ECONOMIC REFORM ROUNDTABLE

Submission July 2025

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Zero damage - Zero harm - Zero disruption

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Supporting Australian Economic Reform

Accelerating infrastructure productivity through national utility data reform

Australia's infrastructure pipeline is growing rapidly, driven by the demands of the net zero transition, housing growth, and critical network upgrades. Yet, a persistent barrier continues to undermine project productivity, safety, and cost-efficiency: fragmented, slow, and manual access to underground utility data.

Each year, more than 20,000 incidents of accidental damage to buried infrastructure result in more than $5 billion in avoidable delays, disruptions, and repairs—costs ultimately borne by government, industry, and the community.

Before You Dig Australia (BYDA) proposes a nationally supported solution: the Digital Utility Location Portal. This secure, cloud-based platform provides planners, engineers, and contractors with a single point of access to digital, machine-readable utility data—before breaking ground. Currently in BETA phase with participation from major utilities across states, the portal represents a practical, scalable reform with the potential to transform how Australia coordinates and delivers infrastructure.

This submission outlines how national policy support for utility data sharing— paired with non-financial government actions—can unlock significant productivity gains, support net zero and housing targets, strengthen infrastructure resilience, and build a digitally skilled workforce.

We invite government leaders to explore this Australian-first initiative and its potential to deliver safer, smarter, and more cost-effective infrastructure outcomes nationwide.

Mell Greenall
CEO, Before You Dig Australia

Our Submission

About Before You Dig Australia

Before You Dig Australia (BYDA) is a national not-for-profit organisation committed to protecting Australia's essential infrastructure and promoting safe excavation practices. Operating the country's primary referral service for underground utility information, BYDA connects contractors, planners, and homeowners with asset owners to prevent accidental strikes on buried infrastructure.

Each year, BYDA facilitates **15 million asset location plan exchanges across Australia**—supporting civil construction, utilities, government, and the general public to work safely and efficiently around underground networks.

Our role extends beyond service provision. BYDA plays a national leadership role in:

- **Promoting** damage prevention education and awareness
- **Advocating** for safer, smarter infrastructure delivery
- **Championing** innovation in underground asset visibility
- **Collaborating** with utility owners, governments, and industry regulators

As an independent, industry-funded body with a public safety mandate, BYDA is uniquely positioned to drive digital reform across the utility sector and enable system-wide productivity gains. The development of our Digital Portal Proof of Concept is a natural extension of this mandate—bringing to life a long-standing national goal: structured, digital access to underground utility data to reduce risk, cost, and disruption.

BYDA submits this proposal for consideration as part of the Government's Economic Reform Roundtable and the productivity reform agenda and the Productivity Commission's five-pillar framework.

BYDA's Submission

Our submission centers on national support for the commercial development of a Digital Utility Location Portal—a once-in-a-generation infrastructure reform to:

- Improve productivity in infrastructure delivery
- Harness data and digital technology for national benefit
- Reduce public and private sector waste and inefficiency
- Enable the net zero transformation
- Strengthen economic resilience
- Support a skilled, digitally capable workforce

The BYDA Digital Portal Proof of Concept is a live, Australian-first initiative that digitises access to subsurface utility information, reducing infrastructure delays, project risk, and underground asset damage. Its national rollout would support reforms under at least eight of the Productivity Commission's 15 priority areas, with no requirement for direct operational funding from government.

National Context and Problem

Australia is experiencing a surge in infrastructure investment—driven by net zero targets, prioritised housing growth, population pressures, and network renewals. Yet our ability to plan and deliver safely and efficiently is hindered by slow, fragmented access to utility location data.

More than 20,000 incidents of underground infrastructure damage occur each year, creating in excess of $5 billion in economic costs. Delays, service outages, emergency works, safety incidents, and insurance claims are the norm, not the exception. These inefficiencies undermine infrastructure productivity and add unnecessary strain to public infrastructure project budgets.

The BYDA Digital Portal – A Smart, Scalable Solution

The BYDA Portal is a cloud-based, GIS-enabled platform that allows planners, engineers, and contractors to **access digital, machine-readable utility asset data** in a single interface—before ground is broken. It is currently in a BETA phase with a geographical test area of greater Sydney, with participation from leading utilities across several states, including Telstra, Ausgrid, Endeavour Energy, Jemena Gas.

The portal builds on models proven overseas—such as the UK's **National Underground Asset Register** (NUAR), the **Netherlands' KLIC system**, and **Hong Kong's Smart Utility Management** platform—adapted for the Australian context via an industry-led governance model.

Relevance to the Productivity Commission's Reform Areas

1. Harnessing Data and Digital Technology

- **Enable AI's productivity potential**

The portal enables AI-driven clash detection, excavation risk profiling, and smart design analysis by making subsurface utility data digitally accessible. This lays the groundwork for more sophisticated, AI- integrated engineering and construction planning workflows.

- **Unlock the benefits of data through consumer access rights**

By improving how project proponents and contractors access utility data—subject to cyber-secure protocols—the portal promotes the safe, structured sharing of previously siloed datasets.

- **Support innovation through outcomes-based privacy**

The BYDA model balances privacy, cybersecurity, and operational safety —backed by expert legal guidance and alignment with the Security of Critical Infrastructure (SOCI) Act. It demonstrates how a risk-based, outcomes-focused approach can unlock innovation without compromising asset security.

