Rail Safety Review

Phase 2 Report

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1. Introduction

1.1. Background

The Department for Infrastructure (DfI) acts as the National Safety Authority (NSA) for the Northern Ireland rail network and is responsible for ensuring compliance with the rail safety and interoperability regulatory framework. The Department does this in accordance with the Railway Safety Act (Northern Ireland) 2002 and associated regulations. The statutory functions of the RSA in the Department are exercised by Rail Safety Branch.

Following EU Exit and the different ways in which the legislative base had been amended for NI compared to GB, alongside the Northern Ireland/ Ireland protocol obligations stemming from the Withdrawal Agreement, it was necessary to review the way in which rail safety was organised in DfI. It was felt important to clearly establish the statutory duties for rail safety that were within the remit of Rail Safety Branch. As such, Phase 1 of the rail safety review consists of an extensive legislative review to identify the scope and extent of statutory duties as NSA.

The Phase 1 report sets out that DfI has three key roles in railway safety. Firstly, as 'National Safety Authority' for rail safety matters; secondly, as 'Competent Authority' for technical standards; and thirdly, as 'Competent Authority' for regulating the train driving professions. It should be noted that Rail Safety Branch is responsible for policy, legislation (except reserved matters on interoperability), operational delivery and regulatory compliance and/ or enforcement across these three key roles. In GB, Ireland and much of the EU these roles are split between policy and legislation (Government Department) and operational delivery and regulatory compliance (Independent Regulator).

In addition, the Phase 1 report also identifies some legislative divergence between NI and GB. The divergence in legislation has resulted in a lack of clarity regarding the allocation of policy and operational responsibilities, both within DfI itself, and between DfI and HSENI as regulatory authorities. This creates the potential for significant cross-over in the remit and work of DfI and HSENI.

In terms of the gaps in NI legislation, much of this relates to the broader regulatory role regarding economic and passenger rights regulations. However, there are some gaps specific to the rail safety remit such as; the division of responsibilities between the Rail Safety Regulator and Government Department; regulation of the train driving profession; offences relating to the use of alcohol and drugs; and funding of rail safety regulation. These gaps will need to be addressed and Phase 2 will provide insight on these issues, with the possible exception of offences relating to alcohol and drugs.

With this in mind, Phase 2 of the rail safety review will explore how the rail safety regulatory function is organised in other jurisdictions and best practice in relation to the structures, processes and systems necessary for the effective delivery of the rail safety function.

1.2. Aims and Objectives of the Rail Safety Review

The overall objectives of the review are focussed on the functions, processes and structure of the RSA role to ensure that it is fit for purpose moving forward and that the Department can effectively deliver on its statutory duty to licence and regulate safety and interoperability on the Northern Ireland rail network.

In particular, the objectives of the review are:

- To review the role/ remit of the RSA to ensure the Department is fulfilling its statutory and other responsibilities in the post EU Exit environment;
- To review the organisational structures, processes and systems to ensure the Department's approach to rail safety and interoperability is appropriately configured to deliver its legislative, policy and operational responsibilities; and
- To review the Department's approach to resourcing and financing rail safety and interoperability regulation to reflect best practice and the lessons which can be learned from other jurisdictions.

2. Methodology

2.1. Overview

In order to meet the three primary objectives of the review, it was felt necessary to conduct the review in three phases. Given the challenges set out in the Phase 1 report in relation to new, extended or additional responsibilities, especially in terms of reserved legislation DfI was not as familiar with as that made in the Assembly, it was felt a legislative review would be a necessary first step in clarifying our statutory duties and the scope of the role and remit of Rail Safety Branch. In contrast, it was felt that Phase 2 should obtain data on best practice from other jurisdictions in relation to how the rail safety function is organised, funded and delivered, as well as exploring other models for regulation which are deployed in Northern Ireland. This will provide insight on how other jurisdictions address those issues set out in objectives 2 and 3, as well as exploring how other policy areas are regulated in NI with a view to how they address similar issues in a different field. Finally, Phase 3 of the review will examine stakeholder views on what the role/ remit of a rail regulator should be, and how this role/ remit should be funded and delivered.

As Phase 2 of this review is focussed on identifying best practice in other jurisdictions in terms of rail safety regulation, and how other regulators in NI address the same issues in a different field, it was considered appropriate to adopt a desk-based case study approach.

