

NEWSLETTER No 7/2008



Railway Technical Society of Australasia
SA Chapter
Engineering House, Bagot Street
NORTH ADELAIDE SA 5006

July 2008

NEXT MEETING

Next Meeting – THURSDAY 7th August 2008

The next meeting of the RTSA SA Chapter will be held on **Thursday 7th August 2008**. The meeting will be held at the:

Chapman Room, Engineering House, Bagot Street, North Adelaide
commencing at 5.30pm.

The topic of the meeting will be:

The PN92 Class Locomotives

and the presentation will be made by

Graham Haywood

Manager Systems Engineering, United Goninan

Rail operator Pacific National has ordered a fleet of new 92 Class locomotives from United Group Rail. These locomotives have many new features compared to earlier classes of locomotive, including the use of AC Traction Motor technology sourced from General Electric in the USA. This presentation will outline the features of the new locomotive, and provide an insight into the challenges of designing, building, testing, commissioning and certifying a new locomotive type in Australia.



Graham Haywood is the Product Development Platforms Manager for UGL Rail. His responsibilities include

development and commissioning of the new 92 Class locomotive. Graham has had a 46 year career in the rail industry, commencing with South Australian Railways where he had a number of engineering, maintenance and management roles. He went on to represent Queensland Rail during the building of the 3400 Class electric locomotives by Clyde Engineering in the mid 1990s before joining A Goninan & Co in an Applications Engineering role, involved in the engineering tendering and configuration of equipment for diesel electric locomotives. Goninan became United Group Rail, and are involved in rail vehicle design, manufacturing, asset management, maintenance and refurbishment.

Light refreshments will be available from 5.30pm. RSVP to Phillip Campbell on email pcampbel56@yahoo.com.au.

Continuous Professional Development (CPD)

Engineers Australia members are reminded that attendance at RTSA technical meetings contribute towards CPD requirements. Each RTSA technical meeting generally has a value of 1 CPD point.

July 2008

LAST MEETING

The last meeting was a presentation by Kevin Taylor, General Manager Rail Industry Safety and Standards Board (RISSB).

The topic of the presentation was "Railway Standards Development by the Rail Industry Safety and Standards Board (RISSB)". The paper below is based on the presentation by Kevin.

The meeting was attended by 34 members and visitors and Tim Calver gave the Vote of Thanks.

Railway Standards Development by the Rail Industry Safety and Standards Board (RISSB)

Overview

Policy Aspects

The Rail Industry Safety and Standards Board (RISSB) operates under the following policy aspects:

- Co Regulatory Framework between industry and government
- \$20billion commitment for expenditure on rail
- ARA Strategic Objectives (x7)
- Recognition of RISSB Products
- Standards are not compulsory

- Not for distribution to non ARA members due to RISSB association with SAI Global.

RISSB Governance Issues

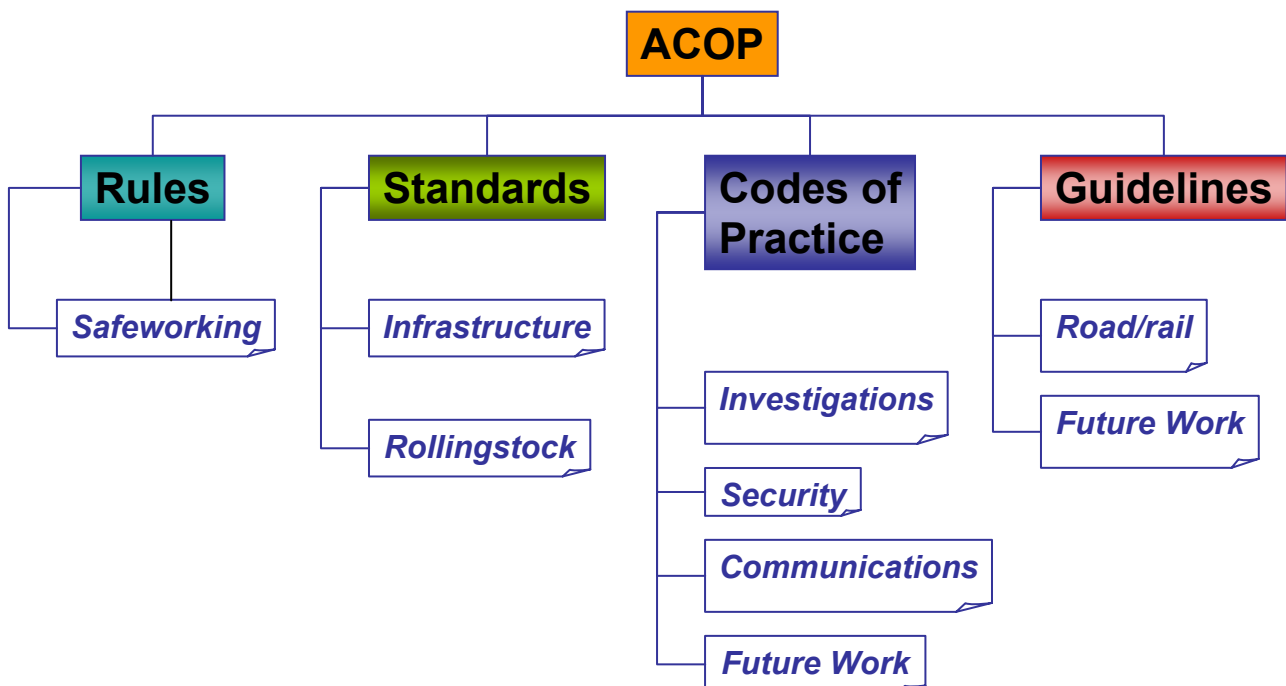
RISSB governance issues are:

