

monitor

news 1

calendar 7

new products 8



www.engineersaustralia.org.au

VOLUME 35 ISSUE 2 APRIL 2010

ISSN 1448-7195

Greenfields Bill debated

Fifteen organisations have responded to the Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010 inquiry, stating the Bill lacks information, has unrealistic deadlines and may delay connecting some new developments.

The Senate Standing Committee on Environment, Communications and the Arts has published submissions received in relation to the Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010.

The amendment will ensure optical fibre to the premises (FTTP) and fibre-ready facilities are installed in development projects from 1 July. In March, the Senate opened an inquiry for industry and other organisations to comment or express their concerns on the amendment.

The Senate received 15 submissions, including those from the Master Builders Association, Optus, Telstra and Engineers Australia.

Of those that made submissions, many considered the 1 July deadline to be unrealistic.

"The Urban Development Institute of Australia (UDIA) believes that this deadline is unachievable," UDIA said in its submission.

"Unless a developer has already made planning allowances for the provision of FTTP into a greenfield estate, it would be extremely difficult to comply with the 1 July 2010 start-date."

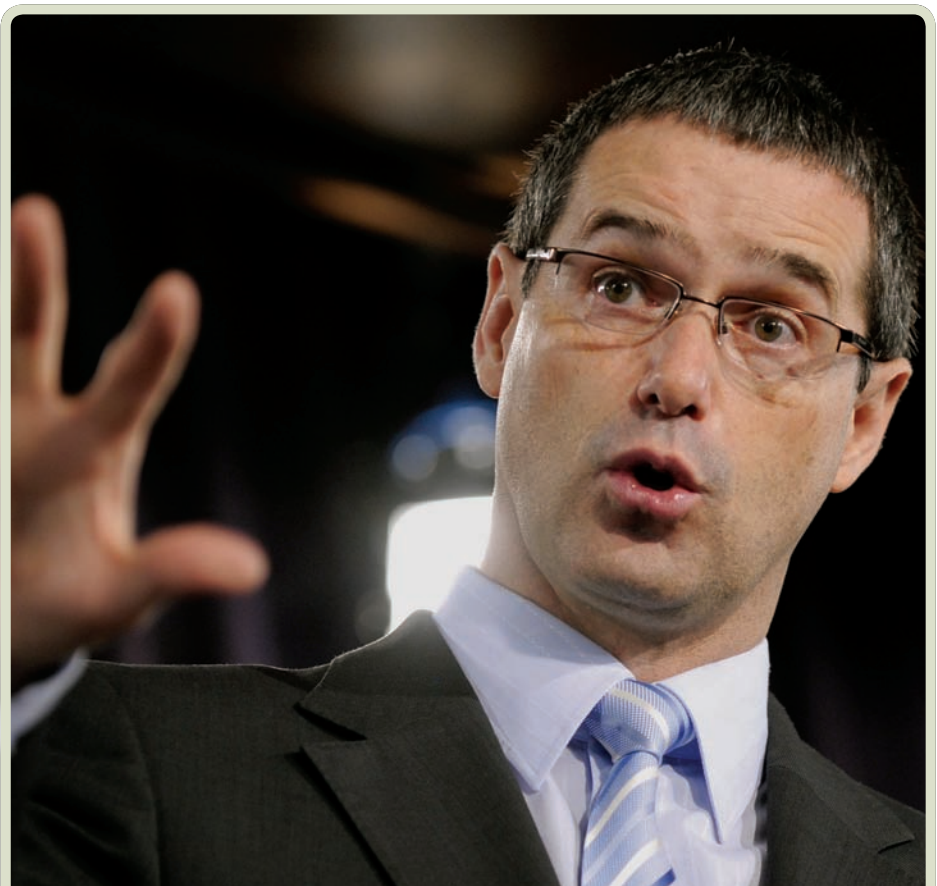
The Urban Taskforce also believed the timeframe could not be achieved.

"The requirement to install FTTP from 1 July 2010 is not considered possible," it said.

"Government must be realistic with its time frames."

Telecommunications companies Optus and Telstra also conveyed their concerns over new developments that may experience delays in fibre deployment due to the new legislation.

"A single dwelling unit might have ac-



Stephen Conroy ... There is still a wide range of views as to how fibre in new developments will be best brought into operation.

cess to high-speed services today over existing networks. If that property is subsequently knocked down and rebuilt or subdivided into multiple units then, as currently drafted, the legislation would appear to prevent the new unit(s) from accessing the existing [fixed] services without a specific direction of the minister," Optus said.

"Without a positive requirement on developers to deploy fibre, residents in new developments may end up having to wait

until the NBN rolls through their area for fixed line infrastructure," Telstra said.

"Fibre is not generally economically viable without a developer contribution; copper will be prohibited; and so in many circumstances wireless will be the best short term option. At this stage, it is unclear whether NBN Co intends or will be required to make these new development areas a priority for rollout."

The Housing Industry Association (HIA)

MONITOR is produced for Engineers Australia's Information, Telecommunications and Electronics Engineering College (ITEEC) by Engineers Media, Engineers Australia's publishing company. The statements made or opinions expressed in this magazine do not necessarily reflect the views of the ITEEC. By accepting advertising in the magazine, the College is neither endorsing, nor is it responsible for the delivery of, the products or services offered.

