RAIL LEVEL CROSSING SAFETY

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Presentation to Victorian Parliamentary Road Safety Committee
31 March 2008
NATIONAL TRANSPORT COMMISSION

- Independent Commission established by IGA as NRTC 1991
- NTC commenced Jan 2004 after a 2002 review expanded the role to cover
  ... Regulatory and Operational Reform in Road, Rail and Intermodal Transport
- Reports to ATC
- Goal of
  “…improving transport productivity, efficiency, safety and environmental performance and regulatory efficiency in a uniform or nationally consistent manner.”
- No role in infrastructure delivery or management
RAILWAY LEVEL CROSSINGS

- Australian Rail Crossing Strategy Implementation Group (ARCSIG)
- Railway Level Crossing Behavioural Coordination Group
- Road Network Classification Guidelines
- National Rail Reform
- Rail Safety Model Bill Interface Agreement Provisions
AUSTRALIAN RAIL CROSSING STRATEGY IMPLEMENTATION GROUP

- Established to implement National Railway Level Crossing safety Strategy
- Membership – State railway level crossing committees, rail industry, Austroads and rail safety regulator representatives
RAILWAY LEVEL CROSSING
BEHAVIOURAL COORDINATION GROUP

- Established by ATC in 2006 for two years
- Funding from all jurisdictions
- Targeting behavioural interventions to improve safety of railway level crossing
- Membership – state and territory road and rail safety agencies, Police and rail industry representatives
- Secretariat provided by Australasian Railway Association
RAILWAY LEVEL CROSSING

BEHAVIOURAL COORDINATION GROUP

- Specific projects delivered on:
  - survey of level crossing users behaviour and attitudes
  - Pilot enforcement and education program evaluations
  - Website for information exchange (hosted by ARA)
  - National workshop on railway level crossing safety
- Template publicity materials being developed
ROAD NETWORK CLASSIFICATION GUIDELINES

- Access levels developed for PBS vehicles
- Matching vehicle performance to road characteristics
- Specifically requires assessment of any railway level crossing on a proposed route. Including:
  - Warning times
  - Clearance time
  - Stacking distances – approach and departure
- Published on NTC website
2005 ATC agreed to
   Improve and strengthen co-regulatory system
   Address national policy on key safety issues

2006 COAG agreed that:
   as a high priority, governments will together explore further measures to implement a nationally-consistent rail safety regulatory framework; and
   ATC should … report to COAG by end 2006
NATIONAL RAIL REFORM

Rationalisation of regulatory instruments
Development of national model *Rail Safety Bill 2006* and model Regulations
First set of six national rail safety guidelines
Review of Institutional Framework

**Phase A**
- Transitional implementation framework
- Process for approval of national guidelines & compliance codes
- CBT for rail safety regulators
- Process of recognition of industry technical standards
- Maintenance arrangements for regulatory instruments

**Phase B**
- Business case for train driver licensing
- Case for and against national regulator
INTERFACE AGREEMENTS FOR RAIL-ROAD INTERFACES

Ongoing dialogue for some years between road and rail authorities to improve their interfaces

Stemmed from the development of tools for level crossing risk analysis, especially:

Australian Level Crossing Assessment Model (ALCAM)

Australian Standard *Uniform Traffic Control Devices* AS 1742.7

Australian Standard 4360 *Risk Management* and engineering and other standards

no systematic overarching process to create consistent, common approaches to road/rail interface risks
RAIL SAFETY (AMENDMENT NO. 2) BILL 2007

Unanimously approved by ATC in December 2007

Three year transitional period for implementation

Provides for new complementary obligations on rail transport operators*, rail infrastructure managers, road authorities and the owners/managers of private roads to jointly manage the safety risks of locations where two or more railways meet, or of ‘road or rail crossings’

‘Road or rail crossings’ include level crossings, rail over road and road over rail bridges, and may include parallel running between railway lines and roads if parallel running is adopted in the state or territory.

* (Rail Transport Operator is a generic term for either rail infrastructure manager or rolling stock operator)
MUTUAL OBLIGATIONS

Rail transport operators must:
- identify and assess safety risks associated with either the interface of any railway operations carried out by any other rail transport operator, or with the existence of any road or rail crossing
- determine measures to manage those risks
- seek to enter into an Interface Agreement with the other rail transport operator or road manager (but if none is a rail infrastructure manager, this does not apply).

