RISSB Product Proposal (and Prioritisation)

Primary information	
Type of product being suggested:	National Guideline and Toolkit
Title of product being suggested:	• National Guideline for the Prevention and Management of Suicide on the Railway • Toolkit for the Prevention and Management of Suicide on the Railway
Date of suggestion:	14/02/2019
Reason for suggestion:	Railway suicides continue to be an important and highly impactful critical incident in the railway industry. The significance and effect of this event in terms of personal tragedy, cost, security, mental health of crew and others involved, and disruptions to services is substantial. Ergonomie has invested resource into creating a Social Research Project around rail suicide designed to make a proactive and positive difference to this traumatic issue. The initiative to create a National Guideline for the prevention and management of suicide was prompted by support from RISSB who saw an opportunity for this guideline. The concept of a national guideline was initially discussed at the RISSB National Track Worker Safety Forum in Perth in October 2018. During this two-day workshop, Craig Fletcher, Managing Director and Principal Consultant from Ergonomie, presented on the suicide research that had been conducted at Ergonomie in the past year. Forum participants discussed the differences in terms of their professional experience and the way that suicide was dealt with across the different states. It is considered that a gap exists around consistency and shared knowledge between operators across the country in how to best prevent and manage railway suicide. At the conclusion of the RISSB National Track Worker Safety Forum, it was identified that a need did exist to share best practice tools and techniques for the prevention and management of railway suicide through a national guideline. It is considered that the approach should entail the development of two major outputs for rail operators: a) National Guideline for the Prevention and Management of Suicide on the Railway b) Toolkit for the Prevention and Management of Suicide on the Railway
Railway discipline area:	Safety, risk management, self-harm, trespass, human factors, station design, crew training, incident management, operations.

Objective:

What:

Guideline

The National Guideline will provide information to the operators on how to set up a framework within their organisation to prevent and manage suicide on their network. It is anticipated that the Guideline will provide operators with guidance on the implementation of appropriate systems and processes to support the management of suicide on their network. This will include, but not be limited to, guidance regarding the development of an overarching policy and associated process and procedures.

The guideline will include guidance on the identification of appropriate preventative measures to be implemented by the operator, ranging from physical barriers (to limit access to the railway) to staff training (e.g. training station staff to identify those who are presenting with suicidal behaviours). The Guideline will not be prescriptive regarding the specific mitigations to be adopted, instead it will provide potential options for the operator to consider when developing their suicide management framework.

Toolkit

The Toolkit is a practical tool that provides operators with a comprehensive list of options that are available to prevent and/ or manage the impact of railway suicides. The information presented in the Toolkit allows operators to identify the most appropriate prevention and mitigation strategies for their specific type of operation (network owner/ operator; rollingstock operator etc.). The toolkit will include a comprehensive list of mitigations that have been identified as being feasible for implementation in the Australian rail environment.

For whom:

The Guideline will be applicable to all rail industry stakeholders but will predominantly be applicable to Rail Infrastructure Managers and Rolling Stock Operators. It would not be compulsory in nature, but rather a Guideline for the operator to aim towards.

The Toolkit is applicable for all rail industry stakeholders, including: all operators types; rail safety and WHS regulators/ research bodies/ investigating agencies. However, the intention is that it would be used predominantly by rail operators to support the identification of suitable mitigation measures to implement on their network.

Why:

The statics below are taken from the Office of the National Rail Safety Regulator (ONRSR) Rail Safety Reports for the period 2016-2017 and 2017-2018:

	Fatalities			Serious injuries		
Period	**Total**	**Suspected Suicide**	**%**	**Total**	**Attempted Suicide**	**%**
2016-2017	89	73	82%	84	22	26%
2017-2018	104	87	83%	90	16	20%
Total	193	**160**	**83%**	174	**38**	**22%**

These statistics demonstrate that there is a considerable, and consistent, number of fatalities and serious injuries occurring on the Australian railway as a result of suicide each year.

Not only is the issue of railway suicides substantial, there is no consistent or standardised approach used within each state to deal with the issue. Each state within Australia has different Guidelines that regulate how they manage and prevent suicide on the tracks. While this local management accommodates the particular needs of the state according to population, geography, resources and so on, there is a lack of national oversight, communication and collaboration on critical incidents, such as railway suicides.

