

# e-monitor

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## June/July 2011

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## news

### **NBN work recommences**

Work has recommenced on the rollout of the National Broadband Network (NBN), with NBN Co awarding a \$1.1 billion contract to Silcar for the construction of the fibre network in NSW, ACT and Queensland.

Silcar, which is a 50/50 joint venture partnership between Siemens and Thiess Services, has been awarded \$380 million over the next two years, with the option of a further two years at an additional value of \$740 million.

Under the arrangement, Silcar will be responsible for the construction of 40% of the total network, including nine of the 19 NBN second release sites previously announced by NBN Co – extensions to existing works in Kiama, Townsville and Armidale and new sites in Springfield Lakes, Toowoomba and inner northern Brisbane, Riverstone in western Sydney, Coffs Harbour, and Gungahlin in the ACT.

NBN Co said it had achieved an optimal balance between price reductions, certainty of volume, location of premises, appropriate



payment terms and the benefits of initial exclusivity to defray overheads.

Discussions have already commenced with a select group of construction companies for all other regions in Australia. NBN Co expects negotiations to be completed in August, selecting up to five contractors and placing one at most in each capital city, stating that there was little benefit in two or more construction companies competing in the same capital city.

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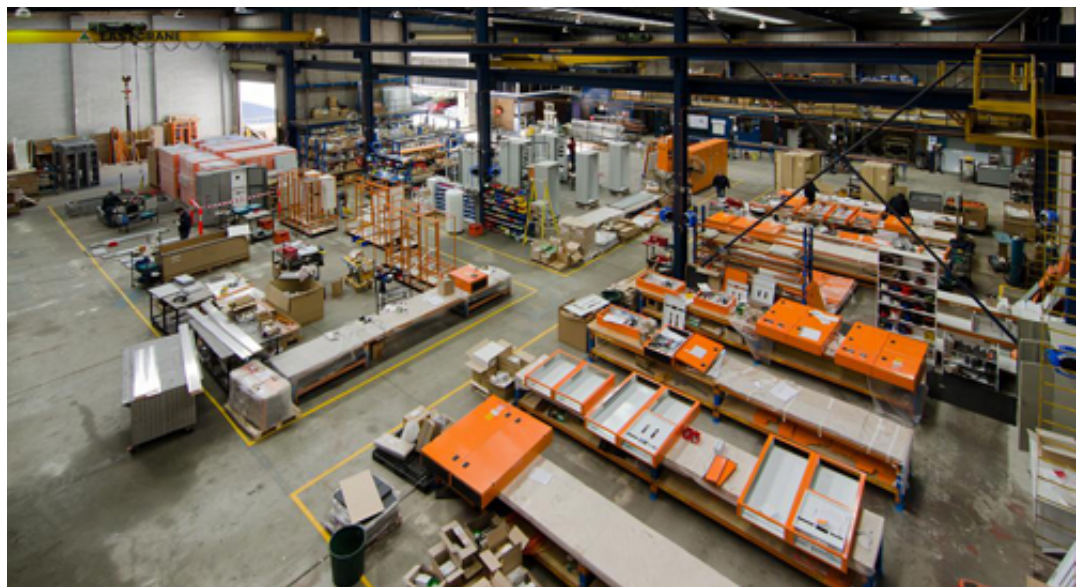
## **New switchboard manufacturing facility in Sydney**

Australian switchboard manufacturer K E Brown has opened a new manufacturing facility in Sydney's Western suburbs. The second of K E Brown's manufacturing facilities, the Smithfield facility specialises in producing both custom-built and modular switchboards for light and power, and motor control centres. It is equipped with modern CNC busbar bending equipment, as well as electric cabling and switchgear assembly areas.

K E Brown general manager Bob Day said the plant has been designed and laid out to minimise waste in time and materials with OH&S also a major contributor to the layout of equipment and work stations.

He added that the time and cost of a person moving a piece of copper through the production process has now been greatly reduced.

As well as improving the movement of the material through the plant, K E Brown created dedicated areas of the plant to optimise the assembly of distribution boards, which are now being designed by the same engineering team who designed the main switchboard. In addition to streamlining the design and manufacture process, the optimisation aims to maximise the facility's sustainability.



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## **NBN fixed-wireless agreement signed**

Rural and regional communities falling into the fixed-wireless coverage area of the National Broadband Network (NBN) may be among the first

to connect to the NBN, with NBN Co signing a 10-year agreement with Ericsson for the design, construction and operation of the 4G network.

The \$1.1 billion contract will be initially delivered as a turnkey solution for at least 12 months to enable a fast start to construction and delivery. As a result, first services are expected to be available from the middle of next year.

The fixed-wireless network service is designed to offer peak speeds of 12Mb/s to retail service providers to offer to people living in approximately 4% of premises not covered by fibre. The company has stated that it will not know the typical speeds of the fixed-wireless network until trials are complete, but expects a minimum of 500kb/s and claims the design is 10 times faster than many mobile networks today.