Engineers Media retains copyright for this publication. Written permission is required for the reproduction of any of its content.

EDITOR

Michael Lee

MANAGING EDITOR

Dietrich Georg

PRODUCTION

Belinda Kung

ADVERTISING

Maria Mamone

phone (02) 9438 1533

fax (02) 9438 5934

email mmamone@engineersmedia.com.au

All editorial contributions

should be sent to:

The Editor

Monitor

Engineers Media

PO Box 588, Crows Nest NSW 1585

phone (02) 9438 1533

fax (02) 9438 5934

email editorial@engineersmedia.com.au

INFORMATION, TELECOMMUNICATIONS AND ELECTRONICS ENGINEERING COLLEGE

CHAIR – P Hitchiner

IMMEDIATE PAST CHAIR – A McPhail

OTHER BOARD MEMBERS

B Broadway, D Burger, R Dixon-Hughes,

S Finlayson, Y Fisher, J Gordon, D Habibi,

A Hanna, P Hitchiner, F Novacco,

G Sizer, G Thomas, J Walsh

ITEEC ADMINISTRATION

Dr David McCarthy

phone (02) 6270 6530

fax (02) 6273 2358

email itee@engineersaustralia.org.au

Members of the ITEEC College can view the latest issue of MONITOR at http://www.engineersaustralia.org.au/colleges/itee/resources/resources_home.cfm

stated that it did not support the Bill claiming that new home buyers should not have to bear the cost of installing FTTP.

"The current method for delivery of telecommunications and electricity into greenfield estates provides a more equitable model for the delivery of the broadband network. In contrast to burdening new home buyers with the upfront cost, the costs of installing the network should be incurred by the NBN Co. with outlays recouped through charges for ongoing use of the network and/or the sale or transfer of ownership of infrastructure to a third party," HIA said.

In its submission, Engineers Australia stated: "The actual cost for providing FTTP would appear to be little different from the cost now of meeting community expectations for reasonable telecommunications services in a new home. In particular, new homes are expected to support not only telephony and broadband data, but also PayTV and often security services."

Another key concern throughout the submissions was a lack of information regarding the implementation of the Bill. Details of the amendment's subordinate legislation, which would provide further implementation specifics, were not available and resulted in some organisations being unable to comment.

"Master Builders has serious concerns regarding the approach of this Bill at this time. The uncertainty of the detail as to the implementation of the Bill and the later "legislative instruments" is creating major concerns across the industry. Master Builders therefore finds it difficult to support the Bill until the details of implementation are finalised," said Master Builders Australia.

Master Builders Queensland supported

Master Builders Australia's concerns stating that it is "imperative that the federal government provides the industry with clear guidance on its roles and responsibilities under the proposed program as soon as possible."

UDIA also stated: "The legislation that is currently before the Parliament does not include or address the many of the major issues that UDIA and the development industry have in relation to the introduction of the NBN on greenfield sites. In short, the key elements of this legislation are still unknown."

"[The] legislation should not be debated by the Parliament without the accompanying subordinate legislation."

Communications minister Stephen Conroy has since released a position paper on the subordinate legislation acknowledging the difference in views as to who should fund the provision of FTTP in new developments and that the Bill's implementation still has significant ongoing debate.

"The government recognises that there is still a wide range of views as to how fibre in new developments will be best brought into operation. Accordingly, while the government has set out its proposed approach to the subordinate legislation with a view to providing guidance to the senate committee, parliament and stakeholders generally, it is prepared to consider alternative approaches where there is reason to do so," the paper stated.

The paper also clarified the 1 July deadline, stating that it is for the legal framework, including the subordinate legislation, not the practical implementation of the Bill.

The submissions and position paper can be found at www.aph.gov.au and www.dbcde.gov.au respectively.

New initiative to support WiMAX 2

A consortium of WiMAX vendors and the Taiwanese research organisation Industrial Technology Research Institute have launched the WiMAX 2 Collaboration Initiative to accelerate interoperability of the next release of WiMAX technology, WiMAX 2.

The group, consisting of Alvarion, Beceem, GCT Semiconductor, Intel, Motorola, Samsung, Sequans, XRONet and ZTE, will work with the WiMAX Forum to accelerate the implementation of profiles for WiMAX 2 equipment and devices.

The objectives of the group include collaborative performance benchmarking, testing of 4G applications over WiMAX 2, early network level interoperability testing, and participation in "plug-

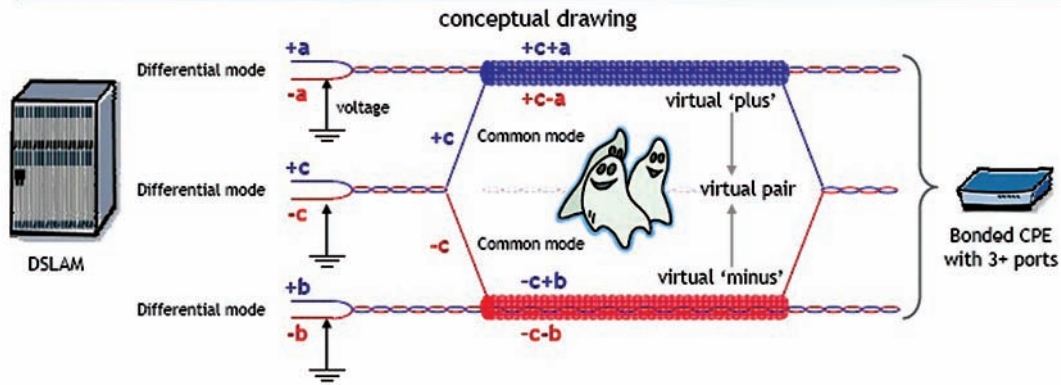
ests" – events that allow manufacturers test and sort out connectivity issues with others.

