



# IEEE SSIT Australia Newsletter

Issue 3  
November 2008

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## Wednesday 3 December The Politics of Next Generation Broadband

6:00pm, Wednesday 3 December 2008  
Theatre 2, Ground Floor, ICT Building, Melbourne University, 111 Barry St, South Carlton

By the time of this lecture, one week would have passed since proposals were submitted to build a National Broadband Network (NBN) for delivering data speeds of at least 12 Mb/s to 98 per cent of Australian homes and businesses, using fibre-to-the node or fibre-to-the home architecture and providing open access to wholesale broadband services. Being a key election promise, the Rudd Government has committed up to \$4.7 billion in funding support for the successful bid.

Optical fibre in the access network offers a quantum change – the potential to end the scarcity of communications bandwidth available to small to medium enterprise and residential customers, heralding the arrival of a veritable cornucopia of services. Given the right settings, an NBN could significantly assist in further developing Australia's networked information economy and improving our international competitiveness. Yet this proposed National Broadband Network is predicated on a new policy and regulatory framework yet to be devised; and so far there has been a distinct lack of transparency of process. Some parties are arguing this initiative could even sound the death-knell of effective competition in Australian telecommunications.

This lecture will discuss whether the National

Broadband Network is in the best interests of end-users.

### The speaker

Ross Kelso ([www.rosskelso.com](http://www.rosskelso.com)) has more than 30 years as an engineer and manager in the telecommunications industry, and recently completed doctoral studies at Queensland University of Technology in Brisbane, examining the matter of open access to next generation broadband. Until mid 2002, he was a Senior Research Fellow at the Centre for International Research on Communication and Information Technology, CIR-CIT@RMIT in Melbourne. Between then and commencement of doctoral studies, Ross joined the National Office for the Information Economy to work on the report of the Broadband Advisory Group.

Dr Kelso is an independent researcher and consultant, skilled also in writing, lecturing and media presentation. He currently serves on the boards of the Internet Society – Australian Chapter (ISOC-AU) and the Consumers' Telecommunications Network (CTN) of which he is also the Chair.

### SSIT annual dinner

SSIT will hold its (very informal) end of year dinner at a Lygon Street restaurant in Melbourne after the forum (approximately 7.30pm). For details call Greg on 0423 783 527, or just come along to the forum and join us afterwards.

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## Renew your IEEE SSIT membership for 2009

With IEEE renewals for 2009 due in the next few weeks, don't forget to include SSIT in your society memberships. Not already an SSIT member? For those receiving this newsletter who are already IEEE members, membership is open to professionals (and students) in the Engineering, Computer Science & Information Technology, Physical Sciences, Biological & Medical Sciences, Mathematics, Technical Communications, and related Education, Management, Law, and Policy. Alternatively those with another degree and three years professional work experience teaching, creating, developing, practicing or managing in these fields (or six years professional work experience without a degree). Affiliate membership is also available to those not eligible for IEEE membership.

Rates: Membership rates are in US dollars: \$US134 IEEE plus \$US26 SSIT.

Discounted membership fee options:

Students (including graduates carrying a 50% study load): \$US25 IEEE plus \$13 SSIT

Retired: \$US67 IEEE (\$US26 SSIT US\$26, or free if a society members for 5 years)

Follow the link: <http://www.ieee.org/web/membership/join/join.html>

### SSIT 2008 committee

- Greg Adamson (Chair)
- Graeme Hart (Membership secretary)
- Cam Kiley (Web site)
- Michael Arnold
- Martin Gibbs
- Mary Hawkins
- Dixon Kwok (Sydney)
- Anna Yang (Canberra)

## Presentation by Dr Hugh Bradlow, CTO, Telstra: Technology-based solutions to climate change: delivering success or failure?

Report by Cam Kiley

Can the world reduce its rate of power consumption to a level last seen in the Middle Ages, without a drop in the standard of living? That was the challenge that Dr Hugh Bradlow, Chief Technology Officer, Telstra, presented at SSIT Australia's October forum at the Telstra Executive Briefing Centre in Collins Street Melbourne.

Dr Bradlow began by describing organisations such as the "2000-Watt Society", which has the aim for humans to reduce their power consumption to a rate of no more than 2000 watts, a level last seen in the Middle Ages, compared with current averages of 6000 in Europe, 8000 in Australia and 12000 in the US.

Following an opening address and introduction by SSIT Australia Chair, Dr Greg Adamson, Dr Bradlow gave his presentation on the social aspects that affect climate change, focusing on technology, to an audience

of about 45 people. Dr Bradlow also spoke of the "Chindia Test" for new technologies: for new technologies to succeed, they must make it cheaper and easier for the populations of China and India to reach their carbon reduction goals. Bradlow argued that regulating the use of "green" technologies may work in western nations, but that the west cannot regulate what developing nations do.

Dr Bradlow then went on to give some examples where technology is helping society to solve climate change, including:

- Shared cars and bicycles in some European cities, providing personalised public transport, made possible through new mobile technologies;
- Using mobile devices with location capabilities to optimise freight and distribution;
- Giving people better feedback about their own climate footprint; and

- Using presence aware and context aware automation and power management technologies to minimise energy consumption in the home.

Most of the session was taken up with Dr Bradlow answering questions from the audience, ranging from asking advice about how to pitch an energy saving idea to Telstra; whether we are far away from using a mobile phone for financial transactions in Australia; several questions about Telstra's plans for sustainability; and what Dr Bradlow sees as the barriers to working from home.

The forum was the first in a series of activities planned by SSIT on societal barriers to the implementation of environmentally friendly technologies.

