



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**



NATIONAL RAIL REFORM

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 train 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

Identify the level crossings and other road/rail interfaces, resulting in list of relevant assets

Agree on the division of asset ownership, operations and maintenance responsibilities for assets associated with the interfaces

Agree on how to identify, assess, control & document risks

Discuss the standards to be used

Develop and record the hazard register

Consider maintenance and operational issues and risk controls

Rank the risks for treatment

Document the above outcomes

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**



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