

Before You Dig Australia Submission to Safe Work Australia Impact Analysis for Crane Licensing Review

Submitted to: Safe Work Australia

Submitted by: Before You Dig Australia

Date: 4 May 2026

Website: www.byda.com.au

Submitted by: Mell Greenall. CEO

mell.greenall@byda.com.au

0407 166 706

About Before You Dig Australia

Before You Dig Australia (BYDA) is the leading voice for utility damage prevention in Australia. BYDA is dedicated to preventing injury, reducing damage to Australia's underground and aboveground infrastructure, and supporting safe work practices around utility assets.

BYDA's vision is for **zero damage, zero harm and zero disruption**. Its purpose is to promote safe work practices through the provision of free safety tools, education and resources that reduce injury to persons, damage to property and the environment, financial loss, service disruption and inconvenience to individuals, businesses, and the broader community. BYDA members include infrastructure asset owners from across the utilities, telecommunications, gas, electricity, water, and civil infrastructure sectors, as well as non-asset owners who support safe site practices. BYDA also provides free education presentations on safe site practices to raise awareness of utility damage prevention and safe work near infrastructure.

BYDA operates two key safety tools relevant to this submission:

BYDA Referral Service (Free)

The BYDA referral service enables anyone working near infrastructure assets to obtain underground utility plans and safety information directly from asset owners. This information assists workers, contractors, principal contractors, and persons conducting a business or undertaking (PCBUs) to plan work safely before excavation, ground disturbance or crane setup activities that may affect underground assets.

Look Up and Live (Free)

Look Up and Live is a safety tool and interactive map to help workers plan safe work near overhead powerlines. It assists users to identify overhead powerlines, voltages, asset owners, and relevant safety information, including exclusion zones, de-energisation or relocation requirements and high-load information. This tool is directly relevant to crane operations, which often involve working at height, travelling with loads, slewing, lifting, placing materials, deploying stabilisers, or operating in proximity to overhead electrical infrastructure.

BYDA welcomes the opportunity to provide this submission to Safe Work Australia's crane licensing review.

Executive Summary

Before You Dig Australia supports the proposed amendments to the High-Risk Work (HRW) licensing framework for cranes as set out in Options 1 to 7 of the Consultation Paper.

BYDA supports stronger licensing requirements where they improve operator competency, reduce inconsistent safety outcomes and address plant categories that present material risks to workers, bystanders, infrastructure, and the broader community.

BYDA's primary submission is that crane licensing reform should expressly recognise the interaction between crane operations and underground and overhead utility infrastructure. Crane safety does not begin only when a load is lifted. It begins at the planning, access, setup, and pre-start stages, when operators and PCBUs must identify site hazards, confirm the presence of utilities, assess overhead line risks, determine safe crane positioning, and implement controls before work commences.

Crane operations can affect utility infrastructure in several ways, including:

- stabilisers, outriggers, crane pads, piling activity, anchors or other ground-bearing loads affecting underground assets.
- booms, jibs, loads, attachments, or plant entering unsafe proximity to overhead powerlines.
- crane mobilisation, travelling with load or setup occurring in road reserves, industrial areas, residential streets, or civil construction environments where utilities are dense.
- short-duration work being undertaken by small businesses or sole operators without formal site planning systems; and
- remote or complex crane operations reducing direct visual awareness of changing site conditions.

BYDA therefore recommends that Safe Work Australia ensure that all new and amended crane HRW Units of Competency, National Assessment Instruments and implementation guidance include explicit competency requirements for identifying, verifying, and controlling risks to underground and overhead utility infrastructure.

