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Important Update: TITAB Registrar on S009

The TITAB Registrar, **Kevin Fothergill,** has written an article published in the February 2024 edition of Electrical Connection Magazine. Due to its ongoing relevance it has been repeated in this Newsletter.

After an 18-month phase-in period, AS/CA S009:2020 is now mandated for registered cablers and telecommunication workers

Almost all Australian industries have technical or industry standards. Telecommunications has one of critical importance to customer equipment and cabling and it is mandated by the Australian Communications & Media Authority (ACMA).

If breaches occur, there is a risk of severe penalties from the regulator, ACMA, and from litigation that could arise if there is an alarm failure, for example, resulting in harm or loss of property.

Probably the most important standard cablers should be aware of is what is commonly known as *AS/CA S009:2020 Installation requirements for customer cabling (Wiring Rules)* or just *ACMA Wiring Rules* or *S009*. This Australian Standard came into full effect on 29 February 2022 when the 18 months phase-in period expired.

Accordingly, all ACMA Cabling Provider Rules (CPR) registered cablers must comply with the changes – CPR registration is mandatory – when working on communications customer cabling and equipment. CPR registration and compliance with standards are mandatory, regardless of whether you are a telecommunications technician, data cabler or electrician.

Probably the most significant revised section is on heat rise with remote power/Power over Ethernet (PoE) and associated personnel and property safety risks, particularly in legacy cabling that may have been installed long before any consideration was given to remote powering. The key changes to the previous 2013 edition have been notified in Cabler Registrar newsletters, mainly based on analysis by BICSI's Paul Stathis.

All cablers should have access to the revised standard which is available widely from a registrar website, Comms Alliance and Standards Australia. Some of the changes are summarised below:

- New Electrical Energy Source classifications ES1, ES2 and ES3 and how these impact telecommunications circuits and particularly on remote power, PoE, power over HDbaseT (PoH) and there are new requirements for conductor sizes linked to temperature recommendations for generic cabling and cabling linked distributor circuits.
- Updated separation and subducting of hazardous service requirements; revised requirements for protection against contact with live parts of sockets and the appendices have been rewritten to address power feeding in telecommunications networks and ES3 separation of telecommunications and electrical circuits.

- New guidance and definitions on NBN Interconnections including fibre, HFC and fixed wireless network boundaries; "generic cabling", "movable cabling", "types of persons", "registered engineers" and "RFT circuits"; new requirements for cabling, including flexibility and strain relief; updated optical fibre requirements; new movable and dependent telecommunications outlet (TO) requirements; revised cable flammability and fire stopping requirements.
- Cable flammability and fire-stopping requirements are of major significance given the industry's move towards PoE/remote powering and the intention is to better align with the National Construction Code of Australia.
- Other significant updates apply to cabling between buildings; pit and access holes and for installing an earthing bar/terminal at distributors terminating outdoor customer cabling.

TITAB Australia and other registrars will continue to publish in their newsletters a more detailed analysis of the wiring rules changes developed by Paul Stathis for industry distribution and also the ACMA formal advice of the expiry of the transition period and formal date of effect of 29 February 2022.

All technical standards have review dates and already there is work being undertaken by committees looking at industry developments. The key advice given by registrars and the ACMA is to access a copy of the new standard which is readily downloadable and that in the long run, compliance is really protection against future risk to the customers, users, cablers and the business model.

3G Network Closure

Farmers trial new tech to keep equipment running as 3G network shutdown looms.
Excerpt from ABC NEWS article. Read more at: https://www.abc.net.au/news/rural/2024-05-02/farmers-trial-new-tech-as-3g-network-shutdown-looms/103573552

In short: The 3G network will soon shut down and farmers are looking for ways to stay online. Everything from 4G upgrades, low Earth orbit satellites and range extenders are being used.
What's next? The government is offering grants to help farmers adapt.

As the shutdown of the 3G network approaches, millions of Australians are switching over their phones to make sure they are compatible with 4G, but farmers are facing a much bigger problem.

