ELNOs. On the other hand, it would likely deliver improved transparency.

4.4.4 Option 4: Hub-ELNO

Option 4 scores 1 for market structure and competition.

The Hub-ELNO structure would simplify retail entry by reducing it to a single connection point, but would confine competitive dynamics to the retail layer whilst preserving monopoly control of core infrastructure. This wholesale-retail split would likely create significant information asymmetries, with the hub monopolist holding substantially more market intelligence than retailers or subscribers. Whilst the single hub would improve coordination relative to distributed models, the concentration of information and control over pricing mechanisms would undermine market transparency despite the increased regulatory oversight from the implementation of increased monopoly regulation.

4.4.5 Option 5: Practitioner-choice

Option 5 scores 1 for market structure and competition.

Practitioner-choice would reduce network effects for non-bank elements of transactions but preserve the responsible ELNO's information advantages and likely market dominance. The model would achieve

moderate improvements in coordination and regulatory flexibility compared to fully distributed approaches, though it would still require negotiation on interoperability standards. Access would remain constrained by the need for bilateral connections and the partial nature of competition, limiting the transparency gains that would emerge from broader market contestability.

In a Practitioner-choice model, PEXA would be incentivised to limit the disclosure of market information where this allowed it to profit from information asymmetries, potentially disadvantaging retail ELNOs and practitioners who lack access to comparable data. Here, information asymmetry refers to the difference in information between a monopolist who sees more of the market, and competitors with smaller market shares who have less information, and therefore sometimes less market power.

4.4.6 Option 6: Direct connect via Practitioner-choice

Option 6 scores 3 for market structure and competition, in line with the Direct connect model and for the same reasons.

4.4.7 Option 7: Monopoly regulation

Option 7 scores 0 for market structure and competition.

Monopoly regulation would achieve excellent coordination through centralised decision-making and provide strong audit capabilities but would likely not support market access and adaptability. The regulatory framework required to oversee a monopolist could create substantial barriers for any theoretical future entrants and could limit the monopolist's flexibility to respond to technological or market changes. The concentration of information within the monopolist would create the same information asymmetry problems, where the monopolist has significantly better information about the market than other participants, as the status quo, with regulatory oversight providing only partial mitigation.

4.4.8 Summary of criteria scores across options

The summary table below shows that Options 1 (Direct connect), Option 3 (Central ESB) and 6 (Direct connect via Practitioner-choice) achieve the highest market structure and competition scores of 3, indicating they are expected to promote the most competitive market outcomes. Option 2 (ESB between ELNOs) follows with a score of 2, reflecting a moderate improvement in competition. Options 4, and 5 each score 1, indicating limited positive impact, while Option 7 (Monopoly regulation) scores 0, indicating no improvement over the status quo.

Table 14 | Market structure and competition scores for options

	Status Quo	Option 1: Direct connect	Option 2: ESB between ELNOs via Direct connect	Option 3: Central ESB via Direct connect	Option 4: Hub-ELNO	Option 5: Practitioner-choice	Option 6: Direct connect via Practitioner-choice	Option 7: Monopoly regulation
MCA Score	0	3	2	3	1	1	3	0

5 Costs of market reform options

Market reform options impose varying costs and risks on stakeholders across the eConveyancing market including the complexity of implementing the reform. Two criteria form the basis for assessing market costs:

- implementation and ongoing costs of reform
- implementation complexity.

Note that all costs are measured and scored relative to the status quo, which scores zero by definition.

5.1 Summary of quantified costs

Comparing across the total quantified costs for all stakeholders, Practitioner-choice (Option 5) is the lowest-cost option with monopoly regulation the second lowest-cost option. These lower costs are driven by fewer estimated costs for some major banks, which are significant in models where interoperability requires significant additional technical integration and operational change to maintain functional equivalence. While monopoly regulation would not require material ELNO expenditure, this is offset by the cost to setup and run an access-regime regulatory capability.

Practitioner-choice and monopoly regulation are the lowest cost options with present values of $42 million and $50 million over the next 20 years respectively. Other interoperability options incur significant upfront costs, with the highest cost option being a Central ESB with a 20-year present value of $151 million. Building new infrastructure connections and making operational changes constitute the majority of the estimated upfront costs. Table 15 provides the total 20-year cost for all options.

Table 15 | Total quantified costs by option over FY2026-46 ($m, present value 2025)

Option	Upfront cost PV	Ongoing cost PV	Total cost PV
Option 1: Direct connect	42	44	**85**
Option 2: ESB between ELNOs via Direct connect	52	71	**122**
Option 3: Central ESB via Direct connect	79	72	**151**
Option 4: Hub-ELNO	23	61	**83**
Option 5: Practitioner-choice	22	20	**42**
Option 6: Direct connect via Practitioner-choice	47	44	**91**
Option 7: Monopoly regulation	3	47	**50**

As shown in Table 16, and detailed further in sections 5.2.1 through section 5.2.6 (which provide more detail on each option) banks, ELNO, and regulators incur the most significant costs over the 20-year period. Importantly, options with centralised infrastructure connections such as Hub-ELNO and monopoly regulation incur significantly lower costs through avoiding technical integrations.

Table 16 | Quantified costs for each stakeholder group by option FY2026-46 ($m, present value 2025)[55]

	Subscribers	ELNOs	Banks	LRs	SROs	Regulators	Government	Total
Option 1: Direct connect	8	26	43	1	3	5		**85**
Option 2: ESB between ELNOs via Direct connect	8	27	43	1	5	5	33	**122**
Option 3: Central ESB via Direct connect	8	34	58	4	5	7	35	**151**
Option 4: Hub-ELNO	7	24		0	(1)[56]	53		**83**
Option 5: Practitioner-choice	8	25	4	0		4		**42**
Option 6: Direct connect via Practitioner-choice	8	27	46	1	3	5		**91**
Option 7: Monopoly regulation					(1)	51		**50**

5.2 Implementation and ongoing costs of reform

5.2.1 Option 1: Direct connect

The analysis estimated the present value of Option 1 costs at $85 million over the next 20 years.

It is estimated that the costs for the Direct connect option are highest for ELNOs and banks, with banks expected to incur the largest costs. This is a result of the operational changes necessary for some banks to accommodate a second independent infrastructure connection with integrations equivalent to their existing integrations with PEXA. Subscribers are expected to incur more significant switching costs in initial years as market share is more rapidly gained.

Table 17 | Total quantified costs and cost profile over time by stakeholder group for Option 1, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	8	
ELNOs	26	
Banks	43	
Land Registries	1	
State Revenue Office (SRO)	3	
Regulators	5	

Direct connect is estimated to be relatively central in terms of total costs relative to other options, with most borne by the private sector and by banks in particular. It is nonetheless expected to be less costly than the ESB models, which require similar infrastructure build out as well as a government built ESB.

This option receives a criteria score of -2, as it sits between other options in terms of total quantified costs.

[55] Blank cells in all result tables indicate that the cost is zero or not applicable, zeroes represent small costs that have been rounded down, and values in brackets represent negative amounts.
[56] Negative costs (counted as benefits) show that a cost under the status quo is avoided. See the sub-section below for Option 4 and Option 7 for more information.

5.2.2 Option 2: ESB between ELNOs via Direct connect

The analysis estimated the present value of Option 2 costs at $122 million over the next 20 years.

Estimated costs for both banks and ELNOs are relatively similar the Direct connect option, with additional infrastructure connections, operational changes, and financial rail setup still required. On top of this, the government faces a PV cost of $32.7 million over the next 20 years to setup the ESB between ELNOs to facilitate interoperable transactions.

Table 18 | Total quantified costs and cost profile over time by stakeholder group for Option 2, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	8	
ELNOs	27	
Banks	43	
Land Registries	1	
State Revenue Office (SRO)	5	
Regulators	5	
Government	33	

These costs make the ESB between ELNOs model the second most expensive option for reform.

The option receives a criteria score of -3, reflecting the second highest total cost of reform.

5.2.3 Option 3: Central ESB via Direct connect

The analysis estimated the present value of Option 3 costs at $151 million over the next 20 years.

Central ESB via Direct connect is estimated to incur significant upfront build costs for both ELNOs, banks, and government. For ELNOs and banks, these are driven by both intermediate costs to implement Direct connect and then additional build costs for banks to integrate with the Central ESB. Land registries, state revenue offices, and other stakeholders with integration and testing costs are also expected to incur these again to integrate with the Central ESB.

Option 3 is estimated to be the highest cost, reflecting that both Direct connect and Central ESB market models require independent infrastructure to be built.

Table 19 | Total quantified costs and cost profile over time by stakeholder group for Option 3, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	8	
ELNOs	34	
Banks	58	
Land Registries	4	
State Revenue Office (SRO)	5	
Regulators	7	
Government	35	

This option receives a criteria score -4, reflecting the highest total cost of reform.

5.2.4 Option 4: Hub-ELNO

The analysis estimated the present value of Option 4's costs would be $83 million over the next 20 years.

These would be driven primarily by the cost to setup and then operate an appropriate regulator to enforce a wholesale access regime for the market. While ELNOs incur smaller costs than under other options, low costs for banks drive the overall cost of this option down significantly. Hub-ELNO is estimated to be slightly more expensive than Direct connect and more expensive than Monopoly regulation. This is because it combines the cost of setting up a monopoly regulator with some interoperability costs.

There would be no material costs for banks, as it is effectively a model where existing infrastructure is retained.

Notably, the option also estimates some slightly negative costs (counted as a benefit) for state revenue offices, though they are balanced by additional interoperability testing costs. This occurs because under the Hub-ELNO option, connections which are still yet to be built under the status quo can be avoided completely for one ELNO, resulting in a small benefit to the market.

Table 20 | Total quantified costs and cost profile over time by stakeholder group for Option 4, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	7.5	
ELNOs	24.3	
Banks	0	
Land Registries	0.2	
State Revenue Office (SRO)	(1.1)	
Regulators	52.5	

This option receives a criteria score of -2, reflecting the substantial estimated cost, and placing the model roughly on par with Direct connect costs.

5.2.5 Option 5: Practitioner-choice

The analysis estimated the present value of Option 5's costs at $42 million over the next 20 years.

Practitioner-choice is the lowest cost model, nearly $10 million less than monopoly regulation, reflecting that it has been designed to be an intermediate step. ELNOs ($25 million) and Banks ($4 million) face the most significant costs to implement interoperability while land registries and SROs are assumed to have costs near to zero. Subscriber switching costs, with an estimated present value of $8 million, are also present in other options, but become material in relative terms at the low total cost estimated for Practitioner-choice.

Notably, the option also estimates some slightly negative costs (counted as a benefit) for SROs. This occurs because under the Practitioner-choice option, connections which are still yet to be built under the status quo can be avoided completely, creating a benefit if Option 5 is pursued.

The option receives a criteria score of -1, reflecting that costs are low compared with other options, but are nonetheless costs when compared with the status quo.

Table 21 | Total quantified costs and cost profile over time by stakeholder group for Option 5, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	8	
ELNOs	25	
Banks	4	
Land Registries	0	
State Revenue Office (SRO)	0	
Regulators	4	

5.2.6 Option 6: Direct connect via Practitioner-choice

The analysis estimated the present value of Option 6's costs at $91 million over the next 20 years. The drivers for costs are largely similar to Option 5 and Option 1. Notably, this option is estimated to be marginally more expensive than Direct connect because some costs are incurred earlier by Practitioner-choice . Nonetheless, it remains a relatively central option in terms of present value costs.

The option receives a criteria score of -2, reflecting the CBA cost directly.

Table 22 | Total quantified costs and cost profile over time by stakeholder group for Option 6, FY2026-46 ($m, present value 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	8	
ELNOs	27	
Banks	46	
Land Registries	1	
State Revenue Office (SRO)	3	
Regulators	5	

5.2.7 Option 7: Monopoly regulation

The analysis estimated the present value of Option 7's costs at $50 million over the next 20 years.

Costs for the monopoly regulation model are simply constituted of the cost to government to establish and run a full monopoly regulation model. This is expected to cost around $8.9 million to setup, with costs of $4.3 million ongoing annually. There are some immaterial averted costs for state revenue offices.

This is amongst the lower cost options and is the cheapest option to implement where the model is designed to be an ongoing model. The option receives a criteria score of -1, directly reflecting the lower estimated total cost.

Table 23 | Total quantified costs (PV) and cost profile over time by stakeholder group for Option 7, FY2026-46 ($m, 2025)

Stakeholders	PV ($m)	FY26 to FY46
Subscribers	0	
ELNOs	0	
Banks	0	
Land Registries	0	
State Revenue Office (SRO)	(1)	
Regulators	51	

5.2.8 Summary of criteria score across options

Table 24 shows that Option 3 (Central ESB) receives the lowest criteria score of -4, reflecting the highest total cost among all options. In contrast, Option 5 (Practitioner-choice) and Option 7 (Monopoly regulation) achieve the highest scores of -1, indicating they are estimated to be the least costly options.