Design of the fixed-wireless network has already started. The exact locations to be covered in the initial rollout will be announced in the coming months following the completion of detailed network planning and consultation with local communities. An augmented approach will be taken to ensure that the existing 3G and copper networks in rural locations are not affected. Of the 121 points of interconnect, about 40-45 will be for the fixed-wireless network.

Several new mobile towers will be constructed in remote areas where there are currently none. These will form clusters to deliver wireless into an area from towns where there is a fibre connection and where necessary, microwave backhaul will be used to bring services back to the fibre network.

In addition, the 4G fixed-wireless network will support quality of service capability, allowing bandwidth to be prioritised according to applications being used over the network.

Households connecting via fixed-wireless will have an antenna, about the size of an A4 piece of paper, mounted outdoors on an eave, with a cable fed inside to a device similar to most ADSL modems in use today. It is expected that these devices will be upgraded as the network evolves and faster speeds are possible.

Complementing the fixed-wireless service, NBN Co expects to launch its interim satellite solution in the next six months. Once past the interim period, it will be able to connect large numbers of premises in a short period of time.

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## **Australia drafts first cyber white paper**

The federal government has announced it will develop Australia's first Cyber White Paper to provide a comprehensive blueprint to help Australians connect to the internet with confidence.

It will be a comprehensive review of how governments, businesses and individuals can work together to realise the full benefits of cyberspace while at the same time ensuring current and emerging risks can be managed.

The paper will examine what Australians need to do to protect themselves online, the role of government, industry and the public in

protecting interests, and priorities in the cyber environment.

It will also cover a broad range of areas including consumer protection, cyber safety, cyber crime, cyber security and cyber defence.

The paper will be built on the government's 2009 Cyber Security Strategy and the establishment of the Cyber Security Operations Centre (CSOC), CERT Australia, the Cyber Safety Plan and the Digital Economy Strategy.

The announcement comes shortly after the high-profile cyber-attacks on three US defence contractors – Lockheed Martin, L-3 Communications and Northrop Grumman – which ironically occurred during or shortly preceding Australia's national Cyber Security Awareness Week. All three defence contractors provide services to Australia.

The paper will be led by the Department of Prime Minister and Cabinet and is expected to be completed in the first half of 2012.

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## **CIOs working towards greener IT**

New research from independent technology analyst Ovum suggests almost three-quarters of chief information officers (CIOs) have deployed environmentally sustainable IT within their organisations, with an additional 8% intending to do so by the end of 2012.

The figures were obtained by Ovum through a survey which canvassed around 500 CIOs across Europe, the US, the Middle East and Australia. The increase to 73% in the second half of 2010 marked a 5% boost on the approximate 68% of organisations using green IT in the first half of the year.

"The growth in global green IT penetration reflects a change of attitude by CIOs and other IT decision-makers," said Ovum analyst Rhonda Ascierio. "Previously, they considered green IT optional because they defined its value primarily in terms of corporate image, rather than the bottom line.

"It is now viewed as a core technology that delivers business value by cutting costs and increasing efficiency. We believe this change has occurred because of constrained IT budgets and a sluggish global economy in the wake of the recession, which forced organisations to scrutinise spending on all types of IT. Many CIOs have for the first time had to calculate a financial return on investment of green IT."

In Australia, Ovum claimed green IT penetration is, in part, being driven by anticipated carbon emissions-reduction legislation, stating that CIOs seem to be preparing for the eventuality of greater legislative pressure and plan to embrace green IT in the next couple of years.

Ovum surveyed CIOs about five major categories of green IT: data centre virtualisation, data centre power and cooling technologies, desktop virtualisation, printing and paper usage management, and power management tools for PCs and monitors.

Of these different areas of green IT, Ovum reported that data centre virtualisation has the greatest penetration; with 53% of the CIO

respondents in Australia saying they currently use it. According to Ovum's survey, this figure will grow to almost 80% of CIOs in Australia during the next couple of years.

Ovum classified green IT by a reduction in resource consumption, typically electricity from fossil fuels.

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## **UNSW iCinema exports to China**

One of China's leading mine safety research and development bodies, the Shenyang Research Institute of China Coal Technology & Engineering Group, has signed a \$1 million deal to use the Advanced Visualisation and Interaction Environment (AVIE) technology developed by the University of New South Wales' iCinema Centre in a new training facility. In the past three years the Australian mining industry has installed AVIE technology at four Australian sites as part of a \$6.1 million commercialisation. These have been used to teach mine workers how to survive life-threatening workplace hazards and have led to worldwide interest, with China claiming the first completed installation outside of Australia. AVIE technology also made its theatrical debut last month during the Sydney Film Festival as part of the cinematic artwork Scenario.

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## **Development of Uni TV wins global telecoms innovation award**

The Institute for a Broadband-Enabled Society (IBES) at the University of Melbourne and project partner Ericsson received the 2011 Global Telecoms Business Innovation Award for remote education innovation at a ceremony in London last month. The award recognises collaboration between the IBES and Ericsson in developing Uni TV, which involved the use of an IPTV platform to deliver educational service in fields such as medicine, chemistry and engineering by developing 3D content to assist learners in engaging with complex subject matter.

