

## *VOICE*data Electrica

THE NECA COMMUNICATION COUNCIL NEWSLETTER

**APRIL 2004** 

## **Government and ICT Sector Views**

NECA along with other interests in the ICT Sector is to meet with the Minister for Communication, IT and the Arts, over dinner to discuss an ICT strategy for Australia. NECA has raised this issue with the Government and others in the lead up to the election. The necessity arises from the apparent failure of the Governments initiative "Framework for the Future" and the difficulty the Government has in responding to the recommendation from the F3 Leaders Forum held in August 2003.

At that Forum, the NECA CEO Peter Glynn and the NECA Communications Council member Paul Stathis from Belden presented the need for Government and others to acknowledge the vital role of the cabling sector in achieving Australia's connectivity requirements and also in the development in technical skills i.e. connectivity as against content.

**Comms Cabling Regs** and Standards Update First Edition

Edition No.1 hit the streets 26 March (April 2004 edition). The newssheet is produced at no charge to the readers and contains only unedited comment about regulations and standards provided by;

- The Australian Communications Authority (ACA)
- Standards Australia
- Australian Communications Industry Forum (ACIF)

Where there is available space in any month, it will include non proprietary technical information.

The objective of the newssheet is to create a forum of medium through which the cabling sector can be kept up to date about regs and standards relevant to their work. Obviously, it won't contain all the detail and often times may refer to other publications, but at least there will be a regular publication for the industry to be told what the regulator and the technical standards bodies believe they need to know whether it be changes, rulings or any other important issue relevant to regulation and standards.

The update is published by Australian Cabler Registration Service (ACRS) in the interest for the cabling industry and for the benefit of registered cablers and others that have a need for thisinformation.

If you haven't yet received a copy of the update, phone ACRS on 1300 667 771

Paul Stathis will again represent NECA at this very important meeting. NECA is a founding member of the National ICT Industry Alliance that is sponsoring the meeting. The Alliance is a Forum where leading industry organisations representing the Australian Information and Communications technology and the interest of the ICT professionals and users, meet to exchange views, and discuss initiatives to advance the industry.

The Alliance members support the Governments "Framework for the Future", and its call for leadership from Government, Industry and research leaders to drive change, to build awareness of the importance of ICT to the economy and to identify and implement actions to take the framework agenda forward. Areas such as innovation, broadband, infrastructure development, IP, Standards and trade opportunities and developments have been discussed at the Alliance meetings during 2003/04.

The Cabling Sector in Australia while not without its problems is well managed with each link in the supply chain being properly led and being able to influence policy development. This Forum is one of the tools used by NECA and the NECA Communication Council to achieve the stated outcomes from the industry for profitability, sustainability, widespread and ongoing take-up of the technology, and a workforce equipped to deliver the technology. We anticipate that this meeting will go a long way to delivering on these outcomes.

## **NECA US Conference 2004**



NECA Victoria will be arranging special group airfares, accommodation plus post conference options for you to consider or you may just like to do 'your own thing' either way we would like to encourage you to join us on this very special tour to Los Angeles.

Further details can be obtained by contacting Catherine Davies at NECA Victoria on 9645 5533

ACRS Australia's largest cabler register, best value, lowest fees, now a regular update of standards and regulations. ACRS

Only \$22 per annum or \$66 for three years.



In this issue NECA US Conference

Cole Royal Commision

Optus installation

Skills Shortages



## Rittal gives metering enclosures | Addressing Skill Shortages a face lift.

Rittal, the worlds largest enclosure manufacturer has consistently been asked by contractors to provide a metering enclosure solution for the Australian market. After months of research and listening to contractors frustrations about quality and ease of wiring of existing products on the market Rittal is launching a new range in May.

Every effort has been made to provide contractors with what they are asking for in order to make there job easier and we have succeeded in most cases without adding to the cost or the changing the basic size of the enclosure. Some products offer additional wiring space in the DIN section as well as additional DIN modules.

The range complies with all relevant standards including AS3012 where necessary.



Another important aspect is providing a quality product in keeping with the standard of new homes being built today.

Again Rittal have succeeded in improving the overall appearance and quality of the enclosure.

Keep an eye out for the product in your local wholesaler.







