

The Development of the ONRSR Annual Safety Report

Consultation with the RISSB Safety Managers Group

Steve Bickley, Director, Safety and Risk Russell Preece, Manager, Safety Intelligence 21 Aug 2013

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

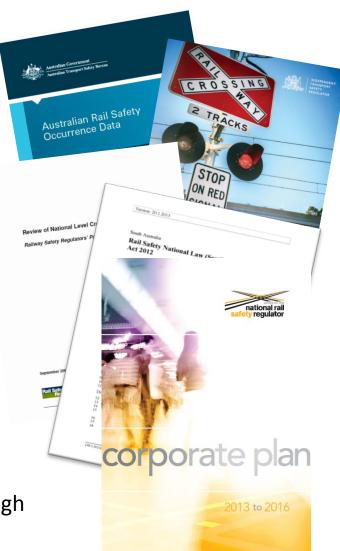


Historically...

- 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

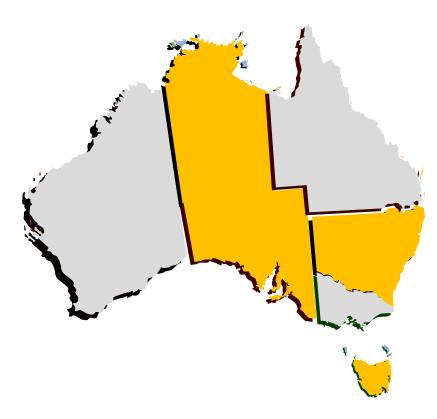
Our Intent...

- 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

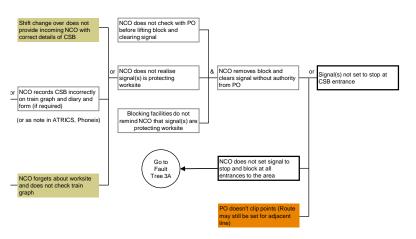
Study Area

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

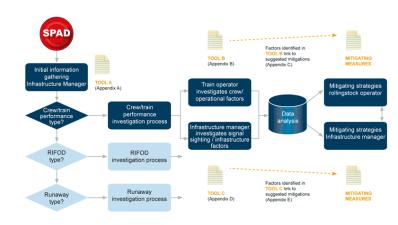
Annual Safety Report Challenges



- 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.)



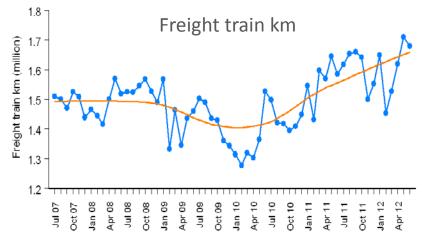
- data still sparse and there remain definitional inconsistencies between jurisdictions
- some important precursors not clearly defined eg. misalignment, degraded working
- estimation of risk hampered by inconsistent consequence data eg. 'serious' injury
- some regulatory risk models exist but vary in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



Content Outline



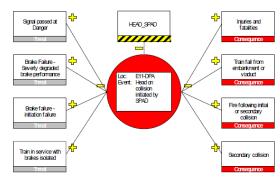
- Key sections proposed
 - Introduction: the new Regulator
 - Industry Overview: NSW, NT, SA, Tasmania
 - General 'risk picture': safety risks in context
 - Identification of (focus on) key risks
 - Safety performance 2012-13 (key areas)
 - Analysis of key accident precursors
- First report sets new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

