

## NEW ZEALAND RAILWAY AND TRAMWAY SAFETY REGIME

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### **Legislative Scope of Review**

A review of current legislation which deals with railways, tramways and other transport systems using fixed infrastructure has been carried out. The following acts and associated regulations are involved:

District Railways Act 1908;  
Local Government Act 1974;  
Local Railways Act 1914;  
NZ Railways Corporation Act 1981;  
Public Works Act 1981; and the  
Tramways Act 1908

### **Requirements for Licensing**

There is obviously an initial need to identify railway and tramway operators, particularly in regard to Government monitoring of safe operation. The simplest and most logical way to do this would be to require operators to be licensed under the Transport Services Licensing Act 1989. This involves no quantity control, but would provide a simple form of identification as a basis for the safety audit procedures covered later.

There are also a large number of small railway systems used by fairground railways and model engineering clubs that can carry passengers. These are presently covered by the Machinery Act 1950 (Amusement Devices Regulations). To eliminate any conflict between these regulations and the safety regime proposed for "large" railways, the most simple division point is the track gauge. The systems covered by the Machinery Act all effectively have a track gauge of less than 550mm, while the systems covered by this proposal all exceed this gauge.

Any person responsible for providing or using a system using track with a gauge between the rails greater than 550mm and/or providing or using rail vehicles for the public carriage of passengers or freight would then be required to hold a licence under the general terms of the Transport Services Licensing Act 1989.

Private sidings off a railway system, involving no ownership of rolling stock, would be deemed to be part of that system and not require a separate licence. Works railways, providing they did not cross a public road, would be treated as industrial machinery for safety control.

### **Safety Audit Model**

A safety audit model applied to the railway and tramway mode can therefore have following procedural stages:

- a) Legislation sets general safety principles for railway systems, including the scope of Safety Agreements;
- b) The general scope of the Safety Agreement would be specified by Regulation to include inspections; infrastructure design and maintenance standards; vehicle design and maintenance standards; train crew and operating staff training and certification; operating, signalling and traffic control practices. The document would be restricted to matters relating to safety;
- c) All existing railways and tramways are identified by the procedures already outlined;
- d) Each identified railway or tramway operator sets minimum safety targets and prepares detailed documentation of proposed safety practices, in terms of legislative requirements and its business aims;
- e) Ministry of Transport appoints a competent auditor who examines and recommends approval of safety practices set out in the draft Safety Agreement;
- f) Agreement concluded between Ministry and operator;
- g) Operator is then responsible for operating within agreed Safety Agreement;
- h) Amendments to the Safety Agreement would be processed in the same manner;
- i) Ministry of Transport would be responsible for periodic audit of operator compliance with Safety Agreement, either directly or by use of a third party.

- j) In the event of repeated non compliance, legislation would have penalty provisions, up to and including licence restriction, suspension or removal.

### **Steam Boilers and Overhead Electricity Supply**

Two aspects of railway and tramway engineering are currently dealt with in separate general legislation.

- a) For all railways other than the NZ Railways, boilers of steam locomotives are currently inspected in terms of the Boilers, Lifts and Cranes Act 1950. The NZ Railways Corporation still have powers to certify boilers to its own standards. Given the specialist nature of railway steam boilers, it seems appropriate that inspection by "proper persons" of the standards relating to these should be included in the particular Safety Agreements, through an amendment to the requirements of the Boilers, Lifts and Cranes Act or successor legislation, including regulations. All operators would then be on the same basis.
- b) Matters relating to supply of electricity for tramways and railways are currently covered by the Electricity Act 1968 and the Electrical Registration Act 1979 and related regulations. New Zealand Railways again has an exemption. In order to be consistent for all operators, it would be appropriate to include responsibility for these matters in the particular Safety Agreement, by amending the appropriate legislation.

### **Transitional Arrangements**

The initial development and preparation of Safety Agreements is likely to take some time, particularly for the enthusiast railways, who rely on volunteer work forces. There will therefore need to be a significant period of transition, as follows:

- a) All operators to hold an appropriate transport service licence within three months of the legislation being passed;
- b) Existing safety legislation in the Public Works Act or the NZ Railways Corporation Act 1981 to apply as appropriate to all operators for an agreed interim period, subject to satisfactory progress towards completion of a Safety Agreement;
- c) All Safety Agreements to be completed by 1993, with provision for reasonable extension at the Secretary for Transport's discretion where justified;

- d) Any new operator proposing to start after the legislation is passed, other than a former component of the NZ Railways Corporation, to have a Safety Agreement in place before operations start.

### **Accident Investigation**

There needs to be an accident and incident reporting (and investigation) mechanism that:

- a) Applies to all operators;
- b) Provides adequate information for identification of adverse trends;
- c) Provides for external investigation and public reporting of serious accidents.

All serious accidents on any railway and tramway system should be required to be reported to the Ministry of Transport. At that stage, there would be a mechanism for identifying accidents that were serious enough to warrant detailed public investigation. The procedures would be similar to those introduced in the Civil Aviation Law Reform Bill.

The Ministry has already developed a proposal for an independent Air Accidents Investigation Commission, and has signalled that it is ultimately intended to develop this into a Transport Accidents Investigation Commission to investigate serious transport accidents across all modes.

Extending the scope of the Commission to include investigation of railway accidents, together with the reporting system noted above, would provide the necessary structure to monitor and investigate railway and tramway accidents.

### **Transport Corridor Management**

A number of existing legislative provisions also relate to the safety management powers of the railway operator over the transport corridor for which it is responsible. These particularly relate to:

- a) level crossings, particularly of roads;
- b) control over lights adjacent to railway signalling;
- c) protection of the integrity of the track bed and other structures from erosion or other soil destabilisation;

- d) rights of action against trees and other external structures overhanging onto the railway.
- e) stock trespass

These matters, which are presently divided between the NZ Railways Corporation Act 1981 and the Public Works Act 1981, apply equally to all fixed infrastructure transport systems and should be retained in legislation.

There is also a legislative requirement for addressing issues of management responsibility;

- a) where two corridors, such as road and rail, cross;
- b) where two systems run together, such as in a tramway line along a street, or on combined road and rail bridges.

These are required to establish appropriate areas of responsibility for maintenance and construction. Again, they should apply equally to all operators.