- ARA as the parent body
- Funded 50/50 by Government and Industry under a 3 Year MOU with Government
 - Due for renewal in March 2011
 - Audited by Government every 12 months
 - Report to RISSB Board quarterly on activities and spend
- Accredited by Standards Australia
- ARA as the Parent Organisation but report to the RISSB Board for outputs and budgetary matters
- RISSB is not a policy setting organisation
- Work closely with ARA
 - ARA does policy work
 - RISSB operational part of the ARA – Manage the ACOP
- RISSB Activities are linked to the seven ARA Strategic Objectives

Australian Code of Practice (ACOP)

The Australian Code of Practice components are shown in Figure 1 below.

Figure 1 Australian Code of Practice Components



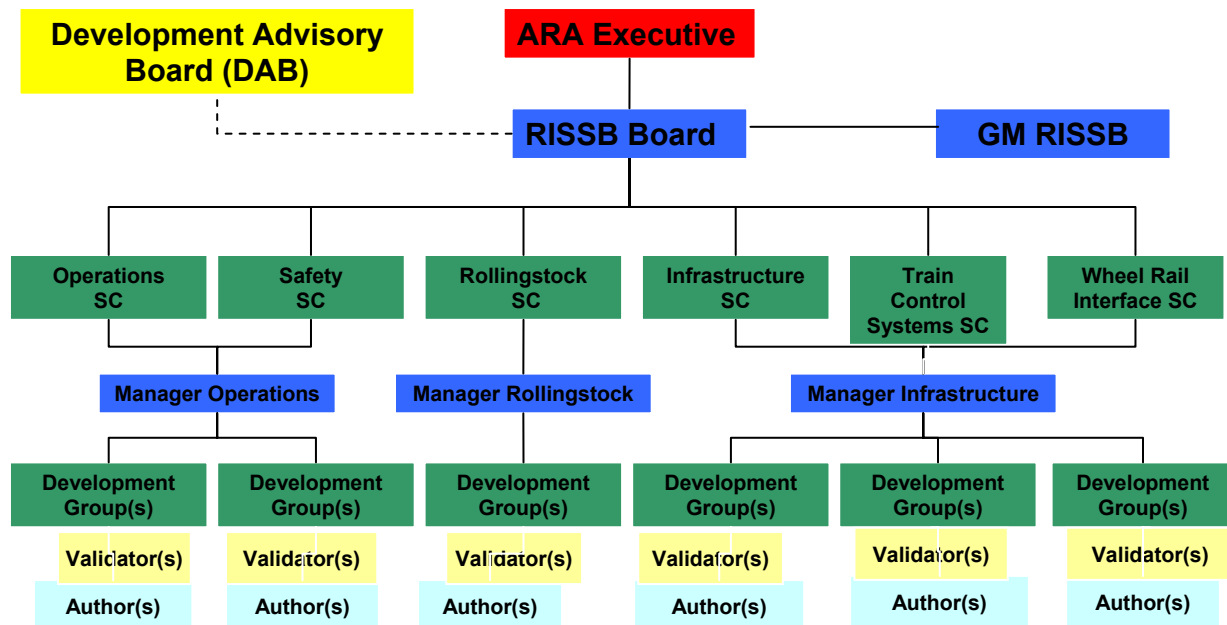
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RISSB Governance Arrangements

The RISSB governance arrangements are shown in Figure 2 below.