Farmers have a range of equipment that relies on 3G signals to work and as the 3G towers around the country are switched off water pumps, weather stations, soil monitors and security systems have stopped working.

New South Wales grain grower Ian Carter has successfully upgraded four of his tractors but now he is wondering about the irrigation sensors and the monitors on bores and tanks on his Quirindi farm.

"Only the other day I suddenly thought, 'Oh, our automatic weather station has got a modem in it as well'," he said.

"It will have to be upgraded."

Mr Carter said costs were mounting but the quality of his phone service was declining.

"We seem to be in a bit of an area of flux at the moment, because nothing is working as well as it was," he said.

For more info on 3G Network Closures refer to: https://www.acma.gov.au/3g-network-switch

Before You Dig Australia (BYDA) Name Change

Before You Dig Australia - we've lost the Dial, but we are still Australia's safety partner for working near underground infrastructure.

For over 3 decades Australia relied on Dial Before You Dig to source your underground infrastructure plans. But in 2022 you might have noticed a change – we have dropped the "Dial", and you might be wondering why. What many in industry didn't realise was that Dial Before You Dig was run as 6 separate state businesses, and whilst the core service was the same in each state, their strategies, support services and engagement with industry was not, which to be frank meant we couldn't evolve and keep pace with industry needs. So began a transformation project to merge the 6 state businesses into a truly national organisation, with a single goal of being industries safety partner when it comes to working with near utility infrastructure, and on July 1 2022 we dropped the Dial and relaunched the national organisation as Before You Dig Australia or BYDA for short.

Over the last 2 years, BYDA has achieved some significant milestones, reinforcing why the change was needed and demonstrating what can be achieved when a national team is working under a united strategy and common goals to be the voice of damage prevention. We now represent over 700 utility infrastructure owners across Australia and manage over 2.2 million plan requests every year. You can lodge your free plan requests via our website www.byda.com.au

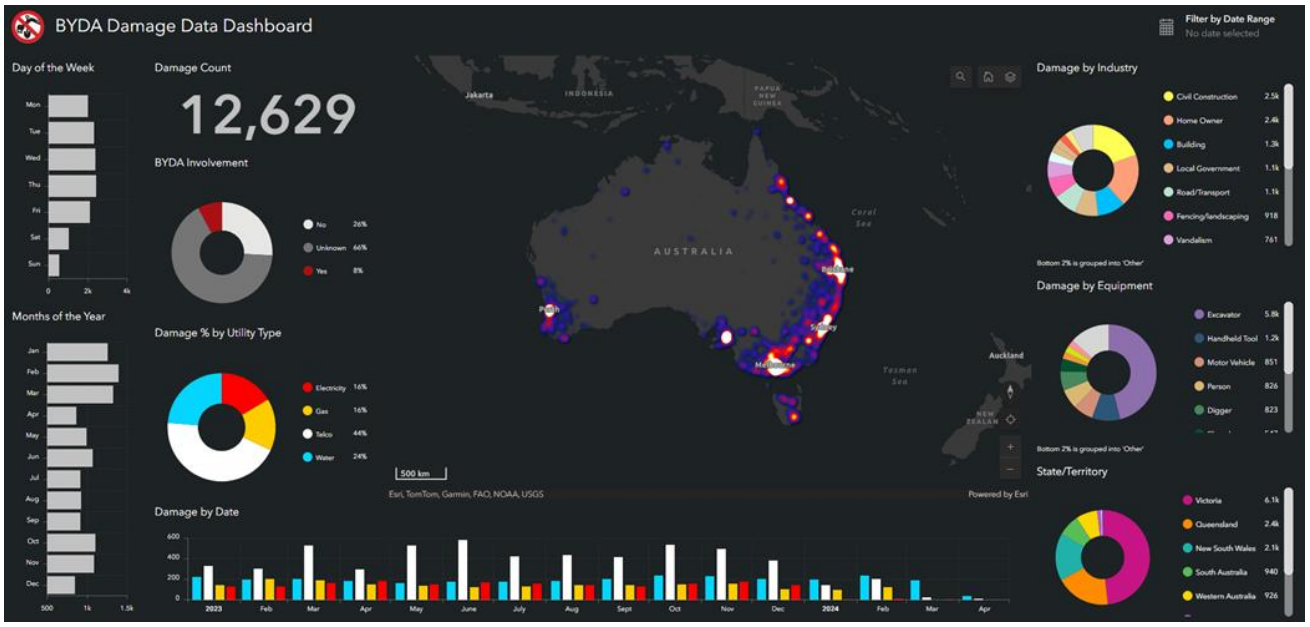
But just as importantly we are building a strong foundation of support services that support our vision of zero damage zero harm. In the last 12 months our damage prevention team have delivered over 700 toolbox style talks on safe excavation and effective plan reading to the construction sector, with a participation rate of over 7000 individuals, additionally we have attended over 200 trade events and regional field days to engage the community on the importance of never digging blind this gave us a reach of over 20,000 people. This was supported by a national radio campaign themed "Don't Dig Blind" has played over 5000 times on metro and regional radio and over 450 social media posts on Instagram, LinkedIn, and Facebook with a reach of over 1 million people, focussed on raising awareness of never digging blind.