Proud supporters of





NECA welcomes the announcement by Dr Brendan Nelson, the Minister for Education, Science and Training, of the new cutting edge strategy in addressing skill shortages in the trades – The National Skills Shortages Strategy. This strategy will take a more focused industry approach to skill needs and tackle many significant issues for the Electrotechnology industry.

"Whilst much progress has been made, tailored programs are necessary to address critical issues" said Peter Glynn, CEO of NECA. "We will work with the Government to develop flexible training pathways that meet the needs of the industry, attract young people, and create opportunities for mature age workers".

Specialised skills are in high demand in an industry that incorporates new and emerging technologies. This strategy will enable the industry to research and target specific areas and facilitate training to ensure our workforce is highly skilled and able to working in that high tech environment.

Attracting and retaining young people has been a problem in the trades, the attrition rate of 35% needs to be addressed. This strategy will provide the industry with the tools to create better links with the school community, provide current career advice and opportunities for work placements and challenge the traditional views of the trade.

This new strategy will build on the strengths of the National Industry Skills Initiative and further the key findings from those projects.

The Electrotechnology looks forward to the challenge provided by the Australian Government and we will continue to work together to address the critical issue of skill shortages to meet the needs of all Australians.

Further information can be found at www.getatrade.gov.au

## Matching Enjoyment with a Job

People who match employment with personal interests usually have higher levels of job satisfaction, are seen as better workers and experience success in their chosen field. Unfortunately, young people sometimes fail recognise the connection between things they enjoy and career pathways. It's almost as if they refuse to believe anyone will pay them for having fun!

Young people interested in areas of practical electronics such as; Hi-fi, Radio, security systems, remote control modelling, computer maintenance, network design and installation, theatrical sound, lighting and so on will probably find a career pathway in electrotechnology.

To increase industry awareness, NECA conducts an annual award for secondary students. Industry members are invited to nominate students in Years 9 to 12 who have demonstrated exemplary skills in electrotechnology at home, school or work projects.

The winner from each State will receive a cash prize of \$200 and the national winner will be flown to Sydney, with a parent/guardian to receive the award at the NECA National Apprenticeship Awards on 10 November.

To nominate someone for this award, fill out the application form found at www.electrotecfutures.com.au (follow the link to Parents & Advisors, scroll to downloads) or email: rogerk@neca.asn.au

Jeffery Sinclair, winner of the 2003 Electrotechnology Secondary School Students Award with Angelo Torresen, Director from the sponsor NHP at the NECA Apprenticeship Awards in Melbourne.



# The latest generation of Pluggable Compact Relays

PLC-RELAYs are the latest modules from Phoenix Contact. The pluggable, modular and flexible interface system offers either a relay interface (PLC-R) or a solid state relay interface (PLC-O) in a modular terminal block format in either screw clamp or spring cage connections. They consist of 6.2 mm wide base terminal blocks and pluggable miniature relays or solid state relays with practical switching capacities up to 6 A at 250 V ac in a Single Pole Double Throw (SPDT) configuration. A double pole double throw (DPDT) version is also available in a 14 mm package. There is also a high current (HC) version in the 14 mm package available with practical switching capacities up to 10 A at 250 V ac.

#### Modular and flexible

The main utilisation of the PLC-RELAY product line is as an interface between control level and field devices in automation and building control applications.

Modular means: the number of channels needed can be adjusted to the users' requirements. In other words, no wasted equipment or space for unused channels.

Flexible means: the input voltage as well as assembly with either electromechanical or semiconductor relays (solid state relays) can be selected freely for each channel depending on the application. For easy maintenance, they can be replaced quickly with the easy-to-operate ejector latch.

#### Input voltages from 12 V to 230 V

PLC-R...21 is delivered in all common input voltages from 12 V to 230 V. Unlike many commercially available coupling relays, the PLC interfaces are already equipped with an input circuit integrated in the base terminal block as a standard feature:

- -The LED status display clearly informs about the operational status -Coil circuitry with a damping function ensures reliable EMC interference suppression
- -The polarity protection diode in DC types prevents destruction in the case of polarity reversal.