Figure 2 – RISSB Governance Arrangements



Committee Composition

The RISSB Committee composition is as follows:

- **ARA Executive**
 - CEOs of all major operators and providers/suppliers representative
 - Chair (Mr Don Telford)
- **ARA Council**
 - ARA Executive plus provider/supplier CEOs (or reps)
 - Chair (Mr Don Telford)
 - Meets once a year in May timeframe
- **RISSB Board**
 - A mirror image of the ARA Executive but with GGMs and senior GMs
 - Chair (Mr Bryan Nye)
- **Standing Committees**
 - GGMs or Senior GMs from most major operators and providers as well as supplier reps
 - Selected by the RISSB Board
- **Development Groups**
 - Major and minor stakeholders
 - Anyone providing he/she are appropriately qualified

Development Advisory Board

The Development Advisory Board (DAB) is composed of the following:

- **Chair** – Mr Dale Budd
- **Members** – Mr Alan Osborne (RSR Vic) and Ms Liz McNamara (Deputy DG – NSW MOT)

The purpose of the DAB is to ensure due process is followed in development of RISSB products. The first meeting was held in April 2008 to process AS7508 (Track Forces and Stresses) and AS7519 (Bogie Structural Requirements).

The DAB – Responsibilities

The responsibilities of the DAB are to:

- Work with the General Manager RISSB and the RISSB Board in satisfying its remit;
- Facilitate the Government's funding of the RISSB;
- Oversee the utilisation of funding provided to RISSB by the Government; and
- Act as an appeals committee for any complaints arising from the standards development process.

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ARA Strategic Objectives

The ARA strategic objectives are:

- Achieve a single regulatory framework for the rail industry
- Ensure rail is positively advantaged by the emissions trading regime relative to competitors
- Influence policy settings so governments provide sufficient incentives and investments in rail (above and below rail)
- Achieve Industry collaboration to improve efficiency, productivity and safety – Harmonisation
- Campaign to reduce Level Crossing collisions by working with all stakeholders
- Promote long term strategic planning and policy to ensure rail's contribution to economy and society is maximised
- Facilitate collaboration to define emerging skills and technology needs to ensure efficient supply to support rail industry growth

Collaborative Activities

RISSB works collaboratively as follows:

- RISSB work – standards, codes etc
- Sharing of management info (data)
- Supply chain activities
- Closer cooperation and collaboration between long distance haul and passenger operations on the north–south rail corridor
- Establish common terminology across the industry
- Separation of passenger and freight on Sydney network
- Embracing philosophy of likeness not sameness

RISSB Development Process

Accreditation

Standards Australia Board considered RISSB's application on 26 June 2007. Accreditation was received on 30 July 2007. Informal Regulator acceptance has been received.

RISSB is the second largest Standards Development Organisation in Australia behind Standards Australia. Standards Australia envious of standards development process, but it is expensive though.

Key Developmental Issues

Steve Rykers was instrumental in developing the RISSB process. He developed a seven step process that covers Standards, Codes of Practice, Rules and Guidelines.

A hazard tree approach to the development of standards was used. This uses standard risk analysis technique and the development of hazard registers.

The process also:

- Verifies alignment with International standards
- Verifies compatibility with national standards
- Has a minimum of two rounds of consultation
- Has independent validation
- Uses broad stakeholder input from both industry and the public
 - Except for guidelines which are kept internal and validated by Industry.
- Has an appeal process.

Standards Development Steps

For a diagram of the standards development steps - refer Figure 3 at the end of this Newsletter.

RISSB Standards Work

Rolling Stock Standards

The following standard statistics have been achieved for rolling stock:

- Total Number of Standards 136
- Australian Standards approved 24
- Standards to RISSB Board in Aug 08 8
- Standards presently being developed 44
- 12 standards being endorsed by the Standards Group
- 11 standards being finalised for Standards Group endorsement
- 21 standards undergoing drafting and review
- 4 standards about to commence drafting
- 5 standards at initiation phase

The following rolling stock standards have been completed and approved:

- AS7505 -- Signalling Detection Interface
- AS7515 -- Axles
- AS7516 -- Axle Bearings
- AS7517 -- Wheelsets
- AS7519 -- Bogie Structural Requirements
- AS7531 -- Lighting and Rolling Stock Visibility

The following rolling stock standards to be completed in FY08-09 include:

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- AS 7501 -- Rolling Stock Acceptance (1)
- AS7524 -- Drawgear (4)
- AS7511 -- Driver Supervisory Systems (3)
- AS7508 -- Track forces and Stresses (4)
- AS7509 -- Dynamic Behaviour (4)

New Standards Work for FY 07/08 include:

- Workplace Health and Safety x 4 (AS7502) (On hold pending review of OH&S legislation)
- Braking Systems x 4 (AS7510)
- Body Structural Requirements x 4 (AS7520)
- Couplers and Drawgear x 4 (AS7524)
- Exterior Environment x 4 (AS7512)

Infrastructure Standards

Infrastructure standard statistics include:

- Total Number of Standards 40
- Standards approved to date 0
- Standards presently being developed – 4, being
 - Track Classification
 - Rail
 - Clearances, and
 - Track lateral stability.