The group will issue milestones and delivery schedules within the next three to six months that will allow the WiMAX Forum to certify commercial products by late 2011.

WiMAX 2, based on the IEEE 802.16m standard, builds upon 802.16e by adding new capabilities while maintaining backward compatibility. It delivers higher capacity with peak rates of more than 300Mb/s, lower latency, and increased VoIP capacity.

The 802.16m air interface standard definition began in 2006 and is expected to be completed later this year.

Phantom mode technology: transporting 3 channels over 2 pairs
The whole is more than the sum of the parts



Phantom mode simplified.

IMAGE: ALCATEL-LUCENT

300Mb/s speeds achieved over copper

Alcatel-Lucent's research arm, Bell Labs, has demonstrated that speeds of up to 300Mb/s are possible over 400m, or 100Mb/s at 1km over regular copper infrastructure.

Dubbed "DSL Phantom Mode", the technology involves the creation of a virtual or "phantom" channel that supplements the two physical wires that are the standard configuration for copper transmission lines.

The new technology may have implications on how the federal government implements the National Broadband Network and its aim to deliver a 100Mb/s connection to 90% of Australians through the rollout of fibre to the premises, wireless or satellite connections.

"Alcatel-Lucent Bell Labs' DSL Phantom Mode lab test adds

a whole new dimension to the ongoing '100Mb/s for all' debate. The fact that existing copper loops can facilitate 300Mb/s at 400m reshapes the whole next-generation broadband competitive environment," said Kamalini Ganguly, analyst from IT and telecommunications advisory company Ovum.

"We often think of the role innovation plays in generating technologies of the future, but DSL Phantom Mode is a prime example of the role innovation can play in creating a future for existing solutions and injecting them with a new source of value," said Gee Rittenhouse, head of research for Bell Labs.

Bell Labs is conducting further research to refine deployment models and determine compatible equipment for use with the technology.

Smart contact lens to monitor eye pressure

Semiconductor company STMicroelectronics will develop and supply a wireless micro-electro-mechanical systems (MEMS) sensor for Swiss medical micro-systems company Sensimed to produce a solution to enable better management of glaucoma patients.

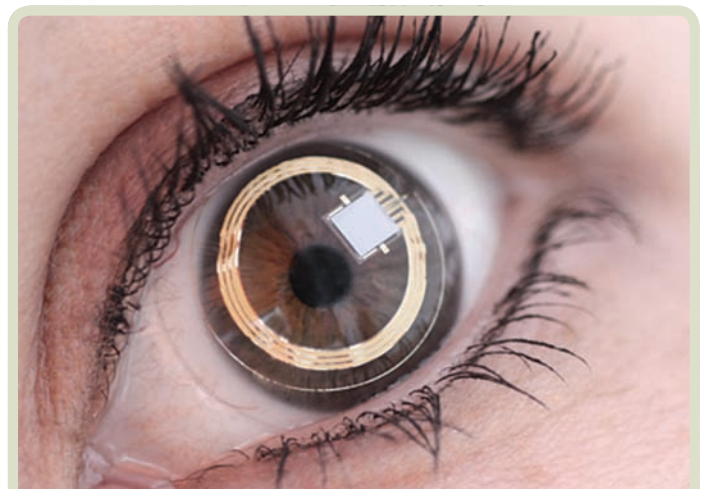
Sensimed's solution, called Sensimed Triggerfish, is a two-part system comprising the smart contact lens and a small receiver worn around the patient's neck. The contact lens uses a tiny embedded strain gauge to monitor the curvature of the eye over a period of about 24 hours. The lens also contains an antenna, a tiny dedicated processing circuit and an RF transmitter to communicate the measurements to the receiver.

The lens is powered via the received radio waves and does not need to be connected to a battery. The embedded components are positioned in the lens in such a way that they do not interfere with the patient's vision.

After wearing the lens for the prescribed period, the lens and receiver are removed and a complete record of eye pressure changes can be analysed.

According to Sensimed, this solution will enable earlier diagnosis and treatment that is tailored to the individual patient.

"Application trials are confirming the significant benefits that our unique platform can provide and the next step is to commercialise the product to a larger number of centres in selected



The contact lens contains an antenna and processing circuit.

geographies," said Jean-Marc Wismer, CEO of Sensimed.

ST expects the development of the sensor to be completed by mid 2010 and manufacturing to start by September 2010.

