

Ms Carmel Donnelly PSM
Chair
NSW Independent Pricing and Regulatory Tribunal
Level 16, 2-24 Rawson Place
SYDNEY NSW 2000

Via email: ipart@ipart.nsw.gov.au
cc. jennifer.vincent@ipart.nsw.gov.au

6 May 2026

Dear Ms Donnelly,

RE: Review of Electronic Lodgment Network Operator service fees – TBH Hypothetical ELNO Draft Report

Thank you for the opportunity to provide feedback on the Draft Hypothetical ELNO Report (the Report) and Draft Cost Model (the Cost Model) produced by TBH Consultancy as part of IPART's Review of Electronic Lodgment Network Operator service fees (the Review).

PEXA's position is that the TBH Draft Report, in its current form, does not meet an appropriate standard of evidentiary robustness or factual accuracy for a document that may influence regulatory pricing outcomes, and should not be published or relied upon. If the Tribunal is of the view that the Report should form part of the Review, PEXA requests the opportunity to review the next version of the TBH Report, and the Draft IPART Report prior to their publication. This would allow us to consider the need to provide a concurrent update to the ASX correcting any inaccuracies and mischaracterisations that would materially impact the market's accurate understanding of the operating and regulatory requirements that apply to an ELNO.

To assist the Tribunal PEXA has provided feedback and corrections in the prescribed form requested by IPART. However, given the extent of the Report's inaccuracies and the misconceptions of an ELNO's operating and regulatory environment it contains, PEXA believes it is necessary to provide further detail about our concerns for the Tribunal's consideration. This letter is intended to be read in conjunction with the evidence provided in the feedback template.

I acknowledge and appreciate that TBH took the opportunity to engage with PEXA, including seeking written materials, and holding workshops to understand an ELNO's operating environment and regulatory requirements.

However, we believe the report does not accurately reflect the technical complexity and operating requirements that must be factored into the costs of a fully functional ELNO.

We submit that TBH would have benefited from a deeper and more comprehensive understanding of this new and unique industry. This is reflected in the time committed for TBH to understand the eConveyancing ecosystem.

The Report suggests that three workshops were held, however it is my understanding that the intended third extended workshop with PEXA was cancelled by TBH. While a third meeting was held, I am advised that this was an informal discussion without a clear agenda and therefore cannot be characterised as a workshop. The proposed third workshop's agenda included: "Q&A covering high level technical, regulatory and commercial themes."

Given the concerns PEXA has raised with the Report, set out below, it is clear further consultation with ELNOs, including PEXA, would have been valuable in providing TBH with a greater understanding of the commercial, operating, and regulatory environment of an ELNO. Given the gravity of the implications for PEXA on relying on the TBH analysis we respectfully request the Tribunal strongly consider our feedback on the report

Comparisons with Real-world ELNO builds

As PEXA's fact check response sets out, the Report's constructed hypothetical ELNO is not reflective of the real-world operating requirements, regulatory framework, and customer requirements of an ELNO. The Report finds that a hypothetical ELNO with 100 percent market share, delivering core features, would incur initial capital expenditure of between \$42.1 million and \$64.0 million to design and build.

The shortcomings of this conclusion can be clearly demonstrated when comparing the resulting hypothetical ELNO to four real-world examples of ELNO builds:

- PEXA's Australian Exchange cumulative build costs exceeding \$300 million since 2011;
- Sympli - which is yet to enter all jurisdictions, does not offer a full list of digital registry instruments nationally, and has a smaller network of customers across

conveyancers and banks - is reported to have received \$168 million in investment as at May 2025;¹

- PEXA UK's build costs exceed AUD\$100 million (and more than AUD\$295 million in total investment); and
- LexTech's \$200 million estimate of the investment required to establish an ELNO platform.²

Even accepting efficiencies could be found across these four examples, and accounting for errors in the Model's formulae and inputs (set out in PEXA's fact check response), the hypothetical ELNO's build cost is less than 40 percent of the lowest real-world example. This discrepancy suggests the model is based on fundamental misunderstandings of the real world operating and regulatory requirements of an ELNO.

The lack of correlation between the Hypothetical 'efficient' ELNO and real-world ELNO builds reference points reflects a either a misunderstanding or a failure to account for the broad set of requirements and pressures ELNOs must adhere to. TBH defines a Hypothetical ELNO as "an operator that delivers all required functionality in accordance with the MORs and relevant legislative obligations, operates a secure, reliable, and scalable platform, adopts modern, maintainable, and cost-effective system architecture, and maintains appropriate service quality and risk controls at an efficient cost." However, as discussed below, the actual parameters and assumptions used in the Hypothetical ELNO model are significantly lower than those that would be needed to meet TBH's definition.