2.2. Phase 2 – Desk-Based Case Study Review Methods

The desk-based review is an in-depth review of rail safety regulation in other jurisdictions and NI based regulators in different fields focussing on the organisational structures, processes and systems of regulators; how legislative, policy and operational responsibilities are allocated; and the approaches taken to resourcing and financing regulatory activity.

The desk-based case study review was conducted between August 2022 and June 2023. The review commenced with a shortlisting process to identify potentially suitable regulators to include as a case study. Once suitable case study organisations were identified a data extraction tool was developed to ensure the review obtained the necessary information in a consistent format. On completion of the data collection stage of Phase 2, the data was subject to extraction from the data extraction tool, it was then consolidated and analysed thematically. These processes are set out in more detail below.

2.2.1. Identifying and selecting case study organisation

The desk-based case study review process commenced with an initial scoping exercise to identify potential organisations for inclusion. In terms of rail safety regulators in other jurisdictions, identifying potential case study organisations was shortlisted on access and availability of key documents in English while looking for a range of regulators who applied different regulatory models. On that basis, the rail safety regulators included in the Phase 2 review are listed as follows:

- Northern Ireland
- Ireland
- New Zealand
- Great Britain
- South Africa
- Australia
- United States of America

In terms of identifying other NI based regulators for inclusion in this study it was felt prudent to include regulators on the basis that they were regulating either large public service organisations, regulating safety or regulating in the field of transport. On this basis, the following NI based regulators were selected for inclusion:

- Utility Regulator Northern Ireland
- Health & Safety Executive Northern Ireland
- Transport Regulation Unit

The selection of these rail safety regulators and NI based regulators in other fields takes in a range of different approaches to regulation and regulatory models. Additional organisations were considered. For instance, the review considered German Rail Safety Authorities to examine other models of devolution of rail safety regulation. The review also considered the Norwegian model to potentially explore how non-EU countries aligned to EU rail safety regulation through international treaty organise rail regulation. Unfortunately, it was not possible to explore these potential case studies further due to a lack of access to documentation in English and a lack of time and resources to investigate these models to the same extent as those listed.

2.2.2. Data collection and extraction tool

The review of each individual case study organisation was undertaken by different members of the review project team. As such, it was necessary to develop a data collection and extraction tool to ensure consistency between team members in terms of the information extracted for each case study.

The template for data collection and extraction sought to obtain several pieces of information (Annex A: Case Study Data Capture Template for Rail Safety Regulators (Blank) is a blank template used for data collection and extraction). Each case study of rail safety regulation in other jurisdictions sought to obtain the following information:

- Size and Scale of rail network
- Safety statistics relating to the network
- Organisation(s) that regulate rail safety
- Type of regulating organisation, its size, and degree of independence from Government
- Funding mechanism(s) for regulator
- Functions/legislative basis of regulator(s)
- Enforcement capability of regulator
- Type(s) of regulatory activity (e.g. monitoring and supervision)?
- Rail accident investigator (same or different organisation)
- Engagement/co-operation with other bodies
- Any other useful information

The data collection template was revised for NI based regulators in other fields to obtain the required information from those organisations (Annex B: Case Study Data Capture Template for NI Based Regulators (Blank) is a blank template used for data collection and extraction). The case studies of NI based regulators sought to obtain the following information:

- Type of regulator
- Regulatory statistics
- Type of regulating organisation, its size, and degree of independence from Government
- Remit/ Functions/ Breadth of Responsibility
- Board/ Governance arrangements
- Legislative and policy making role and responsibilities
- Enforcement capability of regulator
- Type(s) of regulatory activity (e.g. monitoring and supervision)?
- Investigatory powers and appeals
- Engagement/co-operation with other bodies
- Any other useful information

Once the template was completed for each case study review, the information was recorded in the data capture spreadsheet, along with a record of where it was stored in Content Manager and details of who completed the template. Data was subsequently consolidated for analysis. During the consolidation process some case studies were re-examined to obtain further information and insights.