Road managers of public roads must:
- identify and assess safety risks associated with the existence of any road or rail crossing, determine measures to manage those risks and seek to enter into an Interface Agreement with the relevant rail infrastructure manager.

Managers of a road other than public road
- The same obligations apply, but only if the relevant rail infrastructure manager advises the road manager of the need for the safety risks associated with the existence of any non-public road or rail crossing to be managed in conjunction with the road manager.

The legislation enables all these parties to jointly or separately identify and assess risks, or to adopt the identification and assessment carried out by the other party.

Each party must keep register of any Interface Agreement to which they are party.
WHO THE CHANGE AFFECTS

State government authorities owned/controlled public roads
responsible for management of principal metropolitan and rural arterial roads within
the state and for general jurisdictional road safety policy and strategy

Local government controlled public roads
extensive local road networks servicing communities, including feeder and
distribution roads linking State government controlled arterial road networks

Crown lands
The government department responsible for these lands effectively becomes
another road authority with the same obligations as other road authorities

Owners/persons responsible for roads other than public roads
either road authority or road manager - for a range of different purpose roads – eg
large commercial companies (mines through) individual landholders, farmers

Railway infrastructure managers
required to cooperate with other rail transport operators, road authorities and road
managers
JOINT WORK CAN REDUCE RISK

Coordinating the timing of level crossing signals and boom gates with traffic lights

Moving warning signs in compliance with the Australian Standard for Uniform Traffic Control Devices AS 1742.7

Coordinating level crossing signals and boom gates with traffic lights to create consistent dwell times at level crossings, stop vehicles entering when training is approaching and facilitate cars’ departure

Assigning priority to the road traffic departing an area where a level crossing exists

Considering the level crossing safety issues when planning heavy vehicle routes

Installing interlocked advance warning signals

Clearing vegetation

Many suggestions in this list are from AS 1742.7
WHAT IS AN INTERFACE AGREEMENT?

An agreement made between two parties setting out a mutual understanding and arrangement for managing safety issues at a shared interface – covering:

- the assets in the agreement
- processes for implementing and managing the measures to control risks
- evaluating and testing the measures and revising when necessary
- identifying the roles and responsibilities of each party for managing those measures
- procedures for each party to monitor the other to check compliance
- a process to keep the agreement current through review and revision

An Interface Agreement could:

- apply to multiple road authorities and private road owners and one or more railway infrastructure manager/s or rail transport operators
- apply to one or more location between two or more parties
- be based on a model agreement developed by a rail safety regulator or a local government association
TYPICAL ISSUES COVERED BY INTERFACE AGREEMENTS

Agreements on responsibilities, applicable standards and agreed treatments for items identified in the assets register, such as:

- How risks will be identified, assessed, managed, implemented, maintained, evaluated and tested, and revised
- How operational information such as maintenance plans, train operations information, road and rail traffic speed, volumes, heavy vehicle routes, road vehicle mass and dimensions will be monitored and exchanged
- How Interface Agreement information will be managed and kept up to date
- Managing change and continual improvement
- Road/rail signage/signalling, including interlocking signaling and advance warning
- Fencing, barriers and roadside infrastructure, road markings, pavement design (road width, surface treatment, rumble strips)
- Emergency responses
- Land-use planning change
TYPICAL STEPS IN INTERFACE AGREEMENT FORMATION

1. Identify the level crossings and other road/rail interfaces, resulting in list of relevant assets
2. Agree on the division of asset ownership, operations and maintenance responsibilities for assets associated with the interfaces
3. Agree on how to identify, assess, control & document risks
4. Discuss the standards to be used
5. Develop and record the hazard register
6. Consider maintenance and operational issues and risk controls
7. Rank the risks for treatment
8. Document the above outcomes
9. Develop the Interface Agreement
IF EITHER PARTY WILL NOT ENTER INTO AN INTERFACE AGREEMENT

Rail safety regulator or a person appointed by the Minister has power to:
review whether the parties have:
- made reasonable attempts to enter into Interface Agreements
- been unreasonably refusing to enter into an agreement, or
- unreasonably delaying negotiations for an agreement.

issue a direction to:
- determine the arrangements for management of risks safety for road or rail crossings
- direct parties to affect these arrangements
- nominate a date by which the directions must be followed

Interface Agreements between parties need to be in place 3 years from implementation of new law