The Model is Predicated on Fundamental Misunderstandings of the ELNO Operating and Regulatory Environment

The TBH Report and Model rely heavily on untethered assumptions and a hypothetical construct that is not sufficiently grounded in the operational, regulatory and technical realities required under ARNECC's Model Operating Requirements, and in several areas materially mischaracterises the nature of PEXA's cost drivers and system design. Under the Report's proposed model, PEXA would not be able to meet many of its regulatory obligations.

There is also little-to-no background for why certain assumptions have been made, which is particularly concerning given the significant discrepancies between some assumptions and real-world ELNO experience, or publicly available benchmarks. For example, the Model assumes the build and deployment of interoperability could be delivered in 120 person-months, resulting in a cost estimate of \$2.1 million to \$3.3 million. However, there is no

¹ *Australian Financial Review*, 'Rival to PEXA quits e-conveyancing market', 12 May 2025.

² *Australian Financial Review*, 'Rival to PEXA quits e-conveyancing market', 12 May 2025.

justification for these cost assumptions and they are contradicted by ARNECC’s independent experts, Nous Group, which estimated the cost of implementing interoperability to be approximately \$6.5 million per ELNO.³ While the interoperability costs have been removed to account for recent regulatory decisions, the discrepancy between ARNECC’s appointed independent expert, and the Model’s assumptions (by a factor of two-three), without any commentary or justification, is concerning. Similar examples of untethered assumptions are discussed below.

The “Steady-state” misconception: ELNOs require Continuous Investment and Expansion

A critical misunderstanding that flows through the Report and Model is the assumption that an ELNO with significant market share exists as a “steady-state operating model” and that this steady-state does not require ongoing investment activity, jurisdictional expansion or digital registry instruments coverage.⁴ This is incorrect, in that regulatory requirements and customer expectations require constant investment activity to be met, beyond mere ‘upkeep’. The Model Operating Requirements (MOR), including clauses 5.1 and 5.2, require ELNOs to progressively expand the range of registry instruments capable of electronic lodgment.

Further, there are also multiple updates to the National Electronic Conveyancing Data Standard (NECDS) each year which impact the more than 800 digital registry instruments across all eight jurisdictions PEXA operates in. This necessitates ongoing capital investment in product development, system enhancement, and integration with external parties. Platform development therefore must continue well beyond initial platform build, and even beyond a point where there is commercial incentive to continue to develop instruments or expand markets given obligations to drive toward 100% digital adoption of eConveyancing instruments. To meet these obligations, PEXA works with Land Registries to define the Australian Registrars Working Group (ARWG) roadmap and invests more than \$5 million capital expenditure on an annual basis. Further, as digital platforms, ELNOs must invest in ongoing technology innovations, including AI, cloud data storage, integrations, and security requirements in order to meet customer and regulator expectations. Digital platforms are not ‘set and forget’ infrastructure, but are required to evolve to remain fit for purpose in a rapidly changing environments, compared to traditional infrastructure.

Regulatory Obligations Extend Beyond the MOR and Drive Baseline Costs

This “steady-state operating model” misconception is compounded by an incorrect treatment of an ELNO’s regulatory environment that permeates the entire Report and

³ Nous Group, *Economic analysis of reform options for the eConveyancing market*, 19 December 2025, Figure 1 and Table 3.

⁴ TBH Draft Report, page 30.

Model. The Draft Report frequently frames ELNO obligations as being governed primarily by the MOR – the “minimum requirements that ELNOs must satisfy to be approved and to operate.”⁵ However, this does not reflect the full scope of regulatory requirements that determine the baseline cost and complexity of operating an ELNO with national reach (national reach itself being a requirement in the MOR). For instance, in New South Wales, ELNOs are subject to the Registrar General’s Conditions of Approval, which impose explicit requirements relating to service levels, continuous improvement, and customer outcomes. Clause 6 of those conditions includes obligations regarding call handling performance (such as that calls must be answered within a minute) and customer engagement, which directly drive operational cost. Other jurisdictions impose equivalent obligations through Approval Conditions or Operating Agreements. Many of these regulatory instruments or contracts are not publicly available, but they nevertheless drive compliance obligations on ELNOs. Similar bespoke requirements can be found across jurisdictions in Operating Requirements and Operating Agreements which PEXA (and a Hypothetical ELNO with national coverage) must respond to with bespoke customised business processes and builds that add cost and complexity to the national system.

