RISSB Product Proposal (and Prioritisation)



(The information you provide in this form will be used to help stakeholders determine where the proposed product sits within the railway's priorities. <u>The more thorough your submission, the better the decision</u><u>making process in prioritising new ideas</u>.

Light blue italicised text is for guidance and should be deleted as the form is completed. Feel free to write more words, text boxes will expand as necessary.)

Primary information					
Type of product being suggested:	Guideline				
Title of product being suggested:	Recovery or re-railing of rolling stock				
Date of suggestion:	06/02/2019				
Reason for suggestion:	Observed deficiency in what some network owners may require but for which some rolling stock operators do not have specific processes relating to the recovery of defective rolling stock or the re-railing of all types of rolling stock.				
Railway discipline area:	Rolling stock, operations and safety				

Objective:

The guideline is intended to cover the processes required to be applied for the recovery of defective rolling stock unable to operate on a railway as well as derailed rolling stock on networks throughout Australia and in particular the re-railing of rolling stock in electrified network.

Scope:

The scope of the guideline would cover all categories of rolling stock which during the railway operations planned they break down, become defective or are involved in a collision or derail during their operations.

Network owners and rolling stock operators have as part of their Safety Management Systems, processes to cater for an emergency but what is often not included is the specifics of how to recover from the emergency.

There are hi-rail excavators that could become defective during their worksite operations on – track but for which there may not be a specific recovery process other than to require them to be removed from track. How are they removed from track?

Large track machines could derail in the course of the operations they engage in whether travelling on the open network or within possessions / occupations and whilst cranes may be able to be used in some cases what of other non-accessible areas or networks electrified and for which extraction by crane may require the relocation of the overhead wiring system.

The guideline will not cover issues dealt with in emergency or incident management plans but will focus on the recovery methodology process itself which will include the various options, operational recovery / re-rail, the use of jacks to effect the re-rail and the use of cranes as the recovery method.

Hazard identification: (what safety hazards would the proposed product seek to address)

1	Personal injury	6	
2	Operational disruptions	7	

3	Damage to rail infrastructure	8	
4	Damage to rolling stock	9	
5		10	

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: (enter wherever applicable in below categories)

<u>Safety</u>

The guideline could be used to assist rail transport operators develop processes for the recovery of rolling stock that may have become defective whilst on track, may have been involved in an operational incident including a derailment.

There are times when items of rolling stock becomes defective or has been involved in an operational incident people decide themselves the means of recovery but may not take in to account all options available or those that are most practicable.

The result is that people put themselves and others at risk when attempting to do the right thing but implement the wrong approach.

The event has occurred and it is time to recover the item of rolling stock but has the contingency arrangements for such an event been determined and are the required resources available to effect the recovery. Has the methodology been trialled to ensure its availability and effectiveness? If these items have not been addressed within the operators SMS there could be lengthy delays in getting the respective item recovered, any repairs to the infrastructure undertaken and the track returned to operational running.

There are a variety of products that can be used for the recovery process but what is reasonable and practicable to have operators implement or should the network owner assist in the recovery process of items of rolling stock that have been operating on their network.

To reduce the risk SFAIRP it is required to consider all known options and determine the most effective and efficient control to be applied.

Interoperability / harmonisation

At present there appears to be a deficiency in the actual processes and equipment used to recover defective or derailed rolling stock so an opportunity to provide network owners around the country with a guideline to enable them to consider the options and build processes in to their systems.

The larger rolling stock operators they may well have the framework and resources to deal with such events however on questioning some of these organisations they conceded they don't have documents processes that sets out how the recovery will be undertake, what will be used, the options and the resources needed.

Smaller rail transport operators will need guidance to assist in putting the relevant processes in place as they will advise the network owners control centre that an event has taken place but do they wait for the

network owner to respond or should they have systems themselves that activate when such an event occurs.

Financial

Without a guideline or other similar document industry is without clear direction of the processes that should be implemented following an event where an item of rolling stock is found to be defective, is involved in a forceful collision putting the item out of service but still on track or is derailed.

From the time of the event the clock is ticking and if the item is not recovered in a reasonable period of time, costs will start escalating. The environment or the network may determine what is able to be applied but if the process isn't established and trialled such events could incur lengthy delays to a network owner.

There are products available and used on some networks across Australia to recover defective items of rolling stock or others that are impacting on the operational capability of the network so it would be necessary to determine what is available and what is currently used. Is the cost of such items that which can only be borne by larger rail transport operators or is it relative to other smaller operators?

If new technology is to be introduced how is the change managed and what training and instruction is required to be rolled out to workers involved in the items use or the recovery of the rolling stock and the planning should such an event occur.

Should the recovery process fall to the network owner are they able to recover costs through the access agreement in place with the rolling stock operator but what if there is no existing access agreement who bears the cost of recovery.

Environmental

Environmental factors need to be incorporated in any recovery process where rolling stock has been involved in either a break down or incident. Spill kits are available on most items of rolling stock that operate on networks but what if the incident / breakdown results in major spillages.

Impacts:

Without guidance of any sort the rail industry is relying on people at a location where an event has occurred to do the right thing. But what if the process attempted turns out to be the wrong option thereby compounding the problem created.

Some RTO's will have the recovery process covered but is it documented and is it effective. Can it be provided to others to implement or should others be required to develop their own processes.

Is the cost of some recovery items too prohibitive for small operators to directly source or could they utilise what the network owner may have and pay a fee for such use.

Reference / source materials: (*This is very important; it will directly impact the tone/style/flavour of the product. It will also have an impact on the research we undertake and therefore impact timescales/cost. It may also be useful to identify reference / source materials that should be avoided.*)

#	Reference / source material	Available from				
1						
2						
3						
4						
5						

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).