The Development of the ONRSR Annual Safety Report

Consultation with the RISSB Safety Managers Group

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NOTE: DATA INCLUDED IN THIS PRESENTATION ARE FOR ILLUSTRATIVE PURPOSES ONLY; FINAL DATA WILL BE PROVIDED IN THE ANNUAL SAFETY REPORT

Agenda

- The role of ONRSR in rail safety data
- Safety reporting before ONRSR establishment
- Scope of the first Annual Safety Report
- Annual Safety Report challenges
- Content outline
- Future

The Role of ONRSR in Rail Safety Data

ONRSR has two key roles in relation to Rail Safety Data

1. Data to support regulatory function:
   "*maintain and improve rail safety through effective risk based regulation*"
   - to enable a risk based approach to regulation we need data and knowledge of risks
   - under RSNL operators notify ONRSR of rail safety occurrences
   - we need to effectively convert this safety data into intelligence
2. Custodian of national rail safety data on behalf of the industry:
   - centralise collection of notifiable occurrence reported by RTOs
   - capture / consolidate historical safety data
   - take ownership of national reporting framework and associated guidance e.g. OCG1 and ONS1
   - lead the development of the National Data Strategy for Australian Rail
   - transition responsibility to industry over time

Safety Reporting Before ONRSR Establishment

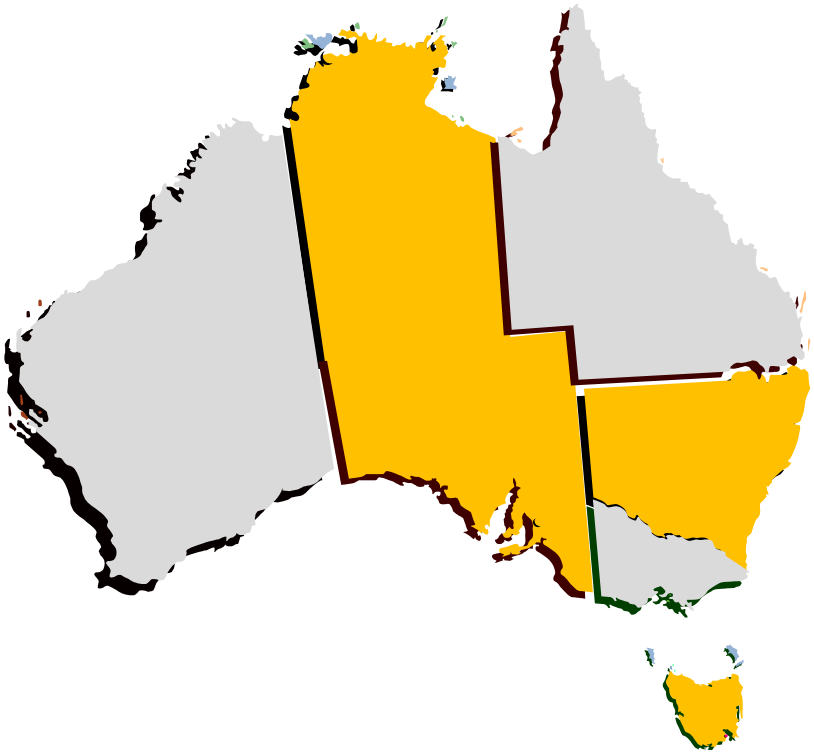
Historically…

- reporting varied markedly between jurisdictions
- limited / led by available data (OCG1, ONS1)
- ‘performance’ based on frequencies rather than risk
- little insight into infrequent but catastrophic events relevant to rail but absent in observed data
- precursors based on available data rather than contribution to train accident / other catastrophic risk

Our Intent…

- single annual picture of rail safety nationally
- focus on priority risks rather than just OCG1-based stats
  - some OCG1 stats will be included noting ATSB will no longer be producing their bi-annual statistical summary
- information useful to industry and the regulator
- identify information gaps and address strategically through National Data Strategy and related initiatives (SISAR)

Scope of the First Annual Safety Report



"Safety"