#### Plug-in jumpers save wiring

For wiring, we have something special: The convenient plug-in jumper system FST up to 32 A. Whether there is an A2 ground on the coil side or a feed-in at the moving contact on the contact side, the 2 position bridging plug and the continuous plug-in jumper, which can be cut to length as desired, guarantee quick, economical, and error-free wiring. This makes complicated, time-consuming loop bridges a thing of the past.ß,

## User-friendly marking

All markings, such as the input voltage and the connection labels, are clear, easily visible and permanently printed. The large print on the side gives further details. A device label - e.g. ZB 6 from the Phoenix modular terminal block program - can be clipped onto the engagement lever.





# Cole Royal Commission into Building and Construction Industry - Where is it at?

Progress of the Bill has stalled pending the outcome of the Senate Committee that was formed to conduct an enquiry into the findings of the Royal Commission. NECA has been advised of a scheduled time allocation before the Senate Committee (mid May), we are now concerned that the onset of an election could stall the process further.

An illuminating aside is that a Labour Senator from Victoria, who is sitting on this Senate Committee, was during the period reviewed by the Royal Commission, a senior official with ETU Victorian branch and more notably a trustee on the two trusts that received the secret commissions. Is that a conflict of interest?

While the passage of the Bill has stalled, the Interim Building Industry Task Force, which was established as part of the Governments response to the findings of the first report of the Royal Commission has now tabled its own report "Upholding the Law – 1 Year On; Findings of the Interim Building Industry Task Force". The report provides an overview of the environment in which the task force operates and highlights in particular the continuation of unlawful and inappropriate behavior in the industry,

"behavior that is unacceptable by general community standards are the norm in the industry. Too many Australians who are attempting to earn an honest living have become victims of the industry's blatant disregard to the law".

This is one of the more illustrated comments from the report but it gives substance to our worse fears and indicates that the task forces budget of \$8.9 million and 47 staff are a necessary burden on the public purse.

To quote illustrations from the report;

- More than two out of every 3 complaints (to the Task Forces 1800 hotline) are made against trade union officials.
- Cohesion, intimidation, violence and threatening behaviour are the most prevalent complaints received by the Task Force.
- The challenge before the Task Force is not to simply restore the rule of law to the industry, it is to introduce the rule of law for the first time.
- The task force continues to receive reports that Union officials extort money and services in return for industrial peace on building sites.
- The Task Force is most concerned when it receives information about occupational health and safety being used as leverage in industrial matters.

The Executive Summary is a interesting read, but the body of the report balances the extremes and describes an environment of a complex work and management environment not properly supported by either the regulation of statue. For instance, the decision of the Magistrates Court that resulted in the criminal conviction of a union organiser for improperly influencing and coercing a site manager that was to appear as a witness before the AIRC was to find the official \$500. Ironically, on handing down his decision, the Magistrate offered the opinion that current penalties provided under existing legislation do not reflect the severity of this type of offence.

Probably the most insightful comment in the report was sourced from discussion held between Task Force staff and Industry participants.

"It is like a school yard. You have got your bullies (Unions), the wimps (head contractors) and the blokes who just want to have a kick of the footy (sub-contractors)".

## **Communications Training**

### Western Australia

The College of Electrical Training (CET) offers a range of specialist courses for the trade.

The following quality courses have been developed for telecommunication cablers who wish to increase their qualifications:

Course Name	Duration	Next Course Commences	Subsidised Course Fee \$	Non-Subsidised Fee \$
ACA Open Cabling Registration	7 days - full time (Sat - Sat)	17/4/04 - 8/5/04 - 12/6/04	354.00	990.00
Restricted Cabling Registration	4 Nights & 2 days - After hours (2 Tue & Thur & 2 Sat)	20/7/04	90.00	450.00
Structured Cabling Registration	5 Days	3/5/04 - 28/6/04	335	900
Category 5	4 Nights & 1 day		145	500
Optical Fibre	4 Nights & 1 day	25/5/04		

Intending students should contact the CET TODAY, as there are limited places available. Please contact the College administration team on (08) 9240 7700, on email coordinator@cet.asn.au or visit the comprehensive website www.cet.asn.au for further information.