BYDA's primary recommendations are:

1. **Include utility-risk management in all relevant crane HRW Units of Competency and National Assessment Instruments.**
Competency should include the ability to identify overhead and underground utility risks, obtain asset-owner information, understand the limitations of utility plans, recognise when further verification is required, and incorporate utility-risk controls into lift plans, Safe Work Method Statements, Job Safety Analyses and pre-start processes.
2. **Reference BYDA, Look Up and Live, asset-owner information and equivalent jurisdictional processes in implementation guidance.**
BYDA does not submit that use of any single tool alone is sufficient to make crane work safe. Rather, operators should be trained to use BYDA, Look Up and Live, asset-owner information or equivalent recognised processes as part of a broader system of planning, verification, and control.
3. **Expand the benefit-quantification framework used in the impact analysis.**
The impact analysis should include avoided utility-strike costs as a material benefit category. BYDA's economic research identifies that utility strikes impose a significant annual cost on the Australian economy. Even a modest reduction in utility strikes attributable to improved licensing and competency would be material to the regulatory impact assessment, particularly for Options 4 and 5.
4. **Treat Option 5; vehicle loading cranes as a priority for utility damage prevention.**
Vehicle loading cranes frequently operate in residential streets, delivery locations, small worksites, industrial estates, and road reserves, often outside the controlled environment of major construction sites. These environments present acute overhead and underground utility risks.
5. **Engage BYDA in the development of revised competency and assessment material.**
BYDA offers to work with Safe Work Australia, the Crane Licence Working Group, WHS regulators, training package developers, and Registered Training Organisations to ensure revised crane licensing material accurately reflects utility damage prevention and safe work near infrastructure.

BYDA's Interest in the Crane Licensing Review

BYDA's interest in this review flows directly from its purpose: preventing damage to Australia's underground and aboveground infrastructure networks and reducing the associated risks to workers, communities, asset owners, and service users.

Crane operations routinely occur in environments where underground and overhead utilities are present. This includes work involving piling rigs, telehandlers, non-slewing mobile cranes, vehicle loading cranes, tower cranes, and self-erecting tower cranes.

Overhead powerlines present a significant risk for crane operations. Cranes and crane-like plant operate at height, often with booms, jibs, loads, or attachments that may approach overhead electrical infrastructure. Electricity can arc or flash over where plant, equipment or loads come too close to energised powerlines. Direct contact is not required for an incident to be fatal.

Underground infrastructure is also at risk. Crane setup activities may involve ground disturbance, heavy ground-bearing loads or the placement of stabilisers, outriggers, crane pads, foundations, anchors, or other supports. Where underground utility assets have not been identified and appropriate controls have not been implemented, crane setup and associated works may damage buried pipes, cables, and conduits.

The consequences of utility strikes can extend well beyond the immediate worksite. They may include worker injury, public safety risks, fire or explosion, electricity interruption, telecommunications outages, water or wastewater disruption, environmental harm, emergency response costs, asset repair costs, project delay, and broader economic loss.

For these reasons, BYDA submits that utility-risk management should be embedded in the crane HRW licensing framework, rather than treated as an optional or peripheral planning issue.

BYDA's Primary Request

BYDA requests that Safe Work Australia ensure that all new and amended crane HRW Units of Competency, National Assessment Instruments and implementation guidance include explicit competency requirements for identifying, verifying, and controlling risks to underground and overhead utility infrastructure before crane mobilisation, setup, operation, relocation and pack-up.

This should include competency in:

- using BYDA, Look Up and Live, asset-owner information or equivalent jurisdictionally recognised processes before relevant work commences.
- recognising that underground utility plans are indicative and may require further verification before work proceeds.
- identifying overhead powerline risks, including line location, voltage, ownership, exclusion zones, de-energisation, relocation or other asset-owner requirements.
- incorporating utility-risk controls into lift plans, Safe Work Method Statements, Job Safety Analyses, pre-start briefings and site-specific risk assessments.
- positioning cranes, outriggers, stabilisers, crane pads, foundations, anchors and exclusion zones to avoid damage to underground and overhead assets; and
- contacting asset owners where information is incomplete, unclear, conflicting or indicates that additional controls are required.

BYDA does not submit that a BYDA enquiry or use of Look Up and Live alone is sufficient to make crane work safe. These tools are practical and important planning inputs. They must be used alongside asset-owner instructions, site verification, competent supervision, applicable WHS duties, jurisdictional requirements, and the hierarchy of control.

Utility-Risk Pathway Across the Crane Work Lifecycle

BYDA recommends that Safe Work Australia consider utility risk across the full crane work lifecycle.