There also appears to a significant misunderstanding of other legal obligations required of an ELNO with material market share including:

- Compliance with the *Security of Critical Infrastructure Act 2018* (SOCI Act),
- Compliance with the Reserve Bank of Australia operating agreement,
- APRA requirements under CPS230 as a material service provider, who provides a critical operation to Australia’s banking institutions and;
- ASIC obligations pertaining to an exemption from being required to hold an Australian Financial Services Licence.

The effect is that the true baseline obligations of an ELNO extend materially beyond the MOR, and any model that does not fully incorporate these broader requirements will accordingly understate ongoing operating costs. Further, the MOR itself embeds a requirement for continuous improvement and ongoing development. These obligations are underpinned by evolving integration requirements with “Back End Infrastructure Connections” (as defined by the MOR), including land registries, financial institutions and revenue offices. For example, integration with financial institutions is not a one-off activity but requires ongoing development, testing, and enhancement as systems evolve.

Integration Complexity is Structural and Materially Underestimated

The Report assumes that all financial institution integrations can be completed in 48 person-months for all bank integrations (or, 4.8 months for a 10-technician squad).⁶ This is unrealistic and reflects a misunderstanding of the complexities associated with integrations.

⁵ TBH Report, ‘Model Operating Rules’ “, page 11.

⁶ TBH Model, Cost Inputs, N44.

Recent industry examples demonstrate the true scale of time and resource required. PEXA's own experience in the United Kingdom, developed by Thoughtworks (industry best practice software engineering consultants), indicates that bank integrations require in the order of 12 months for a ten-person squad. Similarly, the integration between Symplici and the Commonwealth Bank of Australia is understood to have required approximately 12 months of effort for a dedicated delivery team.

Given that 10 integrations are required for Australian market coverage, real-world experience suggests this would take a squad of ten technicians 120 months - more than 20 times the 4.8 months TBH has estimated. The divergence between these examples and the assumptions adopted in the Draft Report is therefore material and again indicate a broader misunderstanding of the regulatory and operational environment.

Cybersecurity and Critical Infrastructure Obligations Are Materially Underestimated

The TBH Report and Model also do not adequately account for the broader security, resilience, and risk management requirements associated with operating any digital platform, let alone an ELNO with material market share.

Cybersecurity is a critical and non-discretionary component of operating an ELNO at scale. An ELNO facilitating the transfer of material sums through Australia's payment systems must be regarded as critical national infrastructure. In PEXA's case, approximately \$720 billion was processed in FY25, making the platform a persistent target for cyber criminals and fraudsters. The failure of the Report and Model to appropriately understand and reflect this further materially undermines the credibility of its cost assumptions.

The Report's assumptions are not supported by either operational reality or published benchmark data. TBH assumes approximately five full time equivalent (FTE) resources and \$900,000 in annual cybersecurity expenditure, based on a generic scaling approach tied to company size. This is fundamentally incorrect. Cybersecurity capability in this context is driven by regulatory obligation, threat exposure, and the requirement to maintain continuous settlement integrity – none of which scale neatly with headcount.

Published Australian benchmarks provide a clear point of comparison. The CISO Lens Benchmark 2024, drawing on data from 96 organisations across Australia and New Zealand and endorsed by the Australian Cyber Security Centre, reports a median security budget of \$12 million and an average of \$28 million across all respondents in FY24. The report further identifies 9 percent of total technology budget as an "absolute floor" for appropriate security investment. Against this benchmark, the Model implies a security spend ratio of approximately 4 percent, less than half the published floor, applied to one of only two

licensed ELNOs in Australia operating under SOCI, ARNECC, and APRA CPS 234 obligations simultaneously.

On headcount, the same benchmark found the median security team size across all respondents was 30 FTE, with an average of 68 FTE. For Large Financial organisations, defined as ASX-listed entities with market capitalisation above \$10 billion and the closest available comparator by regulatory profile, the average security team represented 1.20 percent of total organisational headcount. However, the report explicitly identifies heavily regulated industries as warranting a higher baseline, stating: "*Of course, heavily regulated industries are a notable exception.*" This is confirmed by the benchmark's top 10 respondents by security-to-headcount ratio, who averaged 2.69 percent, and of whom nine had fewer than 5,000 staff. The report is unambiguous: it is regulatory obligation, not organisational scale, that drives security team sizing at the upper end of the benchmark range. Applied to PEXA's workforce, the top 10 average of 2.69 percent produces an indicative figure of approximately 13 FTE. TBH's assumption of 5 FTE sits below the Large Financial benchmark average and well below the figure indicated for a heavily regulated organisation of PEXA's profile, which operates concurrently under SOCI, ARNECC, and APRA CPS 234 obligations, placing it squarely within the heavily regulated exception the report identifies.