- **Enhance reporting efficiency, transparency and accuracy**

Machine-readable utility data reduces manual plan interpretation errors, accelerates approvals, and improves the transparency of underground conditions during project design and development

2. Creating a Dynamic and Resilient Economy

- **Reduce the impact of regulation on business dynamism**

The current requirement for separate, manual utility data requests creates administrative duplication and delay. The digital portal removes this bottleneck, allowing faster, more agile responses to infrastructure needs and investment opportunities.

- **Support business investment**

Major investors in housing, energy, and telecommunications cite utility coordination delays as a risk. The portal gives greater certainty to developers and infrastructure financiers by reducing geospatial unknowns.

3. Investing in the Net Zero Transformation

- **Speed up approvals for new energy infrastructure**

Renewable energy rollout depends on fast, coordinated infrastructure planning—across substations, transmission corridors, EV charging networks, and more. The portal enables early identification of utility conflicts and optimal routing.

- **Encourage adaptation by addressing barriers to private investment**

By improving coordination and reducing construction risk, the portal encourages private sector delivery of public-benefit assets, especially where long-term returns are sensitive to delay or disruption.

- **Reduce the cost of meeting carbon targets**

Avoiding utility strikes and rework lowers emissions and materials waste, contributing to net-zero objectives while delivering cost-effective environmental outcomes.

4. Building a Skilled and Adaptable Workforce

- **Support the workforce through a flexible post-secondary education and training sector**

The portal enables a shift toward data-enabled trades and technical roles. It supports new competencies in spatial analysis, digital safety, and smart infrastructure design—fostering adaptability and career mobility.

5. Delivering Quality Care More Efficiently

- **Reform quality and safety regulation to support a more cohesive care economy**

Although not directly part of the care sector, the portal advances public safety regulation in the utility space—reducing injuries and fatalities, including to emergency service personnel, contractors, and the public during infrastructure works.

National Benefit, Budget Responsibility, and Practicality

This is a reform in the national interest, with clear and measurable benefits:

- **Productivity uplift:** Reduces rework, delays, and litigation in the $150+ billion construction sector
- **Economic resilience:** Strengthens Australia's critical infrastructure protection and continuity
- **Skilled workforce enablement:** Supports new roles, competencies, and digital safety cultures
- **Budget responsibility:** The platform can be fully funded by industry and requires no recurrent government spend
- **Practicality:** The portal is live in BETA form with demonstrated industry buy-in.

Recommended Actions for Government

To unlock full value from this platform, the following non-financial policy actions are recommended:

1. **Support a National Data-Sharing Framework for Utilities**
   Champion consistent, cyber-safe data sharing protocols to enable structured access to subsurface asset information.
2. **Align Digital Utility Planning with National Infrastructure Strategy**
   Recognise the digital portal as a key enabler of Infrastructure Australia's productivity goals and net zero initiatives.
3. **Mandate Structured Digital Formats for Asset Plans**
   Encourage industry transition away from PDF plans to interoperable, spatial formats (e.g. GML, GeoJSON) via planning or regulatory levers.
4. **Support Inclusion in Skills and Digital Uplift Programs**
   Include utility digital location systems in workforce digital capability programs under the National Skills Agreement and Jobs and Skills Councils.

Key Focus Points

1. Actively Support Utility Data Provision to the National Portal

The government would be needed to endorse and actively support the inclusion of utility asset data in the BYDA Digital Portal as a matter of national interest—particularly for critical infrastructure sectors such as energy, water, gas, and telecommunications.

This includes:

- **Formally recognising** utility data provision as an essential public safety and productivity measure, not a discretionary activity
- **Encouraging regulated utilities** to participate through ministerial and departmental engagement, particularly where government is the asset owner or shareholder
- **Establishing clear expectations** across jurisdictions that utilities contribute to national coordination efforts by enabling structured digital access to their data

This would send a strong signal to industry that collaboration and transparency are expected norms in the delivery of public and private infrastructure.

2. Develop and Adopt National Minimum Data Sharing Standards for Utility Information

Australia currently lacks a consistent, enforceable framework for utility data sharing. To address this, the government should:

- **Introduce a nationally harmonised policy or regulatory framework that defines minimum data-sharing requirements,** including timeliness, format, and completeness, this can leverage the existing Australian Standard for subsurface utilities AS 5488
- **Align with international best practice standards,** such as those adopted in the UK's NUAR or the Netherlands' KLIC platform
- **Ensure alignment with cybersecurity, privacy, and SOCI obligations,** allowing utilities to participate confidently in data-sharing ecosystems.

Conclusion

BYDA's Digital Portal POC is an example of the type of practical, scalable, and impactful reform that the Productivity Commission seeks to advance. With the right policy settings, it can become a permanent fixture in Australia's digital infrastructure landscape—delivering real-world productivity, economic, and safety outcomes across sectors.

We welcome the opportunity to collaborate with the Commission and government to bring this initiative to full maturity.

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BYDA Mission

To achieve zero damage to utility infrastructure resulting from construction and ground- breaking activities, preventing community disruption, and protecting people and property from harm.

Zero Damage.
Zero Harm.
Zero Disruption.

Before You Dig Australia

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