- safety of people interacting with rail
- train accident and other catastrophic risk
- heavy and light rail; commercial, T&H

Reporting Period

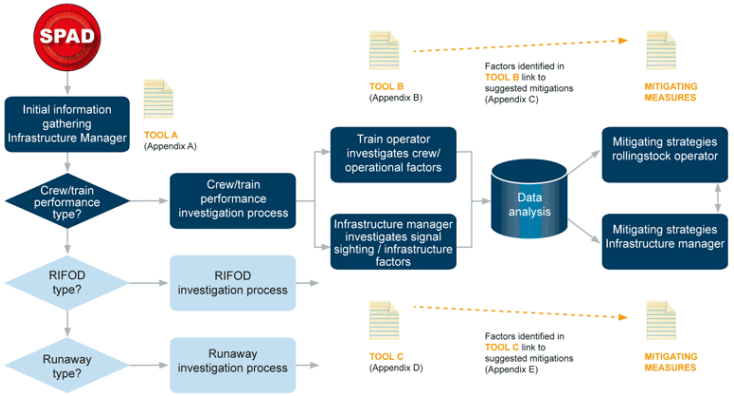
- ONRSR commenced 20 January 2013
- focus on 1 July 2012 to 30 June 2013
- intend to go back further where data is accurate and useful for the analysis

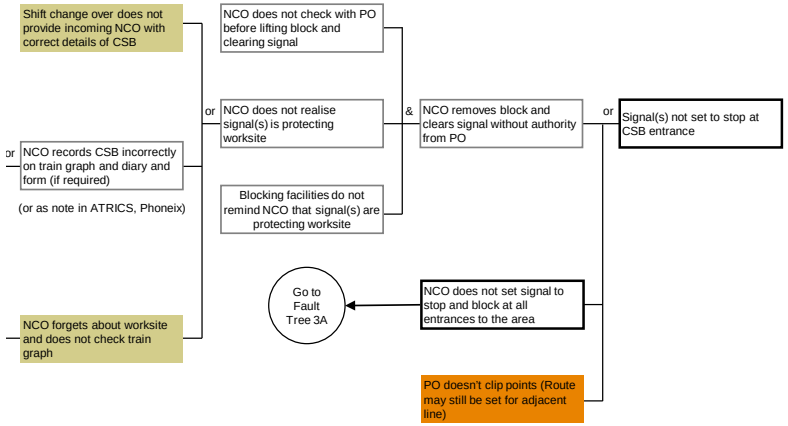
Study Area

- NSW, SA, NT, Tasmania initially
- approx 40% of track and train km nationally
- moving towards a national picture
- some jurisdiction-based summaries proposed

Annual Safety Report Challenges

- ONRSR is in transition
- ONRSR commenced January 2013
- still building capability (systems and people)
- legacy of disparate data collection & reporting systems
- national reporting framework started 2008-09
  - specifying information to be provided by RTOs
  - classification scheme (incident types, injury etc.)

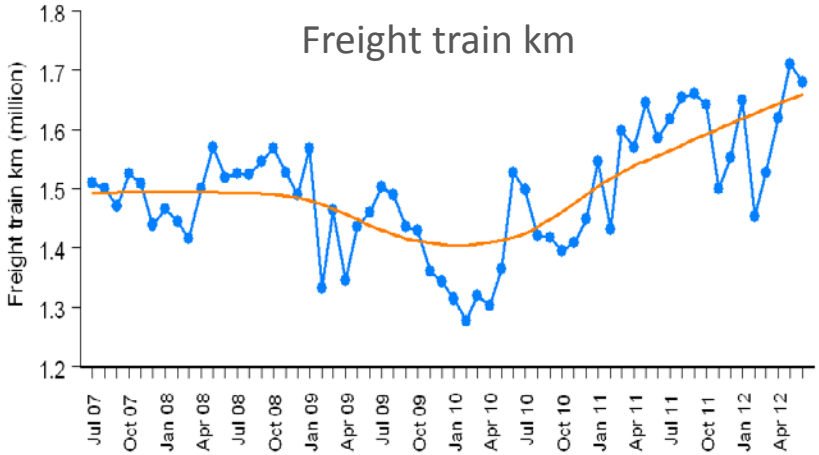




- data still sparse and there remain definitional inconsistencies between jurisdictions
- some important precursors not clearly defined eg. misalignment, degraded working
- estimation of risk hampered by inconsistent consequence data eg. ‘serious’ injury
- some regulatory risk models exist but vary in method, coverage, detail and relevance