The benchmark also found that 12 percent of total security team headcount across respondents was consumed solely by responding to external audits and reviews. For a 5-FTE team, this implies less than one person available for audit response across PEXA's full regulatory calendar, which includes the annual ARNECC ELNO audit, bank-driven CPS 234 assessments from major financial institution subscribers, SOC 2 Type II audit preparation, and SOCI CIRMP maintenance and board sign-off. This is not a credible allocation for an ELNO with material market share.

PEXA's experience is consistent with these benchmarks and reflects the practical requirements of operating a systemically important platform. In FY25, PEXA defended against more than 6.5 million attempted intrusions without compromise to platform integrity or availability. This outcome was supported by sustained investment exceeding \$10 million per annum in cybersecurity, a global team of more than 20 dedicated specialists, and 24-hour, seven day a week managed security services. These capabilities are not discretionary enhancements, but baseline requirements necessary to meet regulatory obligations, support financial institution participation, and maintain a secure and resilient platform.

In this context, the Report's assumptions do not represent a credible operating model. They reflect a level of resourcing that would be insufficient to manage the scale and sophistication of threats faced and are inconsistent with both industry benchmarks and

observed practice. The absence of justification for these assumptions further reinforces that the Model materially understates the cost and capability required to operate an ELNO securely at scale.

Costs Do Not Stabilise at Scale or Maturity

These and other perpetual cost drivers mean costs would not stabilise following initial platform deployment, or even platform maturity, but would continue to grow in response to regulatory requirements, evolving industry standards, and the need to support broader adoption. It would be manifestly incorrect to describe a Hypothetical ELNO as “steady-state” (except perhaps after decades of operation). The premise of a “steady-state” ELNO, capable of maintaining operating approval and market participation without sustained investment, is entirely inconsistent with observed market behaviour or regulatory expectation.

The “Core vs Non-Core” Distinction Excludes Essential Functions

Customer Service and Operational Support Are Mischaracterised

The Draft Report’s dichotomy of “core” versus “non-core” services further contributes to this understatement of cost. By adopting a narrow definition of core services, the model excludes or minimises functions that are essential to the operation of a viable digital platform, let alone a compliant and commercially operating ELNO. For example, customer service is treated as a largely automatable, exception-based function, despite its central role in managing complex, time-critical, multi-party transactions. In practice, significant resources are required to support users through transaction execution, resolve issues in real time, and maintain system confidence across the network. In addition, regulatory requirements apply, relating to customer service (such as call response times (which require a team member to answer), maximum call abandonment rates, and minimum enquiry resolution times) which are not accounted for in the Report or Model.

No Consideration of Customer needs and expectations

As a customer focused organisation PEXA is concerned that the Report and Model almost entirely omit the cost and strategic importance of meeting customer needs, evolving expectations, and ongoing relationship management in its assumptions. In a network-driven market, these functions are not discretionary, they are fundamental to sustaining scale. The assumption that an ELNO can achieve and maintain material market share without sustained investment in these areas is not supported by observed market behaviour, as seen in PEXA’s initial launch and the current experience of PEXA UK. If customers were treated as the hypothetical ELNO’s model suggests, any ELNO would either lose customers, reducing its network effects and therefore losing efficiencies, or face regulatory penalties and interventions to improve its performance. The hypothetical ELNO is in this instance

more of a theoretical tool, rather than a commercially viable, regulatorily compliant, customer-facing digital platform. It therefore produces a fundamentally flawed benchmark for 'efficient' cost.

The Model's approach to customer acquisition and retention also appears to disregard MOR 5.1, which states that "The ELNO must encourage widespread industry use of the ELN," including specific plans "to encourage the use of the ELN nationally and in the Jurisdiction" and "timings for the commencement of operations and the anticipated level of service, including matters such as ease of connection and access for different classes of users." TBH's assumptions regarding the Hypothetical ELNO's investment in customer service would mean non-compliance with the MOR, rather than an efficient functional ELNO.