Crane work stage	Utility-risk issue	Relevant control pathway
Planning	Unknown underground and overhead assets	BYDA enquiry, Look Up and Live, asset-owner information, equivalent jurisdictional processes
Site access and mobilisation	Travel routes, overhead clearances, road reserves, high loads	Overhead powerline assessment, route planning, asset-owner advice
Setup	Outriggers, stabilisers, crane pads, anchors, piling, foundations, ground-bearing pressure	Asset plans, site verification, locating, potholing where required, exclusion zones
Operation	Slewing, lifting, suspended loads, travelling with load, proximity to overhead lines	Exclusion zones, spotters, de-energisation, relocation, lift planning
Relocation	Repeated setup in new locations, changed site conditions	Updated pre-start checks, revised SWMS/JSA, re-checking asset information
Pack-up and demobilisation	Removal of plant, movement near services, changed ground conditions	Final controls, asset protection, incident reporting where required

This lifecycle approach would ensure that utility-risk management is not limited to excavation activity. It would also capture crane-specific risks arising from stabilisers, outriggers, ground loading, vertical reach, horizontal reach, and operation near overhead electricity infrastructure.

Response to Consultation Discussion Questions

Option 1: New HRW Licence for Piling Rig Operation

Do you support the option?

Yes. BYDA supports Option 1.

Piling rigs present severe risks in construction and civil works environments. The absence of a dedicated HRW licence is a significant gap in the current framework, particularly given the scale, complexity and potential consequences of piling rig failure or misuse.

From BYDA's perspective, piling rigs also present specific and material risks to underground infrastructure. Piling, boring, and associated ground disturbance activities require thorough pre-works identification of underground assets. Without adequate competency in utility identification, asset-owner referral processes, and site verification, piling rig operators risk striking buried cables, pipes, and conduits.

The consequences of such strikes may extend beyond the worksite to asset owners, service users, emergency services, and the broader community. They may include service outages,

fire, explosion, flooding, environmental harm, project delay, asset repair costs, and public safety risks.

BYDA supports the creation of a dedicated piling rig HRW licence, provided the relevant Unit of Competency and assessment instruments include explicit requirements for underground utility-risk identification and control.

Do you agree the impact analysis is representative of costs and benefits?

BYDA considers the impact analysis to be broadly reasonable. However, BYDA submits that the benefit side is likely understated because the analysis does not fully account for avoided utility-strike costs.

A dedicated piling rig licence with robust competency requirements should reduce the likelihood of underground asset damage caused by inadequate pre-work planning, inadequate asset identification, or insufficient understanding of asset-owner referral processes.

BYDA recommends that the impact analysis include a utility-strike benefit category, including:

- direct infrastructure repair costs borne by asset owners.
- emergency response costs.
- service disruption costs borne by households, businesses, and essential service users.
- environmental harm and remediation costs.
- project delay and productivity losses; and
- broader community impacts.

BYDA also supports recognition of prior learning pathways for experienced operators, provided those pathways require assessment of competency in utility-risk awareness, BYDA or equivalent referral processes, asset-owner information, plan interpretation, and verification requirements.

Additional evidence or information

BYDA recommends that the new piling rig licence include competency requirements covering:

- how to obtain underground utility information through BYDA or equivalent asset-owner referral processes.
- how to interpret asset-owner responses.
- how to recognise that plans are indicative and may require further verification.
- when to seek direct asset-owner advice.
- how to incorporate underground utility controls into SWMS, JSA and pre-start processes; and
- how to stop work and escalate where asset information is incomplete or inconsistent with site conditions.

Options 2 and 3: New HRW Licences for Telehandler Operations

Do you support the options?

Yes. BYDA supports Options 2 and 3.

Telehandlers are versatile and widely used across construction, agriculture, logistics, civil works, and industrial environments. Their use with attachments such as forks, jibs, buckets, and work platforms can alter the risk profile significantly. When used as a crane, the risks associated with suspended loads, reach, stability, and proximity to infrastructure increase.