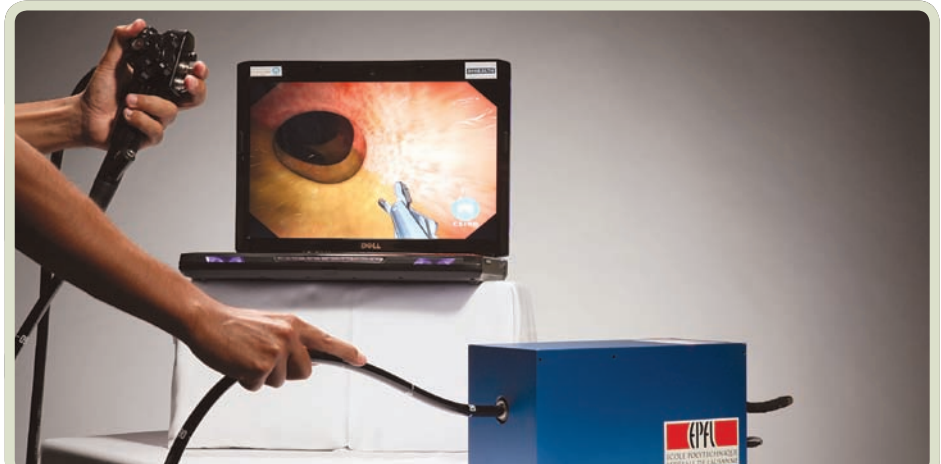
Gaming technology used for colonoscopies

The CSIRO is developing a colonoscopy simulator to enable trainee surgeons to interact with accurate computer-based simulations of the human colon using a modified clinical colonoscope and realistic force feedback.

CSIRO project leader Josh Passenger said the simulator provides photo-realistic rendering using OpenGL technology, usually used in video games, and high-fidelity physics simulations using the processing power of NVIDIA graphics cards.

“In a similar way that a software development company produces a computer game, we have generated realistic environments that enable trainees to search for polyps and abnormalities inside virtual patients,” Passenger said.

“We are currently developing a system that can produce realistic, randomised colons, so that surgeons can be prepared



The simulator uses rendering technology found in video games.

PHOTO: CSIRO

for a wide variety of colonic anatomies.”
The simulator was developed in collab-

oration with Ecole Polytechnique Fédérale de Lausanne in Switzerland.

Understanding optical fibre networks

Communications Alliance, a representative body for the Australian communications industry, has released a draft paper defining the passive optical infrastructure for the National Broadband Network (NBN).

The paper titled “National Broadband Network – Optical Access” aims to develop a common understanding of the components of optical fibre networks, factors

influencing network limits and choices available in deploying the networks.

Prepared by a technical working group, the paper is intended as a reference point for designers and builders of optical fibre networks, as well as service providers who will use these networks.

In addition to defining the generic elements of optical networks, the draft paper

outlines issues to be resolved for the NBN and addresses factors that affect the optical budget; optical budget calculations; general considerations for connectors versus splicing; and testing.

“[The] paper is the second significant outcome from the technical working group as part of our NBN Project,” said Communications Alliance CEO John Stanton.

Australian broadband industry surveyed

Most internet users do not support mandatory internet filtering, according to a report released by Australian IT news site Whirlpool.

The report covers the performance of Internet service providers and public opinion on internet-related issues such as the proposed filter.

An Australian broadband survey was conducted from January to February and forms the basis for the report.

It includes a comparison to the previous year’s survey as well as introducing a new section on mandatory internet filtering.

Some of the results were:

- 92.6% of respondents do not support mandatory internet filtering
- 44.1% indicated the introduction of mandatory filtering would be a key factor in affecting their vote at the next federal election
- 91.6% indicated that they are able to, or have the means to circumvent mandatory filtering.

The report also covered the performance

of popular internet service providers, broadband hardware and user trends such as what they use their broadband service for, how they pay for it, what they

like about their service provider and why they change providers.

The full report can be viewed at <http://whirlpool.net.au/survey/2009>.

Power rectifiers need to be reliable and efficient

Reliability and efficiency are the key concerns of telecommunications carriers in the Asia-Pacific region when considering power rectifiers, according to analyst firm IDC.

In its report “Power Rectifier Reliability: Telco Carriers’ Perspective in Asia/Pacific”, sponsored by Emerson Network Power, IDC conducted in-depth interviews with 16 leading telecommunications operators from Australia, India, Indonesia, Malaysia, Singapore, Thailand and Hong Kong to gauge the relative importance of reliability, efficiency and cost.

The study found that reliability (24%)

and efficiency (23%) were the top considerations for power rectifier purchases by all respondents, followed by cost (15%) and support (14%).

More than half of the respondents said they preferred to use a centralised monitoring system to detect rectifier failures. In most cases, carriers also conducted a health check on the systems whenever they made a site visit, typically once a month, regardless of whether they used a monitoring system or not.

The full report can be downloaded from Emerson at EmersonNetworkPower.com.

The cost of data breaches

Australian organisations that experience data breaches lose an average of \$1.97 million in operational costs, including the cost of activities intended to prevent a loss of customer or consumer trust, according to the 2009 annual study “Australian Cost of a Data Breach”.

The study, developed by privacy and information management research organisation the Ponemon Institute together



Australian organisations are not required to notify victims of data breaches.

PHOTO: FLICKR: ANONYMOUS ACCOUNT

with PGP Corporation, analysed the actual data breach experiences of 16 Australian companies from nine different industry sectors. It also analysed the economic impact of lost or diminished customer trust and confidence as measured by customer turnover rates.