Content Outline

- Key sections proposed
  - Introduction: the new Regulator
  - Industry Overview: NSW, NT, SA, Tasmania
  - General ‘risk picture’: safety risks in context
  - Identification of (focus on) key risks
  - Safety performance 2012-13 (key areas)
  - Analysis of key accident precursors

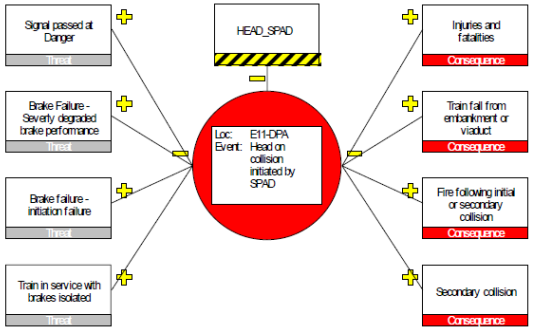


- First report sets new direction
  - *move away* from blanket reporting of categories under national reporting scheme
  - *move towards* identification and analysis of risks relevant to Australian railways

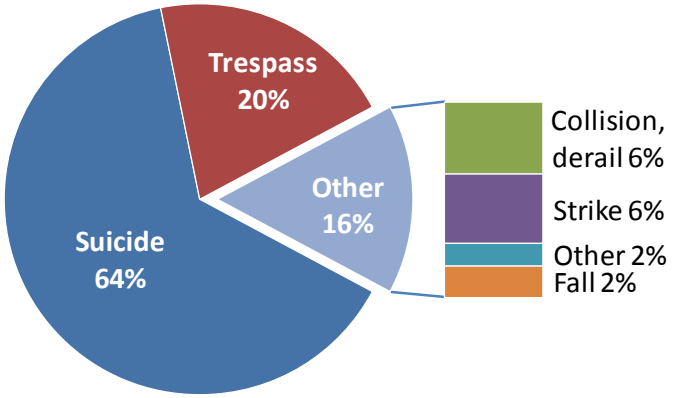
- However, some of the information we need does not exist so we are initially reliant on a mix of Australian information and information from other sources

Content – General Safety Picture

- Catalogue hazardous events of relevance to Australian rail via:
  - notifiable occurrences
  - local risk registers
  - overseas research
  - existing regulatory risk models
- Brief summary of all risks
  - High Frequency-Low Consequence : observed data
  - Low Frequency-High Consequence : observed and (where we have it) estimated data
- Shortlist and focus on key risks:
  - remainder of analysis to focus on priority events
  - consistent with ONRSR's Regulatory Approach
  - supported by preliminary / summary analysis of overall risk