Table 24 | Implementation and ongoing cost scores for options

	Status Quo	Option 1: Direct connect	Option 2: ESB between ELNOs via Direct connect	Option 3: Central ESB via Direct connect	Option 4: Hub-ELNO	Option 5: Practitioner-choice	Option 6: Direct connect via Practitioner-choice	Option 7: Monopoly regulation
MCA Score	0	-2	-3	-4	-2	-1	-2	-1

5.3 Implementation complexity

Implementation complexity varies substantially across the options, driven primarily by technical and scope risk, implementation timeframes, and the scale of expected stakeholder resistance.

The Direct connect option benefits from manageable technical scope, though it faces significant resistance from key stakeholders concerned about their infrastructure investments.

The ESB-based options present greater challenges. The Central ESB model requires the longest implementation timeframe and introduces the highest technical risk through the creation of new infrastructure while potentially stranding existing investments in similar infrastructure. The ESB-between-ELNOs is expected to be similar but reduce this difficulty by avoiding the creation or stranding of infrastructure connections

The Hub-ELNO model is expected to present the most severe implementation challenges overall, and likely the strongest stakeholder resistance.

Practitioner-choice options reduce implementation difficulty compared to mandated interoperability, with lower technical risk and shorter timeframes, though it is still expected to face some stakeholder resistance as the details of the design are agreed. Monopoly regulation is expected to be the least complex technical implementation because no technical build is a part of achieving the model, and would be expected to face limited stakeholder resistance in a one ELNO market.

Assessments for each option in terms of implementation complexity are provided in the sections below.

5.3.1 Option 1: Direct connect

Option 1 scores -2 for implementation complexity.

The option benefits from manageable technical scope, though it requires bilateral integrations between ELNOs and faces significant resistance from PEXA and institutional participants. The moderate implementation timeframe keeps the overall difficulty contained.

5.3.2 Option 2: ESB between ELNOs via Direct connect

Option 2 scores -3 for implementation complexity.

Creating a new government technical agency to manage the ESB introduces both technical complexity and coordination challenges across states. The longer timeframe and stakeholder resistance, similar to Direct connect, contributes to higher implementation difficulty.

5.3.3 Option 3: Central ESB via Direct connect

Option 3 receives a score of -4 for implementation complexity.

This option presents the highest technical and scope risk, requiring new infrastructure while potentially stranding existing investments. The longest implementation timeframe and need for interstate coordination compound these challenges, though stakeholder resistance is comparable to other Direct connect models.

5.3.4 Option 4: Hub-ELNO

Option 4 scores -4 for implementation complexity.

The option faces severe implementation complexity due to potential vertical separation of PEXA and access regime requirements, combined with the strongest stakeholder resistance from both major ELNOs. These factors outweigh the benefits of using an existing technical body and a moderate implementation timeframe.

It is worth noting that a previous CBA commissioned by ARNECC into eConveyancing also dismissed this model on the basis of high expected costs and uncertainty around the implementation pathway.

5.3.5 Option 5: Practitioner-choice

Option 5 scores -1 for implementation complexity.

The progressive implementation approach reduces technical risk and shortens the timeframe relative to the direct model. However, likely continued stakeholder resistance, though limited to ELNOs rather than banks, means that implementation is not scored in line with the status quo.

5.3.6 Option 6: Direct connect via Practitioner-choice

Option 6 scores -3 for Implementation complexity.

Option 6 (Direct connect via Practitioner-choice) combines elements from both constituent reforms, resulting in moderate implementation difficulty. The three-year timeframe reflects sequential implementation of both reforms. Technical risk encompasses ELNO system changes and infrastructure development, though Practitioner-choice enables progressive rollout that somewhat mitigates these challenges. This option receives a lower score than Option 1 (Direct connect) because the staged approach creates two development phases to manage and agree to, even without adding duplicated technical development, and increasing the scope for issues in reaching the completion of Direct connect.

5.3.7 Option 7: Monopoly regulation

Option 7 scores -1 for implementation complexity.

While the option requires minimal technical changes, it demands substantial administrative effort to establish a comprehensive access regime similar to those in telecommunications and electricity markets - the ACCC noted such regulation can be "complex, timely and costly,"[57] requiring determination of pricing mechanisms, compliance frameworks, and dispute resolution processes. Some difficulty also arises from risks around key decision makers and uncertainty about the implementing body.

Nonetheless, the option is technically simple and requires less cooperation from key stakeholders to be successful than more technically involved options.

5.3.8 Summary of criteria scores across options

Table 25 shows that Options 3 and 4 receive the lowest criteria scores of -4, indicating the highest implementation and ongoing costs among all options. Option 5 (Practitioner-choice) and Option 7 (Monopoly regulation) achieve the highest scores of -1, indicating the lowest relative costs, though all options score below zero.

Table 25 | Implementation complexity scores for options

	Status Quo	Option 1: Direct connect	Option 2: ESB between ELNOs via Direct connect	Option 3: Central ESB via Direct connect	Option 4: Hub-ELNO	Option 5: Practitioner-choice	Option 6: Direct connect via Practitioner-choice	Option 7: Monopoly regulation
MCA Score	0	-2	-3	-4	-4	-1	-3	-1

[57] ACCC, Report on e-conveyancing market reform, December 2019.

6 Assessment of options

This section brings together the cost and benefit analyses in the previous chapters to assess the net benefits and consider the overall quantified and qualitative impacts to determine a preferred reform option.

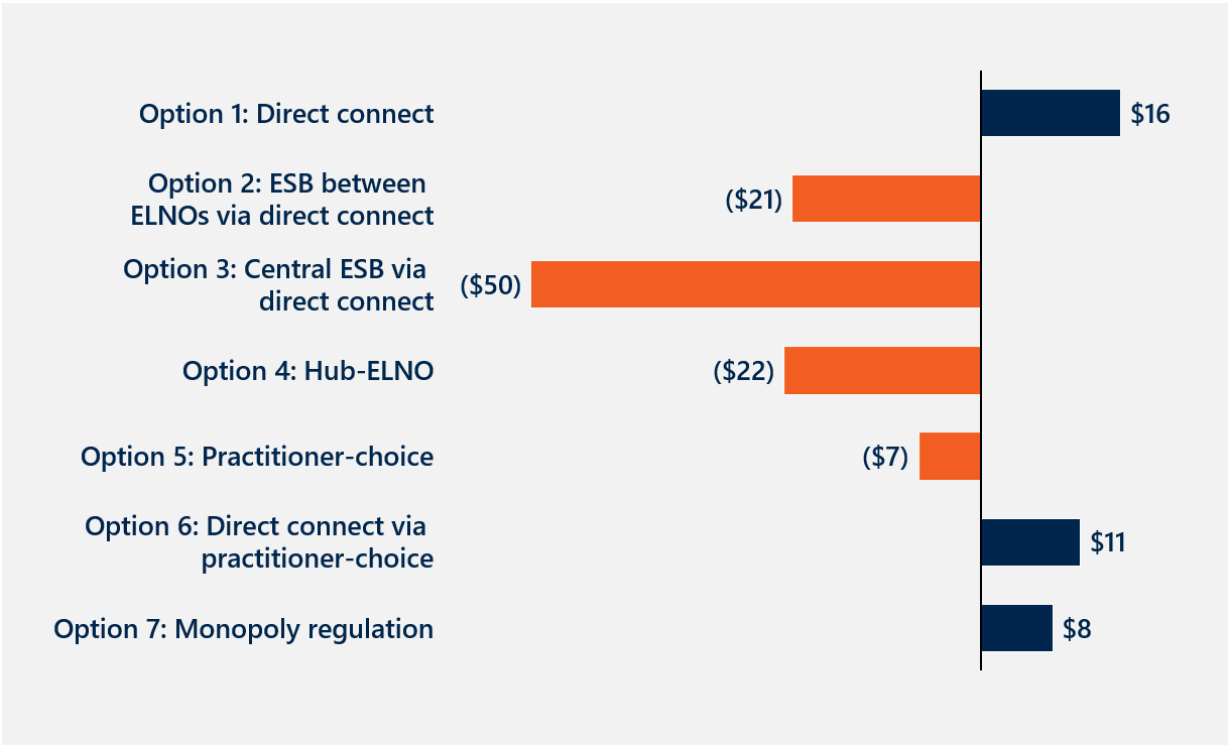
Like all decision tools, it is important to understand the outputs of a MCA in context, noting both the limitations of the analysis and the assumptions involved.

6.1 Three reform options are estimated to realise net benefits and receive positive MCA scores

The quantitative analysis found that Option 1: Direct connect and Option 6: Direct connect via Practitioner-choice are expected to have materially positive NPVs, with 20-year net benefits of $16 million and $11 million respectively. Option 7: Monopoly regulation would also be expected to have a positive NPV, with a net benefit of $8 million. All other models are expected to result in net costs relative to the status quo. These results are presented in Figure 13.

These quantitative results are subject to the limitations outlined in section 3.4. Their sensitivities are explored in Section 6.2 and Appendix C.

Figure 13 | 20-year net present value of each option (millions, 2025 dollars)



The quantitative results provided a key input into the MCA which is the decision tool used for this analysis. This is because it provides a more complete assessment of the reform options, by considering factors that cannot be monetised.

The MCA found that three options were preferred to the status quo:

- Option 1: Direct connect
- Option 6: Direct connect via Practitioner-choice
- Option 7: Monopoly regulation.

All other models receive an overall negative score, meaning they were assessed as being inferior to the status quo. These results are presented in Table 26, summarising the scores that are explained in Sections 4 and 5.

Table 26 | MCA criteria, weightings, scores and total weighted score by option

	Benefits			Costs		
	Consumer price savings	Service Quality	Market structure and competition	Implementation & ongoing costs	Implementation complexity	Total weighted score
Weightings	*20%*	*15%*	*15%*	*30%*	*20%*	**100%**
Status Quo	0	0	0	0	0	**0.0**
Option 1: Direct connect	3	3	3	-2	-2	**0.5**
Option 2: ESB between ELNOs via Direct connect	3	2	2	-3	-3	**-0.3**
Option 3: Central ESB via Direct connect	3	2	3	-4	-4	**-0.7**
Option 4: Hub-ELNO	2	1	1	-2	-4	**-0.7**
Option 5: Practitioner-choice	1	1	1	-1	-1	**0.0**
Option 6: Direct connect via Practitioner-choice	3	3	3	-2	-3	**0.3**
Option 7: Monopoly regulation	2	1	0	-1	-1	**0.1**

6.2 Net benefits are sensitive to market outcome assumptions, but option rankings remain broadly stable

Sensitivity analyses help to determine whether the conclusions of the analysis remain valid under plausible alternative scenarios and assumptions. A number of these were conducted for this analysis, with the key findings below and the more detailed sensitivity analysis provided in Appendix C.

Sensitivity testing identified three key assumptions where plausible adjustments would result in material changes to the overall net–benefit results: market share dynamics, price efficiency and subscriber time savings. While other assumptions produced variations in results, these three materially changed whether particular interoperability models, especially Direct connect, delivered net benefits relative to the status quo.

- **Price efficiency**. Based on the methodology applied, a price increase by Sympli of more than 1.8 per cent, relative to PEXA's price, would eliminate the net benefits of competitive models (Options 1–3, 5–6). However, it is important to note that lower relative prices by PEXA would produce similar or large benefits and therefore retain net benefits. For example, if Sympli's price increased by more than 1.8 per cent, if increased competition put downward pressure on PEXA's pricing, net benefits would likely be realised. For monopoly regulation options (Options 4 and 7) realising net benefits would depend on achieving prices two per cent below CPI growth through cost regulation (on the basis that prices under the status quo would increase by CPI only). Net benefits are highly sensitive to pricing assumptions because the total revenue in the market is large compared with the estimated costs in this analysis.
- **Market share**. Based on the methodology applied, if competitors such as Sympli capture less than 42 per cent market share by the end of the 20 year analysis (without a competitive price response from PEXA) then Direct connect would no longer be estimated to deliver positive net benefits. However, if there is a

price response by PEXA due to the increased competition then Direct connect would likely continue to deliver positive net benefits even if the non-incumbent ELNO was unable to capture at least a 42 per cent market share.

- **Time savings**. If subscribers achieve two minutes of savings per transaction (rather than one), Direct connect's net benefits triple and most options become viable. If no time savings materialise, only monopoly regulation delivers positive net benefits.

Net benefits are moderately sensitive to assumptions on ELNO and bank interoperability cost, and regulatory operational costs. Significant underestimation would be required to alter the net benefit conclusions for Option 1: Direct connect, while some underestimation of costs for Option 6 and 7 could change respective net benefit conclusions.