2.2.3. Data consolidation and analysis

Once all the data was captured from the desk-based case study review an analysis spreadsheet was developed to consolidate the information captured. There were two separate spreadsheets, one for rail safety regulators in other jurisdictions and one for other NI based regulators in different fields. These spreadsheets covered all the pieces of information included in the two data capture templates. The information collected on each template was extracted to the appropriate analysis spreadsheet for interrogation.

The information collected in each spreadsheet was subject to a thematic analysis for the two types of regulators examined in Phase 2. This enabled the project team to explore different models and approaches to rail safety regulation, as well as different forms of regulatory forms deployed in Northern Ireland. In addition, it facilitated an examination of different structures, systems and process for regulation, as well as looking at funding and resourcing mechanisms for regulatory bodies.

2.3. Reporting the findings of the desk-based case study review

Chapter 3 of this report details the findings of the Phase 2 Desk-Based Case Study Review of rail safety regulation in other jurisdiction and NI based regulators in different fields. It commences with an overview of the current organisation, structure, and functions of the NI Rail Safety Regulator as a base for comparison with practices of rail safety regulators in other jurisdictions and NI base regulators in other fields.

Subsequently, Chapter 3 provides an overview of organisation, structures, functions, and practice of rail safety regulators in other jurisdictions. This part of chapter 3 focuses on identifying themes across rail safety regulators in other jurisdictions against the key questions set out above in the first part of section 2.2.2.

Next, Chapter 3 provides insights into the organisation, structures, functions, and regulatory practices of NI based regulators in other fields. This part of chapter 3 centres on highlighting emerging themes across the other NI based regulators of other fields against the key issues highlighted in the second part of section 2.2.2.

Finally, Chapter 3 draws together the themes across both rail safety regulators and other NI based regulators to identify some key questions for potential approaches to organisation, structures, functions and funding.

3. Findings

3.1. Overview of the NI Rail Safety Regulator

The broad regulatory framework for rail safety in Northern Ireland has been based on the EU model since 2006. This has primarily consisted of a system of licensing and certification for railway operators and infrastructure managers, and subject to regulatory supervision through safety inspections and audits.

Prior to the introduction of the EU model, rail safety regulation in Northern Ireland formed part of the broader UK approach. From its establishment in 1840 until the devolution of rail safety functions in the Northern Ireland Act 1998, His Majesty's Railway Inspectorate (HMRI) was responsible for safety on all UK Railways. The main functions of HMRI were to inspect and approve all new or modified railway works and to investigate railway accidents.

For the last 17 years, rail safety regulatory functions have been discharged by the Department for Infrastructure. The remainder of this section provides a more detailed overview of how rail safety regulation in Northern Ireland is organised, structured, funded, as well as outlining some of its key functions.

3.1.1. Size and Scale of rail network

The Northern Ireland rail network uses a track gauge of 1,600mm (5ft 3in), more commonly known as the Irish gauge. It consists of approximately 333km or 220 miles of operational lines, 13 stations and 39 halts and is controlled from three operations centres or signal cabins (Belfast, Portadown and Coleraine).

At the time of writing, there are currently 59 public road crossings and 74 user worked crossings across the network. In addition, there are numerous bridges, tunnels, viaducts, embankments, culverts and other civil engineering structures which form part of the network. The network operates only passenger services with freight services ceasing to operate in 2007.

Currently, there are 5 main passenger routes:

- Bangor line.
- Larne line.
- Londonderry/ Derry line.
- Portrush branch line.
- Portadown/Newry Line, Border line to Dublin; and
- Knockmore line (Lisburn-Antrim) which is mothballed.

There are three forms of passenger vehicles in operation on the mainline network, including 3-car Class 3000 Diesel Multiple Units (DMUs) built by CAF and first operated in 2004, a mix of 3-car and 6-car Class 4000 Diesel Multiple Units (DMUs) also built by CAF and first operated in 2011, as well as the cross-border Alstom De-Dietrich Enterprise sets, consisting of locomotive, generator van and passenger coaches first operated in 1996. In addition, there is a range of on track plant and road-rail vehicles which operate on the network to provide maintenance services.

At present, the administrations in Northern Ireland and Ireland are undertaking a study, termed the ‘All-Island Strategic Rail Review’ to consider future investment priorities for railway infrastructure. The size and scale of the projects being considered for future investment as part of the review have the potential to radically change the size and scale of the network. The outcome of the review and future priorities for infrastructure investment is likely to have a significant impact on the NI rail safety regulator in its role for approving the deployment of new and/ or modified infrastructure.