Operations Standards

A standard on communication is being developed. The standard will standardise strategic requirements for train radio communications. The focus will be on:

- Interoperability
- Produce the overall lowest cost industry solution; and
- Provide a level of reliability and redundancy that meets the operational task and risk environment of the respective rail network
- Ability to support the safety and business needs of track managers and train operators

Other RISSB Projects

Heritage Locomotive Code of Practice

The present situation is untenable. Experience levels in boiler maintenance are declining.

- 2 x Australian Standards
- The Code = 'How' to do it

The aim is for a December 2008 approval. Regulators and Industry are very supportive.

Accessible Rail (Disability) Code

The Code development commenced in June 2007. The Regulator is comfortable with the RISSB process.

The ARA has sought exemptions on 132 DDA requirements.

The Project was deferred due to disagreement on the structure of the Code's exemplar chapters. The issues were resolved in February 2008 and the project is proceeding.

The Australian National Rules Project (ANRP)

Objective: a library of rules for national application

This became an RISSB Project in October 2006.

The project expands on the DOI Victoria rules work to encompass Australia.

A Licence Deed was signed in November 2007. Some delay caused by legal disagreement by lawyers but this did not prevent project documents etc being developed.

The proposed timeframe is:

- Phase 1 (52 'Work on Track Rules and Procedures') - August 2008
- Phase 2 (70 'Train Operations') – August 2009
- Implementation approx Feb 10.

The Key Deliverables are:

- A National Suite of rules and procedures
 - For all common (Level 2)
 - Level 3 and 4
- Plain English Review
- Risk analysis
- Traceability
- Regulatory Impact Statement
- Independent Validation
- Implementation plan

Safety Projects

The following safety projects are being pursued:

- Risk Management Guideline
- Safety Culture Toolkit
 - RISSB licence
 - In service by July 2008
- Legislation Alignment with Model Bill
 - Contract with Deacons to identify differences between National Model Bill and State's interpretation
 - Completed April 2008
- Human Performance Guideline
 - For Line Managers
 - 80% complete

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RISSB Projects

Other RISSB projects include:

- National Rail Safety Worker Behavioural Controls
 - Survey of other industries undertaken
- Safety Data Quality Audit
 - Focus on Data processing issues such as reporting regimes for incidents, near misses etc
- Safety Competencies for Rail Workers
- DIRN Codes 1,2,3,4 and Freight Loading manual Updates.

Level Crossings

National Survey

A national survey has been undertaken with the following results:

- One in four of those surveyed reported having engaged in risky behaviour at a rail level crossing.
- Respondents identified the 16-25 year old age group as being the group of drivers most at risk. (self-aware)
- Whilst 18 – 25 year olds were aware that they were an “at risk” group, older drivers (whilst highly familiar with RLCs) were less self aware of their own risk
- Driver inattentiveness and impatience as the greatest factors.
- Majority aware of flashing lights and boom-gates - fewer spontaneously recalled warning signage at RLX.
- 24% of respondents reported illegally using RLX at some point
- One in five people surveyed reported that they had crossed a rail level crossing and not known it until after the event
- One in five people surveyed were not aware of any type of penalties for breaking the rules at a rail level crossing.
- Two thirds of those surveyed felt that they were less likely to be penalised for an infraction at an RLC than for speeding on the roads.

Industry Level Crossing Safety Policy

The three keys of the policy are:

- **Education** - Commitment to extending and strengthening community Level Crossing Safety education programs and develop key safety behaviours from an early age through school education programs.

- **Enforcement** - Increase police enforcement activity at hot-spots identified by the rail industry and revise penalties in all State jurisdictions to ensure they are adequate and consistent.
- **Engineering** - Speed reductions around selected high-frequency use Level Crossings. Rationalize and close redundant crossings where low-use crossings are close together. Grade separation on all new lines being built, especially on heavy vehicle routes. The ARA calls for measures that aspire to achieve:
 - Total grade separation of metropolitan area suburban passenger networks
 - Total grade separation of all major crossings used by high mass vehicles.

Summary

In summary:

- RISSB was accredited on 30 July 2007 as an SDO
- Large work programme being undertaken including:
 - Standards Development, Disability Code, the ANRP, etc
 - New initiatives constrained by finances
- A strong industry participation but one needs to be mindful of resource limits.