While net benefit estimates are sensitive to assumptions - particularly around benefits - most options share proportional exposure to these changes, so option rankings remain broadly stable across scenarios tested. For example, if service quality benefits prove higher than estimated, Options 2–4 could see improved results, but Option 1: Direct connect would likely remain the most beneficial. Given this sensitivity, decision-makers should place greater weight on the relative ranking of options rather than the absolute magnitude of net benefits.

6.3 The preferred option is Direct connect

Option 1 (Direct connect) is the preferred option as it has the highest overall MCA score, per Table 26. The Direct connect option would deliver interoperability between ELNs, which allows subscribers to select an ELN independently of other subscribers. Full implementation of this model is assumed to be achieved by July 2028.

Option 6 (Direct connect via Practitioner-choice) and option 7 (Monopoly regulation) also represent reforms that are expected to deliver overall improvements compared with the status quo.

The following three options are not preferred relative to the status quo (based on their scoring):

- Option 2: ESB between ELNOs via Direct connect
- Option 3: Central ESB via Direct connect
- Option 4: Hub-ELNO.

6.4 Further considerations for decision-making

This economic analysis identifies a choice between an end state of Direct connect (via Practitioner-choice or directly) or moving to monopoly regulation. Any decision between these two options should consider how to weigh certainty against innovation, since competition-based and regulation-based models reflect fundamentally different views on addressing monopoly power in digital platforms. Competition-based models rely on market forces to drive efficiency, innovation and price discipline, often accepting more complexity and uncertainty to do so. Monopoly regulation-based models use government oversight to achieve price efficiency and service standards, accepting reduced innovation incentives and permanent regulatory oversight costs.

The following uncertainties remained external to this analysis for a range of reasons but are important to consider.

Uncertainty about the level of competition in the market. This is important because competitive pressures improve quality, reliability and price. If the level of competition in the market were to decrease in the short term, this would materially change the benefit of options. Faster reform implementation would improve the chances of the market remaining competitive. The Practitioner-choice model can be established more quickly because they require less technical work or coordination across multiple parties. Direct connect and ESB models require extensive integration work across ELNOs, financial institutions, land registries and SROs, extending implementation timelines to three to five years.

Uncertainty regarding the size of market outcomes delivered by competition. Different reform options carry different types of risk, and government must consider how much uncertainty it is willing to accept. Direct connect offers the highest potential benefits but these estimated benefits rely on more competitive prices and/or market share shifting toward the non-incumbent ELNO. Monopoly regulation delivers more predictable outcomes because prices and service standards could be better controlled through regulation, but it also removes the competitive pressure that can drive efficiency improvement over time. Choosing between these options depends on the relative value placed on certainty versus potential upside: interoperability models involve higher execution risk with greater potential benefits, while monopoly regulation models offer more immediate stability with fewer opportunities for competitive gains.

Uncertainty around the level of cooperation provided by market participants. The cooperation of key participants will continue to play an important role in enabling, slowing or stopping the pursuit of interoperability market reforms. Direct connect, as well as other interoperability reforms, requires sustained cooperation between competing ELNOs, major financial institutions, and multiple government agencies to agree on standards, build connections, and maintain interoperability. Success depends on commercial parties acting in the market's long-term interest rather than protecting their commercial positions. If there is confidence that coordination and potential conflicts can be managed, reform should favour a distributed interoperability model. If there is uncertainty about achieving sustained cooperation, reform should consider options with stronger regulatory settings.

Uncertainty around whether banks will build additional connections. While the analysis assumes that banks will make the operational and technical changes required to enable Direct connect in a way that maintains service standards and is functionally equivalent, there are limited existing incentives or regulatory requirements to ensure this outcome. While a substantial portion of subscriber price benefits are expected to be realised by banks, they still face more than an estimated $40 million in additional infrastructure and development costs. As these banks have already achieved significant savings by moving from paper conveyancing to electronic conveyancing, they may have limited incentives to incur these additional costs unless they perceive there are commensurate benefits.

Appendix A eConveyancing ELNO market analysis

The best market structure depends on how many ELNOs can be sustained and the cost of an 'efficient' minimal ELNO

Central to the hypothesis that competition would benefit the eConveyancing market is the assumption that competition is possible in the long-run, and that the size of the market can sustain more than one ELNO.

There are several structural elements of the eConveyancing market which drive up the initial investment required to establish a viable ELNO. Specifically:

- **The Universal Service Obligation**. Requiring service to be available to all jurisdictions and for all relevant transaction types means that ELNOs face significant (multi-million dollar) set-up costs to serve the market. This is partially tempered by the regulatory acknowledgement that the USO can be met over the course of time in line with a business plan, but this tempering does not reduce the overall costs of full entry.
- **Network effects combined with (relatively) high fixed costs** for subscribers. Because all subscribers must use the same ELNO in the status quo to execute a transaction, banks have particularly high fixed costs for interfacing with a new ELNO, dominated by operational changes to sections of the business that can cost many tens of millions of dollars to operate each year.

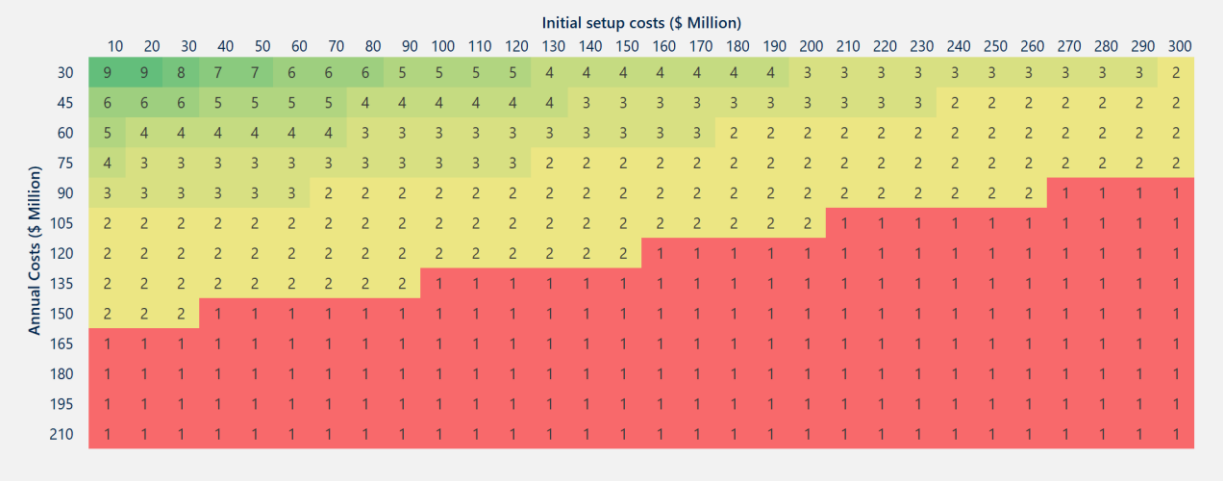
The sustainable number of ELNOs in the eConveyancing market is therefore driven by a combination of:

- the available revenue in the market (the size of the addressable market) and
- the capital expenditure and operational expenditure required to achieve that revenue.

Digital services are generally characterised by high fixed and upfront costs and relatively low marginal unit costs. This means that the key determinant of the number of sustainable ELNOs is the minimum capital and operational expenditure required to provide an ELNO service.

Figure 14 shows the number of ELNOs that would be expected in different efficient market scenarios (where profits are equal to the cost of capital) where each market varies by the initial setup and annual costs for an efficient ELNO. For example, a highly competitive market with more than four firms would only be likely with annual costs below $60 million and setup costs below $120 million, significantly below the observed costs of the ELNOs in the market today. It is assumed that the return on capital would be achieved over 15 years, which is typical for the digital platforms relevant to this market.

Figure 14 | Maximum sustainable number of ELNOs under different market conditions (Illustrative scenarios)



Deciding on which of these markets most closely represents the potential situation in Australia is challenging because the minimal capital and operational expenditure needed to establish reasonable market share is difficult to estimate. While this should be based on real-world examples, it is noted that past expenditure by existing participants may be structurally higher than the future expenditure by hypothetical new entrants to the market.

Based on Nous' understanding of existing operational and capital expenditure along with revenues of each ELNO, it is likely that the current market can only sustain up to two ELNOs. Significant changes to market and cost structures would need to occur for more ELNOs to sustainability enter the market.

Appendix B Detailed cost-benefit analysis methodology

The modelling is structured by financial year, beginning in FY2026–27 (FY27). Costs are assumed to be incurred progressively over the course of each financial year, with implementation completed by year-end and associated benefits commencing in the following period.

B.1 Size of the eConveyancing market

The projected size of the eConveyancing market (i.e. number of transactions) provides the baseline for estimating all costs and benefits in the cost–benefit analysis. Transaction volumes are a key input into the calculation of costs for subscribers, ELNOs, financial institutions and government agencies. A robust projection of market size ensures that the scale of both costs and benefits is consistent across all models, particularly as interoperability reforms are expected to expand digital adoption and transaction activity.

The projection is developed using a straight-line growth method, based on the average annual increase in eConveyancing transaction volumes over the past three years. This approach is reasonable given the stability of historical growth and the absence of structural shifts in the underlying market. Transaction data were sourced from ARNECC, which compiled transaction data from all state and territory land registries.

The model assumes that the total conveyancing market (including both electronic and paper transactions) will grow by 0.2 per cent per year over the assessment period. This reflects the mature and stable nature of Australia's property market, where transaction volumes are primarily influenced by population growth and macroeconomic conditions. Within this total market, the share of transactions conducted electronically continues to increase as digital systems become more established and user confidence grows.

To reflect jurisdictional differences, separate growth paths are applied for mature eConveyancing markets such as NSW, VIC and QLD, and emerging markets, including the Northern Territory and Tasmania. For mature jurisdictions, growth is assumed to slow as eConveyancing approaches saturation. Some residual share of paper conveyancing is expected to persist due to exemptions and complex transaction types. Even in the most digitally advanced states, electronic lodgement is expected to plateau below full adoption, at around 99.96 to 99.99 per cent of transactions.

In emerging jurisdictions, growth in eConveyancing adoption is expected to be faster once systems are fully operational. PEXA began offering eConveyancing services in the NT in FY2026. Adoption is expected to start gradually and accelerate as local infrastructure matures, and users gain experience. This pattern reflects the limited current digital capacity and slower early-stage adoption typical of smaller markets. By 2032, approximately 50 per cent of NT conveyancing transactions are expected to occur electronically.

Applying these jurisdiction-specific assumptions results in an average national eConveyancing market growth rate of 0.62 per cent per year. This figure is consistent with recent historical trends and provides a reasonable basis for projecting total transaction volumes over the 20-year analysis period.

B.2 Benefits quantification

B.2.1 Consumer price savings

Price efficiency benefits represent the reduction in service prices that occurs when ELNOs are either exposed to competition or subject to price regulation that enforces efficient cost recovery. In competitive markets, multiple ELNOs must lower prices or improve service quality to attract subscribers, which drives prices toward their efficient level. Under monopoly regulation, an assumed price caps based on a CPI–X framework could mimic these competitive pressures by limiting price growth and requiring ongoing productivity improvements.

Rationale for why benefits or costs may be realised

Under competitive market options, competition forces ELNOs to operate more efficiently and align prices with their true costs to attract and retain subscribers in a homogeneous market.

Under monopoly regulation, price regulation could limit how much an ELNO can charge, ensuring prices reflect efficient cost rather than monopoly profit. It mimics the effect of competition by setting price caps that encourages providers to reduce costs and improve productivity over time.

Price savings under competitive options

The total price efficiency benefit under competitive options is calculated as:

Consumer price savings = Additional transaction volume for Sympli under interoperability × Sympli's service price (PEXA price – 7.5%)

This calculation captures the value of price savings realised by subscribers who transition to Sympli's lower-cost platform over time. The "additional transaction volume" represents the number of transactions Sympli gains through increased market share under each interoperability scenario. 7.5% represents the historically observed price difference between Sympli and PEXA.

Certain variables may constrain the confidence in these results, for instance:

- Initial price discounts by Sympli to attract subscribers may not be maintained once higher market share is reached, reducing long-term savings. Sympli may raise its prices once it secures a stable market share, reducing the ongoing price differential and limiting long-term benefits.
- PEXA could lower its prices or offer discounts in response to competition, potentially increasing price efficiency benefits beyond current estimates.
- Without adequate regulatory oversight, duopoly pricing could occur, diminishing the downward pressure on prices.
- If interoperability or platform integration is delayed, Sympli's market share growth may occur more slowly, reducing total price efficiency gains.
- Differences in scale and resources may prevent Sympli from maintaining lower prices over time, limiting sustained competition.