BYDA supports the distinction between general telehandler use under Option 2 and telehandler use as a crane under Option 3. The more prescriptive treatment of telehandlers used as cranes is appropriate because suspended-load operations can present elevated risks to workers, bystanders, property, utilities, and public infrastructure.

Telehandlers frequently operate in environments where underground and overhead utilities are present. These include civil works areas, road reserves, farms, industrial estates, residential construction sites, and mixed-use worksites. Operators may encounter overhead powerlines, buried electrical cables, gas pipelines, water assets, telecommunications assets, and other critical infrastructure.

BYDA recommends that the telehandler HRW licence framework include utility-risk competency for both general telehandler operation and telehandler-as-crane operation, with additional emphasis on suspended-load and overhead powerline risks for Option 3.

Do you agree the impact analysis is representative of costs and benefits?

BYDA considers the quantified benefit assessment to be useful but incomplete. The analysis should include avoided utility-strike costs and avoided overhead powerline incidents as benefit categories.

The benefits of improved telehandler competency are not limited to reduced injury claims. They may also include reduced damage to infrastructure, reduced service interruption, improved site planning, reduced emergency response activity, and improved compliance with safe work near utility assets.

BYDA recommends that Safe Work Australia include a sensitivity analysis that estimates the value of avoided utility incidents attributable to improved telehandler licensing and training.

Additional evidence or information

For telehandler operators, the revised competency framework should include:

- recognition of overhead powerline hazards.
- understanding of exclusion zones and minimum approach requirements.
- use of Look Up and Live, asset-owner information or equivalent jurisdictional tools.

- identification of underground assets before ground disturbance or deployment of stabilisers where relevant.
- safe travel and load movement in areas where overhead and underground utilities are present; and
- escalation to asset owners where controls such as de-energisation, relocation, physical location, or exclusion zones are required.

Option 4: Amended HRW Licence for Non-Slewing Mobile Cranes

Do you support the option?

Yes. BYDA supports Option 4.

BYDA supports removal of the 3-tonne capacity threshold for non-slewing mobile cranes. A crane operating below the current threshold can present materially similar risks to one operating above it, particularly where it is travelling with a load, operating in constrained environments, or working near utilities, workers, or the public.

From BYDA's perspective, non-slewing mobile cranes are frequently used in civil construction, road work, utilities work, industrial facilities, and public environments where underground and overhead assets are concentrated. These cranes may travel with suspended loads and may operate on or near roads, verges, footpaths, easements, and utility corridors.

Competency should therefore include identification and control of underground and overhead utility risks before positioning and operating the crane.

Do you agree the impact analysis is representative of costs and benefits?

BYDA considers the analysis reasonable but submits that unquantified benefits are likely material. These include infrastructure protection, service continuity, reduced public disruption and reduced emergency response costs.

The current benefit framework appears to focus primarily on direct workplace safety outcomes. BYDA recommends expanding it to include avoided utility-strike costs where licensing reform reduces unsafe operation by unlicensed or inadequately trained operators.

Additional evidence or information

BYDA recommends that the amended non-slewing mobile crane licence require operators to demonstrate competency in:

- identifying underground and overhead utilities in the work area.
- considering the risk of travelling with load near overhead lines or underground assets.
- confirming safe access routes and setup locations.
- obtaining BYDA, Look Up and Live, asset-owner or equivalent information before work.

- understanding plan limitations and verification requirements; and
- integrating utility controls into SWMS, JSA, lift planning and pre-start processes.

Option 5: Amended HRW Licence for Vehicle Loading Cranes

Do you support the option?

Yes. BYDA strongly supports Option 5.

BYDA considers Option 5 to be one of the most important options from a utility damage prevention perspective.

Vehicle loading cranes frequently operate outside the controlled environment of major construction sites. They are often used in residential streets, delivery locations, small commercial premises, driveways, industrial estates, farms, road reserves, and civil works areas. These are environments where underground utility density can be high and where overhead powerlines may be present at heights relevant to crane operation.

