

# ENGINEERING

## the future™

news bulletin

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THE **Warren** CENTRE  
FOR ADVANCED ENGINEERING

## "Sustainable Transport in Sustainable Cities" - Project underway



The State of Play Authors Workshop attendees - 13th August 1999.

The "Sustainable Transport in Sustainable Cities" project - the biggest ever undertaken by The Warren Centre - is well under way. More than 20 of the 26 authors involved in the first series of papers, called "The State of Play", met for a workshop mid August. Fifteen stakeholder representatives joined the authors in the afternoon to discuss progress and resolve definitions.

The purpose of the entire project, which is expected to take close to two years, is to develop a generic transport planning methodology that can be applied to cities with populations of a million people or more both in Australia and overseas.

In large cities, there are a host of generic problems in transport, access issues and communication which need to be balanced against the environmental, technological and cost factors. These problems can be solved by urban planning strategies that integrate transport and infrastructure development.

"By bringing together stakeholders and participants, this project will help resolve core issues and recognise the real needs of people in large cities," said Project Convenor Hugh Ralston. "We are thrilled with the progress and support to date."

With Sydney as the model, this Warren Centre project will produce strategies and promote technologies for a big-city integrated transport system that gives both equal access to all, and is sustainable within the urban structure.

Issues to be addressed range from the current situation, "The State of Play", through community attitudes, new technology, financing transport in cities, legal and financial aspects through to sustainability, the role of transport planning models, systems engineering and a summary of final outcomes.

Once tested on Sydney and completed, the document and its methodology (which includes planning to 2020 to fit a 2050 vision) will be marketed and sold overseas.

Sponsors to date are the **NSW State Rail Authority, Rail Access Corp, Qantas, AMP, Landcom, Walter Construction, Lend Lease, Baulderstone Hornibrook, NSW Department of Urban Affairs & Planning and the Urban Infrastructure Management Unit of the NSW Premier's Department.**

**For further information, contact: Project Director, Ken Dobinson on (02) 9481 0453, or Robert Mitchell on (02) 9351 4048.**

## DIARY DATES

22 October:

Australia's Great Engineers - William Henry Warren. 80th Anniversary of IEAust and 90th Anniversary of the Old PNR Building. A lecture by Dr Michael Gourlay in the Old PNR Lecture Theatre, Sydney University. Introduced by the Chancellor and the Minister for Public Works (tbc).  
Contact: Judy Potter,  
tel (02) 4422 2203;  
email twc@welldone.com.au.

16 November:

New Materials - New Millennium at the Australian Technology Park.  
Contact: Judy Potter  
tel (02) 4422 2207;  
email matconf@welldone.com.au.

6 December:

National Information Industry Network launch featuring an address by Danita Lowes, Managing Director, Telstra Media. Australian Technology Park.  
Contact: Judy Potter, as above.

6/7 December:

Enterprise Innovation 2000. Key speakers from Industry, the Innovation Summit and Government. Pre conference participation available through focus groups.  
Contact: Michael Johnson  
tel (02) 9810 8107,  
email mjanda@zip.com.au

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## New Govenors

Three new business leaders have joined the Governors' program to benefit from this unique network of technology-driven organisations. The Warren Centre welcomes:

- **Andrew Denver**, President and Chief Operating Officer (COO) of USF Filtration and Separations, a role he took up in February 1998 when US Filter acquired Memtec Limited where he had been President and COO since 1987.

- **John Maclay**, General Manager, Industrial Markets Group for 3M Australia. John has been with 3M Australia for 21 years and was appointed General Manager 10 years ago. For three years, John was 3M Australia's Technical Director and developed the showpiece 3M Innovation Centre.

- **Bill Wild**, General Manager Regional, Queensland, Northern Territory & South Pacific for Leighton Contractors. With 30 years experience in the engineering industry, Bill has worked almost continually for the Leighton Group of companies since 1975, when he joined the then Thiess Brothers.

# AUSTRALIAN MICROELECTRONICS NETWORK

## *gathers momentum*



**Matthew Henderson, the Australian Microelectronics Network project director says the network is needed if the Australian electronics industry is to survive into the next century.**

With \$60,000 funding from the DISR matched by contributions from Industry. The Warren Centre is conducting a feasibility study into the Australian Microelectronics Network on behalf of interested organisations.