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June Meeting Presentation Paper

Details of the June meeting presentations could not be included in the June Newsletter due to a technical problem. As advised, the paper based upon the presentation follows:

Rail Revitalisation

Mark Williams - Manager, Rail Policy and Investment, DTEI
Daniel Martucci – Engineer, Rail Policy and Investment, DTEI
Charles Irving - Project Director, DTEI

Budget Announcement - \$2 Billion Public Transport Blueprint

As announced today, the State Government's \$2 billion Public Transport Revolution provides a vision for 2018 and will deliver:

- Tram Extensions
- Rail Revitalisation (heavy rail)
- Railcar Depot Relocation
- Railcar/tram procurement
- Railcar refurbishment (3000 class)
- Bus priority in Adelaide CBD
- Acquisition of rail corridor to Aldinga
- New ticketing system
- Bus procurement

Introduction

With the imperative for South Australia to ensure its economic sustainability by growing towards a population of two million by 2050, and the need to limit its environmental footprint, the urban form of Adelaide must become more compact.

Continuing sustainability, liveability and economic imperatives mean that development needs to become denser, particularly around key transport corridors.

A modern, efficient and sustainable public transport system is a critical component of the future of Adelaide.

Public transport in Adelaide will be transformed by the biggest service improvements and investment in vehicles and infrastructure that has ever taken place in its history.

These projects will involve a transformation of TransAdelaide that will impact on nearly every aspect of its operations.

Better Planning – Better Future

Planning Reforms 2008 – The State Government is implementing the broadest range of planning reforms seen in SA in decades to build on our current strengths and make the most of our opportunities.

Key Areas of Reform

The key areas of reform are:

- Strategy as a growth driver (transport corridors and new Transit Oriented Developments (TOD's))
- Streamlined development assessment
- Land supply management (25-year supply of broadacre land)
- Better institutional arrangements (with local government and Planning Dept.)

Transport Corridors

The opportunity is to take advantage of existing infrastructure along rail corridors.

Transit Oriented Development (TOD's)

A mix of high density, high quality housing located with employment, mass transit connections, recreational activities and services will be offered.

In the first instance, Bowden / Hindmarsh, West Lakes, Marion / Oaklands and Noarlunga may provide excellent potential for future exploration.

Rail Planning

The rail planning will build on existing planning work that will be consolidated into an overarching Master Plan including:-

- Train service plan
- Station and facilities plan
- Track network plan
- Signalling plan
- Overhead traction plan
- Rail fleet acquisition and upgrade plan
- Staff plan
- Financial plan
- Economic analysis
- Asset management plan

Opportunities in Works Planning

For consideration in works planning are:

- Concurrent road network upgrades – DTEI and Councils
- Services & Utility works

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- Future-proofing initial works (electrification and standardisation)
- Transition management for gauge conversion

Heavy Rail Corridor Works

Heavy rail corridor works include:

- Installation of concrete sleepers on all tracks
 - 50/60kg rail
 - Gauge convertible
 - Hook in shoulder
 - Third rail through LX
- Rationalisation of track junctions, addition of new junctions and upgrade of infrastructure
 - Refurbishment or replacement of P&C
 - Full network analysis
- Rationalisation/Simplification of Adelaide yard
- Continuously Welded Rail (CWR)
- Vertical and horizontal misaligned weld correction
- Rail grinding and replacement
- Formation repair and drainage works
- Ballast reclamation and reuse
- Signalling and communication upgrades including equipment immunisation, optic fibre communications backbone and signalling control systems reliability upgrade
- Gauge standardisation after completion of the concrete sleeper upgrade project and delivery of new rail cars
- Installation of a 25,000 Volt AC traction system on the Noarlunga and Outer Harbor lines, with Gawler to follow
- Substation construction and trackside installations
- Interchange, station and Park'n'Ride upgrades
- Critical bridge upgrade work

Key Project Issues

The key project issues are:

- Minimise disruption to existing services, including provision of alternatives
- Road user access issues, including local business, emergency services, buses etc
- Transition from diesel to electric and broad gauge to standard gauge
- Interface with metro and freight rail operators
- Lead times

Key Milestones

Key milestones are:

- Project works commence - June 2008

- First whole-line upgrade work packages - late 2008/early 2009
- Commence electrification works – 2nd half 2009
- Stabling Yards and Rail Car Depot Relocation - mid 2010
- Delivery of new railcars, first fully electrified services – 2012
- Gauge standardisation – 2013/2014
- Electrification project complete - 2016

CORE Youth Scholarship Award

RTSA's bi-annual CORE conference is Australia's premier rail industry gathering, attracting the decision-makers and key players in the rail industry in Australia and throughout the world.

The 2008 conference is being held in Perth in September and the organisers are keen to include students and young professionals with less than a year's experience in the workforce.

