

31 July 2026

Before You Dig Australia submission on the consultation paper: Streamlining and Modernising the Security of Critical Infrastructure Act (SOCI) 2018

About Before You Dig Australia (BYDA)

Before You Dig Australia (BYDA) is the national not-for-profit organisation that operates Australia's primary referral service for underground utility asset location information. BYDA has over 850 asset owner members across the electricity, oil and gas, water, and telecommunications sectors, as well as local councils and non-utility asset owners, corresponding closely to the asset classes regulated under the SOCI Act. BYDA also has over 700,000 registered service users and processes more than 2.7 million requests for underground utility asset location plans annually.

BYDA became a member of the Trusted Information Sharing Network (TISN) in 2026 and has contributed to SOCI policy development on prior occasions, including through direct engagement with the Cyber and Infrastructure Security Centre (CISC) that resulted in updated guidance under section 42AA of the Act. BYDA welcomes the opportunity to provide further input through this consultation process to streamline and modernise the Security of Critical Infrastructure Act 2018.

Overview

BYDA welcomes the proposed reforms to streamline and modernise the SOCI Act 2018. BYDA particularly welcomes the Independent Review's finding that the framework remains too focused on cyber security and should better address physical security and all-hazards risk, and the reform direction toward effectiveness-based assurance rather than document-based compliance.

Third-party excavation and ground disturbance is among the most prevalent causes of physical damage to critical infrastructure in Australia. Current BYDA data indicates more than 30,000 utility strikes occur each year as a result of third-party construction activity, double the number reported annually. BYDA's 2024 Economic Assessment of Utility Strikes in Australia¹ found these incidents cost the national economy over \$4.6 billion per year in direct repairs plus indirect and social costs - 32.4 times higher than direct repair costs - and up to 160 times higher for telecommunications assets.

¹<https://www.byda.com.au/wp-content/uploads/2026/02/BYDA-Economic-Assessment-of-Utility-Strikes-in-Australia-2024.pdf>

This submission makes four targeted recommendations, responding to Measures 2, 6, 7, 15 and 20 and the associated consultation questions. Each recommendation is complementary to BYDA's Tranche 1 submissions, draws on BYDA's operational experience, and can be implemented through the proposed Act architecture, Rules and guidance without adding regulatory complexity.

Recommendation 1: Ensure utility strike and ground disturbance risk material can be specified under the proposed Specified Risk Information mechanism (Measure 20; consultation questions 99–100)

BYDA strongly supports Measure 20. A statutory mechanism requiring responsible entities to consider specified published risk, hazard, standards or guidance material – and to document their response through CIRMP governance – directly addresses the gap BYDA identified in its Tranche 1 submissions: excavation-related utility damage is a recurrent, well-evidenced physical hazard that frequently sits outside formal risk management decision-making.

BYDA recommends that the kinds of documents capable of being specified expressly include published material addressing physical hazards to buried and networked infrastructure from construction, excavation and other ground-disturbing activity. Relevant examples include:

- Evidence-based risk assessments such as BYDA's *Economic Assessment of Utility Strikes in Australia*²;
- Industry standards for underground utility information, including Australian Standard AS5488 (Classification of Subsurface Utility Information)³ and the Open Geospatial Consortium's Model for Underground Data Definition and Integration (OGC MUDDI)⁴, and;
- Sector guidance on damage prevention practice, including guidance on making enquiries through the BYDA service and using the BYDA Digital Utility Portal (BDUP) before ground-disturbing works.

Specifying such material for the electricity, gas, water, liquid fuel and telecommunications asset classes would ensure the most prevalent physical hazard to those assets is considered and documented through CIRMP processes, without converting the material into a binding technical standard.

² [BYDA-Economic-Assessment-of-Utility-Strikes-in-Australia-2024.pdf](#)

³ [AS 5488-2013 Classification of Subsurface Utility Information \(SUI\)](#)

⁴ <https://docs.ogc.org/is/23-024/23-024.html>

Recommendation 2: Include underground utility asset location data within the Register's proposed "systems, suppliers and dependencies" category (Measure 2; consultation question 9)

BYDA supports the restructure of Part 2 and the proposed Register category for key systems, key suppliers and material dependencies. For buried and geographically dispersed asset classes, the location of assets is foundational to visibility, incident modelling and cascading-risk analysis – the purposes identified in consultation question 9.