The introduction of national Guideline for the Prevention and Management of Railway Suicides would ensure there is a consistent and collaborative approach to addressing the issue across Australia. It would unify states and provide a model of best practice to be rolled out.

Having access to a Toolkit which provides a comprehensive list of preventative and mitigative measures would also support the move towards a more consistent approach within Australia. Having a focus on both the prevention and management of railway suicides allows for a large scope. This ensures that as many elements of the issue can be addressed in a holistic approach that is broad and addresses the multi-faceted nature of the issue.

Scope:

The Guideline would be directly focused on the best practice methods, both nationally and internationally, of how railway suicides can be managed and prevented.

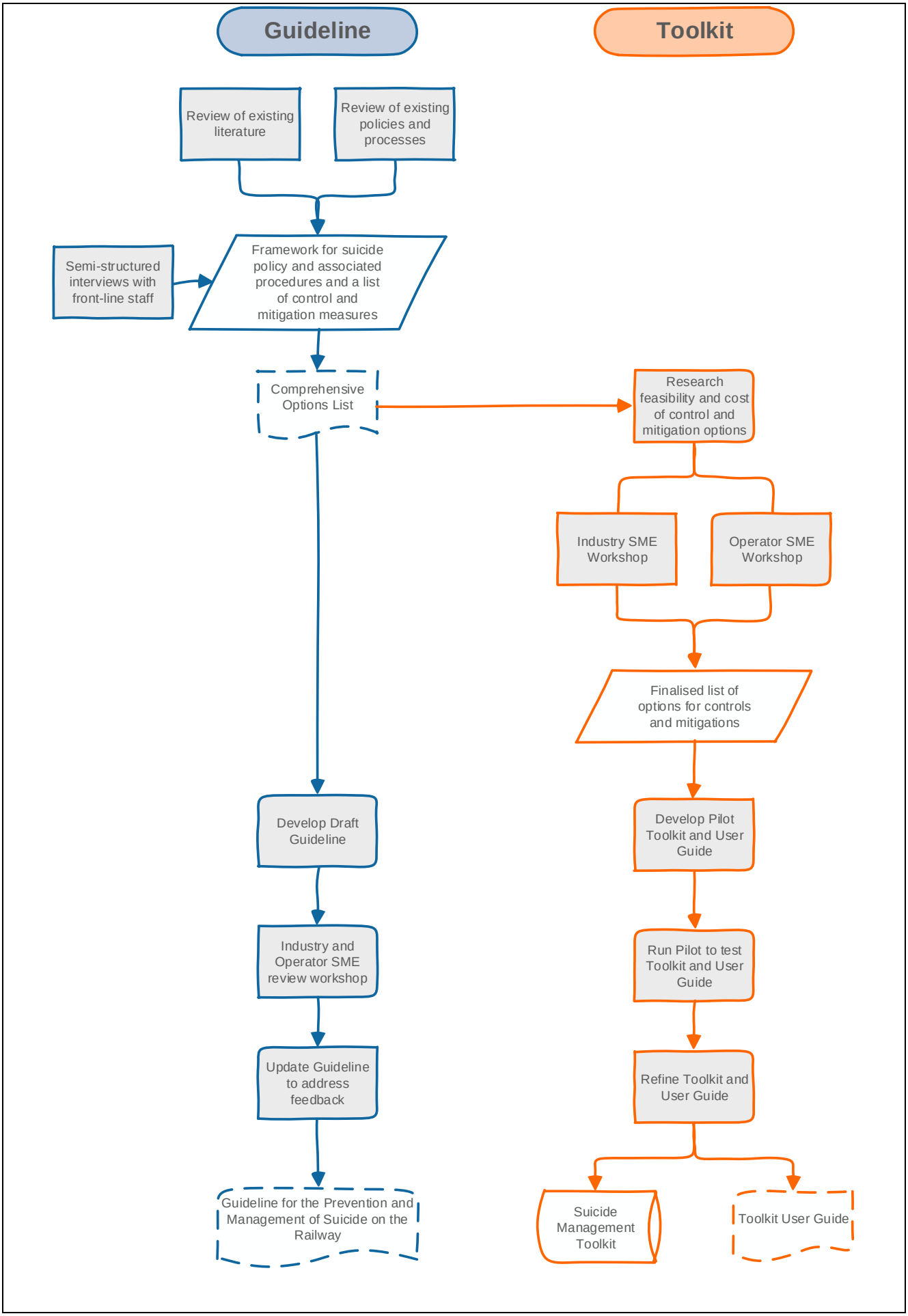
This Guideline will include:

- An overview of the nature of railway suicides, including (but not limited to): a clear definition of suicide; statistical suicide rates; costs; demographics of those attempting to/ committing suicide; influencing factors regarding the selection of the railway.
  Data will be sourced from Ergonomie's literature review and other research papers as they become available.
- Guidance on how to develop a framework and management system to support the prevention and management of railway suicides
  Developed based a review of existing policies and processes in place within Australia and semi-structured interviews with those implementing the policies to identify which aspects should be carried forward into the best practice framework.
- A comprehensive list of mitigation measures that are available for the prevention and management of suicide on the railway.
  Developed from a structured process of research and semi-structured interviews and workshops with industry stakeholders and Operator subject matter experts.

The Guideline will not mandate which specific mitigation measures an operator should adopt. The diverse nature of the Australian railway means that a 'cut and paste' approach, in which a standardised approach to the number and type of interventions applied, would not be realistic or effective. The decision to create a Guideline therefore is one that respects the complexity of the nation-wide variation in terms of resources, demographics and geography of the railway system.

The Toolkit would provide a practical tool that allows operators to look at what options are available that would be suitable for their type of operation (network owner/operator; rollingstock operator; etc.). Each mitigation would be presented to the user of the Toolkit along with the predicted cost (financial); benefits of implementation; and examples of where it has been implemented previously (nationally or internationally). It is envisaged that the user will be able to filter the options to ensure that they are presented with the most suitable mitigations for their operations, taking into consideration the geography, demographics, organisational needs and incident history of fatalities on their railway network.

The Guideline would refer out to the Toolkit as a source of further detailed information on the implementation and application of the various mitigation measures. Thus, while they would be developed as two separate deliverables they would be created in a parallel manner to ensure consistency in the information presented. Please refer to the diagram below, which presents the process flow for the development of the Guideline and Toolkit for the Prevention and Management of Suicide on the Railway:


Guideline
Toolkit
Review of existing literature
Review of existing policies and processes
Framework for suicide policy and associated procedures and a list of control and mitigation measures
Semi-structured interviews with front-line staff
Comprehensive Options List
Develop Draft Guideline
Industry and Operator SME review workshop
Update Guideline to address feedback
Guideline for the Prevention and Management of Suicide on the Railway
Research feasibility and cost of control and mitigation options
Industry SME Workshop
Operator SME Workshop
Finalised list of options for controls and mitigations
Develop Pilot Toolkit and User Guide
Run Pilot to test Toolkit and User Guide
Refine Toolkit and User Guide
Suicide Management Toolkit
Toolkit User Guide

Hazard identification:		
1	Train Crew health and wellbeing	Reduce incidents of Drivers and other Train Crew being exposed to suicide and therefore reduce incidence of post-traumatic stress disorder (PTSD) and other psychological disorders.
2	Station Staff health and wellbeing	Reduce incidents of Station Staff being exposed to suicide and therefore reduce incidence of post-traumatic stress disorder (PTSD) and other psychological disorders.
3	Passenger health and wellbeing	Reduce incidents of Passengers being exposed to suicide and therefore reduce incidence of post-traumatic stress disorder (PTSD) and other psychological disorders.
4	Members of the Public (MoP) health and wellbeing	Reduce incidents of MoP being exposed to suicide and therefore reduce incidence of post-traumatic stress disorder (PTSD) and other psychological disorders.
5	Rail safety incidents	Reduce the risk of further rail safety incidents occurring as a result of the Driver being distracted from their primary task following a prior incident.

Definitions

i A ***Guideline*** is a set of informative guidance. It is not normative but informative.

A ***Code of Practice*** is a set of descriptions. It is the "how" one can meet a higher-level requirement (either of a Standard, or a piece of Legislation). It is normative, but by its nature can contain several options about how to achieve compliance with the higher-level requirement. It can also have some informative guidance within it if it is more practical than writing a separate Guideline.

A ***Standard*** is a set of requirements only. It is the "what" must be done to be claim compliance to the standard. It is normative. It can also contain optional and/or supplementary requirements, but they still should be worded as requirements.