According to the study, the two most significant components of the cost for Australian organisations were lost business, and detection and escalation of incidents. The least significant was notification. Australian organisations are not required by law to notify victims when a data breach occurs, unlike the US and UK and the study reports that this may be a factor in reduced notification costs.

“The cost of notifying customers that their information has been compromised remains lower in Australia than we have seen in other countries where breach laws mandate notification,” said Dr Larry Ponemon, chairman and founder of the Ponemon Institute.

Malicious attacks and botnets cause the most damage in data breaches in Australia with costs substantially more than those caused by human negligence or IT system glitches. 44% of all cases in the study involved a malicious or criminal attack that resulted in the loss or theft of personal information.

The cost per record compromised via

malicious attacks or botnets averaged \$156. Other findings of the report showed that 31% of all cases involved a systems glitch or lost or stolen data-bearing devices; 25% of all data breach cases involved employee negligence; and 56% of organisations surveyed that had better security posture had lower data breach costs than their less-prepared peers.

“This study shows that organisations that proactively protect their data suffer less when hit by a data breach,” said Phillip Dunkelberger, president and CEO of PGP Corporation.

Copies of the full study are available at www.encryptionreports.com.

New initiative to support WiMAX 2

A consortium of WiMAX vendors and the Taiwanese research organisation Industrial Technology Research Institute have launched the WiMAX 2 Collaboration Initiative to accelerate interoperability of the next release of WiMAX technology, WiMAX 2.

The group, consisting of Alvarion, Beceem, GCT Semiconductor, Intel, Motorola, Samsung, Sequans, XRONet and ZTE, will work with the WiMAX Forum to accelerate the implementation of profiles for WiMAX 2 equipment and devices.

The objectives of the group include collaborative performance benchmarking, testing of 4G applications over WiMAX 2, early network level interoperability testing,

and participation in “plugfests” – events that allow manufacturers test and sort out connectivity issues with others.

The group will issue milestones and delivery schedules within the next three to six months that will allow the WiMAX Forum to certify commercial products by late 2011.

WiMAX 2, based on the IEEE 802.16m standard, builds upon 802.16e by adding new capabilities while maintaining backward compatibility. It delivers higher capacity with peak rates of more than 300 Mb/s, lower latency, and increased VoIP capacity.

The 802.16m air interface standard definition began in 2006 and is expected to be completed later this year.

Telstra to trial LTE technology

Telstra will start trials of Long Term Evolution (LTE) technology in May to assess its capability and performance for the Next G network.

The company will work with Ericsson, Nokia Siemens and Huawei for three to six months to test the feasibility and technical capability of LTE for future commercialisation.

The tests will seek to understand LTE attributes including radio access characteristics, coverage, performance, signal propagation and enhanced packet core features.

“LTE is globally acknowledged as the dominant next generation technology for mobile technology,” said Telstra acting chief operations officer Michael Rocca.

The testing will comprise urban and rural evaluations of LTE in addition to laboratory trials.



Michael Rocca

Influencing government

by Peter Hitchiner



Peter Hitchiner

Many opportunities are available for engineers to show leadership with government through contributions to government inquiries. In recent times Engineers Australia, with input from the ITEE College, has made contributions to the digital dividend green paper and a senate committee inquiry into fibre to the premises in greenfield estates.

While we have the ability to provide input in a wide range of areas, the ITEE College covers a very wide range and needs expertise in many areas. For instance I am concerned that the College may be very thin in its capabilities in the area of broadcast engineering, an area in which the IREE had historical strength. It would be good to hear from any broadcast engineers of whom I would have been very appreciative for input on the digital dividend submission to government. It is worth noting that the “creative industries” including media and broadcasting are undergoing major transformation enabled by technology changes. I would like to think that the ITEE College members are seen as being involved in that transformation.

Much recent attention to the structure of the health sector and its funding seems to focus on relocating the channels for funding more of the same, rather than seeking the fundamental changes that seem necessary for sustaining long-term expectations in health care. Health needs transformational change enabled by new technologies. While EA tends to focus attention on infrastructure, we have contributed to the digital economy through a submission to government in 2009. Insufficient attention is given to the role of engineering in delivering electronic services, including in the health

sector. Can we show a lead in this Year of Engineering Leadership?

In my first column, I foreshadowed an ITEE College initiative with the CELM Conference, marking the Year of Engineering Leadership.

Regrettably, the authors had to withdraw their proposal due to other priorities.

Insufficient attention is given to the role of engineering in delivering electronic services.

Hopefully we will be able to develop other leadership initiatives during the year. The ITEE College Board, which provides leadership for the College, meets shortly after this issue of *Monitor* is published. I will report on that meeting in the next issue of *Monitor*, which may appear in a new electronic format. We will be seeking feedback on any changes.

Monitor can also benefit from your contributions. The new format may allow a greater variety of content and hopefully all members of the College will feel motivated

to contribute news or technical items and share their knowledge. A small contribution from all members will greatly enhance the benefit to all.

Finally, and by no means least, congratulations to Dr Iain Collings who was awarded the IREE Neville Thiele Award for his work in enhancing the capability of

wireless systems to deliver broadband services in rural locations by applying CSIRO developed MIMO technology.