"Some 30 companies and 20 university departments throughout Australia are behind the project which will make accessible expensive system-on-a-chip design facilities so that Australian companies have a chance of competing on the world market," said Matthew Henderson, AMN Project Director.

With the assistance of MBA students from the Australian and Macquarie Graduate Schools of Management, the study is looking at a number of structural models for the project.

Seminars will be held towards the end of the year to bring companies, universities and government representatives together to make their tool requirements known, and input to the AMN's structure.

"We want to create the community and the critical mass which will streamline the process for the Australian design community," said Henderson.

The AMN will make resources available nationally on a user-pay basis with at least one support node in each mainland state.

The initiative also has the support from the NSW, South Australian, and Queensland governments.

#### **For more information contact:**

**Professor Trevor Cole tel (02) 9351 7224;**

**email [trevor@ee.usyd.edu.au](mailto:trevor@ee.usyd.edu.au) or**

**Matthew Henderson, tel (02) 9209 4459;**

**[m.henderson@ee.usyd.edu.au](mailto:m.henderson@ee.usyd.edu.au)**

## Invitation to **SERVE**

You are invited to serve the community through joining a Warren Centre committee.

Whether it be selecting projects that will contribute to society's wealth and development, or organising seminars and lectures to raise the profile of Australian engineering, innovation and entrepreneurs. The Centre's committees provide scope for participation in the wider business community.

Through its committee structure, The Centre enables a large number of effective, influential and experienced professionals to bring their expertise to bear on a wide range of projects.

Whether your skills are technical, in project management, marketing, sales or event organisation, The Warren Centre welcomes you.

**If you would like to find out more about how you could contribute, contact Robert Mitchell, tel (02) 9351 4048.**

## More on **INNOVATION** Metrics

Twenty-five people from a wide range of industries gleaned valuable insights into

enterprise improvement at the Innovation Metrics roundtable held on 8 July at the Australian Technology Park.

Presented by Darren Smith of Arthur D Little, the roundtable explored ways of driving change - the questions which need to be asked and the key indicators and metrics which must be measured.

Another roundtable on Innovation Metrics will be offered shortly. **If you are interested, then tick the box  and fax with your contact details to Cheonhee Sohn on (02) 9351 2012.**

### **ENERGY PAPERS AVAILABLE**

The Industrial Energy Efficiency Project Report and Technical Papers are now available for \$105.

For a copy, tick the box:



Project Report  
Technical Papers

Fax with your contact details to Cheonhee Sohn on (02) 9351 2012.

## *Innovative*

## GLOBAL ENTERPRISE

In early July, Dr John Nutt AM, Warren Centre Governor and retiring Chairman of Ove Arup, hosted a governors luncheon which continued the theme of 'Managing the Innovative Global Enterprise'.

Principals of the Australasian practice, Dr Robert Care, Richard Hough, and Peter Thornton, provided insights into the firm's commitment to exploring innovation in its staff recruitment and development, managing projects in a challenging global environment and developing new techniques and materials.

Creativity and efficiency have been skillfully balanced in the firm's operations through significant investment in R&D and by challenging its people.

In a frank discussion, John Nutt explored the organisation's driving tenets and the philosophy of the firm's founder, Ove Arup, which underpins its corporate governance and management style. In recent years, Dr Nutt has been responsible for coordinating Arup's global strategy, operating in 50 countries across an incredibly broad spectrum of disciplines ranging from architecture to acoustics, housing to motor cars.

Ove Arup's Australian practice which has around 500 staff (200 in NSW) has engineered many of the region's best known construction projects, including the Sydney Opera House, exhibition centres in Melbourne, Sydney and Brisbane, the Sydney Football Stadium, and many of Australia's high rise buildings, and major infrastructure projects.

### INTERNATIONAL JOINT VENTURES

In August, The Warren Centre Governors explored creating growth through the strategic use of international joint ventures at a function hosted by The Bishop Group. The event included a site tour of The Group's new Villawood facility and the opportunity to view the Bishop Austrans test track and vehicle prototype.

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