#### **South Australia**

For information on courses available at PEER TEC please call (08) 8351 4888

Course Name	Duration	Next Course Commences	Subsidised Course Fee \$	Non-Subsidised Fee \$
Open Registration	Mon - Fri	24/5/04 - 28/5/04, 21/6/04 - 25/6/04	215/149	\$660
Open Registration	Tues & Thur Evenings	20/4, 22/4, 27/4, 29/4	215/149	\$660
Structured Cabling (Category 5)	Sat & Sun	8/5/04 - 9/5/04	200/159	410
Coaxial Cabling	Sat	17/4/04	100/79.50	205
Optical Fibre	Mon - Wed	31/5, 1/6, 2/6/04	355/291.50	635
Restricted Registration	Mon & Tue	7/6/04 & 8/6/04	155/116.50	385

#### Victoria

For further information call Milcom on Ph 1300 369 320 or contact NECA on tel 03 9645 5533

Course Name	Date	Location	NECA Members \$	Full Course Fee\$
Open Registration	19 - 23 April, 17 - 21 May , 21 - 25 June	Newport training centre	650.00	715.00
Restricted Registration	19 - 20 April, 17 - 18 May, 21 - 22 June	Newport Training centre	340.00	390.00
Regulatory Framework	19 - 20 April, 17 - 18 May, 21 - 22 June	Newport Training centre	510.00	550.00
Telephony & Switching	21 - 23 April, 19 - 21 May, 23 - 25 June	Newport Training Centre	510.00	550.00
Upgrade - Restricted	21 - 23 April, 19 - 21 May, 23 - 25 June	Newport Training Centre	460.00	495.00
Cab 8 - Structured Cabling (Cat 5)	4 - 5 May	Newport Training Centre	399.00	450.00
Cab 9 - Coaxial Cabling	5 May 04	Newport Training Centre	95.00	125.00
Cab 10 - Optical Fibre	6 - 7 May	Newport Training Centre	550.00	600.00

#### **New South Wales**

For further information call Milcom on Ph 1300 369 320 or contact NECA on tel 02 9744 1099

Course Name	Date	Location	NECA Members \$	Full Course Fee\$
Open Registration	After hours course 19 - 23 April 10 - 14 May, 7 - 11 June	St Leonards Fri: 5pm - 8:30pm & Sat: 8:30am - 4:30pm St Leonards 8:30am - 4:30pm	650.00	715.00
Restricted Registration	After hours course 19 - 20 April 10 - 11 May	340.00 Fri: 5pm - 8:30pm & Sat: 8:30am - 4:30pm St Leonards 8:30am - 4:30pm	390.00	
Regulatory Framework	After hours course 19 - 20 April 10 - 11 May, 7 - 8 June	St Leonards Fri: 5pm - 8:30pm & Sat: 8:30am - 4:30pm St Leonards 8:30am - 4:30pm	510.00	550.00
Telephony & Switching	After hours course 21 - 23 April, 12 - 14 May, 9 - 11 June	St Leonards Fri: 5pm - 8:30pm & Sat: 8:30am - 4:30pm St Leonards 8:30am - 4:30pm	510.00	550.00
Structured Cabling (Cat 5)	27 - 28 April, 25 - 26 May, 28 - 29 June	St Leonards 8:30am - 4:30pm	399.00	450.00
Optical Fibre	29 - 30 April, 27 - 28 May	St Leonards 8:30am - 4:30pm	550.00	600.00
Aerial/Underground Installation	28 - 29 - 30 April, 28 - 29 - 30 June	St Mary's 8:30am - 4:30pm	400.00	450.00
Smart Wired Course	5 - 6 - 7 May	St Leonards Day 1-8:30am-4:30pm Day 2- 8:30am-12:30pm	280.00	320.00
Telstra Accredited Courses	Contact Milcom			

**Northern Territory** - Contact NECA NT on telephone 08 8922 9666 **Tasmania** - Contact NECA TAS on telephone 03 6236 9290

**Australian Capital Territory** - Contact NECA NSW on telephone 02 9744 1099

## **Professional Indemnity Insurance - Growing Concern**

NECA has stepped up its campaign to assist contractors by addressing the broader problem of the availability and price of insurance and the particular problem that arises with Professional Indemnity Insurance. NECA has raised these matters directly with the Government and through the ACCI Small Business Committee that is active in this field.

