

FIRST ARF FORUM SETS A HIGH STANDARD



An attentive audience listens to David Anderson. From left (front row): ARF President Ray Fisher, Tony Wilson (partly obscured - NTC), Lloyd Roberts (Transport SA), Ed Sandrejko (MIG), Rob Stewart (Thiess), Peter Taylor (Engineers Australia), Leigh Brown (Australian Construction Products), Nigel Hatcher (BIS Shrapnel), Stig Falster (RIISC), Keith Wenban (Transfield Services), Michael Bresnahan (Shell).

On 29 September ARF convened the first meeting of the Forum which functions as the national peak body for stakeholders in the road transport sector.

The meeting, sponsored by Macquarie, was specifically structured to meet the high threshold required by senior management who are themselves well informed.

A "College of Industry Leaders"

ARF President Ray Fisher reported that over 70 companies were represented - all ARF members or their invited guests.

"Our aim was to bring the leading companies, government agencies, and the key industry associations together in one room - a college of industry leaders", Ray Fisher said.

"This was clearly achieved and the feedback has been very positive."

Industry leaders report the "State of the Nation"

During the morning session the Forum reviewed the "state of the nation" for road transport in Australia.

Mark Davis, the national parliamentary correspondent from the Australian Financial Review began the day with an analysis of the forces which underpin the parties' current standings and which may be important in future.

Nigel Hatcher from BIS Shrapnel reviewed the outlook for business activity and for road construction in particular.

The heads of the roads agencies from all eastern states and the Commonwealth outlined recent developments within their jurisdictions and spoke under Chatham House rules about what was on the horizon.

NSW Roads Minister announces AusLink signature

The NSW Roads Minister, the Hon Joe Tripodi, addressed the Forum over lunch and used the occasion to announce that NSW would sign the AusLink agreement.

The Minister said that he strongly supported ARF. But he pulled no punches when it came to outlining his concerns about some of the key financial terms of the AusLink agreement as far as they affected NSW. Particularly since the Minister is new to the portfolio, his



The Forum was attended by representatives of over sixty companies and agencies. The meeting format encouraged active participation.

Like to find out MORE about ARF?

- Visit our website – www.roads.org.au or
- Call the Executive Director, Ian Webb, on (03) 9821 5255.



VicRoads Chief Executive David Anderson, briefed Forum Members on the outlook for road construction in Victoria.

assurance and grasp of the issues made a strong impression on his audience.

Macquarie seeks "Win-Win" opportunities

After lunch, Nicholas Moore, head of Macquarie's Infrastructure Banking Group, gave a keynote address on Macquarie's vision for public-private partnership in infrastructure. It was a rare opportunity to hear one the industry's most significant policy makers.

Nicholas illustrated how "win-win" outcomes characterise good infras-

COMPANIES REPRESENTED AT THE FIRST FORUM MEETING

Abigroup Construction	Egis Projects	Queensland Transport
Allens Arthur Robinson	Emoleum	Reed Constructions
ARF	Engineers Australia	Australia
ARRB Group	FRH Group Pty Ltd	RIISC
Australasian College of Road Safety	GHD Pty Ltd	RTA NSW
Australian Automobile Association	Hyder Consulting	Shell Co of Australia Ltd
Australian Construction Products	Institute of Logistics and Transport	Sinclair Knight Merz Skilled
Australian Financial Review	Institute of Public Works Engineering Australia	SMEC Australia
Austrroads	Interlink Roads	Statewide Roads
Baulderstone Hornibrook	John Holland Group	Tenix Solutions Pty Ltd
BIS Shrapnel	Kellogg Brown and Root	The Earthmover & Civil Contractor
Boral	Komatsu	Transfield Services Australia Pty Ltd
BR Durham & Sons	Leighton Contractors Macquarie Infrastructure Group	Transport SA
Brisbane City Council	Maunsell	Transport Workers Union of Australia
Cement, Concrete & Aggregates Australia (CCAA)	National Transport Commission	Transurban Infrastructure Development
Civil Contractors Federation	NSW Minister for Roads	University of Sydney
Clayton Utz	Parsons Brinckerhoff	VicRoads
Connell Wagner	Phillips Fox	Westlink Motorway Limited
Department of Main Roads, Queensland	Pioneer Road Services	Westpac
Deutsche Telekom	Price Waterhouse Coopers	WesTrac
DOTARS	Queensland Main Roads	

tructure investment. He demonstrated how this principle is applied within Macquarie in identifying projects which are likely to be successful - because commercial success and community benefits will coincide.



The NSW Minister for Roads, the Hon Joe Tripodi announcing that NSW would sign the AusLink agreement.



Nicholas Moore of Macquarie told his audience that win-win benefits for commercial investors and for the community were essential ingredients for successful infrastructure projects.



Ed Sandrejko of Macquarie moving the vote of thanks to the Minister.