The full presentation can be found under "Past events" at <http://ssit.ieeevic.org/>.



*"...for new technologies to succeed, they must make it cheaper and easier for the populations of China and India to reach their carbon reduction goals.."*

## IEEE President's Change the World competition

IEEE Presidents' Change the World Competition Offers US\$10,000 Top Prize for Humanitarian Endeavors

IEEE, the world's largest technical professional society, has launched the first IEEE Presidents' Change the World Competition. The contest is open to college and university students who demonstrate excellence in the design and implementation of technology that can solve a life challenge for the benefit of humanity. Entries will be accepted from 1 September 2008 through 28 February 2009.

The competition's goal is to recognize and reward individual students or teams of students who identify a real-world problem and apply engineering, science, computing and leadership skills to solve it. Individual IEEE student members or teams of college and university students who have selected an IEEE student member as the team lead may compete. Prizes range from a US\$10,000 top award to a US\$500 people's choice prize. Read the full press release. (<http://www.ieee125.org/newsroom/news/2008-09-02-ieee-challenges-students-change.html>)

The IEEE Presidents' Change the World Competition is part of the global celebration of IEEE's 125th Anniversary. To enter and for complete rules and guidelines, please visit the IEEE 125th Anniversary Web site at <http://www.ieee125.org/ChangeTheWorld>.

## Call for committee volunteers for 2009

Interested in volunteering for the Australian SSIT committee for 2009? The work of SSIT is entirely voluntary, and depends on volunteers to put in time and ideas. The committee currently has members in Melbourne, Sydney, Wollongong and Canberra. We meet monthly via teleconference, at a time negotiated to suit most people. If you are interested in helping out we would welcome your involvement. Please contact Greg Adamson at [g.adamson@ieee.org](mailto:g.adamson@ieee.org).



## SSIT's annual ISTAS conference Arizona, May 2009

Each year SSIT organises an international conference, the International Symposium on Technology and Society. The 2009 conference is titled "Social Implications of Sustainable Development". It will be held in Phoenix, Arizona, 18-20 May.

In previous years Australian SSIT members have received a good response to presentations. They report that the audience is diverse, extremely multidisciplinary, and expert.

Key dates: Full paper submission deadline, 31 December 2008; notification of acceptance, 20 February 2009.

For more information about the conference visit the SSIT portal web site:  
<http://www.ieeessit.org/>.

### STOP PRESS!

The IEEE International Symposium on Technology and Society (ISTAS) is coming Down Under in 2010 for the very first time. And we want YOU to be involved! The event will be held in Sydney, NSW over three days, with a one day satellite event to be hosted at the University of Wollongong's Innovation Campus. Dates will be finalised shortly.

Are you interested in being a part of the Program Committee? Do you wish to nominate someone for a keynote/plenary address? Have you got a special

track in mind? Are you thinking of submitting a research paper? Do you want to exhibit your products or services? Do you want to be a sponsor? Do you want to participate as a delegate? If you have answered YES to any of these questions, then please get in touch with the Organising Committee Chair, Katina Michael ([katina@uow.edu.au](mailto:katina@uow.edu.au) | 0431201172). We hope to make this the best ISTAS yet with your support.

The ISTAS Conference Committee Chair Mr Gene F. Hoffnagle broke the news of the successful bid to Katina Michael in June, and an organizing committee was assembled under his guidance composed of Professor Clinton Andrews, Professor Joe Herkert, Professor Susan O'Donnell and Dr Holly Tootell.

A larger group of Australian researchers in the field of the social implications of technology, have also indicated their support for the conference including: Dr Greg Adamson founding chair of the IEEE Society on Social Implications of Technology; Prof Simon Bronitt the Director of the National Europe Centre and a Professor in the ANU College of Law; Professor Roger Clarke Principal of Xamax Consultancy; Associate Professor Peter Hyland, Head of the School of Information Systems and Tech-

nology at the University of Wollongong; Dr M.G. Michael honorary fellow at UOW and co-author of the series on the Social Implications of National Security; Dr Lucy Resnyansky, research scientist of the Defence Science and Technology Organisation; and Professor Marcus Wigan professorial fellow at the University of Melbourne.

An international contingent is expected to be attracted to the ISTAS Conference so we will need all hands on deck. Please let your local and overseas academic and professional networks know about the conference. The theme is currently under review by the Organising Committee and SSIT Board of Governors but we can say that it will have to do with the social implications of advanced/emerging technologies including nanotech, location-based services, microchip implants for humans, bionics, automatic identification for national security etc.

For more information on ISTAS please see the 2008 ISTAS web site: [http://istas08.ca/index.php/Main\\_Page](http://istas08.ca/index.php/Main_Page), or the SSIT portal listed above.

Dr Katina Michael (<http://ro.uow.edu.au/kmichael>) Senior Lecturer, School of Information Systems and Technology, Faculty of Informatics, University of Wollongong,



## Visit our Web site

The SSIT web site is starting to provide a good range of topics and talks that have been delivered to SSIT Australia technical meetings over the past three years. It can be found at <http://ssit.ieeevic.org>. Send any announcements, suggestions or links to Cam Kiley at [ckiley@netspace.net.au](mailto:ckiley@netspace.net.au).



## About SSIT Australia Newsletter

The SSIT Australia Newsletter is an electronic newsletter published occasionally by the IEEE Society on Social Implications of Technology Australia. Please let us know if this newsletter is useful to you, and any information you would like it to include. Responsibility for all content in this newsletter is taken by Greg Adamson. Please send correspondence to [g.adamson@ieee.org](mailto:g.adamson@ieee.org).

**Please let us know if you don't want to receive this newsletter.**