The following extracts are from a media comment prepared by NECA.

Phillip Green, chief executive officer of NECA Victoria, said the issue of professional indemnity insurance in the electrical and communication industry was of growing concern to members as it was becoming increasingly necessary to have this type of cover in order to do business. He said it was extremely difficult to find insurers willing to write professional indemnity insurance policies and it was almost unaffordable for most contractors.

Currently between 10-20 per cent of members required professional indemnity insurance, but the trend towards needing it in order to meet head contractor requirements was growing.

"More and more builders, or head contractors, are likely to contractually request that the electrical sub-contractor has professional indemnity insurance in place. There is a growing trend towards builders trying to minimise their risk by relocating the risk elsewhere," Mr Green said.

"There will be circumstances where it is quite legitimate, reasonable and necessary for the contractor to have this type of insurance, but they just can't get it. If they can get it, it's almost unaffordable for them."

Mr Green said the second issue driving demand for professional indemnity was that contractors were increasingly undertaking design work. "In the past, design was the domain of engineers or consultants," he said. "We are now finding that contractors themselves will sometimes undertake design work and therefore there are certain risks involved, which a contractor would normally seek to mitigate with a professional indemnity policy."

Mr Green said the insurance problem was caused by the fact that the insurance industry did not understand the nature of the electrical contracting sector or the risks and were unprepared to write the policies.

"Most contractors will have public and product liability either as a matter of legal requirement, which is a necessity here in Victoria, or good business practice. However this doesn't get to the issue of professional indemnity."

He said for those who were able to get professional indemnity insurance, the costs were often prohibitive.

James Tinslay, chief executive officer of NECA New South Wales, agreed that while there were some differences in insurance needs across the states the issues of difficulty in obtaining insurance and the un-affordability were common problems.

"Essentially, insurers don't understand what risk there is in the electrical and communication contracting industry. They don't understand what contractors do and they believe that because we are installing we are actually designing," he said. "Contractors follow AS3000 standards. Insurers believe that because we are using Australian Standards we are therefore carrying out design work. Electrical contractors are generally installing to meet the requirements of AS3000 and other Australian Standards. Unlike consultants, for example, electrical and communication contractors do not charge a fee for design – it is integral in the plan and install process."

Both branches of NECA were in discussions with insurance brokers to educate them about the industry.

"Across both states we are endeavoring to build a picture of the industry so that our brokers can attempt to 'sell it' to the insurers," Mr Green said. "We are building a profile of the industry – the contractors, the nature of the work and the real risks involved in carrying out installation work. The insurers will then have a basis upon which to assess the risk and make independent decisions."

Peter Glynn, chief executive officer of NECA National said while Victoria and New South Wales were leading the way in dealing with the issue on behalf of their states' members, the issue was of growing concern to the national electrical and communication sector. "More and more of our members are facing this dilemma and it can only be expected to worsen in the future.

Mr Glynn said some progress had been made to date through discussion with the industry, but the desired outcome had not yet been achieved.

## **Construction Innovation**

The BRITE project is aiming to improve the incidence and quality of innovation in Australian building and construction industry by publishing six case studies highlighting lessons leant by innovators. Some of the key findings are that the benefits of innovation are significant, small local business can be technology leaders, building relationships with clients is a key means of gaining competitive advantage through innovation, links with global experts is important.

For further information see www.brite.crcci.info .

## ACA Penalties in Lieu (PILs) -The NECA Position

NECA has been very vocal about the PILs (Penalties in Lieu) system, and we have made two points very clear;

- The ACA's method of introducing PILs to the industry has not been managed very well and at best has created a mood of extreme concern in the cabling sector.
- 2. NECA is a strong advocate for and supporter of the present PILs system.

When the first fact sheet that included reference to PILs was released NECA demanded its withdrawal. The ACA intention was no more than making people aware of all aspects of the relevant statutes, explaining the reasons for the ruling, the appropriate technical references, the correct application and the penalties for perspective non-compliance — as it should! However, this was the first industry knew about PILs — the range of penalties, when did they apply, what was there PIL mechanism etc.

As it transpires, the industry and NECA's concerns were overstated and the ACA's management rules for application of the penalties are as NECA and the industry would believe reasonable and appropriate.