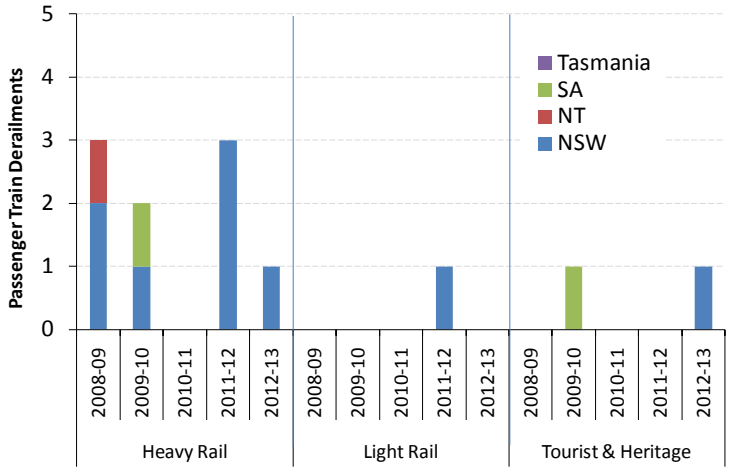


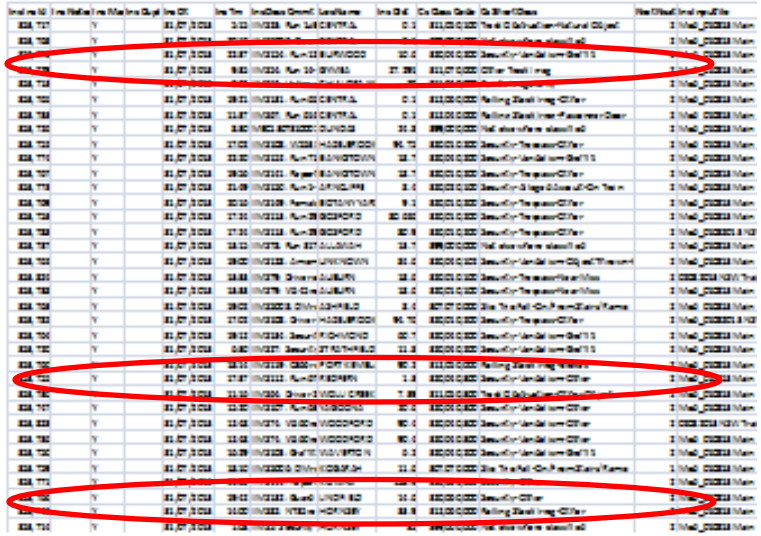
Fatalities (10 year)



Content – Safety Performance 2012-13

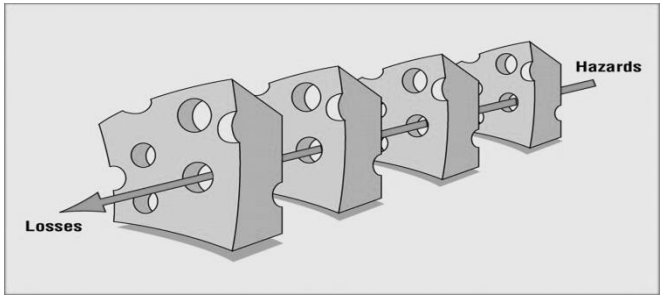
- Summarise observed harm in 2012-13
  - fatality and injury
  - focus on key accident types
  - tailored to / reflect breadth of operations
    e.g. ‘freight’ split into trains, light locos, wagon
    e.g. ‘passenger’ split into heavy, light, heritage
  - some categories may be defined more precisely to align with risk eg. ‘collision’ may exclude tree branches, small animals
- Summarise relevant critical near-miss incidents
  - not coded under OCG1
- Benchmarking
  - desirable in long term (broad topics initially)
  - some OCG1-related data definitions do not align with overseas definitions
- Manual review necessary





Content – Accident Precursors

- Identification of important precursors to train accident and related risks:
  - previous reports tended to focus on precursors with available data (in OCG1 and reliably captured)
  - these are not necessarily the ones that contribute significantly to train accident risk
- Necessary first steps:
  - What are the most significant train accidents (high consequence) where precursor monitoring is important?
  - What are the precursors of these train accidents?
- Some precursors not previously reported may be highlighted as important
- Some previously reported precursors may be excluded eg. faulty train door; brake irregularity



Future

- ONRSR has responsibility to enhance consistency and improve utility of rail safety data to inform decisions on safety
- RISSB is embarking on national rail safety database, referred to as the SISAR (Safety Information System for Australian Rail)
- ONRSR is very supportive of:
  - development of a safety risk model tailored for use by the Australian rail industry
  - a national database that is part of a broader data collection and reporting framework aligned to risk-based analysis
- The ONRSR's ASR and the systems and processes that underpin it will evolve in the future

Questions?

Feedback and Suggestions Welcome:

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