Scholarship recipients will receive passes for each day of the two-day conference, lunch and morning and afternoon teas on both days, a conference satchel - and the opportunity to meet with industry leaders and decision-makers.

A certificate will be supplied to each recipient, which they will be able to add to their CV.

Up to 50 scholarships, valued at \$900 each, will be awarded to students studying for a degree or diploma in the following disciplines, or who have been graduated for less than one year, and who can demonstrate an interest in the rail industry:

- Engineering
- Project management
- Business/Commerce
- Safety, Risk, OHS, Human Factors
- Information technology
- Spatial sciences

How to Apply:

Please visit CORE conference web site or visit the following web site:

www.core2008.org/youth-scholarship-award

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Advanced Notice Reminder – RTSA Eminent Speaker Presentation

The RTSA 2008 Eminent Speaker will be **Andrew McCusker**, Operations Manager – MTR Corporation Hong Kong who will be making his presentation to the SA Chapter on **WEDNESDAY 3rd September 2008**.



Andrew's Topic will be:

INTEGRATED LAND USE AND TRANSPORT PLANNING – A SUCCESS STORY

Please note this important event in your diary. Look for further details in later Newsletters.

Chairman's Chatter – Duncan McLeod

A recent visit to San Diego, California, revealed an interesting light rail network, with much of relevance to Adelaide.

San Diego city has a population of about 1.3 million, not much above that of Adelaide, although at least as many again live in the surrounding county area. The city has, somewhat unkindly, been described as having been built by visionaries, only to adopt a "no growth" and "no change" attitude. Some parallels there?

However, unlike many other American cities, San Diego has a well developed public transport network, involving buses, light rail, and heavy rail. It also has, in common with everywhere else, a ubiquitous freeway network.

The San Diego trolley, as the light rail network is known, was initially commissioned in 1981, the first such development in the USA. The system is somewhat unusual, in that it runs on city streets, as well as along dedicated corridors, and on heavy rail freight tracks (albeit with freight trains limited to the early morning hours when trolleys do not run). Heavy rail operation is fully signalled; signalling appears to also be provided on

some of the dedicated trolley tracks, which seem similar to a conventional suburban railway.



The trolley system has three separate lines, totalling over 70 route kilometres. Stations are spaced well apart (up to about 2 km), optimising transit times. Each service stops at every station. In this regard, the trolley is more like a train than a tram.

Within the CBD, which is built to a grid pattern like Adelaide, some streets are closed to road vehicles so they can be dedicated exclusively to trolley tracks. Key stations have park and ride facilities, and bus interchanges.

The overhead traction system is generally two-wire, with catenary and contact wires, but has only a single trolley wire in places.

The trolley appeared to be well patronised, notwithstanding the convenience and relatively modest cost of car travel. Daytime service frequency is a standard 15 minutes, and \$US5.00 buys an all-day ticket valid on buses as well as the trolley. Heavily discounted travel is provided for pensioners and disadvantaged groups.

Disabled passengers are well catered for, and frequent users of the service.

The trolley and bus common ticketing system is relatively unsophisticated, with the majority of passengers travelling on monthly passes. These are shown to bus drivers, and not examined at all on the trolleys. How ridership numbers are calculated is a bit of a mystery. At trolley stations, single journey and day tickets are obtained from platform vending machines, which accept notes, coins and plastic cards. On buses, tickets are obtained from machines, overseen by the driver. Drivers handle no money and change is not supplied.

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Consideration is being given to the introduction of "smart card" ticketing, but there are concerns over the cultural change required if people have to validate a ticket upon boarding a trolley, where no such action is required at present.

The San Diego trolley is a good example of what can be achieved with public transport which is attractive to use, with good service frequency, attractive fares, reliable performance, and efficient interchanges with buses and private vehicles.

Adelaide's recent tram extension has similarly demonstrated a successful mix of many of these features.

THE OBSERVATION POST – Max Michell

There are times when things (rail things in this context) seem to be on a long and never ending slippery slope to irrelevance, only to have an unexpected but very welcome total reversal of fortune. One that clearly comes to mind was back in the early 1980's when the Victorian Railways country passenger service was in trouble - old cars, infrequent and slow schedules and a report (the Lonie Report) which recommended simply getting rid of country passenger trains altogether. Fortunately a contrary view prevailed, which resulted in a significant core country passenger network being retained with new trains and locomotives acquired to run faster and more frequent schedules. Since then ongoing incremental improvements in both rolling stock and infrastructure has given Victoria a regional passenger network that is by far and away a leader in this country.