Price savings under monopoly regulation

The price saving benefit arises from introducing price regulation that captures productivity and scale efficiencies over time. This applies to two regulatory market models:

- Option 5: Hub-ELNO: a regulated monopoly operating as a wholesale provider.
- Option 7: Monopoly regulation: the existing monopoly (PEXA) continuing operation with additional regulation.

The analysis assumes that a CPI–X pricing framework would be applied, where the "X" factor represents ongoing efficiency improvements expected to reduce real prices over time. For this assessment, Nous has adopted an assumed X-factor of two per cent to illustrate the potential price efficiency that could be realised under regulation. This assumption is not based on new empirical analysis but is intended to represent a reasonable, indicative level of productivity improvement for a mature digital infrastructure provider.

The price efficiency benefit under regulation is calculated as the difference between the projected CPI-indexed price path under the status quo and the projected CPI minus two per cent price path under the regulated model, multiplied by the expected transaction volume over the assessment period.

Price efficiency benefits = [Current price of service × (1 + CPI) – current price of services × (1+CPI – ×)] × expected transaction volume over the period.

The analysis assumes that a CPI–X pricing framework would be applied, where the "X" factor represents ongoing efficiency improvements expected to reduce real prices over time. For this assessment, Nous has adopted an assumed X-factor of two per cent to illustrate the potential price efficiency that could be realised

under regulation. This assumption is not based on new empirical analysis but is intended to represent a reasonable, indicative level of productivity improvement for a mature digital infrastructure provider.

The robustness of the estimate may be influenced by factors such as:

- The assessment of the efficient price is based on Nous' estimation of PEXA's efficient cost using financial data provided by PEXA, which may differ from its actual cost structure.
- The assumed two per cent efficiency factor (X) is indicative only and may not reflect the true rate of productivity improvement achievable under regulation.
- The analysis assumes stable transaction volumes; however, actual volumes may vary significantly with changes in the Australian housing market, affecting total benefits.
- Future regulatory settings and the strength of enforcement mechanisms may differ from those assumed, altering the extent to which efficiency gains are realised.

Price savings across options

Table 27 | Subscriber price efficiency benefit allocation and rationale

Option	Subscribers benefiting	Rationale
Option 1: Direct connect	Banks and practitioner subscribers	Price reduction from market competition
Option 2: ESB between ELNOs via Direct connect	Banks and practitioner subscribers	Price reduction from market competition
Option 3: Central ESB via Direct connect	Banks and practitioner subscribers	Price reduction from market competition
Option 4: Hub-ELNO	Banks and practitioner subscribers	Additional price regulation
Option 5: Practitioner-choice	Practitioner subscribers only	Pruce reduction from retail market competition
Option 6: Direct connect via Practitioner-choice	Practitioner subscribers during Practitioner-choice, all subscribers after Direct connect is operational	Price reduction from market competition
Option 7: Monopoly regulation	Banks and practitioner subscribers	Additional price regulation

B.2.2 Improved participant outcome

Improved participant outcomes represent the time savings, and productivity gains that subscribers achieve from using a more intuitive and efficient ELN platform. A more usable ELN reduces the number of steps, clicks, and data entry errors required to complete a transaction, allowing practitioners and financial institutions to process conveyancing activities more quickly and with fewer administrative burdens. This improvement in platform usability directly translates into measurable time savings per transaction and, over time, enhances the overall efficiency and experience of subscribers operating within the eConveyancing system.

Rationale to estimating participant outcomes

Based on prior analysis on time saving benefits, it is assumed one minute of time saving can be achieved. Testing conducted by Sympli combined with anecdotal feedback from conveyancer stakeholders found that the Sympli platform's alternative user interface reduced subscriber effort by approximately one minute over six weeks, from workspace creation up until documents are signed and lodged. This time saving reflects

improvements in workflow design, navigation efficiency, and user interaction, which collectively reduce administrative time for subscribers completing conveyancing transactions.

Participant outcomes benefits vary across options based on the scale of participant choice

Nous assessed the potential transfer of market share from PEXA to Sympli resulting from interoperability. Benefits are allocated according to the proportion of subscribers expected to adopt Sympli's platform under each interoperability model. In models where Sympli gains access to the market, the usability benefit accrues to the subscribers who choose its platform.

The distribution of benefits varies depending on which subscriber groups can access alternative platforms under each interoperability model, see Table 28. Under these assumptions, benefits are realised only for the subset of subscribers who would transact using the Sympli platform.

Participant benefits are estimated based on time savings

The total benefit from improved participant outcomes is calculated as:

Improved participant outcome = **Time savings per transaction**
× Number of subscribers involved per transaction
× Number of transactions
× Estimated additional market share for Sympli under interoperability

Time savings are converted into economic value using standard valuation of professional time (e.g. average hourly wage rates for conveyancers and legal practitioners), allowing the total benefit to be expressed in monetary terms.

Several factors could influence the robustness of these results such as:

- PEXA responding to competition to improve participant outcomes, increasing the benefits of competition.
- The actual current difference is less than one minute, or the benefit is not realised by all subscribers.
- PEXA could also improve in absence of IOP (meaning this cost saving cannot be attributed to the reform options).
- Unreliable inputs or dynamic competitive behaviour could overstate or understate this benefit

These factors are unknown as they depend on how different players act in the face of a more competitive market and/or the threat of increased competition

Table 28 | Subscriber participant outcome benefits allocation and rationale

Option	Subscribers benefiting	Rationale
Option 1: Direct connect	Banks and practitioner subscribers	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 2: ESB between ELNOs via Direct connect	Banks and practitioner subscribers	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 3: Central ESB via Direct connect	Banks and practitioner subscribers	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 4: Hub-ELNO	Practitioner subscribers only	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 5: Practitioner-choice	Practitioner subscribers only	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 6: Direct connect via Practitioner-choice	Banks and practitioner subscribers	Subscribers using Sympli's platform have reduced document preparation time and achieve time savings
Option 7: Monopoly regulation	No improved participant outcome benefits	No time saving benefits will be achieved

B.2.3 Market resilience

The eConveyancing system facilitates approximately 730,000 property transactions each year, many of which tie up the majority of households' wealth in the largest transactions they undertake. Enhanced market resilience reduces the risk of systemic disruption to property settlements, minimises the likelihood of financial loss from delayed transactions, and ensures that essential property exchange services remain available even in the event of an ELNO system failure.

Rationale to market resilience benefits

Improved market resilience is expected to arise under market models that introduce redundancy through multiple operating ELNOs or impose explicit resilience and continuity obligations on regulated entities. We assume that as the market becomes more competitive, the reliability of each of the ELNOs improves and creates benefits equal to the delays avoided through fewer ELNO related outages. In models where further regulation is implemented, improved resilience is also assumed to be created.

Market models considered

Market resilience benefits are expected under the following interoperability and regulatory models:

Table 29 | Applicability of subscriber cost impacts per option

Market options	Stakeholder benefited	Rationale
Option 1: Direct connect	Consumers	Alternative ELNO provides resilience
Option 2: ESB between ELNOs via Direct connect	Consumers	Alternative ELNO provides resilience
Option 3: Central ESB via Direct connect	Consumers	Alternative ELNO provides resilience
Option 4: Hub-ELNO	Consumers	Enhanced resilience through regulated standards
Option 5: Practitioner-choice	Consumers	No alternative settlement option
Option 6: Direct connect via Practitioner-choice	Consumers	Alternative ELNO provides resilience when Direct connect is operational
Option 7: Monopoly regulation	Consumers	Enhanced resilience through regulated standards

Options 1, 2, 3 and 6 achieve greater resilience through the participation of alternative ELNOs. Options 4 and 7 achieve resilience through strengthened regulatory standards, such as mandatory business continuity planning, data recovery capability, and cybersecurity resilience requirements.

The potential benefit of improved market resilience is quantified using standard contract penalties as a proxy for the consumer and industry costs of settlement delays.

Resilience benefits = One-day Delayed transactions attributable to PEXA x Daily penalties rates x Estimated proportion of the market with subscription to both ELNOs.

This approach provides a reasonable estimate of the economic impact of disruption in the eConveyancing market. Using a combination of data sources, Nous identified the total number of one-day settlement delays attributable to ELNO platform issues. Settlement delay penalties were then estimated based on standard contract conditions, which apply interest on the outstanding mortgage balance.

Nous assumed a penalty rate based on average settlement contract penalty rates, average deposit size, and property value, with the daily penalty rate calculated using the mean dwelling price for each state. The number of one-day delays was multiplied by this daily penalty rate to estimate the total annual financial impact of settlement delays caused by ELNO outages. Finally, the total penalty value was adjusted by the expected market share of Sympli, or other alternative ELNOs, to represent the proportion of transactions that could continue uninterrupted in an interoperable market, reflecting the avoided consumer and industry losses resulting from improved resilience.

B.3 Costs quantification

B.3.1 Costs for subscribers

The cost to subscribers represents the additional expenditure incurred by conveyancers, lawyers and financial institutions that they may need to subscribe to and begin operating on a new ELN as a result of interoperability. These costs arise where subscribers are required to register, obtain digital credentials, and undergo initial training to use an alternative platform.

Two categories of upfront costs have been identified for subscribers:

1. Set-up costs, which include the purchase of a digital certificate to enable secure access to the new ELN.

2. Training costs, representing the time and effort required for subscribers to familiarise themselves with the new platform's functionality and workflow.

Consultation with industry practitioners confirmed that there are no material ongoing training costs. Once a practitioner has been trained on an ELN, they are able to continue operating the platform without requiring further formal training.

Rationale for inclusion

The rationale for including subscriber costs is that interoperability will enable multiple ELNOs to compete for market share, which will in turn require some practitioners and institutions to establish new ELN subscriptions. As conveyancers and financial institutions adopt alternative ELNs, they will need to complete one-off registration and onboarding activities.

These costs are most likely to be realised under models that introduce competition between ELNOs - such as Direct connect, ESB between ELNOs, Central ESB, Practitioner-choice, and Practitioner-choice to Direct connect. Under these models, interoperability allows subscribers to choose between platforms. A portion of subscribers will therefore incur costs to set up and learn to use a new system.

Under monopoly regulation models, subscriber costs are expected to be negligible because most subscribers are already registered with PEXA, and the market structure does not require additional onboarding.

Approach of subscriber cost calculation

Upfront set-up costs

The set-up cost reflects the purchase of a new digital certificate, which is required for each subscriber registering with an ELN. Consultations with industry stakeholders indicated that the average cost of a digital certificate is $200 per subscriber. The total upfront set-up cost is calculated as:

$$\begin{aligned}\textbf{Set-up cost} &= \textbf{Cost of digital certificate} \\ &\quad \times \textbf{Number of subscribers affected}\end{aligned}$$

Upfront training costs

Training costs reflect the time subscribers dedicate to becoming proficient in a new ELN system. Consultations with conveyancers and legal practitioners suggest that eight hours of training is typically required to become comfortable with a new ELN platform.

The cost of training is monetised using the average hourly wage of conveyancers and legal practitioners, applied across the number of subscribers expected to adopt new ELNs. The total upfront training cost is calculated as:

$$\begin{aligned}\textbf{Training cost} &= \textbf{Average hourly wage} \\ &\quad \times \textbf{8 hours} \\ &\quad \times \textbf{Number of affected subscribers}\end{aligned}$$

Limitations for subscriber cost

Several factors may influence the accuracy and robustness of these estimates:

- The average cost of digital certificates and the training duration are based on practitioner feedback and may vary across jurisdictions or subscriber types.
- The average wage rate used to value training time is indicative and may differ across firms depending on size, location and role seniority.
- The model assumes all affected subscribers require both a new digital certificate and eight hours of training, which may overstate costs for subscribers already familiar with multiple ELNs.
- The rate of market share transfer from PEXA to Sympli is uncertain and depends on the timing and effectiveness of interoperability implementation.
- Differences in training resources, system usability, and support services offered by each ELN may affect how quickly subscribers adapt and the true extent of training costs.

Market models impact

The number of affected subscribers differs across interoperability options based on the degree of competition each model enables:

Table 30 | Applicability of subscriber cost impacts per option

Option	Subscribers affected	Rationale
Option 1: Direct connect	All subscribers switching to a new ELNO	Upfront investment in digital certificates and training is required.
Option 2: ESB between ELNOs via Direct connect	All subscribers switching to a new ELNO	Upfront investment in digital certificates and training is required.
Option 3: Central ESB via Direct connect	All subscribers switching to a new ELNO	Upfront investment in digital certificates and training is required.
Option 4: Hub-ELNO (Wholesale–Retail)	All subscribers switching to a new ELNO	Upfront investment in digital certificates and training is required.
Option 5: Practitioner-choice	All subscribers switching to a new ELNO	Upfront investment in digital certificates and training is required.
Option 6: Direct connect via Practitioner-choice	Retail competition before Direct connect is operational, fully competitive after Direct connect is operational.	Upfront investment in digital certificates and training is required.
Option 7: Monopoly regulation	None	Subscribers have existing training and connections for PEXA, who remains the dominant ELNO, and therefore incur no additional cost.