The lift itself may be short duration, but the utility risk can be acute. Stabilisers and outriggers may be deployed over or near underground assets. Booms, jibs, attachments, or loads may approach overhead service lines. Operators may work alone or as part of a small crew, and the work may not always be supported by a principal contractor's formal site safety systems.

For this reason, BYDA strongly supports lowering the threshold for vehicle loading crane licensing and strengthening competency requirements for this class of plant.

BYDA recommends that the amended vehicle loading crane licence explicitly require operators to demonstrate competency in:

- identifying overhead powerline risks before setup and operation.
- using Look Up and Live, asset-owner information or equivalent tools.
- identifying underground assets before deploying stabilisers or outriggers.
- recognising when BYDA enquiries, asset-owner advice or physical verification are required.
- setting up stabilisers, outriggers, and exclusion zones safely.
- incorporating utility-risk controls into delivery planning, lift planning and pre-start checks; and
- stopping work where utility information is incomplete or site conditions are inconsistent with available information.

Do you agree the impact analysis is representative of costs and benefits?

BYDA submits that the net benefit figure for Option 5 is likely understated because the analysis does not fully capture the utility-risk profile of vehicle loading cranes.

In particular:

- incident data based on workers' compensation claims is likely to undercount incidents involving sole operators, owner-operators, and small businesses.
- damage to utility infrastructure may not always appear in workers' compensation datasets.
- utility strikes may impose substantial costs even where no compensable injury occurs.
- VLCs often operate in public-facing environments where service disruption affects households, businesses, and essential services.
- VLC operators may not have the same site support systems as operators on major construction projects; and
- licensing and competency uplift may improve pre-work planning, stabiliser deployment, overhead line awareness and engagement with asset-owner information.

BYDA submits that the impact analysis should not treat avoided injury costs as the only relevant benefit. For Option 5, avoided utility damage, avoided service disruption, and improved public safety are central to the benefit case.

When these unquantified benefits are included, BYDA considers the long-term net benefit of Option 5 is likely to be materially stronger than the quantified figure suggests.

Additional evidence or information

BYDA recommends that Safe Work Australia conduct a utility-risk sensitivity analysis for Option 5. The analysis should estimate the value of avoided utility strikes and overhead powerline incidents attributable to improved VLC licensing and training.

Where crane-class-specific data is not yet available, BYDA recommends using low, medium, and high attribution scenarios, supported by:

- BYDA enquiry and education data.
- de-identified asset-owner strike data.
- repair cost data.
- service outage duration data.
- emergency response data.
- incident case studies; and
- stakeholder evidence from utilities, civil contractors, delivery operators, and WHS regulators.

BYDA is willing to work with Safe Work Australia and relevant stakeholders to support this analysis.

Options 6 and 7: HRW Licences for Tower Cranes and Self-Erecting Tower Cranes

Do you support the options?

BYDA supports Option 6 as the preferred approach.

Consolidation of tower crane and self-erecting tower crane licences would reduce regulatory complexity while maintaining a strong focus on safety and competency. BYDA also supports inclusion of remote operation and out-of-service conditions in revised competency requirements.

Tower cranes operate at significant height, often in dense urban construction environments. While tower crane sites may have more formal safety management systems than some smaller worksites, they can also involve complex interactions with overhead electricity infrastructure, underground services, adjoining properties, public roads, rail corridors, telecommunications assets, and other critical infrastructure.

BYDA recommends that tower crane competency requirements include explicit recognition of overhead powerline risks, underground utility risks during crane erection and foundation works, and the need to incorporate utility-risk information into planning and pre-start systems.

In relation to remote operation, BYDA notes that operators working from offsite or virtual cockpit environments may have reduced direct situational awareness of changing site conditions. This does not reduce the need for utility-risk controls. Rather, it reinforces the need for robust planning, communication, supervision, and pre-start processes that ensure the operator has access to accurate site information.

Option 7 is acceptable as an alternative if Option 6 is not progressed, provided any separate remote tower crane licence includes equivalent or stronger requirements for utility-risk awareness and site-specific planning.

Do you agree the impact analysis is representative of costs and benefits?

BYDA considers the impact analysis broadly reasonable but recommends that it recognise avoided infrastructure damage as a relevant benefit category.