More recently the Perth suburban service, which at the time comprised three routes and was operated by a fleet of mainly old railcars based on contemporary bus engine technology, was clearly on the skids. The first step to annihilation was closure of the Fremantle Line - but that engendered sufficient activism in support of the rail service to overturn the incumbent government and restore the closed line, but most importantly to electrify and extend the suburban rail network. Perth now has a suburban system that is both original in its concept and highly effective in its execution.

Original? Perth is the only place in this country where trains run in the median strip of freeways, at speeds in excess of the legal road speeds, and where massive car parks have been built at new stations in recognition of the importance of the car to access public transport. The recently opened (Dec 2007) line between Perth and Mandurah traverses a suburban strip that has never previously had a rail service but within months of

opening has been carrying more passengers than the whole of the old railcar system used to. The fact that trains at 10 - 15 minute intervals take only 48 minutes to cover the 72 km line (88 km/h average including stops!) may have something to do with it!

The recent unveiling of a ten year plan to electrify and standard gauge the Adelaide suburban rail network falls into the category of an unexpected but very welcome announcement. This plan, in simple terms will see the whole suburban rail network concrete resleepered and converted to standard gauge, with 25 kV AC electrification installed on the Noarlunga/Tonsley, Outer Harbor and Gawler lines, coupled with extensions to the tram system to embrace Grange, West Lakes, Port Adelaide and Semaphore. Dual voltage cars for these latter services, allowing them to use the heavy rail line for part of their journey, are a decidedly original concept (although Adelaide has a history of successfully adopting novel technology - O-Bahn and AC traction railcars are examples).

These proposals will see Australia's first 'big gauge' application of modern high voltage technology - existing 'big gauge' electrification uses the now rather heritage 1500 V DC system that Melbourne pioneered in 1919, while all the Australian applications of 25kV ac so far have been on narrow gauge. Interestingly it is proposed to convert some of the existing 3000/3100 diesel cars for electric use - a practice that both Sydney and Melbourne followed back when they electrified but has otherwise not been seen locally for around 80 years. Adelaide of course has done this before in a different context, adapting steam hauled suburban cars as railcar trailers as part of the Red Hen program! Brisbane, on the other hand, built a number of loco hauled suburban train sets designed for conversion to electric which in the end were outdated by the time electrification actually came and were simply retired when electric trains took over Brisbane suburban working.

The announced Adelaide rail and tram enhancement plan is intended to be spread over ten years, with progressive implementation during that time. The end result will be a modern high voltage electrified railway along with an extended tram system. The Belair line will remain as a diesel railcar operation for the time being - the pronouncements seem to imply eventual electrification, this being dependent to some degree on the future of the adjacent ARTC track.

The whole plan should revitalise the suburban rail (and tram) network in Adelaide, but more importantly it will open up some future opportunities once the basics are in place. For instance a cross city line running

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underground down King William Street forming a city loop via Wayville would allow city centre delivery of rail passengers, while use of dual voltage trams would allow the Glenelg - Northern Suburbs trams to go underground using the same infrastructure. The combination of reduced travel times, more frequent services and city centre access, as has been shown in Perth, can be a very powerful combination in increasing the utilisation of public transport. Reorienting bus services to be regional distribution services for key rail nodes would further enhance matters, particularly if improved frequencies can be delivered at the same time.

Gauge conversion of the Adelaide suburban network will not create any break of gauge problems apart from lines north and east of Gawler. The Barossa Valley line has a daily stone train now, plus a significant potential for cement and regional container traffic which has been largely on road for many years as a result of the break of gauge. Although it is geographically beyond the immediate Adelaide suburban area there should be a good case for gauge conversion of this line concurrently with the Gawler line (planned for completion fairly late in the program in 2016). The BG line north from Gawler is current closed, despite the first station out (Roseworthy) having a huge grain receival terminal, and a number of additional on-line grain storages further out on both the Balaclava and Burra branches. One 'far out' possibility for part of this unused network is as an alternate SG route between Adelaide and Bowmans using the existing route to Balaclava and the former cross country route from there to Bowmans. An even further out possibility would be if the inter-capital main line from Melbourne were to be diverted north from Murray Bridge (going around the Lofties), in which case it may well find the Gawler-Roseworthy area a useful link point to the 'Western' SG network, with direct SG links to Adelaide via the Gawler Line and to the line to Perth via Balaclava.

A low key issue may be the ability to re-introduce freight rail operations to industrialised areas cut off in the recent past by breaks of gauge. The Lonsdale/Stanvac area, and Tonsley suggest themselves in this regard, as might parts of the Gawler Line (Elizabeth for instance). Recent closure of both the refinery at Stanvac and the Mitsubishi plants may have been a set back, but availability of SG rail access in the near future may well enhance re-development possibilities for these already industrialised areas.