Your feedback and constructive comments on this column and *Monitor* in general will be very welcome.

This column also appears in the ITEE College Board Chair blog (http://engineer-saustralia.typepad.com/itee_college_chair) – please post your feedback.

Peter Hitchiner is the ITEE College Chair 2010.

Digital dividend green paper

Australia needs to adopt a globally harmonised standard for spectrum use, according to Engineers Australia.

In its response to the federal government’s digital dividend discussion paper, it said adopting global standard would maintain global roaming flexibility and allow Australian industry to supply products to both domestic and international markets. The current differences in permitted frequency spectrums limit certain wireless products to the domestic market.

Engineers Australia stated support for improving the bandwidth efficiency of communications techniques and technologies, also noting the importance of engineering in “restacking” the spectrum to deliver these efficiencies.

It also noted that the roll out of long-term evolution technology and the availability of the 700MHz spectrum in other countries would place increased demand on that spectrum. It stated that to meet this demand, the government should include mobile telephony and broadband services in the proposed digital dividend spectrum as soon as possible.

The digital dividend is the term used to describe the radio-frequency spectrum

made available as a result of the switchover to digital-only television.

“It is anticipated that a contiguous block of dividend spectrum will be suitable for a larger number of potential communications uses, maximising the potential benefits that the spectrum could provide to Australians,” communications minister Stephen Conroy said.

The green paper, released by the federal government on 5 January, aims to achieve 126MHz of contiguous ultra-high frequency spectrum. In order to do so, some digital television services will be moved to new channels. The government sought public comment on the benefits and costs of maximising Australia’s digital dividend by posing questions relevant to the implementation of the new spectrum.

Engineers Australia’s submission was one of over 100 responses received, including those from the telecommunications industry, television stations, state government bodies, law enforcement groups, and other associations.

The digital dividend green paper and responses from the public are available at www.dbcde.gov.au/digitaldividend.

For a more comprehensive list of engineering events, visit Engineers Australia's online events calendar at www.engineersaustralia.org.au/events

SEMINARS

Demystifying information security management systems (1 day) Sydney 14 May. *Inquiries:* 1300 727 444, email training@saiglobal.com, web www.saiglobal.com/training

Hands-on data communications, networking and TCP/IP troubleshooting (2 days) Perth 16 Aug, Sydney 19 Aug, Brisbane 23 Aug; **Practical radio telemetry systems for industry** (2 days) Perth 13 Sep, Melbourne 16 Sep, Brisbane 20 Sep; **Practical shielding, EMC/EMI, noise reduction, grounding/earthing and circuit board layout** (2 days) Brisbane 23 Sep, Melbourne 27 Sep,

Adelaide 30 Sep. *Inquiries:* IDC Technologies 1300 138 522, fax 1300 138 533, web www.idc-online.com

COURSES

Object oriented analysis and design with UML (4 days) Sydney 17 May, Canberra 1 Jun, Brisbane 15 Jun, Adelaide 13 Jul; **Advanced data modelling** (3 days) Sydney 16 Aug, Melbourne 30 Aug; **Introduction to SQL** (1 day) Sydney 19 May, Melbourne 26 May, Brisbane 1 Jun, Canberra 30 Jun; **Introduction to software testing** (2 days) Melbourne 9 Aug, Sydney 19 Aug; **ISTQB software testing foundation** (3 days) Brisbane 2 Jun, Melbourne 7 Jun, Sydney 16 Jun, Canberra

16 Aug; **Programming and databases for testers** (2 days) Sydney 18 May, Canberra 28 Jun; **Web testing** (2 days) Melbourne 29 Jul; **Managing the testing process** (3 days) Adelaide 23 Jun, Melbourne 5 Jul, Canberra 12 Jul, Sydney 26 Jul, Brisbane 30 Aug; **Software project management** (3 days) Melbourne 28 Jun, Sydney 30 Jun, Canberra 4 Aug, Brisbane 18 Aug, Adelaide 23 Aug, Sydney 8 Nov; *Inquiries:* 1800 145 152, web www.softed.com.

CONFERENCES

Australian 4G summit (2 days) Sydney 18 May. *Inquiries:* email aanemogiannis@iir.com.au, web <http://www.informa.com.au/4G>. **HP Technology@Work 2010** (1 day) Sydney 20 May. *Inquiries:* email chris.yeeloy@bm.com, web <http://www.hp.com.au/taw10>. **Citrix iforum 2010** (1 day)

Sydney 1 Jun. *Inquiries:* email citrix@pdkevents.com.au, web <http://www.citrixforum.com.au>.

STANZ 2010 software testing conference (2 days) Sydney 26 Aug. *Inquiries:* 1800 145 152, web www.softed.com/stanz

17th Asia Pacific software engineers conference (4 days) Sydney 30 Nov. *Inquiries:* web www.apsec2010.com

OVERSEAS

HIMSS AsiaPac'10 exposition (3 days) Beijing, China 26 May. *Inquiries:* +65 9848 5259, email syeo@himss.org, web <http://www.himssasiapac.org/expo10>.