BYDA recommends that the Rules prescribing information items within this category include, for relevant asset classes, information about how the responsible entity documents and maintains underground asset location data, consistent with AS5488 and OGC MUDDI, and whether current digital location data (including GIS-based data where available) is shared through BYDA.

This mirrors BYDA's Tranche 1 recommendation on section 11A(2)(a) of the Enhanced CIRMP Rules and would give the Register a standards-aligned, low-burden basis for capturing dependency information about buried infrastructure. It would also support the authorised disclosures contemplated by section 42AA of the Act, under which sharing underground asset location data to prevent strikes is a permitted disclosure.

Recommendation 3: Expressly recognise excavation-related damage within all-hazards vulnerability assessment and CIRMP assurance, with BYDA / BDUP compliance as testable evidence of control effectiveness (Measures 6 and 15; consultation questions 32 and 74–76)

BYDA supports reframing SoNS vulnerability assessments on an all-hazards basis (Measure 6) and introducing proportionate, effectiveness-based assurance of CIRMP design, implementation and operation (Measure 15). Consistent with BYDA's submission on the draft CIRMP guidance Chapter 6, BYDA recommends that supporting guidance for both measures expressly identify third-party construction, excavation and other ground-disturbing activity as a material physical hazard to be assessed.

BYDA further recommends that guidance recognise compliance with the BYDA process, including BDUP, as objective and independently verifiable evidence of physical-hazard control effectiveness. Unlike many physical security controls, this control produces measurable indicators that assurance reviewers can test, including:

- The currency, accuracy and coverage of the entity's asset location data lodged with BYDA, including updates when assets are installed, altered, relocated or decommissioned;
- Rates of BYDA enquiry and BDUP use before excavation on or near the entity's assets, and the embedding of BYDA / BDUP requirements in procurement, permit-to-dig and contractor management processes, and;
- Utility strike incident and near-miss trends affecting the asset.

BYDA also supports the proposed event-based triggers for earlier CIRMP review under Measure 15 and recommends that relevant risk information communicated by the Department, including any material specified under Measure 20 concerning excavation-related damage, operate as such a trigger.

Recommendation 4: Recognise ground disturbance risk to submarine cable shore-end infrastructure and the BYDA process as an established control for newly captured entities (Measure 7; consultation questions 34 and 38)

BYDA supports the proposed function-based cable system boundary, including its extension to cable landing points, beach manholes, shore-end conduit, landing station components and power feed equipment. These terrestrial components are buried assets exposed to precisely the third-party ground disturbance risk documented in BYDA's evidence base, including from coastal works, roadworks, development activity and landscaping.

BYDA recommends that guidance and transition material for newly captured owners and operators of shore-end components (consultation question 38) identify registration of asset location data with BYDA, and the making of BYDA enquiries before ground-disturbing works near those components as established, immediately available controls.

This would give newly captured responsible entities, including non-carrier consortium and special purpose vehicle structures, a practical pathway to managing physical damage risk from the point of capture and would support coordination where responsibility for a single cable system is distributed across multiple entities.

Conclusion

The recommendations in this submission are complementary and straightforward to implement through the proposed Act architecture, Rules and guidance. Collectively, they would give practical effect to the Independent Review's finding that the SOCI framework should better address physical security and all-hazards risk, by connecting the most prevalent, well-evidenced physical hazard to critical infrastructure – third-party excavation and ground disturbance – to the Register, the specified risk information mechanism, all-hazards vulnerability assessment, and effectiveness-based CIRMP assurance, using an established national control mechanism that is already available to every responsible entity.

Contact

BYDA is a member of TISN and welcomes ongoing engagement with the Department on these matters. We are available to provide further information in support of this submission.

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