Benefits:

Safety

The measurable improvements in safety that would come from having a national Guideline and Toolkit for the prevention and management of suicide on the railway are as follows:

- Fewer people seeing their suicidal thoughts through to completion due to preventative measures being in place, e.g., physical barriers at stations to limit access; increased rates of interventions from rail employees/ station staff.
- Reduction in safe working incidents caused by Driver distraction as a result of a prior incident (reduction in SPADs etc.) – this would be achieved through improved support and management of staff following an incident.
- Operators will be able to demonstrate that they are managing the risk of suicide as far as is reasonably practicable through implementation of a framework and demonstrated consideration of mitigation options.
- Improved physical and mental health and wellbeing of staff through the improved post-incident management of a suicide.
- A reduction in the Lost Time Injury Frequency Rate through the improved post-incident management of a suicide.

Interoperability / harmonisation

It is anticipated that the Guideline will be taken up and implemented by rail operators across Australia.

The nature of the Australian rail environment requires that rail operators work together to ensure that rail safety requirements and operational needs are met. By implementing a consistent approach to the prevention and management of suicide on the railway there will be a greater likelihood that the mitigation measures are successful. For example, a consistent approach to the post-incident management of a suicide will support the operators to resume services quicker (through collaboration with each other and external organisations, i.e. the police) and will ensure that staff are supported in a consistent manner, regardless of where the incident occurs.

The Guideline will be structured to allow operators to integrate the guidance into their existing management systems. The Guideline will be designed in a way that allows operators to adopt the guidance in full or in parts to ensure that is suitable for their specific rail operation (geography, type of operation etc.).

Financial

In Australia, specific data does not exist regarding the financial impact of railway suicide, although it estimated to be very high. In the UK it is estimated that it costs the rail industry between £20m and £40m per year; the largest element being the delay and cancellation costs paid by Network Rail to the affected Train Operating Companies (RSSB, 2014, p. 2). Implementation of a national Guideline for the prevention and management of railway suicide would increase the efficiency of post-incident management through improved collaboration between rail operators and external agencies (e.g. police/ coroner etc.). This should lead to a reduction in the time taken to manage the incident, reducing operational down time and, in turn, reducing the financial cost of these events.

The cost of implementation of the Guideline would depend on the extent to which the operator implements the guidance. Implementation of a management system framework for the prevention and management of suicide would not be a significant financial cost to the operator. Implementation of mitigation measures would increase the financial cost to the operator. However, it is intended that the Toolkit will be available to support the identification of measures that are the most appropriate for their type of operation, taking into consideration the size, geography and needs of their organisation.

Environmental

N/A

Impacts:

Elements that might impact the development of this product:

Large Scope of the Project

The scope of the project is more than the development of a Guideline. It also includes the development of a Toolkit to support operators in making informed decisions when selecting and implementing mitigation measures. This is not considered to be an issue necessarily, but does need to be taken into consideration when scheduling the activities required to complete both streams of work.

Sensitivity of the topic

It is understood that the impact of witnessing or being involved in a suicide incident may make it difficult to talk about.

Regarding ethics and the psychological ramifications of asking people about the critical incident that they have experienced, conversation would centre around the professional and procedural aspects of the experience with railway suicide. For example, in conversations with train drivers there would be a focus on how the incident was dealt with professionally and procedurally, to minimize any emotional triggering. While it is hard to prevent complete emotional engagement when reporting on a traumatic event, all measures would be taken to avoid re-living the psychological damage that occurred at the time.