HIMSS AsiaPac'10 congress / HIMSS AsiaPac'10 summit (3 days) Daegu, Korea 26 Oct. *Inquiries:* +65 9848 5259, email syeo@himss.org, web <http://www.himssasiapac.org/congress10>.

Call for participants in software engineering survey

The School of IT at Murdoch University is calling on software professionals to participate in a survey to develop a clear view of software measurement practices for agile software development projects.

Aimed at software practitioners, the survey intends to investigate current software measurement practices for agile software development projects. Software measurement assists in planning, estimating, controlling and improving

software development projects, while agile methods are the new software development methodology to cater for rapid change in software development technology.

The survey invites a broad range of software professionals such as project customers, project managers, developers, and software engineers to comment on current agile metrics and provide suggestions on what information is needed to better manage agile software projects.

The survey will be open until 30 June 2010. Interested professionals can download the questionnaire from www.it.murdoch.edu.au/~s980606e/research/agileMetrics/index.html

For further information contact Dr Jocelyn Armarego (J.Armarego@murdoch.edu.au)

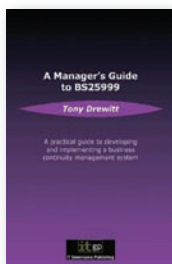
Completed questionnaires can be submitted by email to 31068363@student.murdoch.edu.au

A Manager's Guide to BS25999: A Practical Guide to a Business Continuity Management System

Tony Drewitt

2008 9781905356515 212pp Paperback

\$77.27 + GST = **\$85.00**



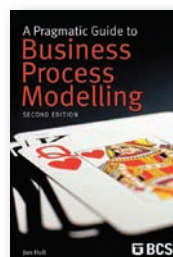
This book is a concise and practical guide to implementing the new benchmark for business continuity management - BS25999. While the number of events that could potentially disrupt the ability of your organisation to continue with its business activities continues to grow, the ramifications are increasingly dramatic. This guide will help you understand and meet the growing need to demonstrate and provide assurance to partners, customers and stakeholders that, should some significant business disruption occur, you have done everything possible to minimise disruption to the continued supply of the products or services by your organisation.

A Pragmatic Guide to Business Process Modelling, 2nd Revised Edition

John Holt

2009 9781906124120 248pp Paperback

\$59.09 + GST = **\$65.00**



This expanded second edition shows how effective and accurate modelling can deliver a more complete understanding of a business. By applying the visual modelling techniques described here, it is possible to map an entire business, using the Unified Modelling Language (UML). Jon Holt covers all aspects of the BPM process, including analysis, specification, measurement and documentation. New chapters deal with the presentation of process information, enterprise architecture and business tools.

Laptop series receives update

Apple has updated its MacBook Pro line of laptops with faster processors, new graphics processors and longer battery life.

The 13-inch MacBook Pro now includes faster Intel Core 2 Duo processors and 4GB RAM.

According to Apple, the new model's NVIDIA GeForce 320M graphics processor is 80% faster than its predecessor.

The 13-inch MacBook Pro has a battery life of 10 hours on a single charge.

The new 15-inch and 17-inch MacBook Pro models are up to 50% faster than previous models, according to Apple. Apple's turbo boost feature can also accelerate the system from 2.66GHz to 3.06GHz for intensive dual core tasks and up to 3.33GHz for single core tasks.

The 15-inch and 17-inch models now include two graphics processors, the NVIDIA GeForce GT 330M and Intel HD Graphics, with the system automatically switching between which graphics processor is used.

The 15-inch and 17-inch MacBook Pro models have a battery life of 8 to 9 hours on a single charge.

www.apple.com



The MacBook Pro series.

High definition cameras for security

Sony has launched 16 new high definition (HD) network security cameras to cater for different surveillance needs.

The new range of HD cameras comes in three series. The V series incorporates technology to increase the dynamic range of the camera and increase light sensitivity. The X series is designed for use in environ-

ments that require a small footprint. The E Series includes entry-level models.

Many of the new models also incorporate in-camera analytics for system feedback and image analysis in real time.

Most models are available in weather-proof and vandal-proof versions for high traffic, outdoor installations.



HD cameras for remote monitoring.

Uninterruptible power supply

Emerson Network Power has developed the Liebert PSA uninterruptible power supply (UPS) for use in small-office computers and electronic equipment.

The Liebert PSA is a line-interactive UPS system designed to provide backup power for up to 15 minutes at typical load and five minutes at full load in the event of power disruption. Automatic voltage regulation and 220J of surge suppression help to protect equipment from power fluctuations.

Connecting the UPS to a machine via USB enables remote monitoring and automated shutdown. The Liebert PSA is available in 500VA, 650VA, 1KVA and 1.5KVA sizes.

www.liebert.com



The Liebert PSA UPS.

Industrial switches for security

Belden has developed a new range of zone-level security switches to protect control systems against network problems and cyber threats.

The Eagle Tofino is a distributed security solution that implements cyber security protection within control networks.

Its architecture allows users to create security zones throughout a control network to protect system components. Belden says the switches are simple to implement and will not require plant shut-downs.

The range of switches include the ability to deploy a virtual private network without introducing additional risk to industrial processes, and to manage the security of control networks from a single location.

Belden have designed the new range with the intention to help users meet reliability requirements and ANSI/ISA-99 standards.