We also invested in improving the user experience with our plan referral service. Gone are the days of what industry had nick named "email hell" whereby you would receive all of the utility information via individual emails and attachments, which we know in urban areas could result in upwards of 12 emails, and over 20 attachments per request. In March 2024 we launched the collated response viewer, where you can now log into the system and view all of the utility responses at once via the portal, you can download all the information as a zip file pack or as a single pdf, you can also share the link to your jobs utility information with people in your team so that they can view and download. This was a significant step forward for us to better support users in their needs for efficient and easy access to the utility plans and the supporting safety information.

Under our current strategy we are focussing on building the data and understanding of the impact of third part utility strikes to Australia's networks and in June this year we will publish the BYDA Damage Data Dashboard for 2023. We currently have over 12000 validated strikes provided by participating utilities and expect by the time we publish the dashboard will show close to 20,000 recorded damages for the calendar year 2023. This is 20,000 chances of injuries to workers and disruption to our community, and BYDA is sure we all agree this simply isn't ok. BYDA is commissioning an independent economic research study to validate if the UK modelling that for every dollar spent by a utility to repair a damage it equates to a 29-dollar cost to community and hop to publish this report by the end of 2024. If the UK numbers are validated, we are looking at a potential 4-billion-dollar problem every year.

This means that as a collective industry we must come together to work on the solutions. BYDA is working with members to identify how we can improve the quality of plan information, but this is only part of the solution. We also need improved education and skills sets for those working near utility infrastructure to better locate it on site and mitigate the risks, and as such BYDA will be actively seeking to work the relevant job skills councils to ensure that these skills are built into any qualification that involves breaking ground. Additionally, we would like to see utility risk awareness built into the construction white card.

BYDA knows we can't achieve zero damage – zero harm on our own, we know that that this is a complex problem and requires a multifaceted approach across multiple stakeholders, but we are here, we are listening and we want to work with you to ensure that we can create safer outcomes and protect Australia's utility network that keeps all of us connected to Electricity, Gas, Water and telecommunications.