3.1.2. Safety performance

Safety performance on the network is measured in line with the standards set by the EU as part of the development of a single railway area through the second and third rail packages which included the development of common safety targets for all EU member states. From 2004 the EU has collected and published statistics comparing the achievement of common safety targets across all its member states as well as neighbouring countries, such as Norway and Switzerland, who participate in safety performance monitoring. In 2009, the EU published a Common Safety Method for Assessing the Achievement of Common Safety Targets which has been implemented in Northern Ireland.

Despite the UK exit from the EU, the annual safety performance reports published by the two safety regulators in the UK include the EU figures for comparative analysis purposes. Equally, rail safety authorities across the EU make use of the separate GB and NI figures to conduct comparative analyses of their own including a UK total.

The analysis of Common Safety Targets in Northern Ireland demonstrates that it is one of the safest jurisdictions in Europe in which to travel by rail. The Common Safety Targets and key safety performance indicators in relation to accident and incident precursors have for many years been consistently quite low in numbers and indicate a safe rail network. This is reflected in the CSI Annual Safety Performance report published on the Department’s website which highlighted that the NI rail network is among the safest in Europe.

3.1.3. Type of regulating organisation, its size, and degree of regulatory independence

As mentioned briefly in the introduction to this section, the rail safety regulatory functions are delivered by the Department for Infrastructure, specifically Rail Safety Branch, which is a Government Department headed by a Minister and responsible to the Northern Ireland Assembly. Rail Safety Branch (acting as the Rail Safety Regulator) sits within the Safe and Accessible Travel Division, part of the Climate, Planning and Public Transport Group in the Department for Infrastructure.

Rail Safety Branch is a small Branch headed by a Principal, with 1.5 FTE Deputy Principals, 1 Staff Officer and 1 Executive Officer. In addition to delivering the regulatory functions set out in the following sub-section, Rail Safety Branch is also responsible for providing Ministerial advice on rail safety and standards issues, delivering the Minister’s legislative priorities for rail safety and standards, and developing rail safety and standards policy in line with Ministerial Direction. Consequently, Rail Safety Branch has been allocated a further 0.5 FTE Deputy Principal and 1 Staff Officer on temporary loan to undertake policy work on this review as directed by the previous Minister as well as other short term policy pressures.

With this in mind, there is significant potential for the regulatory independence of Rail Safety Branch to come under pressure. While it has not occurred during the lifetime of this review, nor is there any record of previous conflicts of interest, it is possible that a future Minister could disagree with a regulatory decision of the Head of Branch and put pressure on the regulatory decision-making process. This is further complicated by the fact the Department for Infrastructure is the ’de facto’ owner of the main Public Transport holding company which includes the companies that own and operate the railways. Additionally, the Department is also the main funding body for capital and resource expenditure by the Public Transport holding company. Consequently, there is limited separation from both Ministers and regulated entities. As mentioned, this has never previously caused any issues in terms of Ministers or regulated entities pressurising Rail Safety Branch as the regulator, however the circumstances exist which create the potential for this to occur in future.

3.1.4. Functions of regulator

The Phase 1 legislative review highlighted three key roles for Rail Safety Branch. Firstly, as ‘National Safety Authority’ for rail safety matters; secondly, as ‘Competent Authority’ for technical standards; and thirdly, as ‘Competent Authority’ for regulating the train driving professions. A more detailed analysis of the role and remit of the NI Rail Safety Regulator is provided in Table 1 below.

Table 1: Overview of the statutory duties of Rail Safety Branch		
National Safety Authority	***Competent Authority for Interoperability***	***Competent Authority for Train Driver licensing***
Licensing, Certifying and Authorising Railway Undertakings	Authorising new infrastructure or rolling stock to be placed in service	Issuing licences to qualified train drivers and overseeing the process for certifying drivers for the network
Supervising and Monitoring the delivery of the management system	Maintaining Registers of new or ongoing projects for authorisation	Maintaining a register of train drivers and sharing with other regulators on request
Railway Construction and operational restrictions	Issuing exemptions or derogations from applying technical specifications	Setting the standards and overseeing their deliver for the training and examination of train drivers
Systems to be deployed on trains and the network	Setting and enforcing standards regarding interaction of the railway with waterways	Approving doctors and psychologists to undertake medical and psychometric examinations of train drivers
Appointment of Inspectors and regulatory enforcement	Working with HSENI to enforce interoperability regulations	Publishing registers of trainers, examiners, doctors and psychologists approved for the train driving profession
Overseeing the implementation of recommendations following an incident/ accident		Undertaking compliance checking (and enforcement) to ensure standards are met in the training of train drivers.