For Options 1 to 6, subscribers will incur set-up and training costs as they begin to transact through new ELNs. Under monopoly regulation (Option 7), almost all subscribers are already registered with PEXA, and therefore only a small number of new users are expected to incur set-up or training costs.

B.3.2 Costs for ELNOs

The cost of interoperability for ELNOs includes both upfront and ongoing components. These costs have been assessed separately for Sympli and PEXA, recognising their distinct roles and different stages of system development.

Three major categories of costs were identified for each ELNO:

- Upfront technology development costs, including the design, build, and implementation of interoperability application programming interfaces (APIs) and associated system components.
- Upfront other costs, covering operational process changes and legal agreement updates necessary to support interoperability.
- Ongoing costs, including technology maintenance, compliance, and operational activities required to maintain an interoperable network.

Due to data limitations, different approaches were used to estimate Sympli's and PEXA's upfront technology development costs, while the same methodology was applied for their upfront other costs and ongoing costs

Rationale for inclusion

These costs are included to capture the direct financial impacts on ELNOs from developing, implementing and maintaining interoperability solutions. Interoperability requires ELNOs to exchange information and execute transactions seamlessly between platforms, which necessitates investment in new technology, additional testing, updated operational processes, and modified legal frameworks.

Because models other than Direct connect are not yet fully defined in terms of technical specifications or operational arrangements, the Direct connect model was used as the baseline for estimating costs. Costs for other models were then adjusted based on stakeholder input regarding the relative effort and complexity associated with each.

This approach reflects the expectation that implementing interoperability will impose material system development costs on both ELNOs, but that the scale and timing of these costs will vary depending on the structure of the market model adopted.

Approach to ELNO cost calculations

Upfront Technology Development Costs

Upfront technology development costs include the following activities:

- Interoperability (IOP) API design, build and implementation
- Non-functional requirements
- Security testing
- Connectivity to the ESB where applicable
- ELNO-to-ELNO interoperability testing.

For Sympli, the Direct connect model serves as the baseline.

- The cost of IOP API design, build and implementation was estimated using historical API development costs and the remaining APIs yet to be developed. This includes both the original interoperability scope and the additional scope provided by ARNECC.
- Security testing costs were calculated based on the Sympli's interoperability team's estimated effort for building and testing, which are commercial-in-confidence.
- ELNO-to-ELNO testing is assumed to require a testing team of six FTEs over a three-month period.

PEXA's Direct connect cost baseline was assessed by Nous using the functional requirements separately developed for ARNECC.

ELNO-to-ELNO testing costs were assumed to be the same as for Sympli.

Other interoperable models were adjusted relative to the Direct connect baseline:

- Status quo to ESB between ELNOs and Central ESB: Both ELNOs are assumed to incur a similar level of development cost as the cost of Direct connect, with an additional connectivity cost to the ESB. Connectivity, covering additional API design, build and implementation, is estimated to be one per cent of total interoperability costs.
- Option 3: Hub-ELNO: Interoperability technical development costs are assumed to be equivalent to Direct connect.
- Practitioner-choice: Development and non-functional requirement efforts are assumed to be 15 per cent lower than for Direct connect, reflecting reduced integration complexity. ELNO-to-ELNO testing remains consistent with Direct connect.
- Direct connect via Practitioner-choice: Costs are assumed to be similar to Direct connect, but a portion of API and non-functional development costs are incurred earlier to reflect the transition to Practitioner-choice. Two rounds of testing are assumed to reflect staged implementation.

Other upfront costs

Other upfront costs include the additional administrative and legal efforts required to adapt to new interoperability arrangements, such as updating operating procedures, workflows, and legal agreements between ELNOs and stakeholders.

For Sympli under:

- Direct connect and Practitioner-choice: operational process changes and legal agreement updates are estimated based on expected timeframes and implementation effort.
- ESB between ELNOs, Central ESB and Hub-ELNO: both operational and legal efforts are assumed to be three times the effort of Direct connect due to the greater complexity of multi-party arrangements and regulatory obligations.

For PEXA under:

- Direct connect: PEXA's operational process changes are assumed to require more than four times the effort compared to Sympli. This reflects the scale of difference in operational size between the two ELNOs. Legal agreement updates were estimated to be in a similar range to Sympli.
- ESB between ELNOs and Central ESB: upfront operational efforts are assumed to be three times greater than Direct connect.
- Hub-ELNO and Practitioner-choice: PEXA is expected to undertake a higher level of operational process change compared to other options. This reflects its role as the Responsible ELNO and the need to modify internal workflows. An additional 150 per cent upfront operational cost is expected relative to Direct connect.

Ongoing costs

Ongoing costs represent the technology maintenance associated with supporting interoperability and RELNO ongoing operational costs. Technology maintenance costs include ongoing software updates, interface maintenance and periodic testing to ensure continued compliance and performance. RELNO ongoing operational cost includes cross ELNO coordination, communication, risk management and conflict resolution.

- For both Sympli and PEXA, ongoing technology maintenance costs are estimated to be 15 per cent of the initial technology development cost required to enable interoperability. This assumption is applied consistently across all interoperability models.
- RELNO ongoing cost is expected to scale based on the number of additional participating ELNO in the market.

Limitations of interoperability cost to ELNOs

- Technical specifications for interoperability models beyond Direct connect remain undefined, requiring cost adjustments to rely on stakeholder-informed estimates rather than detailed system designs.
- The commercial-in-confidence nature of ELNO's data limits transparency in certain cost components, particularly testing and build effort.
- PEXA's development cost range reflects uncertainty regarding functional complexity and scalability, which may narrow once detailed technical requirements are available.
- The assumption that ongoing technology maintenance equals 15 per cent of upfront development may not capture future cybersecurity or compliance-related cost escalations.
- RELNO operational costs are estimated based on indicative staffing requirements and may vary depending on governance models adopted by regulators.
- Variations in project timelines, inflation, and technology costs may affect comparability of cost estimates across implementation periods.

B.3.3 ESB costs for government

The cost to government associated with establishing and operating an ESB arises only under two interoperability models: ESB between ELNOs and Central ESB. These costs reflect the government's role in designing, developing and maintaining the shared digital infrastructure that enables secure and standardised data exchange between ELNOs and other market participants.

Two categories of government costs have been identified:

- Upfront development costs, including the design, build, testing and implementation of the ESB platform.
- Ongoing maintenance costs, representing the recurring operational expenditure required to support system performance, security and interoperability across connected stakeholders.

Rationale for inclusion

Under Option 2 and 3, the ESB is a foundational interoperability component that allows ELNOs and other participants to communicate reliably through a shared, secure platform. Under both ESB models, government is responsible for developing and maintaining this infrastructure to ensure neutral governance, data integrity, and cyber resilience.

The ESB between ELNOs model requires a common communication and integration layer that links two or more ELNOs, enabling them to exchange lodgment, settlement, and registration data. The Central ESB model extends this functionality by providing a single, government-operated vehicle through which all market participants, including ELNOs, banks, land registries, and state revenue offices, connect and interact.

Because the ESB introduces new public digital infrastructure, government would incur both the one-off costs of system establishment and ongoing costs for maintenance, monitoring, and upgrades. These costs are included in the analysis to ensure that the total cost of achieving interoperability reflects both private and public sector investment.

Approach to ESB cost calculation

Upfront development costs

The upfront development cost includes technical development and testing costs. Cost estimates were prepared by Nous based on the functional and technical descriptions outlined in the 2019 Glenn Archer Report and the 2025 interoperability functional requirements identified by ARNECC.

The technical development scope covers the full lifecycle of system design and build, including:

- Foundational development and architecture requirements
- core ESB services
- API design, build and test
- performance, resilience and disaster recovery
- security, privacy and penetration testing
- audits
- partner onboarding and portal
- program management and architecture governance.

Upfront development costs are calculated the following way:

Upfront development cost = Estimated development effort × average contractor daily costs + one-off external security testing and IRAP costs

Upfront testing costs

Testing requirements differ by model:

- ESB between ELNOs: testing is required between the ESB and two ELNOs.
- Central ESB: testing is required between the ESB, two ELNOs, three banks (already integrated with ELNOs), the RBA's RITS system, eight SROs and eight land registries.

Upfront development costs are calculated the following way:

ESB testing cost = Number of connections requiring testing × Average testing cost per participant connection

The development timelines are assumed to differ due to system complexity. Development of the ESB between ELNOs will occur over a 24-months period following full implementation of Direct connect, while the Central ESB will require a 36-months period after Direct connect becomes operational. These timelines include design, procurement, implementation, testing and project management activities.

Ongoing maintenance costs

Once operational, the ESB will require ongoing maintenance to ensure stability, performance and security. This includes software updates, patching, data integrity management and continuous cybersecurity monitoring.

Ongoing maintenance costs comprise:

- Platform and licence costs, including Front Door, WAF, DDoS protection, API Management (APIM Premium) and Service Bus Premium.
- Operations team costs, including a full-time support team of Site Reliability Engineers (SREs), integration engineers, security operations (SecOps) and Level 2 technical support.

Ongoing maintenance costs are calculated the following way:

Ongoing maintenance cost = Ongoing platform and licence cost + Number of FTEs required in the operations team × Average annual wage

Limitations in ESB cost estimation:

A number of factors may affect the accuracy and robustness of these estimates:

- The cost estimates are based on the functional descriptions in the Glenn Archer report and ARNECC's functional requirement review, which may not fully reflect the detailed technical design and operational model ultimately adopted.
- The assumed person-day effort and resource mix are indicative and may vary depending on procurement strategies, resourcing arrangements and delivery methodologies (for example, agile versus waterfall).
- The analysis assumes government ownership and operation of the ESB; alternative delivery models (such as outsourced management or cost-sharing with ELNOs) could materially change the cost profile.
- Testing requirements and costs for integration with third parties (e.g., RBA, SROs, and land registries) are assumed based on current system structures and may differ as interoperability specifications evolve.
- The ongoing maintenance cost estimate of $3.7 million per year assumes continuous operation at current technology pricing levels. Changes in licensing costs or staffing requirements could affect this figure over time.
- Broader policy, governance, and cybersecurity frameworks for managing the ESB are not yet finalised and could introduce additional costs related to oversight or compliance.

B.3.4 Costs for banks

The cost to banks represents the expenditure that financial institutions (FIs) will incur to adapt their systems, processes, and staff capability to operate within an interoperable eConveyancing environment. These costs arise primarily from the need to integrate with multiple ELNOs and maintain secure, compliant, and efficient connections for mortgage lodgment and settlement.

The assessment identifies four main categories of cost for banks:

- Upfront development costs, covering new technology design, API development and payment system integration.
- Upfront training costs, representing the additional effort required to train staff in the use of new or dual settlement user interfaces.
- Upfront testing costs, incurred from validating new system integrations between banks and ELNOs.
- Ongoing costs, which include technology maintenance, reconciliation, audit and compliance activities necessary to sustain multi-ELNO operations.

The estimates are indicative and high level, reflecting the limited technical and design detail currently available for interoperability models such as the ESB between ELNOs, Central ESB, Hub-ELNO and Practitioner-choice.

Rationale for inclusion

Banks are integral to the conveyancing ecosystem, responsible for processing mortgage settlements and ensuring the financial completion of property transactions. Interoperability will require banks to maintain connections with multiple ELNOs rather than a single provider, introducing new technological, operational, and compliance demands.

Consultations with banks confirmed that material costs will be incurred under interoperability options that materially alter existing integrations. These include:

- Option 1: Direct connect
- Option 2: ESB between ELNOs via Direct connect
- Option 3: Central ESB via Direct connect
- Option 6: Direct connect via Practitioner-choice.

Under these models, banks must upgrade systems, modify APIs, and establish additional security and reconciliation processes to ensure seamless settlement across ELNOs. By contrast, under Hub-ELNO, Practitioner-choice and monopoly regulation models, banks are not expected to face major costs because existing connections can continue with minor configuration adjustments.

Approach to assessing financial institution cost under interoperability

Upfront Development Costs

Upfront development costs arise from new or modified system integrations required to maintain secure connections between banks and multiple ELNOs. These costs include payment system integration, API development and related IT upgrades.

Consultation with stakeholders indicates that banks with existing connection to ELNOs will face development costs depending on integration complexity. Banks without existing ELNO connections are not expected to incur development costs, as they will not need to build or modify integration layers.