For tower crane operations, utility risks may arise during:

- crane erection.
- crane dismantling.
- foundation or anchoring works.
- operation near overhead powerlines.
- work near adjacent public infrastructure.
- remote operation.
- out-of-service positioning; and
- changes to site conditions over time.

The benefit analysis should recognise that improved competency and planning can reduce the risk of infrastructure damage, service disruption, and public safety incidents.

Additional evidence or information

BYDA recommends that tower crane and remote tower crane competency requirements include:

- identification of overhead powerline hazards.
- understanding of arcing and flashover risks.
- consideration of underground utilities during crane foundation, anchoring and erection works.
- use of Look Up and Live, asset-owner information or equivalent processes.
- requirements for de-energisation, relocation, or exclusion zones where relevant.
- clear communication between remote operators and onsite personnel; and
- pre-start verification where site conditions change.

BYDA's Safety Tools and Their Relevance to Crane Operations

BYDA Free Referral Service

The BYDA referral service provides workers, contractors and PCBUs with access to underground utility plans and safety information directly from relevant asset owners. The service is free, available 24/7 and accessible through the BYDA portal and BYDA mobile app.

For crane operations, the BYDA referral service is relevant where work involves ground disturbance or where crane setup may affect underground assets. This may include:

- piling.
- boring.
- excavation.
- crane base or pad construction.
- anchor installation.
- stabiliser or outrigger deployment.
- heavy ground-bearing loads.
- access over utility corridors; and
- work in road reserves, verges, easements, or utility-dense environments.

BYDA emphasises that asset plans are a planning input, not a guarantee of exact asset location. Operators and PCBUs must understand the limitations of plans and must follow asset-owner instructions. Where required, this may include further asset-owner contact, physical locating, potholing, protection, relocation, exclusion zones, or other controls before work proceeds.

BYDA recommends that revised crane HRW Units of Competency and National Assessment Instruments require candidates to demonstrate how to obtain, review and respond to asset-owner information before relevant work commences.

Look Up and Live

Look Up and Live is BYDA's free interactive map tool for working safely near overhead powerlines. It assists users to identify overhead powerlines, voltage information, asset ownership, and relevant safety information, including exclusion zones, de-energisation or relocation requirements and high-load information.

Look Up and Live is directly relevant to all crane licence classes covered by this review. Mobile cranes, telehandlers, vehicle loading cranes, tower cranes and piling rigs may all operate in environments where overhead electricity infrastructure is present.

Crane operators must understand that overhead electrical risk is not limited to direct contact. Electricity can arc or flash over where plant, equipment, booms, loads, or attachments come too close to energised lines. This risk should be addressed through planning, exclusion zones, competent supervision, spotters where required, de-energisation, relocation, or other asset-owner controls.

BYDA recommends that Look Up and Live, asset-owner information or equivalent jurisdictional tools be referenced in implementation guidance for all relevant crane licence classes.

Benefit Quantification: Utility-Strike Costs Should Be Included

BYDA recommends that Safe Work Australia expand the benefit-quantification framework for the crane licensing review to include avoided utility-strike costs.

The impact analysis should not assess benefits only by reference to direct injury outcomes or workers' compensation claims. Utility strikes and overhead powerline incidents can impose significant costs even where no compensable injury occurs.

These costs may include:

- direct asset repair costs.
- emergency response costs.
- business interruption.
- service disruption for households and essential services.
- telecommunications outages.
- electricity outages.
- gas, water, or wastewater disruption.
- environmental harm.
- traffic disruption.
- project delay.
- productivity loss; and
- reputational and regulatory costs.

BYDA recommends that Safe Work Australia include a utility-strike benefit module in the Regulatory Impact Statement.

A simple framework would be:

Avoided utility-strike benefit = annual utility incidents involving the relevant crane class × expected reduction from licensing and competency uplift × average direct, indirect, and social cost per incident.

Where crane-class-specific data is unavailable, Safe Work Australia should undertake sensitivity analysis using low, medium, and high attribution assumptions.