The Phase 1 Legislative Review also highlighted a number of areas that are outside the remit of the NI Rail Safety Regulator. For instance, economic regulation of the railways, rail passenger rights, and security of the railways are some related areas which sit outside of the rail safety regulator.

Annex B of the Phase 1 Legislative Review lists the legislative basis for these responsibilities, some of which relate to reserved policy areas (i.e., Competent Authority for Interoperability) as well as devolved policy areas (i.e., National Safety Authority, Competent Authority for Train Driver licensing).

3.1.5. Funding mechanism(s) for regulator

As a branch within a Government Department, funding is allocated to rail safety activities through the normal Government budget processes. The main source of financing for public expenditure within Northern Ireland remains the Departmental Expenditure Limits (DEL) and Annually Managed Expenditure (AME) from HM Treasury. Both DEL and AME are ultimately funded through the proceeds of general taxation across the UK. Any changes in the level of DEL funding for Northern Ireland are determined via the application of the Barnett Formula. Under this the budgets of the Devolved Administrations are adjusted by a population-based share of changes made to the funding for comparable public services in England.

On the basis of the DEL funding, the Minister for Infrastructure sets the financial priorities for the Department of Infrastructure. Funding for Rail Safety Branch for regulatory compliance activities and staff resources is allocated through normal Departmental financial procedures with priorities set as part of the Department's decision-making processes.

There is no funding from industry through levies although there is the potential to charge fees for some regulatory activities such as authorisations and approvals in the role of Competent Authority for Interoperability.

3.1.6. Regulatory compliance and enforcement

The current legislative landscape for enforcing the rail safety regulatory regime is complex with responsibilities spread across different organisations. Firstly, the rail safety regulations place responsibility for regulatory compliance on the Department for Infrastructure as National Safety Authority. This means that Rail Safety Branch, on behalf of the Department, is responsible for ensuring compliance with licensing, safety certification and safety management systems requirements. This regulatory framework was largely made using the primary powers of the Health and Safety at Work (Northern Ireland) Order 1978. However, the rail safety regulations did not specify the Department for Infrastructure as the enforcing authority, which is required under the 1978 Order. Consequently, this means that the HSENI is the enforcing authority for rail safety regulations while Rail Safety Branch, on behalf of the Department, is responsible for delivering the regulatory compliance function.

Similarly, the Rail Interoperability Regulations 2011 (as amended) sets out that the Department for Infrastructure is the Competent Authority for Interoperability with responsibility for operational delivery and regulatory compliance while HSENI are designated as the enforcing authority. As such, Rail Safety Branch as responsible for ensuring that the deployment of new or significantly upgraded interoperable systems and sub-systems comply with the regulations and where they do not HSENI are responsible for enforcing compliance.

In contrast, the final element of Rail Safety Branch responsibilities as the Competent Authority for Train Driver licensing place all regulatory compliance and enforcement powers within the remit of the Department. The Train Driving Licences and Certificates Regulations (Northern Ireland) 2010 as amended sets out that the Department is responsible for regulating the train driving profession and enforcing compliance with the regulations.

Rail Safety Branch delivers its regulatory compliance responsibilities through monitoring and supervision of NIR's Safety Management System, conducting audits and inspections of NIR's applications and practical deployment of its Safety Management System. Rail Safety Branch also investigates breaches of rail safety regulation and conducts post incident reviews with rail operators. Further, Rail Safety Branch also publishes guidance across its remit and engages regularly with stakeholders through the NI Rail Safety & Technical Standards Group.

Overall, the difference in approach defined in the legislation across the three responsibilities of Rail Safety Branch, as well as the differentiation between regulatory compliance and regulatory enforcement activity creates a complex and challenging, as well as at times potentially confusing, landscape for regulating organisations as well as for regulated entities.