The total development cost per bank is calculated as:

Technology cost per bank = Baseline interoperability technology development cost × integration and technology complexity (transaction volume as proxy)

Baseline interoperability technology development costs are provided by bank stakeholders through data provision and consultations. For this analysis, it is assumed that three banks with existing ELNO connections will incur these costs. The annual home loan volume for each bank is used as a proxy for integration complexity, recognising that higher transaction volumes typically require more sophisticated and costly system integration.

Upfront training cost

Banks will also incur training costs in models where mortgage operations staff are required to operate dual settlement systems or learn new workflows. Consultations revealed that while most settlements are currently processed through PEXA, staff will need additional training to use Sympli's system under interoperability.

Stakeholders estimate that training effort will increase by 20 per cent compared to the previous Sympli training program. Training costs will therefore apply under:

- Option 1: Direct connect (one round)
- Option 2: ESB between ELNOs via Direct connect (two rounds)
- Option 3: Central ESB via Direct connect (two rounds)
- Option 6: Direct connect via Practitioner-choice (one round).

The total training cost is calculated as:

Upfront training cost = Historical training cost for Sympli
× Estimated additional training efforts under interoperability
× Mortgage operations scales

The historical training cost includes both the opportunity cost of employee time and the direct cost of engaging external trainers.

Upfront testing costs

Banks will face integration testing costs once new interoperability solutions are developed. These costs cover the design, execution and validation of interoperability testing between banks and ELNOs.

The total testing cost for financial institutions is calculated as:

Testing cost per round = days of testing
× FTE required
× daily contractor wage
× number of banks

The number of test rounds depends on the interoperability model:

- Option 1: Direct connect (one round)
- Option 2: ESB between ELNOs via Direct connect (two rounds)
- Option 3: Central ESB via Direct connect (two rounds)
- Option 6: Direct connect via Practitioner-choice (one round).

Ongoing costs

Once interoperability is operational, banks will incur ongoing costs related to maintaining integrations, monitoring financial settlements, conducting reconciliations and ensuring compliance. These costs include:

- technology maintenance (software updates, bug fixes and infrastructure adjustments)
- financial reconciliation (verification of disbursements, error detection and resolution)
- audit and compliance activities (annual reviews of systems and financial control processes)
- ongoing training (staff familiarisation with ELN system updates or internal process changes).

The ongoing costs are calculated using the following relationships:

- technology maintenance: 15 per cent of upfront development cost
- financial reconciliation: five per cent additional effort relative to current reconciliation costs
- audit and review: 15 per cent additional effort relative to current audit activities

- ongoing training: 20 per cent increase relative to existing training costs.

Calculation method:

- Ongoing technology maintenance cost = Interoperability technology development cost x industry standard ongoing maintenance cost (15 per cent).
- Additional financial reconciliation cost = current financial reconciliation cost x additional financial reconciliation efforts x mortgage operations scales.
- Additional audit and review obligations = current audit and review costs x additional audit and review efforts x mortgage operations scales.
- Ongoing training cost = current ongoing training cost x estimated additional training efforts under interoperability x mortgage operations scales.

Limitations and caveats for bank interoperability costing

Several limitations affect the reliability and precision of the cost estimates:

- Interoperability models lack finalised technical specifications, including financial settlement architecture, reconciliation protocols, and cybersecurity standards, limiting the precision of cost estimation.
- The analysis excludes liability and contractual risks (e.g., authority-to-debit disputes, reconciliation errors, or on-day settlement failures) due to insufficient data.
- It is assumed that banks bear these costs directly; the analysis does not consider whether they may pass costs on to customers through mortgage fees or charges.
- Using annual home loan volume as a proxy for integration complexity is indicative only and may not fully capture technical effort variation across banks.
- Detailed cost and resource data were not available due to commercial sensitivity, requiring reliance on stakeholder-provided ranges.
- The assumed 15 per cent technology maintenance rate reflects general ICT benchmarks and may differ from actual maintenance requirements once interoperability is implemented.
- The assumed 20 per cent increase in training effort is based on stakeholder feedback and may vary depending on user familiarity, system design and support resources.
- Changes in housing market activity, lending volumes, or interest rates could materially affect total cost projections.

B.3.5 Costs for land registries

The cost to land registries represents the additional expenditure required to establish and manage technical connections and operational processes under interoperability. These costs arise from the need to connect to multiple ELNOs and, in some cases, to integrate with new shared infrastructure such as a Central ESB.

Three categories of costs have been identified for land registries:

- Upfront connection costs, representing the cost of establishing new connectivity between registries and ELNOs. This cost can be negative (a benefit) if a connection is planned under the status quo but would not required under the given option.
- Upfront operational costs, reflecting additional administrative effort and business process changes needed to manage multi-ELNO lodgments.
- Upfront testing costs, covering the resources required to verify and validate new connections, particularly under the Central ESB model.

Land registries are not expected to incur ongoing costs under interoperability, as transaction volumes are anticipated to remain stable and existing registry systems will continue to operate under current business-as-usual arrangements.

Under Hub-ELNO and Practitioner-choice, land registries without existing connection to ELNO will receive a cost saving in the form of avoided connection cost. Currently, Sympli is connected to five of the eight jurisdictions. For interoperability to function nationally, the remaining three land registries in Northern Territory, Tasmania and the Australian Capital Territory must establish new technical connections with both Sympli and PEXA. This cost can be avoided if the interoperability option eliminates need for such connections.

Rationale for inclusion

Under interoperability, land registries must maintain secure and reliable connections with multiple ELNOs to facilitate lodgment and registration across platforms. Material costs are also expected under the model, where registries must develop and test new interfaces with a centralised government-managed platform.

In addition, interoperability will require registries to undertake new administrative and operational activities to coordinate lodgments, manage additional workflows, and perform validation checks across multiple ELNOs.

These costs are included in the analysis as they represent direct government and agency expenses associated with the transition to and implementation of interoperability.

Approach to land registry costs under interoperability

Upfront connection costs

Upfront connection costs capture the one-off expenditure required to establish new connections between registries and ELNOs. These include the provision of technical documentation, interface configuration and connectivity testing.

The upfront connection cost is calculated as:

Upfront connection cost = (Cost of technical information provision + interface configuration + connectivity testing) x number of land registries requiring connections

The key inputs for this estimate are based on stakeholder consultations with land registries. Registries estimated provided information on the total cost of connecting to a new ELNO depending on whether the existing system supports multi-ELNO capability. Because the Northern Territory, Tasmania and the Australian Capital Territory are still developing their electronic lodgment systems, Nous has applied the upper-bound estimate per registry, covering all connection-related activities.

Upfront operational costs

Upfront operational costs reflect the additional internal effort required to adapt business processes, manage multi-ELNO lodgments and conduct additional BAU testing.

The upfront operational cost is calculated as:

Upfront operational cost = Additional operational efforts × Daily contractor rates × Number of registries

Consultations with registry stakeholders indicate that interoperability will require approximately 100 person-days of effort per registry, covering process redesign, administrative tasks, and coordination with ELNOs. This cost is assumed to apply to all eight registries participating in interoperability.

Upfront testing costs

Upfront testing costs represent the resources required to validate system connections and ensure interoperability functions correctly. These costs apply primarily under the Central ESB model, where each registry must test integration with the ESB as well as with multiple ELNOs.

The upfront testing cost is calculated as:

Testing cost per registry = Number of FTEs × Daily contractor wage × Testing duration

Stakeholder engagement indicates that integration testing will require five FTE staff per registry over a three to five month period, or approximately 60 working days. The testing team is expected to include project management, system development, integration and operational support staff.[58]

Limitation and caveats

Several factors may affect the robustness of these estimates:

- The final specifications for interoperability and the ESB architecture are not yet defined, meaning connection and testing costs could change when system requirements are finalised.
- Estimates are based on stakeholder feedback and indicative experience rather than detailed engineering costings or procurement data.
- Costs related to procurement and unexpected technical rework are not included in this assessment.
- The assumption of 100 person-days per registry is indicative and may differ depending on the complexity of internal workflows and registry readiness.
- Estimates assume that interoperability is implemented after the Direct connect model becomes operational; delays may increase costs due to inflation or evolving technology requirements.

B.3.6 Costs for State Revenue Offices

The cost to SROs represents the additional expenditure required to support interoperability, primarily arising from system integration testing and administrative adjustments to manage lodgments from multiple ELNOs. These costs are upfront and one-off in nature, as interoperability does not materially change the total number of transactions processed by SROs, nor the core functions performed by their systems.

Two cost categories are identified:

- Upfront integration costs, representing the cost of establishing new connectivity between registries and ELNOs. Under models where further connections are not required, this is considered as an avoided cost.
- Upfront interoperability costs, reflecting the effort required to verify the functionality and performance of new ELNO or ESB connections.

No additional ongoing costs are expected for SROs, as transaction volumes and lodgment processes are expected to remain broadly consistent under all interoperability models. Similar to land registries, under Hub-ELNO and Practitioner-choice, SROs without existing connection to ELNO will receive a cost saving in the form of avoided connection cost.

Rationale for inclusion

Under interoperability, SROs must establish or validate system connections with multiple ELNOs and, in some cases, a new ESB. These connections enable data exchange between the SRO systems, ELNOs, and other entities involved in property settlement. Testing costs are therefore expected under interoperability models that require new or materially altered integrations.

Testing is required for the following models:

- Option 1: Direct connect
- Option 2: ESB between ELNOs via Direct connect
- Option 3: Central ESB via Direct connect

[58] NSW Land Registry Services is assumed to incur a higher testing cost due to additional system and operational complexity.

- Option 6: Direct connect via Practitioner-choice.

Each round of testing ensures that data transfers and lodgment processes are correctly implemented and secure. Testing occurs once under Direct connect, and twice under both ESB models and the Practitioner-choice to Direct connect model to reflect staged implementation.

Other models, including Option 4 (Hub-ELNO), Option 5 (Practitioner-choice), and Option 7 (Monopoly Regulation), are assumed to involve minimal system change. Stakeholders have confirmed that any testing required under these options would be considered BAU and would not impose material additional costs.

Calculation method for SRO cost under interoperability

Upfront integration costs

Upfront integration costs capture the one-off expenditure required to establish new connections between SROs and ELNOs. These include the provision of technical documentation, interface configuration and connectivity testing. The upfront integration cost is calculated as:

Upfront connection cost = Interoperability team size x integration period × number of land registries requiring connections

Upfront interoperability Costs

Interoperability represents the labour and contractor costs required to develop and test interoperable connections. The upfront interoperability cost is calculated as:

Upfront interoperability cost = Number of FTEs required × Average daily contractor rate × Testing duration

Testing costs will be incurred by eight SROs nationally during the period FY30–FY35, depending on the model adopted.[59]

B.3.7 Costs for regulators

The cost to regulators estimates the expenditure required to design, establish and operate a regulatory regime for the eConveyancing market under models that introduce economic or access-style regulation. These costs are only expected to be material under two market models:

- Monopoly regulation, where PEXA continues to operate as the sole ELNO under regulatory control.
- Hub-ELNO, where a wholesale access model would require economic oversight of a central provider.

The regulatory cost categories include:

- Upfront costs, covering policy design and legislation, the stand-up of a specialist regulatory function, and baseline cost and efficiency studies. These are one-off establishment and setup costs.
- Ongoing costs, covering continuing economic regulation, monitoring, compliance and enforcement, consumer protection, stakeholder engagement, and corporate overheads.

The cost for the regulator to implement interoperability is also included for competitive market options:

- Direct connect
- ESB between ELNOs via Direct connect
- Central ESB via Direct connect
- Practitioner-choice
- Direct connect via Practitioner-choice.

[59] Revenue NSW is assumed to incur a higher interoperability cost due to additional system and operational complexity.

The cost categories include:

- Upfront cost, including contracted service costs for interoperability lead, coordination, technical development support, testings, communications and reviews.
- Ongoing cost, including key knowledge holders of interoperability development for future technology upgrades and decision making.

Interoperability implementation cost for regulators is estimated based on budget information supplied by ARNECC.

Rationale for inclusion

The eConveyancing market currently functions as a de facto monopoly. PEXA is the dominant ELNO and captures 99 per cent transaction volume. In this context, some reform options rely not on full competition, but on imposing a regulatory regime to constrain market power, protect users and safeguard system resilience.

Under a monopoly regulation model, or a Hub-ELNO model with a wholesale access provider, regulators would be required to:

- set or approve access terms
- assess and monitor cost efficiency and returns
- resolve disputes between market participants
- ensure consumer protections and service standards.

Consultation with the ACCC indicated that regulating a monopoly ELNO would require more intensive capability and resourcing than recent reforms to the Australian Securities Exchange (ASX) clearing and settlement regime, but less than the fully developed telecommunications access regime that applies to Telstra.

Interoperability implementation costs are included to reflect the regulator's active role in ensuring consistent technical and operational integration across ELNOs. Unlike regulatory oversight in a monopoly setting, competitive interoperability models require the regulator to directly manage coordination between market participants, oversee standard-setting, and monitor adherence to interoperability frameworks.