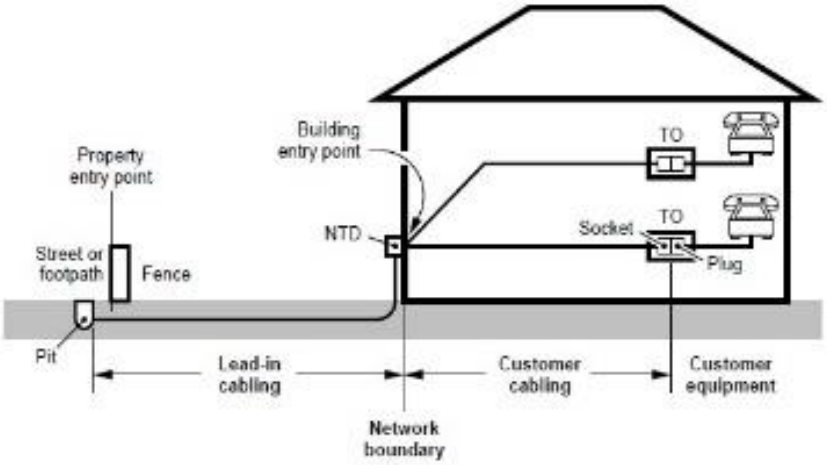
ACMA Mandatory TCA Forms

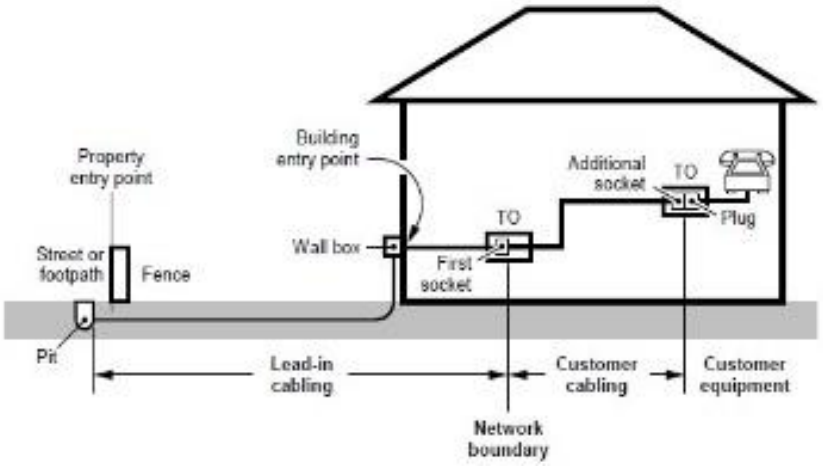
Appendix K Section 3 of the S009 wiring rules identifies the requirements for providing certification advice at the completion of a cabling job. In simpler terms Page 22, Item 15 of the ACMA Cabling Pathways Document clearly states:

"15. Cablers must, at the completion of each cabling task, provide the client (that is, the customer or employer, whichever is appropriate) with a job sign-off form, such as a telecommunications cabling advice form (TCA)".

The last page of this e-Telit provides a link to S009 and the ACMA Pathways Document. TCA forms can be ordered through TITAB via https://titab.com.au/forms

S009 Wiring Rules on Network Boundary

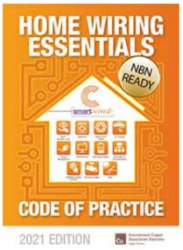




Appendix J of the S009 wiring rules provides some practical examples of where the network boundary is located depending on the circumstances encountered. Section J.2 states:
"As with all legislation, the ACT is open to interpretation and there may be a number of valid interpretations. This Appendix represents interpretation agreed by the ACMA and industry to provide industry certainty."
Cablers need to be aware of the many variations of these interpretations
The last page of this e-Telit provides a link to S009

Smart Wiring Guides

Click on Images



AUSTRALIAN REGISTERED CABLERS

Skills Development

Australian Registered Cablers You Tube Video Presentations, click on the images below

Beyond the Basic AV Network

31 views • 3 weeks ago

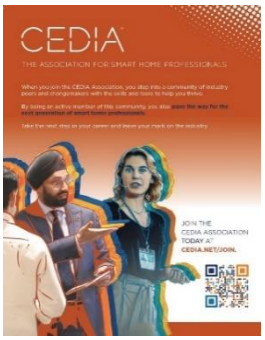
Deploying WiFi in residential premises

The Importance of Applying S009 and Adhering to its...

Training

Associations

Click on Images



Useful Links

ACMA

ACMA Complaints line

ADTIA

Authority to Alter Facilities in Residential & Small Business Premises

Before You Dig

Communications Alliance

Cabling Pathways Doc

Lead In Conduit (LIC) Build Process

NBN Co

Smart Wiring

Training Packages

Wiring Rules AS/CA S009:2020