3.1.7. Engagement/ co-operation with other bodies

As a consequence of the difference in approach to regulatory compliance and enforcement across Rail Safety Branch's responsibilities, and the differentiation between regulatory compliance and enforcement in some of the responsibilities, there is a clear need for engagement, cooperation and collaboration between regulatory bodies. To that end, Rail Safety Branch has in place Memoranda of Understanding (MOUs) with different bodies to promote effective co-operation between them to ensure the safety of the Northern Ireland rail network.

Specifically, there is an MOU with HSENI that sets out the statutory responsibilities of Rail Safety Branch and HSENI relating to rail safety, as well as clarifying the roles and responsibilities of each organisation with regards to rail safety; joint working arrangements; and communication arrangements. The MOU also ensures access to advice and support provided by HSENI and that there is effective inspection of railway undertakings' safety activities.

In addition, there is a tri-partite MOU between Rail Safety Branch, HSENI and ORR (the GB Rail Regulator). This MOU sets out a broad framework within which knowledge, expertise and information will be shared between the three organisations for the purpose of rail safety. This MOU ensures that both Rail Safety Branch and HSENI have access to some of the leading expertise in rail safety specialisms (e.g., civil engineering, fleet engineering, etc.) that are not readily available in NI.

Overall, a complex network of organisational relationships has been developed to ensure that the statutory functions specified within the broad rail safety regulatory regime can be delivered, including regulatory compliance and enforcement.

3.1.8. Rail accident investigation

Rail accident investigation is the responsibility of yet another organisation. The Rail Accident Investigation Branch (RAIB) is responsible for investigating accidents or incidents on UK railways, including Northern Ireland. RAIB is an independent body that investigates railway accidents or incidents to improve safety.

RAIB must by law investigate all rail accidents involving a derailment or collision which resulted in, or could have resulted in:

- the death of at least one person;
- serious injury to five or more people; and/ or
- extensive damage to rolling stock, the infrastructure, or the environment.

The RAIB may also investigate other incidents that could affect railway safety, including those which under slightly different circumstances could have led to an accident.

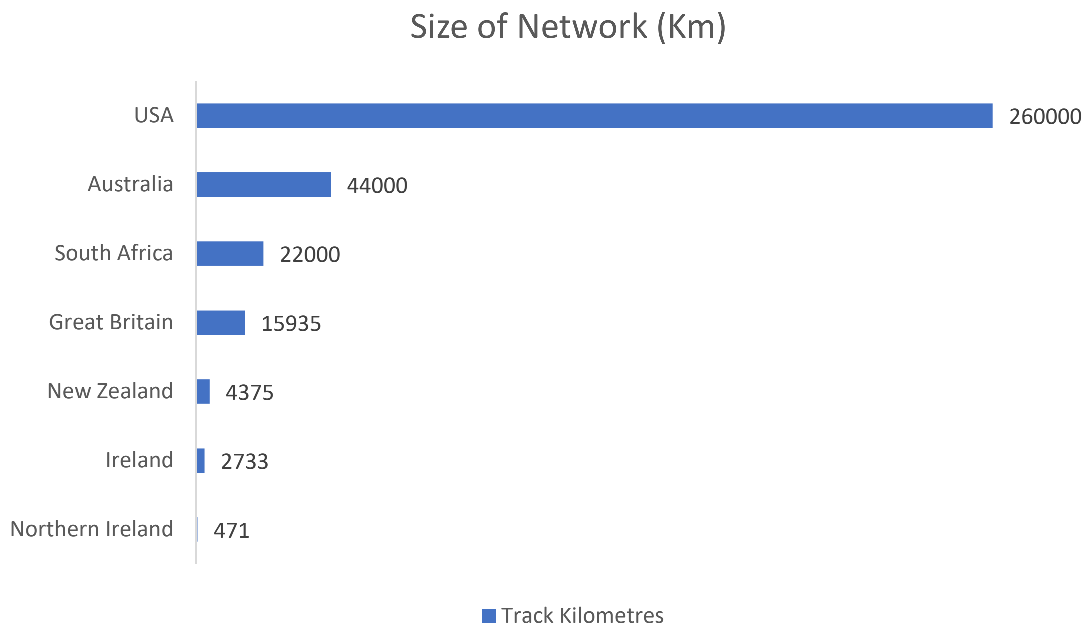
Overall, while rail accident investigation is a devolved policy area it is something that has always been legislated for on a UK wide basis and has only ever been delivered by a UK wide body.