Architectural Assumptions Do Not Reflect ELNO Operating Reality

Greenfield Assumptions Do Not Reflect a Live, Evolving Platform

The TBH Report's Hypothetical ELNO Architecture is based on a greenfield scenario that does not reflect the realities of operating and evolving an ELNO in a live environment. In practice, an ELNO must simultaneously support long-running, in-flight transactions, multiple concurrent versions of workflows and rules, ongoing regulatory changes, and complex, multi-party integrations. These factors introduce persistent complexity that are not recognised by TBH's hypothetical ELNO architecture.

The Report contains few tangible reference points or facts for the overall cost estimates and relies on vague references such as "modern software engineering practices".⁷ The underlying cost drivers are not outlined or substantiated in the report. For example, only the overall 'build costs' are included in the Report but the assumptions underpinning the 'build costs' for the efficient ELNO are not. When considering the supporting Model, it is apparent that these 'build costs' are based on development months per ELNO feature, justified by an "internal base estimate". However, these assumptions are not supported by any demonstrated cost driver; rationale or benchmark. There are more than 50 such features with unsubstantiated estimates.

Recognition of the Platform's Complexity

The Report assumes that complexity can be materially reduced through "orchestration and configuration" layers.⁸ While this approach can improve flexibility, it cannot eliminate underlying complexity. In practice, workflows must accommodate a wide range of

⁷ TBH Draft Report, paragraph 2, page 3.

⁸ TBH Draft Report, paragraph 3, page 2.

participant combinations, digital registry instrument types, and jurisdictional variations, resulting in significant rule proliferation over time. As the number of permutations increases, testing effort grows non-linearly, and system behaviour becomes more difficult to predict and govern. For example, a seemingly minor change, such as the introduction of a new validation rule, can have unintended consequences across multiple transaction pathways, requiring extensive regression testing and increasing the risk of defects.

Similarly, the Report understates the structural complexity of integration within the ELNO ecosystem. While standardisation initiatives such as NECDS improve consistency of data formats, they do not standardise workflow sequencing, validation interpretation, or requirements that differ between jurisdictions. Any hypothetical ELNO must maintain integrations across land registries, financial institutions, revenue offices and other stakeholders, each with distinct systems, processes and requirements. As a result, integration complexity is ongoing rather than transitional, requiring continuous engineering effort to maintain compatibility and manage change.

The Report's treatment of settlement architecture further illustrates the underestimation of operational complexity. By shifting from a centralised, controlled settlement model to a distributed, orchestrated approach, the model reduces direct platform responsibility but introduces reliance on multiple external systems operating in coordination.⁹ In practice, this reduces determinism and increases the risk of timing mismatches, partial readiness, and reconciliation issues.

The Report also does not adequately account for the complexity associated with long-running transactions and platform evolution. ELNO transactions frequently span periods of regulatory and system change, requiring support for concurrent versions of workflows, schemas, and integration logic. This necessitates ongoing investment in backward compatibility, controlled migration pathways, and the ability to maintain, retrieve and audit historical transactions. These requirements introduce sustained engineering, testing, and operational overhead that persists beyond initial implementation, and are not eliminated through modular design. As a result, the model's reliance on a simplified, steady-state architecture does not reflect the true cost and complexity of operating a mature, regulated ELNO platform.

Conclusion

Taken together, these issues discussed above are not isolated errors but reflect a broader misalignment in the understanding of the ELNO operating model. While we recognise the effort undertaken in developing the Report and Model, these matters and the implications

⁹ TBH Draft Report, Figure 1: Hypothetical ELNO, page 19.

of relying on this report mean that it cannot, in its current form, be used as a basis for sufficiently robust regulatory decision-making.

In order to assist the Tribunals considerations, PEXA has provided many real-world examples in this response as evidence of the significant errors and misunderstanding in the Model's assumptions and inputs, and in the Report. As such, PEXA would appreciate the opportunity to redact commercial in confidence elements of this letter if IPART is of the view it should be published as a submission.

Finally, while PEXA has sought to provide as comprehensive a response as possible in its fact check response within the timeframes provided, the Draft Report and accompanying model are extensive and complex. The feedback provided, including the matters outlined above, are the most critical issues with the Report and Model, rather than an exhaustive catalogue of issues. The absence of comment on any specific aspect of the Report or Model should not be taken as an endorsement of the underlying assumptions or conclusions.

Thank you for your consideration of this matter. If you require any further information, please contact Thomas Hansen, PEXA's General Manager, Economic Regulation at Thomas.hansen@pexa.com.au

Yours sincerely,

Russell Cohen

Chief Executive Officer and Managing Director
PEXA Group