Approach to cost of monopoly regulation for regulators

The method for estimating regulator costs involved:

- benchmarking comparable regulatory regimes in Australia and then scale appropriate costs for eConveyancing
- removing costs incurred by government agencies for similar functions under the status quo.

Potential eConveyancing regulatory regimes were benchmarked against two relevant case studies: the ASX and the Australian telecommunications industry

The eConveyancing market is comparably more intensive than ASX access regulation, which is relatively narrow and largely focused on a single infrastructure service, but less resource-intensive than telecommunications, which involves thousands of access seekers, national infrastructure of systemic importance, and continuous price and service quality oversight. Based on these guardrails, analysis applied the following scaling assumptions:

- Ongoing regulator costs for eConveyancing are assumed to be approximately 30 to 50 per cent of the telecommunications access regime cost base.
- Upfront regulator costs are assumed to be broadly comparable to the initial access regime development costs in the ASX case but scaled up to reflect the need to build a dedicated, specialised eConveyancing regulatory capability largely from scratch.

Nous allocated these scaled costs into regulatory components and assigned values to each activity as an adjusted cost estimation, reflecting the expected resource requirements in the eConveyancing context.

Table 31 | Regulator cost inputs by regulatory activities

Cost type	Costed activity
Policy and regulatory design	Developing the regulatory model (e.g. price control vs access arbitration), conducting consultation and Regulatory Impact Analysis, and supporting passage. Mirrors the early work undertaken to establish the ASX cash-equities clearing and settlement access regime.
Regulatory specialist unit	Establishing a dedicated team of specialists (economists, lawyers, technical experts, data analysts and complaints officers) to prepare guidance, price notification and arbitration procedures, and enforcement protocols. Reflects building a capability similar to the ACCC's infrastructure divisions or ACMA's compliance teams.
Baseline and cost studies	Commissioning an efficient-cost study, establishing a demand and cost baseline, assessing WACC settings, and developing the monitoring and reporting framework. Consistent with approaches used in telecommunications and energy access regulation.
Economic regulation core	Conducting access economics and price control functions including maintaining licences, updating WACC settings, publishing pricing methodologies, and ensuring prices reflect efficient cost recovery.
Market monitoring, data and analytics	Collecting and analysing quarterly financial and operational and resilience data, producing dashboards, and publishing annual state-of-market reports, analogous to ACCC and ASIC monitoring functions.
Compliance, enforcement and consumer safeguards	Undertaking risk-based resilience audits, supervising ring-fencing and non-discrimination obligations, investigating access complaints, and enforcing compliance through undertakings or litigation. Modelled on ACMA and ACCC telecommunications functions.
Consumer complaints	Receiving, triaging and resolving complaints and queries from market participants including practitioners, financial institutions and relevant settlement and lodgment authorities.
Stakeholder engagement	Conducting industry working groups, technical consultations, ministerial reporting, and public guidance development, mirroring the structured engagement in ASX and Telstra access regimes.
Overheads and shared services	Covering legal, HR, ICT, finance and corporate reporting functions. Aligned with cost-allocation structures in telecommunications regulation where shared support functions are attributed to specific regulatory activities. This is assumed to be 20% of total ongoing operating cost.

Key assumptions

- Scope of costs: Estimates include regulator staffing, compliance, monitoring, market analytics, arbitration and dispute resolution, consumer protection, and stakeholder engagement, consistent with access regulation practices in other sectors.
- Exclusions: The estimates exclude government business-as-usual policy activities (such as drafting and passage of legislation).

Limitations and caveats

There are several important limitations and caveats that affect the interpretation of these regulatory cost estimates:

- **Institutional design uncertainty**: The eConveyancing regulatory function does not currently exist in the form modelled. The methodology assumes that a new regulator would need to be established from first principles rather than built from existing bodies such as ARNECC, NECDS, IPART, or state-based oversight units. If responsibilities were distributed among existing agencies, marginal costs could be lower, but coordination and governance costs may increase.

- **Exclusion of broader government policy costs**: The estimates exclude routine government policy activities such as Cabinet processes, legislative drafting, and intergovernmental negotiations.
- **Cost recovery assumptions**: The analysis assumes that government bears the full regulatory cost directly. It does not account for potential cost-recovery mechanisms, such as industry levies, licensing fees, or pass-through arrangements within transaction pricing.

Approach to cost of interoperability to regulators

The cost of interoperability for regulators was based on existing costs for ARNECC. Direct annual costs associated with interoperability implementation were identified, including contracted technical support, testing, coordination, and review activities. Under the status quo scenario, where no interoperability exists, these costs are not incurred into the future.

It is further assumed that once interoperability becomes fully operational, a reduced level of regulatory expenditure will continue. Staffing costs are expected to be maintained to support ongoing system upgrades, governance, and future interoperability-related decision-making. This assumption reflects the ongoing requirement for technical and regulatory expertise even after the core implementation phase is complete.

Appendix C Sensitivity analysis

Sensitivity analysis assesses how variations in key assumptions or parameters affect the overall results of the cost–benefit analysis. It provides an indication of the robustness of the findings by testing how changes in critical inputs influence the estimated costs and benefits.

This analysis helps determine whether the conclusions of the analysis remain valid under different plausible scenarios. It also highlights which assumptions have the greatest influence on the outcomes and therefore warrant closer attention or further testing.

The sensitivity analysis tests the effect of varying key assumptions across all seven interoperability and regulatory options. These include:

- option 1: Direct connect
- option 2: ESB between ELNOs via Direct connect
- option 3: Central ESB via Direct connect
- option 4: Hub-ELNO
- option 5: Practitioner-choice
- option 6: Direct connect via Practitioner-choice
- option 7: Monopoly regulation.

The analysis also tests the sensitivity of results to the following key assumptions that materially influence estimated costs and benefits. See Table 32 for summary of sensitivity findings.

The option with the highest net benefit may change under some of these sensitivity analyses.

These figures require a number of caveats. Sympli does not yet service the entire market. In addition, PEXA's costs include significant costs to provide integrations into the banks which primarily benefit the banks and have improved the reliability of financial settlement. These further integration costs may not be relevant to a new entrant.

C.1 Key findings in sensitivity analysis

Sensitivity testing identified two key assumptions that have a material effect on the overall net benefit outcomes: market share dynamics, price efficiency. While other assumptions produced limited variation in results, these two materially changed whether particular interoperability models, especially Direct connect, delivered positive net benefits.

- Under the Direct connect model, if the non-incumbent ELNO is unable to attain approximately 39 per cent market share over the 20-year assessment period (and the incumbent ELNO doesn't respond with its own price reductions), the model is less likely to produce a positive net benefit. This reflects the practical difficulty of achieving full competitive balance given the incumbent's early-mover advantage, network effects, and established integration with major banks.
- Under competitive market models (Option 1,2,3,5,6), if Sympli increases its service prices by more than 2.4 per cent relative to current levels (in relative terms in comparison to PEXA's pricing), the Direct connect model is not expected to produce positive net benefits. Conversely, under monopoly regulations (Option 4 and 7), the model's viability depends on achieving efficiency improvements of at least two per cent below CPI growth (or two per cent below the actual price growth path under the status quo) through cost regulation.

Table 32 | Key assumptions, applications and sensitivity analysis findings

Assumptions	Applications	Key findings
Discount rate	Tests sensitivity of net results to different social time preferences and capital costs	Direct connect and monopoly regulation continued to provide net benefit under 10 per cent discount rate
Assessment period	Examines how varying the assessment timeframe affects total discounted benefits	Direct connect returns a negative net benefit under 10-year assessment period
Competitive environment	Tests outcomes under higher or lower Sympli market shares	Under the Direct connect model, if the incoming ELNO is unable to attain approximately 42 per cent, the model ceases to produce positive net benefits
eConveyancing market growth	Examines how transaction growth and market expansion affect total benefits	Changes in eConveyancing market growth have a limited impact on net benefits
Interoperability cost for ELNOs	Tests sensitivity to different ELNO development and operational costs	Direct connect continues to deliver positive net benefits even under higher interoperability cost assumptions for ELNOs
Interoperability cost for banks	Assesses effect of varied bank integration and development costs	If bank's capital costs increase 37 per cent beyond current estimates, the Direct connect model would no longer deliver a positive net benefit
Integration testing efforts for SROs and land registries	Tests impact of differing testing workloads on participants	Integration testing efforts have limited influence on overall net benefits
Price efficiency under price regulation	Tests CPI–X factors on price efficiency benefits in regulated models	If monopoly regulation achieves price reductions of less than 1.7 per cent below inflation, the efficiency gains will be insufficient to offset regulatory and implementation costs
Price efficiency under competition	Examines how competitive pricing affects subscriber cost saving	If Sympli increases its service prices by more than 1.8 per cent relative to the baseline assumption, the Direct connect model ceases to produce a positive net benefit
Potential time savings under competition	Tests impact of usability differences on subscriber time savings	If subscribers obtain 2 minutes of time savings per transaction, all market options, except Central ESB and Hub-ELNO, will deliver positive net benefits.
Achievable market resilience	Assess impact of total achievable market resilience on option benefits	Variations in achievable market resilience have minimal impact on the overall net benefits across all interoperability options

C.2 Detailed sensitivity analysis results

Note that for all tables in section C.2 (Table 33 to Table 43) net present costs are shown as negative values, denominated by brackets, as opposed to net present benefits

C.2.1 Standard discount rate

The discount rate is used to convert future streams of costs and benefits into their present value equivalents. It reflects the opportunity cost of capital and society's preference for immediate benefits over future ones. In cost–benefit analysis, it is a central determinant of net present value because it dictates how strongly future benefits are discounted relative to upfront expenditures. A higher discount rate places less weight on long-term outcomes, while a lower rate favours investments that deliver benefits over an extended period.

Testing the discount rate under sensitivity analysis is important because the choice of rate can materially change the results, particularly for infrastructure or regulatory interventions with long-term impacts. In the context of interoperability, some models require significant upfront investment followed by a gradual build-up of benefits. Varying the discount rate allows decision-makers to understand whether these models remain viable under alternative economic or policy conditions.

Table 33 | Net benefits sensitivity analysis: Discount rates, ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
3% discount rate	51.3	(2.9)	(40.1)	(24.7)	1.2	47.5	13.3
10% discount rate	1.0	(27.3)	(52.0)	(20.1)	(10.1)	(3.8)	5.5

C.2.2 Assessment period adjustment

The assessment period defines the timeframe over which the costs and benefits of each interoperability option are evaluated. It is used to calculate total discounted net benefits and ensure that all relevant costs and benefits are captured within a consistent analytical window. A longer assessment period captures more of the future benefits associated with sustained efficiency and competition, while a shorter period emphasises immediate returns on investment.

Testing alternative assessment periods is important because different models have distinct cost–benefit profiles. Some interoperability models incur substantial development costs early but generate increasing benefits over time as adoption grows. Adjusting the assessment period tests whether total net benefits remain positive when the assessment timeframe is shortened or extended, providing insight into the long-term sustainability of each model.

Table 34 | Net benefits sensitivity analysis: Assessment timelines ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
10-year assessment period	(25.7)	(48.1)	(75.5)	(22.8)	(17.6)	(30.8)	3.1
15-year assessment period	(5.8)	(36.0)	(64.4)	(22.9)	(12.6)	(10.5)	5.7

Key observations from assessment period adjustments:

- The length of the assessment period has a material impact on the size of the estimated net benefits, as a shorter period captures fewer years of benefits relative to the upfront implementation costs. A longer period, by contrast, allows more time for the cumulative efficiency and competition benefits to accrue.
- The 20-year assessment period adopted for the baseline analysis is considered appropriate, as it aligns with the expected operational life of the technological solutions and provides a balanced view of both short-term and sustained impacts.

C.2.3 Competitive environment in the eConveyancing market

The competitive environment assumption models the degree of market competition achieved under interoperability. It is expressed as the attainable market share captured by Sympli relative to PEXA and determines the extent of cost and benefits attributed to competition. The baseline scenario assumes a fully competitive market where both ELNOs achieve roughly equal market shares over time.

Testing alternative market share scenarios is critical because actual competition outcomes may deviate from theoretical equilibrium. Barriers to switching, network effects, and differences in service quality could limit Sympli's growth or allow PEXA to retain dominance. Sensitivity testing helps to determine whether the economic case for interoperability remains strong if competition develops more slowly or less evenly than expected.