3.2. Overview of rail safety regulation in other jurisdictions

3.2.1. Size and Scale of rail networks

Rail regulators in Great Britain, Ireland, Australia, New Zealand, the United States of America and South Africa were selected as case study organisations due to availability of documentation in English and different approaches they take to rail regulation. They also represent a vast range in the size and scale of the networks they regulate. Figure 1 below illustrates the range in network size between the different case study organisations.

Figure 1: Network Size of Case Study Organisations



While the case study regulators face a different scale of challenge due to the vast range in the size of the network they have to regulate, the remainder of this section highlights some common challenges (such as worker safety) that rail regulators face regardless of the size of the network they regulate, or regulatory approach adopted.

3.2.2. Safety performance

Like NI, both GB and Ireland have long been part of the EU system of safety performance reporting and both measure safety performance in line with the standards set by the EU as part of the development of a single railway area through the second and third rail packages. This means there are directly comparable rail safety statistics. Like NI, both GB and Ireland both perform well in terms of rail safety and are among the best performing networks in Europe. As may be expected however, the USA, Australia and New Zealand do not publish directly comparable safety performance statistics. Nevertheless, each jurisdiction publishes an annual report which includes information on the safety performance of the network. Table 2 provides an overview of the most serious incidents/ accidents based on the most recent reporting year for each case study organisation.

Table 2: Safety Performance of the case study organisations' networks	
Case Study Organisation	***No. of serious incidents reported***
Northern Ireland	Report Year (2021) • 3 collisions with obstacles – no serious injury to a person • 2 serious injuries to persons – one employee and one other person • 1 fatality from suicide or suspected suicide attempt
Ireland	Report Year (2021) • 43 formal notifications relating to accidents, incidents, or dangerous occurrences in 2021 • 25 related to IÉ network, 16 on the LUAS network, 1 rolling stock issue belonging to Rhombers Sersa and 1 involved Bord na Móna operations. • 6 fatal occurrences: 4 of these indicate potential self-harm, 1 due to trespass/ misadventure and person found adjacent to the railway line.
New Zealand	Report Year (2021) • 12 fatalities: 3 motorists, 9 unauthorised members of the public • 7 serious injuries: 1 pedestrian, 2 unauthorised member of the public 1 passenger and 3 rail workers.
Great Britain	Report Year (2021/22) • 11 non workforce fatalities: 6 in mainline stations, 2 passenger fatalities on London Underground and 3 fatalities from collisions between member of the public and trams. • 2 workforce fatalities • 15 fatalities while trespassing on the mainline • 8 fatalities at level crossings – 7 pedestrians and 1 motorcyclist • 329 suicides or suspected suicide attempts of which 261 were fatalities.
South Africa	Report Year (2020/21) • 8052 security related incidents of which 61 injuries and 13 fatalities • 114 operational fatalities, & 145 injuries • 70 fatalities, train strike & 55 train strike incidents (operational) • 2024 other operational occurrences
Australia	Report Year (2021)

	• Passengers: 2 fatalities, 33 serious injuries • Workers: 3 fatalities, 22 serious injuries • Public: 5 fatalities, 13 serious injuries • Trespass (suspected suicide/ suicide attempt): 61 fatalities, 34 serious injuries
USA	Report Year (2021) • Employee on duty fatalities – 11 • Employee on duty injuries – 2,584 • Employees on duty illness (non-fatal) – 116 • Cases with days absent from work – 2,019 • Trespasser deaths not at highway rail crossing – 2,257 • Trespasser injuries not at highway rail crossing – 2,448 • Passengers killed in train accidents or crossing incidents – 0 • Passenger injured in train accidents or crossing incidents – 196 • Passengers killed in other incidents – 9 • Passengers injured in other incidents – 1,809 • Train accidents (not at grade crossings) – 8,913 • Highway – Rail incidents – 9,949 • Other accidents /incidents – 25,980

As mentioned above, the risks being managed on each network are broadly the same although the scale is very different. The difference in scale is reflected in the statistics, despite the differences in the way safety performance is reported. It is clear that there is a risk to passengers using the network, members of the public interacting with the network (such as at level crossings), employees working on the network, and those that trespass on the network. Given the common challenges faced on the networks regulated by the selected case study organisations, there are lessons which can be learned from the different approaches adopted in each jurisdiction.