"Uni TV enables educators, technologists and vendors to work together to deliver educational services across a number of programs," said IBES research leader Ken Clarke. "As Australia rolls out the NBN, Uni TV will provide the basis for other educational services, such as professional development of doctors in remote locations."

Ericsson broadband strategy manager Colin Goodwin said: "The essential innovation with Uni TV was to take Ericsson's standard IPTV product and customise it for education use. While this could have been done on today's broadband networks, the 3D and haptic elements demonstrated with IBES require the very high speeds the NBN will deliver."

Sally Capp, the agent general for Victoria in London accepted the award on behalf of IBES from Global Telecoms Business editor Alan Burkitt-Gray. The awards are given annually to recognise innovation in the telecommunications industry.

Uni TV will be rolled out to a number of sites in the near future and is currently seeking second round funding through the Victorian

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### **ICT students step into virtual realm**

University of Queensland information and communication technology students have developed virtual interior design technology, which allows users to project life-size 2D outlines of furniture on the floor, before viewing them in 3D via use of an iPad. Bachelor of multimedia design student Stephanie Zylstra said that via use of an iPod Touch, an iPad and an infrared glove, users were able to arrange virtual furniture in a physical space to preview how a room might look without the inconvenience of having to arrange each item.

This project went on display at a recent UQ Interactive Design Exhibit, which also featured works from other ICT students. Four students developed a physical interface to the popular Smartphone game Angry Birds, which required game participants to use a giant, 1.5m slingshot to control the game, which was projected on the wall. Engineering student Harmeet Sanghera said the team was able to construct the interactive exhibit using items readily available at electronics and hardware shops for a small budget. "When the user pulls back on the slingshot, they activate the pressure switch which turns on the infrared (IR) light emitting diode (LED), which is then tracked via a webcam with an IR pass filter," Sanghera said.

Another student group, Team Globemasters, has been invited by software developer SAP to submit their Interactive Globe design for inclusion in the Demo Jam event at SAP TechEd 2011. Demo Jam sessions will be held at Las Vegas, Bangalore and Madrid later this year. Master of interaction design student David Harper said that the Interactive Globe project was essentially a giant trackball with a globe projected onto its surface. "When users spin the globe, the projection updates to track the movement, and when it stops on a specific country, the system displays information about that country around the edges," Harper said.

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### **Tip us off!**

Do you know something the ITEE College or the IT/telecommunications/electronics engineering industry should know? Tip us off! e-Monitor is on the look-out for information that would interest our readers.

Do you wish that someone in the media would cover a particular story or interest?

Let e-Monitor know and we'll investigate.

You can submit tips, feedback, or an idea for a story via [email](#) or on [Twitter](#).

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## **new products**

## **iWireless storage device**

The G-CONNECT is a wireless storage device designed for on-the-go access to content through the iPad and iPhone. Designed by technology manufacturers G-Technology, it can be used to access content which is not already loaded on a mobile device, such as movies, music, books, photos, and documents. It can wirelessly stream high definition content to up to three devices or standard definition content to up to five devices simultaneously. The user can load content either wirelessly or through a USB 2.0 port from a computer to their G-CONNECT. iPad and iPhone apps are available for quick access, and content is secured via password protection.



## **Enterprise mobile device**

Technology manufacturer Honeywell has released a mobile device, the Dolphin 6000 Scanphone, which automates the data collection process and provides real-time access to necessary business data.

In addition to its basic mobile phone functionality, the Dolphin 6000 offers features geared towards vertical enterprise, including field service, field sales, and retail and logistics operations.

An integrated scanner provides fast and accurate bar code scanning, simplifying data entry tasks, while Honeywell's Remote MasterMind for Mobility device management software lets users manage, update and remotely diagnose all Dolphin 6000 devices within a network from one centralised location, lowering development and maintenance costs.

It also sports an integrated megapixel camera and features multiple wireless options, including GPS, Bluetooth and Wi-Fi. Utilising the Microsoft Windows Mobile 6.5 Professional operating system, it is designed for easy integration with enterprise-grade software applications.



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## calendar

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The NSW Innovation Forum will be held on Thursday 7 July. Hosted by the Australian Information Industry Association, the forum will address the role ICT innovation will play in the long-term success of NSW and Australia, and will also announce the winners of the NSW state iAwards. The event will take place at the MLC Centre, 19 Martin Place, Sydney. To register, [click here](#).

### **Broadband World Forum announces its 2011 line-up**

This year's Broadband World Forum will take place on 27-29 September 2011 at CNIT La Défense, Paris. It has been expanded include the transport and energy sectors, will feature two new forums – the Connected Transport Summit and the Smart Energy Summit – in addition to the Executive Leadership Summit.

This year's event will host over 40 [speakers](#).

There will be four streams and an exhibition including 200 companies. In addition, the Broadband InfoVision Awards 2011 will be presented at the conference.

For more information on Broadband World Forum 2011 or to view the full event program and register for the event, visit the [website](#).

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