The analysis could draw on:

- BYDA economic research.
- BYDA enquiry and education data.
- de-identified utility strike data from asset owners.
- WHS regulator incident data.
- emergency services data.
- workers' compensation data.
- insurance data.
- outage duration and restoration cost data; and
- case studies from utility owners, contractors, and operators.

This approach is particularly important for Option 5, where the quantified net benefit may be materially affected by uncounted avoided utility damage and service disruption costs.

Proposed Competency and Assessment Wording

BYDA recommends that Safe Work Australia include the following concepts in relevant crane HRW Units of Competency and National Assessment Instruments.

Proposed Performance Evidence

A candidate should be required to demonstrate the ability to:

- identify underground and overhead utility assets relevant to crane mobilisation, site access, setup, lifting, travelling with load, relocation, pack-up and demobilisation.
- obtain and review BYDA, Look Up and Live, asset-owner information or equivalent jurisdictional information before relevant work commences.
- recognise that underground utility plans are indicative and identify when physical locating, potholing, exclusion zones, de-energisation, relocation, or asset-owner advice is required.
- identify overhead powerline hazards, including the risk of arcing or flashover.
- determine whether proposed crane setup, boom movement, load path, travel route, outrigger deployment, or stabiliser placement may affect utility infrastructure.
- position outriggers, stabilisers, crane pads, anchors, exclusion zones, and access routes to avoid damage to underground and overhead assets.
- incorporate utility-risk controls into lift plans, SWMS, JSA, pre-start briefings and site-specific risk assessments.

- communicate utility-risk controls to relevant workers, spotters, doggers, riggers, supervisors and PCBUs.
- stop work and escalate where asset information is incomplete, inconsistent or indicates that further controls are required; and
- respond appropriately to suspected or actual contact with utility infrastructure.

Proposed Knowledge Evidence

A candidate should be required to demonstrate knowledge of:

- hazards associated with underground utility assets, including electrical, gas, water, wastewater, and telecommunications infrastructure.
- hazards associated with overhead electric lines, including arcing, flashover, and induced voltage risks.
- the limitations of underground utility plans and the need to follow asset-owner instructions.
- the role of BYDA, Look Up and Live, asset-owner information and equivalent jurisdictional processes in safe work planning.
- relevant exclusion zones, no-go zones, minimum approach distances, and escalation requirements.
- when de-energisation, relocation, physical location, potholing, protection, or asset-owner supervision may be required.
- how crane setup, stabiliser deployment, outrigger placement, crane pads, ground-bearing pressure, and travel routes can affect underground assets.
- how boom movement, suspended loads, attachments, and high loads can affect overhead assets.
- emergency response requirements following contact with, or damage to, utility infrastructure; and
- reporting and notification requirements following a utility strike or near miss.

BYDA's Recommendations

Recommendation 1: Include utility-risk management in revised Units of Competency

All new and amended crane HRW Units of Competency should include a competency element addressing underground and overhead utility-risk management.

This should include:

- overhead powerline identification.
- underground asset identification.
- use of BYDA, Look Up and Live, asset-owner information or equivalent processes.
- recognition of plan limitations.
- verification and escalation requirements.
- safe positioning of cranes, stabilisers, outriggers, and crane bases.
- integration of utility-risk controls into SWMS, JSA, lift plans and pre-start checks; and
- emergency response following contact with utility assets.

Recommendation 2: Include utility-risk management in National Assessment Instruments

Safe Work Australia should ensure that National Assessment Instruments test practical competency in utility-risk management, not merely general hazard awareness.

Assessment should require candidates to demonstrate that they can:

- identify relevant underground and overhead utility risks from a site scenario.
- determine what information must be obtained before work commences.
- interpret asset-owner information at a basic operational level.
- identify when further verification or asset-owner advice is required.
- select appropriate controls; and
- explain what action to take if a utility strike, near miss or overhead line proximity issue occurs.

Recommendation 3: Reference BYDA, Look Up and Live and equivalent processes in implementation guidance

Safe Work Australia and WHS regulators should reference BYDA, Look Up and Live, asset-owner information and equivalent jurisdictional processes in guidance material, codes of practice, operator communications and training support material associated with crane HRW licence classes.