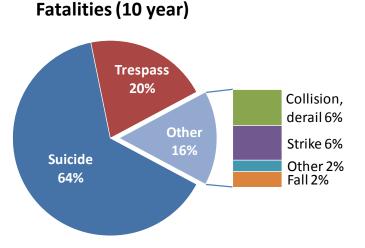


Content – General Safety Picture



- 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







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

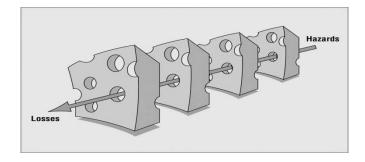


	ra Naladi na Madina Dagi	In Di		InsDes Cront				C Sheri Den	No Dist. In streps lite
22,727	N.	an/er /sea	3/2	1003 No. 24	CINTRA	0.3	11,00,10	Te di Di bihacher Hadard Disjed	2 Mag (2023) Ma
22,722	N	n in here						the first starting of a little	2 Mag COSTA Ma
11	(F	an/er/hea	-	0.000 0.000	(BURNDOD	2.5	10,010,222	Security Verilation Set 15	A COMPANY
-	×	an /er /beau	100	IN 1226 Nov 201	200/80	E 20	11107 0.000	Citier Test I rag	a la seconda Ma
228, 728					a constant and				2 Mag CODDI Ma
228,722	N.	an /er /hear	3.0	NOR AND	CENTRAL	0.3	11,000,000	Asking Start Imp Cities	2 Med_20203 Me
121.785	×	an ity in the	1147	1000 No 00	CENTRAL	0.3	\$11.010.000	failes Soft has fixed rear Sort	2 Med CODER Me
228,722	N.	an /or /hous	1.0	MICL SPRINGER	OUND/S	30.3	10,000,000	Not show of a second set	2 Mag (20203 Ma
121 722	×	n tr hea	1101	INCOME. VOLUME	HADILINGON	86.73	1001030	Security Termine Cities	2 Mag. COSTA Mar
228, 770	N .	an /er /h cua	112	0.000 Ave 70	LANGTOWN	2.7	10,010,000	Description Of Inter Def 13	2 Mag (2020) Ma
222,727	x	n tr hea	31.22	n.cos. n	ANGTOWN	2.7	1001010	Security Termine Cities	2 Mag. COSTA Mar
228, 778	Y	an for A cas	1.0	INCOME. No. 2	45102.010	2.0	10,010,122	Security Sings Steep at Co. Tel 1	2 Mag (2023) Ma
22, 10	x	n tr hea	22	In CORP. Name	agreen new		10000030	Security Telephone Cities	2 Med CODER No.
121, 728	Y	n fr hea	17.30	INCOME NAME	activor o	E 555	10,010,020	Security Temporal Street	2 Mag (2023) Ma
101.720	x	n tr ben	27.20	0.000 0.00	010100	2.1	100000000	Security Tenner City	2 Med CORDON
228.727	N .	n tr hea	18.12	10072 Au 207	ALLANAM	31.7	1000000	Not she where should all	2 Mag (2020) Ma
228,722	Y	n tr hea	30	0/212 0-0-	UNENDER	30.0	820.010.103	Security Version and Security and Theorem	2 No. 0000 No.
228,220		n tr hea	10.00	INCO Distant	ALIEUTY	2.0	10000	Search of the second sections	1 003 104 101 1
224,722	x	n tr hea	23.33	1007 10 C -	ALC: NO	2.0	1001010	Security Termanette articles	2 Mag. College Ma
228,728	x	n tr bea	30	INCOME A DIVE	10498.0	2.0	1000	In Note Color-Tarabase	2 1042 20223 104
224 722	N .	an to how	17.00	In Case, Diver	HADRINGON	8.7	100000000	Security Tenner City	2 Mad CONSIGNATION
228,720	N I	n tr hea	28.22	INTER Search	100/010		10000	Security March (and Security Sec.) 1.5	2 Mad CODER No.
111 12	Y	11.07.000		INTER Search		11.5	1201012-220	Security Methods are Sel113	2 Mail COSTA Ma
224,722		10.01.000	10.00	NO.128. 1992-	POST CIME		110000	All regions and the states	TIME CONTRACTOR
-1.72	Y	11.07.000		INCOME AND	A BOMBAN	1.1		Security Merchilery Cities	2 Mail Inc 18 Ma
111.78		a. (*) (*)	73.76	INCOS Direct	MELLIC SHO		IN COLUMN	The Statute of the Statute	A NEW DOOLD WA
228,707	Y	11.07.300		11/327 5-0		2.5		Security Version Sellings Cities	2 Mag CODE No.
23.23	× .	n tr bea	11.01	INC.15 10 10 10	VICTOR OF T	10.0	100000	Served on Man Call Jame City of	1 000 100 100 1
24.78		11.07.000		INC.15 10 10 10				Served on Man Sel June Citing	2 1042 00003 104
11.72		n.tr.bea		10000 PV10				Security March Law Bell 1	2 Med CODE No.
24.72		11.07 1 014		INCOME DIVIS				The Trachel Could are Zaire Same	3 Med C1223 Me
11.75	× .	-	-						2 Med proteit Me
	×	n tr hea	-	DOM: And		20.0		Sector City	2010000000000
		10.07 10.00		NOD NOD				Juling Zool Ing Cifer	COMPANY AND A DESCRIPTION OF
224,731	Y.	and a local	- 100		Concerning of the	_		the start free sheaf of	

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



Questions?

Feedback and Suggestions Welcome:

Steve Bickley

Director, Safety and Risk

steve.bickley@onrsr.com.au

08 8406 1530