The ACA has advised NECA that its intention with PILs is to enhance its compliance capability. PILs is one method to manage compliance, legal proceedings is the other. The benefit of PILs is flexibility. The ACA's process for using the PIL's system is;

- Stage 1 Consultation
- Stage 2 Warning
- Stage 3 Penalty

We have discussed the process, the experience of the officers involved and the equity issues at those at the receiving end.

NECA supports effective compliance regime and supports PIL's, and will continue to work with the ACA to achieve an optimum compliance regime.

## What does an Optus Installation look like?

Following on from our article titles "How to recognise what is the carrier cabling and what is the customer cabling in a typical residential installation" were we looked at the installation practices used by Telstra and Optus. Now we shall look specifically what makes up an Optus installation.

ure 1 Customer Access Unit (CAU)

'us installs two cables from their network cable in the street to the customer's mises. The cable used in an external type cable containing one is a single twisted r and the other is a coaxial cable. Both cables are terminated into a device known a Customer Access Unit (CAU) see "Figure 1". The CAU is typically a white x mounted on the outside of an external wall.

OTE: the CAU is not the Network boundary. The Network Boundary is the lephone socket that terminates the carrier's network.

two pair cable is installed from the CAU to the telephone socket within the customer's premises see "Figure 2" this is the lead in cable. to "Figure 2" the cable on the right hand side is the pair from the aerial

cable used to power feed the telephone service.



# Are you equipped to deliver the services

As we all know, there are two levels of registration available:

■ Restricted ■ Open

Typically most people associate the Restricted with Domestic installations and the Open with Commercial work, this unfortunately is not the case anymore. Today's customers are looking for more than a basic telephone services, today's customer is looking for as a minimum:

- Telephone services
  Video
  Security
- Data services

(LAN outlets in the study and children's rooms)

In other cases, customers want the above services plus:

■ Lighting control ■ Irrigation ■ Distributed Audio

If you are planning to deliver telephone, data, video and security you will need an Open Registration. Why? The minute you are looking at installing data points throughout the house, these data points have to be connected back to a central patch panel. The minute you install a patch panel you are looking at a Distributor with a cross connect capability and according to the ACA you need an Open Registration. This is not all you need, if you are purporting to provide a Data Cabling solution not only do you need to supply and install the cabling and connectors, you must also test the installation to ensure compliance. There are three standards that you should consider whenever you are looking at data cabling in a domestic or residential installation.

The standards are:

AS 3080:2003 – Telecommunications installations – Generic cabling for commercial premises (ISO/IEC 11801:2002, MOD)

#### Figure 2 Wiring inside the CAU

At no stage should you open the CAU as this is part of the Optus network.

• The aerial cable contains the pair for the power and the coaxial for the signal

AS 3086:1996 – Telecommunications installations – Integrated telecommunications cabling systems for small office/home office premises

AS 3087:2000 – Telecommunications installations – Generic cabling system – Specifications for the testing of balanced communications cabling in accordance with values set out in AS/NZS 3080:2000

The above standards will help you with the telephone and data services.

You then need to ensure you have the proper skill and knowledge to install video and security systems. In the case of video it is highly recommended that you attend a training course such as the one offered by Matchmaster through NECA as this will give you the skill and knowledge required to comply with today's digital Television Standards. With the security system, NECA offers a Basic and Advance course that will give you the skill and knowledge to install the Alarm System and apply for your Alarm Installers licence.

In the case of customers requiring the more advanced features such as:

■ Lighting control ■ Irrigation ■ Distributed Audio

You need to add to your skills profile by undertaking further training that gives you the skill and knowledge to confidently install these technologies. The starting point is the Smartwired course offered by NECA. This course provides an overview of the technologies, cabling requirements and estimating. Once you complete the Smartwired course you can then undertake specialist course on your chosen vendor.

In summary, training is no longer an option but a necessity in delivering your customers technological needs for the 21st Century.

Ian Millner, Managing Director, Milcom Communications Pty Ltd.

For questions from communications installation to smart wiring and regulatory issues contact Milcom on fax 02 9436 4133 or email Helpdesk@milcom.com.au .



NECA welcomes submissions from members of the National Electrical and Communications Association

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