Table 35 | Net benefits sensitivity analysis: Competitive environments ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
25 per cent of eConveyancing market is attainable by incoming ELNO	(30.4)	(67.1)	(96.3)	(22.5)	(20.1)	(35.2)	8.0
42 per cent of eConveyancing market is attainable by incoming ELNO	0.0	(36.7)	(65.9)	(22.2)	(11.4)	(4.6)	8.0
75 per cent of eConveyancing market is attainable by incoming ELNO	61.6	24.9	(4.3)	(21.5)	6.2	57.4	8.0

Key observations under difference competitive environments:

- The monopoly regulation option is unaffected by changes in market share, as it assumes no competition in the market and benefits are derived solely from regulated price efficiency and market resilience.
- Under the Direct connect model, if the incoming ELNO is unable to attain approximately 42 per cent market share over a 20-year period, the model ceases to produce positive net benefits. This reflects the strong dependence of competition-driven models on the extent to which market entry and adoption occur in practice.

C.2.4 Future eConveyancing market growth

This assumption captures the expected growth in the eConveyancing market, measured through transaction volumes over the assessment period. It is used to scale the magnitude of both costs and benefits since higher market activity increases the overall number of transactions affected by interoperability. Stronger market growth amplifies benefits such as price efficiency and productivity gains, while slower growth diminishes them. Baseline scenario assumes eConveyancing market will have 0.62 per cent growth per annum over 20 years.

Testing alternative market growth scenarios is important because future property transaction volumes are subject to macroeconomic conditions, housing market cycles and policy settings. Varying this assumption allows the analysis to test whether the economic viability of each model holds under weaker or stronger market conditions. It also indicates the level of risk associated with external economic fluctuations.

Table 36 | Net benefits sensitivity analysis: eConveyancing market conditions ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
3 per cent growth per annum in all eConveyancing transactions	16.4	(20.3)	(49.5)	(21.8)	(6.7)	11.9	8.0
5 per cent growth per annum in all eConveyancing transactions	17.1	(19.6)	(48.8)	(21.6)	(6.5)	12.6	8.0

Key observations under varying market conditions:

- Changes in eConveyancing market growth have a limited impact on net benefits unless there is a significant increase or decrease in transaction volumes.
- The results indicate that assuming zero market growth produces outcomes similar to the baseline analysis, which is based on an annual growth rate of 0.62 per cent. This suggests that the estimated net benefits are not sensitive to weak market conditions.

C.2.5 Interoperability cost estimations for ELNOs

Cost assumptions represent the capital and operational expenditure required by ELNOs to design, build, test and maintain interoperable systems. These costs form a substantial portion of the overall implementation expenditure for interoperability and influence both public and private net benefits.

Testing higher and lower interoperability costs for ELNOs is important to understand the degree of uncertainty around technical complexity and implementation efficiency. Differences in system design, regulatory requirements, or integration architecture could materially increase costs. Sensitivity testing ensures that the economic case remains robust even if ELNO development changes.

Table 37 | Net benefits sensitivity analysis: Cost estimates for ELNOs ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
50 per cent decrease from the baseline cost estimate for ELNOs	28.5	(7.5)	(33.5)	(9.9)	5.3	24.6	8.0
61 per cent increase from the baseline cost estimate for ELNOs	0.0	(37.5)	(70.7)	(36.7)	(21.9)	(5.2)	8.0
Double the cost estimate for ELNOs	(10.2)	(48.1)	(84.0)	(46.2)	(31.6)	(15.8)	8.0

Key observations from ELNO costs:

- The sensitivity analysis shows that the Direct connect model will not deliver positive net benefits if the interoperability cost assumption for ELNOs is 61 per cent higher. This indicates that the model is relatively resilient to variations in development and implementation costs, suggesting that the economic case for Direct connect remains robust even if technical complexity or integration expenses exceed baseline estimates

C.2.6 Cost estimates for Banks

This assumption reflects the cost incurred by financial institutions to integrate their systems with multiple ELNOs under interoperability. It includes new technology development, API configuration, testing, and staff training. These costs are significant because banks are key participants in the settlement process, and their expenditure directly affects overall net economic outcomes.

Testing this assumption is essential because banks' cost structures vary widely depending on their existing digital maturity and the complexity of their systems. A higher-than-expected integration cost could substantially reduce the net benefit of certain interoperability models. Sensitivity analysis therefore assesses whether the benefits of increased competition and efficiency still outweigh the additional costs borne by financial institutions.

Table 38 | Net benefits sensitivity analysis: Cost estimates for banks ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
50 per cent decrease in interoperability cost for banks	37.1	0.3	(21.2)	(22.0)	(4.8)	34.3	8.0
36 per cent increase in interoperability cost for banks	0.0	(36.6)	(71.4)	(22.0)	(8.6)	(5.7)	8.0
Double the interoperability costs for banks	(27.4)	(63.9)	(108.5)	(22.0)	(11.4)	(35.2)	8.0

Key observation from banks' cost sensitivity testings:

- The sensitivity analysis indicates that banks bear a substantial share of interoperability implementation costs. If these costs increase 36 per cent beyond current estimates, the Direct connect model would no longer be estimated deliver a positive net benefit.

C.2.7 Integration testing effort for State Revenue Offices and Land registries

This assumption captures the level of effort required by SROs and land registries to complete interoperability integration testing with ELNOs and, where applicable, with an ESB. The assumption is used to estimate labour and contractor costs for each testing phase, as these activities typically involve technical specialists, developers and project managers over a defined testing period.

Testing variations in integration testing efforts is important because this activity represents one of the largest cost drivers for SROs and land registries under interoperability. The level of effort can vary significantly depending on the complexity of existing systems, the number of ELNO connections, and the technical architecture of the interoperability model adopted. Sensitivity analysis allows the assessment of how higher or lower testing efforts such as, longer testing durations or greater staffing requirements, affect overall market option viability.

Table 39 | Net benefits sensitivity analysis: Integration testing efforts for SROs, and LRs ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
One months increase in interoperability integration and testing efforts	15.1	(22.0)	(53.8)	(21.6)	(8.0)	9.6	8.3
One months decrease in interoperability integration and testing efforts	16.1	(20.2)	(46.8)	(22.3)	(5.9)	12.7	7.6

Key observations from varying integration testing effort:

- The sensitivity analysis indicates that while integration testing represents a material cost for state revenue offices and land registries, variations in testing effort have a limited influence on overall net benefits. This is because these costs comprise a relatively small proportion of total system-wide expenditure, and changes in testing duration or staffing requirements do not materially affect the aggregate economic outcomes.
- The sensitivity analysis indicates that while integration testing represents a material cost for state revenue offices and land registries, variations in testing effort have a limited influence on overall net benefits. This is because these costs comprise a relatively small proportion of total system-wide expenditure, and changes in testing duration or staffing requirements do not materially affect the aggregate economic outcomes.

C.2.8 Consumer price savings under price regulation

This input models the efficiency gains achieved through regulated price controls under monopoly and Hub-ELNO market structures. It is expressed through an efficiency factor (X) in a CPI–X price regulation framework, which determines how much prices are expected to decrease relative to inflation to be efficient. The assumed efficiency factor drives the magnitude of subscriber cost savings under regulated models.

Testing alternative efficiency factors is essential because regulatory outcomes depend on how effectively cost reductions can be enforced. If regulators achieve stronger efficiency gains, total benefits to consumers and practitioners increase; if enforcement is weak, benefits diminish. Sensitivity analysis ensures that the results account for uncertainty in regulatory effectiveness and the true scope for ongoing productivity improvements.

Table 40 | Net benefits sensitivity analysis: Price efficiency under price regulation ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
No price efficiency gained under monopoly regulation	15.6	(21.1)	(50.3)	(74.2)	(7.0)	11.1	(49.3)
One per cent price reduction under monopoly regulation	15.6	(21.1)	(50.3)	(48.1)	(7.0)	11.1	(20.7)
1.74 per cent price reduction under monopoly regulation	15.6	(21.1)	(50.3)	(29.2)	(7.0)	11.1	(0.0)
Monopoly regulation limits prices to Sympli's current level	15.6	(21.1)	(50.3)	121.6	(7.0)	11.1	165.6

Key observations:

- The sensitivity analysis demonstrates that the net benefits of regulated market models are highly sensitive to the efficiency factor assumed under the CPI–X pricing framework. If monopoly regulation achieves price reductions of less than 1.7 per cent below inflation, the associated efficiency gains are insufficient to offset regulatory and implementation costs, resulting in a negative net benefit.
- Conversely, if regulated price reductions of three per cent or more can be sustained, the Hub-ELNO model becomes economically viable. Under these conditions, the productivity and regulated price efficiencies captured through a centralised wholesale framework are sufficient to outweigh additional regulatory and operational costs.

C.2.9 Consumer price savings under competition

This assumption represents the price changes expected from competitive pressure between ELNOs in an interoperable market. It is used to estimate subscriber cost savings, with the baseline scenario reflecting Sympli's current price discount relative to PEXA. The scale of these benefits depends on how competitive dynamics evolve after interoperability is introduced.

Testing alternative competition-driven price changes is important because actual pricing outcomes will depend on market behaviour, cost structures, and switching incentives. Sensitivity analysis identifies the threshold at which competition delivers meaningful economic benefits to subscribers.

Table 41 | Net benefits sensitivity analysis: Price efficiency under competition ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
No price efficiency gained under competition	(50.6)	(87.3)	(116.5)	(22.0)	(31.7)	(55.9)	8.0
1.8 per cent increase in Sympli's price under competition	(0.0)	(36.7)	(65.9)	(22.0)	(12.8)	(4.7)	8.0
One per cent decrease in Sympli's price under competition	24.4	(12.2)	(41.5)	(22.0)	(3.7)	20.0	8.0

Key observation:

- The sensitivity analysis indicates that the net benefits of competitive interoperability models are highly sensitive to pricing behaviour by ELNOs. If Sympli increases its service prices by more than 1.8 per cent relative to the baseline assumption, the Direct connect model ceases to produce a positive net benefit. This outcome reflects the risk that once sufficient market share is achieved, Sympli could begin to prioritise profit maximisation while maintaining a modest price discount relative to PEXA.

C.2.10 Potential subscriber time savings under competition

This assumption measures the efficiency gains that practitioners and financial institutions achieve from improved usability and workflow design on alternative ELNO platforms. It is used to quantify improved participant outcomes under competitive interoperability models. These time savings translate into direct productivity benefits across a large number of transactions.

Sensitivity testing is required because usability differences between platforms may narrow or widen over time as systems evolve. Varying the estimated time savings ensures that the analysis captures a realistic range of potential efficiency improvements and assesses how strongly these gains influence overall net benefits.

Table 42 | Net benefits sensitivity analysis: Time savings ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
No time saving for subscribers from competition	(18.2)	(54.9)	(84.2)	(30.5)	(17.2)	(23.0)	8.0
2-minute time saving for subscribers under competition	49.5	12.8	(16.5)	(13.4)	3.2	45.3	8.0

Key observations:

- The sensitivity analysis shows that net benefits are highly sensitive to changes in participant time savings under competition. If PEXA enhances its user interface and achieves comparable efficiency improvements in response to competitive pressure or innovation driven by interoperability, the ESB between ELNOs and Practitioner-choice models could become economically viable.

C.2.11 Achievable market resilience

Total achievable market resilience quantifies the degree to which interoperability improves the resilience of the eConveyancing system. It describes the proportion of one-day settlement delays that could be avoided if subscribers can switch to an alternative ELNO during outages or if regulation enforces a required service level. The current assumption is, over a 20-year period, technological and operational improvements will eliminate all one-day settlement delays.

Testing alternative resilience outcomes is important because the extent of avoided delays depends on the realistic operational performance of ELNOs and the effectiveness of the regulators. If resilience improvements are smaller than expected, total consumer and industry benefits may be overstated. Sensitivity testing helps determine how critical resilience outcomes are to the overall economic case for interoperability.

Table 43 | Net benefits sensitivity analysis: Achievable market resilience ($m, present value 2025)

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Baseline result	15.6	(21.1)	(50.3)	(22.0)	(7.0)	11.1	8.0
95 per cent of all eConveyancing one-day delays are avoidable under multi-ELNO environment or additional regulation	15.6	(21.1)	(50.4)	(22.0)	(7.0)	11.1	7.9
90 per cent of all eConveyancing one-day delays are avoidable under multi-ELNO environment or additional regulation	15.5	(21.1)	(50.4)	(22.0)	(7.0)	11.0	7.9

Key observations:

- The sensitivity analysis indicates that variations in achievable market resilience have minimal impact on the overall net benefits across all interoperability options. This reflects the relatively low frequency and limited scale of platform outages in the current eConveyancing market, meaning that the consumer and industry benefits from avoiding one-day settlement delays are modest in aggregate terms.
- However, this finding should be interpreted with caution, as the model does not account for the potential cost of catastrophic or systemic platform failures. Such low-probability, high-impact events are difficult to quantify but could have significant economic consequences. Their exclusion highlights a limitation of the analysis, as black swan events may materially alter the value of improved market resilience.