ARF identifies key policy issues

In the final session, the meeting discussed issues which ARF should pursue as policy priorities. Two key areas emerged - skills shortages and road maintenance.

A series of speakers, including Connell Wagner, CCF, Sydney University and Engineers Australia expressed concern that Australia is not producing the engineers and specialist operators to do the job which lies ahead.

Other speakers, led by Neil Doyle of Queensland Main Roads, called for a national audit of Australia's road maintenance needs.

Neil Doyle said that while it was good to see that infrastructure renewal is now well and truly under discussion, Australia faces a massive maintenance backlog on our existing roads.

"We need to know what we are up against, and the only way to achieve this is for all Australian governments to share information so that we can address national priorities."

The meeting asked the ARF Chief Executive, Ian Webb, to communicate individually with members to seek their participation in ARF working groups to progress these issues.

The paper delivered by Connell Wagner's representative, Graeme Wood, appears overleaf. Papers delivered by the other keynote speakers at the Forum may be accessed under Chatham House rules on the "Members Only" section of the ARF website.

ARF MEMBERSHIP REACHES 39

ARF membership has reached thirty-nine, with Westpac and Thiess joining in the week before the Forum Meeting.

ARF membership has grown from 10 in March 2004. Membership now includes major national players from the following sectors:

- Road Operators
- Paving
- Research
- Government Agencies
- Equipment
- Motoring Associations
- Freight
- Local Government
- Construction
- Engineering
- Unions
- Services



Nigel Hatcher of BIS Shrapnel gave a detailed presentation on future industry prospects.



Mike Mrdak, A/g Secretary of DOTARS, received positive feedback from Forum members about the Department's pro-active approach to industry consultation.

PRIORITY ISSUE FOR ARF - ENGINEERING SKILLS SHORTAGES

Summary of discussion paper delivered by Graeme Wood,
Principal - Transportation (Connell Wagner Pty Ltd).

The current high level of infrastructure expenditure in Australia is significantly affecting the availability of skilled resources, particularly engineers, to adequately service this work.

The contributing factors include the trend that started in the mid 1990s away from technical subjects such as Maths and Science that are required as the basis for engineering courses at the tertiary level.

It can take up to 15 years from a person's initial interest in engineering to becoming a qualified engineer. Only 7.9% of Australia's current graduates are engineers. This compares with something like 40% in China.

When combined with high drop out rates among engineering students and market factors upon engineering graduates, the current situation in Australia is that only 25% of those that commence an engineering degree remain as practising engineers 10 years after graduation. Hence the increasing use of the term "the mythical 5 to 10 years experienced engineer" - that highly sort after combination of youth, enthusiasm and experience.

The engineering skills shortage will probably continue for at least the next 5 years, driven by the continuing infrastructure spend and the withdrawal from the workforce of the "baby boomers".

Since about 70% of engineers are now employed in the private sector, the ACEA has a strong interest in addressing this problem. It recently surveyed 60 member firms. 73% of

respondents advised that skills shortages were adversely impacting their business with the main issues being:

- Increased pressure on existing staff;
- Reduced capacity to meet Client deadlines;
- Restrictions on business growth;
- Upward pressures on salaries; and
- Increased difficulties in retaining staff.

Most medium and nearly all large consulting firms advised that they had measures in place to attract and retain staff such as graduate recruitment and staff training and development programs. For example, Connell Wagner actively participates in career open days and employed 117 new graduates last year. These new graduates will be mentored through Connell Wagner's Graduate Development Program - one of the first such programs accredited with Engineers Australia by a consulting engineering firm.

The skills shortage has contributed to aggressive and possibly unethical approaches to staff recruitment that are not in the best interests of the engineering profession.

BIS Shrapnel have forecast upward pressures on engineering salaries.

Short term measures to address the skills shortage include initiatives such as the Federal Government's Recruitment Expo. Large consulting firms, such as Connell Wagner, have been recruiting overseas for some time and are active participants in this initiative. I understand that the Government's target is to encourage

up to 20,000 skilled migrants to Australia during 2005, hopefully including a good proportion of engineers.

However, skilled migration is not a long term sustainable solution. We need a fundamental change in Australia's approach to attracting young Australians into technology subjects and to retaining them as practising professionals.

Other suggestions to ease the current skills shortage include the use of more efficient delivery systems for major infrastructure and improvements in the contractual framework for these projects.

For example, many of the large DCM and BOOT projects have contract structures that require multiple layers of engineering staff - such as the Client's engineering team, the Contractor's engineering team, the Contractor's Design Consultants' engineering teams, an Independent Design Checker, a Construction Reviewer and an Independent Verifier. Arrangements like this tie up large numbers of highly skilled professionals and involve "checkers checking the checkers".

The contractual frameworks for these large projects can also create adversarial rather than collaborative relationships. These divert resources to address contractual rather than technical issues. This could be improved with better risk allocation procedures or more cooperative approaches to the contractual framework such as alliances or relationship contracting.