One very interesting aspect will be adequacy of the proposed electric fleet. The proposed fleet, including the residual Belair Line diesel cars, will be around 30%

bigger than now. Even allowing for better train utilisation and the conversion of Grange to tram technology, this number looks to be quite pessimistic. Brisbane passenger numbers more than doubled over a number of years following electrification, while Perth, with the addition of the new Northern and Southern lines, has grown to something like 400% of its diesel railcar patronage. It will be very interesting to see the take up by passengers in Adelaide, but my intuitive guess would be that 108 electric cars is very much at the low end of requirements. In fact it would be quiet realistic to suggest that if 108 is all the cars that are required the electrification program will not have achieved its real potential by quite a wide margin.

Now that Adelaide finally has a forward looking suburban rail plan in place it can only be hoped that it continues to its intended conclusion and, based on the 'success breeds success' syndrome, that it encourages continued further enhancement beyond the ten year time frame.

Letters to the Editor

Unfortunately, Letters to the Editor are very few and far between. This is a situation that the RSTA National Executive has resolved to change.

The exchange of the views by members of the issues that they see affecting the rail industry and the promotion of the achievements made both generally within the industry and by its members is to be encouraged. This requires your involvement.

Letters to the Editor are requested and will be most welcome. To facilitate this aim, the RTSA has set up a specific email post box to which Letters to the Editor may be sent. The address is:

SAEditor@RTSA.com.au

CORE 2008

CORE 2008 will be held in **Perth between 7th and 10th September 2008**. The theme of the conference is:

RAIL – THE CORE OF INTEGRATED TRANSPORT

And according to John Goodall, Conference Chairman, will highlight the successful role of rail in integrated transport systems in both urban travel and freight contexts.

Registration for the conference is now opened.

Further information may be found at www.core2008.org.

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RTSA NEW WEBSITE

The RTSA has launched its new website. The new website covers all of the RTSA Chapters and provides an improved layout highlighting future meetings and reports from past meetings.

It is well worth a look at and may be found at:

www.rtsa.com.au

RTSB Level Crossing Bulletin

The RTSB has issued a bulletin on level crossings. The bulletin may be found at:

http://www.atsb.gov.au/publications/2008/rail_bulletin.aspx

MEETINGS FOR 2008

Future Speakers/Dates/Topics				
Date	Speaker	Organisation	Topic	Venue
7/08/2008	Graham Haywood	United Goninan	PN92 Class Locomotives	Chapman Hall, ENG AUST, Bagot St North Adelaide
3/09/2008	Andrew McCusker	RTSA Eminent Speaker	Integrated Land Use and Transport Planning – A Success Story	Gil Langley Room, Adelaide Oval North Adelaide
7-10/09/2008		RTSA	CORE 2008	Perth WA
2/10/2008	George Erdos	ASTB	Benalla Signalling Accident	Gil Langley Room, Adelaide Oval – Joint with IRSE and PWI
6/11/2008	Tim Warren	DTEI	Relocation of Railcar Depot a/c new hospital	Chapman Hall, ENG AUST, Bagot St North Adelaide
25/11/2008	David Marchant	ARTC	AGM	Hyde Park Tavern
1-2/12/2008		ARA	AusRail	Sydney

Note: Meeting topics and venues are subject to change. Please refer to future Newsletters for confirmation.

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KEY RTSA CHAPTER COMMITTEE CONTACTS

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Secretary	Daniel Martucci	08 8204 8213
N/L Despatch	Steve Torok	08 8264 2552
N/L Editor	Stephen Townsend	0400 135 481

Articles or editorial comment for Newsletter are very welcome. We have over 100 members locally some of whom will have stories, events or developments of interest that could be reported in Newsletter.

Part of the function of RTSA is to keep members in touch with what is going on in the industry and with each other and to that end we are only too happy to publish items of interest.

Send copy to the Editor, Stephen Townsend at SAEditor@RTSA.com.au or fax to 08 8297 0992.

Electronic despatch of Newsletter is undertaken by Steve Torok – contact Steve on storok@tge.com.au if you have any problems receiving Newsletter electronically or in hard copy. Note that electronic subscribers will get their Newsletters and flyers as soon as the editorial work is done, while the hard copy mail will of course be some days slower.

For all other matters relating to RTSA SA Chapter contact Duncan McLeod (Chairman) at e-mail dmcleod@aapt.net.au, or by phone on 08 8338 7919.

Disclaimer

This Newsletter is a publication of the South Australian Chapter of the RTSA. The opinions expressed within are not necessarily those of the Chapter, Society or Editor.

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Figure 3 – RISSB Standards Development Steps