The guidance should make clear that these tools are part of a broader safe system of work and do not replace the need for competent risk assessment, asset-owner instructions, site verification, or compliance with WHS duties.

Recommendation 4: Expand the benefit-quantification framework

Safe Work Australia should expand the benefit-quantification framework for the Regulatory Impact Statement to include costs of utility asset strikes and overhead powerline incidents caused by unlicensed, inadequately trained, or insufficiently competent crane operators.

This should include direct repair costs, service disruption costs, emergency response costs, environmental costs, and broader economic impacts.

Recommendation 5: Prioritise Option 5 for utility damage prevention

Safe Work Australia should treat Option 5 as a priority reform from a utility damage prevention perspective.

Vehicle loading cranes frequently operate in public-facing, utility-dense environments and may be used by small businesses, delivery contractors, and sole operators. Strengthened licensing and competency requirements are likely to improve pre-work planning, stabiliser and outrigger deployment, overhead line awareness and engagement with asset-owner information.

Recommendation 6: Engage BYDA in competency development and implementation

BYDA offers to work with Safe Work Australia, the Crane Licence Working Group, WHS regulators, Registered Training Organisations, and training package developers to ensure revised crane HRW licensing material reflects utility damage prevention best practice.

BYDA can assist with:

- technical input into competency wording.
- review of assessment scenarios.
- case studies.
- education material.
- industry engagement.
- asset-owner liaison; and
- free education sessions on safe work near underground and overhead infrastructure.

Summary of BYDA's Position on Each Option

Option	BYDA position
Option 1 Piling rigs	Supports. Recommends explicit competency in underground utility identification, BYDA or equivalent referral processes, asset-owner information, and verification requirements.
Option 2 Telehandler general operation	Supports. Recommends competency in overhead and underground utility-risk awareness for mobile plant environments.
Option 3 Telehandler used as a crane	Supports. Endorses more prescriptive requirements because suspended-load operations increased risk near workers, infrastructure, and overhead powerlines.
Option 4 non-slewing mobile cranes	Supports. Removal of the threshold is appropriate. Recommends inclusion of utility-risk management for travel routes, setup, and operation.
Option 5 Vehicle loading cranes	Strongly supports. BYDA considers this a priority reform because VLCs frequently operate in residential, public, delivery, and road-reserve environments where underground and overhead utility risks are acute.
Option 6 Consolidated tower crane licence	Supports as the preferred approach. Recommends inclusion of overhead powerline, underground utility, erection, foundation, and remote-operation considerations.
Option 7 — Separate remote tower crane licence	Acceptable alternative if Option 6 is not progressed, provided equivalent utility-risk competency requirements are included.

Conclusion

Before You Dig Australia commends Safe Work Australia for undertaking this crane licensing review and supports reform that improves competency, consistency, and safety across high-risk crane operations.

BYDA's submission highlights that crane safety extends beyond the immediate lifting activity. It includes the identification and control of risks to underground and overhead infrastructure before cranes are mobilised, set up, operated, relocated, or packed up.

Crane-related utility incidents can cause injury, service disruption, emergency response costs, environmental harm, project delay, and significant economic loss. These impacts are borne not only by crane operators and PCBUs, but also by infrastructure asset owners, households, businesses, and the broader community.

BYDA therefore recommends that Safe Work Australia embed utility-risk management into the revised crane HRW licensing framework through:

- revised Units of Competency.
- National Assessment Instruments.
- implementation guidance.
- benefit quantification in the Regulatory Impact Statement; and
- engagement with BYDA, asset owners, WHS regulators, training providers, and industry.

BYDA looks forward to continued engagement with Safe Work Australia, WHS regulators and industry on implementation of the crane licensing review outcomes. BYDA is available to support competency development, contribute to guidance material, provide case studies, and deliver free education sessions for operators, trainers and industry participants.

Mell Greenall

CEO

Before You Dig Australia

www.byda.com.au

mell.greenall@byda.com.au

0407 166 706