Guidance from professional bodies, such as Lifeline, would be sought to ensure appropriate strategies are put in place when conducting data collection with front-line staff who have lived experience.		
Reference / source materials:		
#	Reference / source material	Available from
1	Rådbo, H., Silla, A., Lukaschek, K., Burkhardt, J.M., Paran, F., (2012), Reduction of Suicides and Trespasses on RAILway property Collaborative project: Current knowledge of railway suicides and trespassing accidents.	http://www.restrail.eu/IMG/pdf/restrail_wp1_kau_wop_001_310712_a_final_draft.pdf
2	Havârneanu, G.M, Bonneau, M. H., Colliard, J. (2016), RESTRAIL: REduction of suicides and trespasses on RAILway property. Lessons learned from the collaborative European project, European Transport Research Review, 8(2), 1-15.	https://www.researchgate.net/publication/262379779_RESTRAIL_Collaborative_project_on_REduction_of_Suicides_and_Trespasses_on_RAILway_property
3	Daigle, M. S, (2005) Suicide prevention through means restriction: Assessing the risk of substitution A critical review and synthesis, Accident Analysis and Prevention, 37, 625-632.	https://www-sciencedirect-com.wwwproxy1.library.unsw.edu.au/science/article/pii/S0001457505000400
4	Bardon, C., Mishara, B. L., 'Reducing the Impact of Railway Fatalities on Crew Members' (2012), International Rail Safety Conference, London.	http://international-railway-safety-council.com/wp-content/uploads/2017/09/bardon-mishara-reducing-the-impact-of-railway-fatalities-on-crew-members.pdf
5	Rail Safety and Standards Board (2014), 'Research Brief: Improving suicide prevention measures on the rail network in Great Britain, T845 - February 2014' RSSB, London, 1-5.	https://www.rssb.co.uk/Library/research-development-and-innovation/2014-02-research-brief-t845-tackling-suicide-on-the-railways.pdf
6	Rail Safety and Standards Board (2014), 'Network Rail/Samaritans Tackling Suicide on the Railways programme: Annual Report 2013 Annex E: Case studies of different elements of the programme', RSSB, 1-46.	https://www.rssb.co.uk/research-development-and-innovation/research-project-catalogue/t845
7	Ryan, B. (2017). What do we know about rail suicide incidents? An analysis of 257 fatalities on the rail network in Great Britain. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 231(10), 1150-1173.	https://journals-sagepub-com.wwwproxy1.library.unsw.edu.au/doi/abs/10.1177/0954409717701775
8	Bardon, C., Mishara, B.L (2008) 'Research and counter measures to reduce suicide on railway rights of way and their impact on railway workers', Centre for Research and Intervention on Suicide and Euthanasia, University du Quebec a Montreal.	http://restrail.eu/IMG/pdf/restrail-midterm-08-canada-bardon.pdf
9	Comparison between accidents and suicides in Canada' University de Quebec a Montreal, Centre for Research and Intervention on Suicide, Ethical Issues and End-of-Life Practices, n.d. uns	http://railwaysuicideprevention.com/railway-fatalities/accident-suicide-comparison.html

10	The Senate, Rural and Regional Affairs and Transport References Committee, (2017) 'Australia's rail industry', Commonwealth of Australia	https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Railindustry45/Report
11	Rail Safety and Standards Board, (2017), Leading health and safety on Britain's railway Progress Report,	https://www.rssb.co.uk/Library/improving-industry-performance/2016-03-rhss-v1.pdf
12	Safe Work Australia, (2018) 'Mental Health'	https://www.safeworkaustralia.gov.au/topic/mental-health
13	Folkhalsomyndigheten, Public Health Agency of Sweden, (2016) 'National Action Programme for Suicide Prevention', Public Health Agency of Sweden,	https://www.folkhalsomyndigheten.se/contentassets/55a1a12d413344b099f363c252a480bb/nation-action-programme-suicide-prevention-16128.pdf
14	Doroga, A.C. L. (2013), Traumatic exposure and posttraumatic symptoms for train drivers involved in railway incidents, Babes-Bolyai University	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4462444/
15	Bardon, C; Mishara, B. L, (2012) 'Reducing the Impact of Railway Fatalities on Crew Members', International Rail Safety Conference,	http://international-railway-safety-council.com/wp-content/uploads/2017/09/bardon-mishara-reducing-the-impact-of-railway-fatalities-on-crew-members.pdf
16	University de Quebec a Montreal, Centre for Research and Intervention on Suicide, Ethical Issues and End-of-Life Practices, n.d., 'Comparison between accidents and suicides in Canada', UGAM	http://railwaysuicideprevention.com/railway-fatalities/accident-suicide-comparison.html
17	ONRSR, (2017), 'Rail Safety Report 2017-2018'	https://www.onrsr.com.au/__data/assets/pdf_file/0018/22626/17789-ONRSR-Safety-Report-Spreads.pdf

Definitions

ii ***Interoperability*** is the ability of a process, system or a product to work with other process, systems or products (aka compatible systems through managed interfaces).
iii ***Harmonisation*** - the act of bringing into agreement so as to work effectively together (aka uniformity of systems).