Applications include process control, SCADA systems, discrete control, oil and gas custody transfer, safety instrumentation systems, and partner access to telemetry data.

www.belden.com/industrial



The Hirschmann Eagle Tofino.

Router for next-generation internet

Cisco has developed a new core router, the CRS-3 Carrier Routing System, with the intention for providers to use it as the

new foundation for next-generation internet services over the next decade.

The CRS-3 can deliver up to 322tbps of capacity, more than tripling the 92tbps capacity of its predecessor, the CRS-1

Existing CRS-1 users can upgrade their system by reusing the existing chassis, route

processors, fans and power systems, and by adding new line cards and fabric, enable the capabilities of the new platform. Users can perform these upgrades in-service to ensure a smooth transition.

The Cisco CRS-3 is currently in field trials, and its pricing starts at US\$90,000



The Cisco CRS-3.

Hard drive capacities increased

Hard drive manufacturer Western Digital has expanded its 2.5" VelociRaptor series of hard drives to include 450GB and 600GB capacities.

Western Digital claims a 15% performance increase over its previous generation of VelociRaptor hard drives by employing a SATA 6Gb/s interface and a 32MB cache. The drive has a rotational speed of 10,000rpm.

Western Digital has designed the drive for mission-critical applications and states that it is suitable for use in blade servers, professional workstations, and 1U and 2U rack servers.

The VelociRaptor has a 1.4 million hour mean time between failures rate.



WD VelociRaptor® 2.5-inch SATA Hard Drives.

Chimney for server cabinets

Hoffman has released the Proline Flotek Top Duct (TD) server cabinet featuring a top duct chimney to direct hot exhaust air from the cabinet to the ceiling or existing ductwork.

The design is intended to prevent hot air from mixing with cool intake air and increase cooling efficiency. The cabinet allows increased thermal loads while reducing energy costs. It can be used on raised floors or concrete and in rack-mounted data centre servers.

The top duct can be adjusted up to about 2.9m in height to accommodate varying ceiling heights and allows heat dissipation of 20kW depending on server and cooling equipment. It can also be attached to ductwork for increased airflow control.

The cabinet itself has a solid, gasketed rear door and an angled diverter plate direct hot exhaust air straight to the top duct chimney, preventing any hot spots from forming. The front door of the cabinet is perforated to allow unrestricted airflow.

The Flotek TD is available in several standard size options.

www.hoffmanonline.com



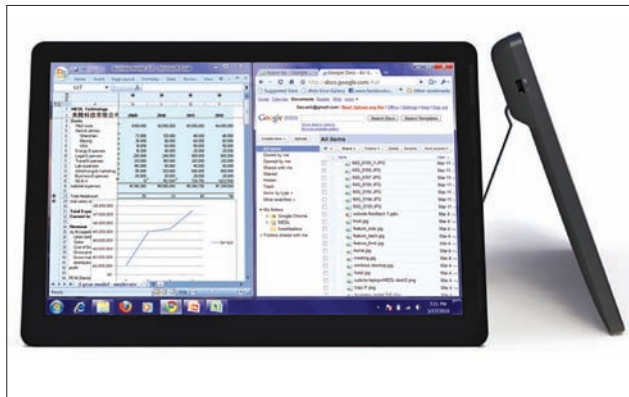
The chimney directs hot air away from cool intake air.

Portable LED monitor

MEDL Technology has developed a prototype portable LED monitor.

The MEDL Panel is a lightweight, portable 13" display that connects to computers via USB, enabling users to add a second or third monitor.

It has a WXGA resolution and a five-hour battery life and can be used with portable video players, cameras, DVD players, iPhones, iPods and gaming consoles.



The portable panel can be set up and ready for use in under 10 seconds.

New processor with six cores

AMD has released a new six-cored processor, the Phenom II X6 1090T.

The processor has a core clock speed of 3.2GHz, but has the ability to transfer performance to three dedicated cores and run at 3.6GHz for applications employing only two or three cores.

It has a 3MB L2 cache (512kB per core) and a 6MB shared L3 cache. The processor can be used in motherboards with AM3 and AM2+ sockets where the necessary BIOS

update has been applied.

AMD also announced the released of the 890FX chipset, enabling up to four ATI Radeon graphics cards to be used and linked via ATI CrossFire technology. The chipset also includes a 6Gb/s hard drive interface, gigabit Ethernet and USB 3.0 connectivity.

The chipset is available on selected motherboards from Asus, Asrock, Biostar, Gigabyte and MSI.



The docking station enables users to connect peripherals and an external monitor over a single USB connection.

Docking station with video output

Targus has released a new docking station with video output capability, but only requires a single USB connection.

The Targus USB 2.0 Docking Station enables users connect to an external monitor, network connection, speakers and microphone as well as four USB devices such as a keyboard, mouse and printer.

A single connection seamlessly connects all devices. There are two high-power USB ports that will continue charging USB devices or peripherals regardless of whether the docking station is connected to the laptop, or if the laptop is in sleep mode.

It also doubles as an ergonomic tilt device to allow more comfortable typing and increase ventilation for laptops.

There are eight connections in total, four USB ports, one Ethernet (10/100), one DVI video port, and two 3.5mm audio ports for speakers/headphones or a microphone.