3.2.3. Type of regulating organisation, its size, and degree of regulatory independence

Across all jurisdictions there are somewhat different approaches to organising the rail safety regulator. In some instances, the rail safety regulatory role is included within a broader organisational structure with responsibilities for other transport modes while in other instances the rail safety regulatory role is distinct and focussed solely on railways. Table 3 below summarises the governance arrangements for rail safety regulators across the jurisdictions considered as part of this report.

Table 3: Governance arrangements for rail safety regulators		
Jurisdiction	***Regulatory Body***	***Status***
Northern Ireland	Department for Infrastructure – Rail Safety Branch	Part of Government Department answerable to Minister
Ireland	Commission for Railway Regulation (CRR)	Independent regulatory body with one Commissioner appointed on fixed term contract by the Minister. No Board.
New Zealand	Waka Kotahi New Zealand Transport Agency of the Ministry for Transport New Zealand	A Board with Chair and up to 9 members all appointed by Minister of Transport. It has a Chief Executive and Executive leadership team
GB	Office of Rail and Road (ORR)	Non-Ministerial Government Department – Governed by a Board and reports to the Secretary of State for Transport
South Africa	Rail Safety Regulator (RSR)	Corporate body comprising Board and Chief Executive answerable to Minister
Australia	Office of the National Rail Safety Regulator (ONRSR)	Corporate Body Chief Executive, who is the National Rail Safety Regulator (NRSR) and two non-executive members. Appointed by Minister.
USA	Federal Railroad Administration (FRA) Office of Railroad Safety	Agency of the U.S. Department of Transportation

In Ireland the rail safety regulatory body is the Commission for Railway Regulation (CRR), which is an independent regulatory body that reports to the Minister for Transport. In total, the Commission has around 17 staff working across conformity assessment, compliance supervision and enforcement, and corporate governance. The Commission has regulatory independence from government and publishes annual reports on its work and the decisions made.

In New Zealand the regulatory body is an agency of the Ministry for Transport New Zealand. Waka Kotahi, the New Zealand Transport Agency with a Board, chair and up to 9 members all appointed by the Minister of Transport. The agency has a total of 2,376 full time equivalent members of staff. However, the staff complement numbers are not broken down to individual transport modes and it is therefore not possible to determine how many rail safety staff are employed by the agency. While the board of the agency is appointed by, and accountable to, New Zealand Government Ministers, the agency has regulatory independence and publishes detailed reports on its activity.

In Great Britain the regulator, the Office of Rail and Road (ORR), is a Non-Ministerial Government Department, governed by a Board which reports to the Secretary of State for Transport. The ORR employs around 370 full time equivalent members of staff, the majority of whom work on railways regulation. As a non-Ministerial Government Department, the ORR is independent of Government decision-making, although is accountable to the UK Parliament and regularly reports on its decisions and activity.

In South Africa, the Railway Safety Regulator (RSR) is a juristic person (corporate body) comprising a Board, and chief executive that are accountable to the Minister. The RSR employs 176 full time equivalent members of staff working across railway safety and corporate services. As a juristic person, the RSR is independent of the South African Government, although is accountable to the Minister for Transport and publishes an annual report of its activity.

In Australia, there is the Office of the National Rail Safety Regulator (ONRSR) which is a body corporate with a Chief Executive, who is the National Rail Safety Regulator (NRSR) and two non-executive members. The ONRSR employs 154 full time equivalent staff focussed solely on rail safety regulation. The ONRSR is independent of the Australian Government and is not subject to Ministerial direction in the exercise of its functions or power, except where provided by law.

In the USA, the Federal Railroad Administration (FRA) specifically the Office of Railroad Safety is the regulatory body, it is an independent regulatory agency of the U.S. Department of Transportation with the administrator a Presidential appointment. The Office of Railroad Safety employs around 400 full time equivalent inspectors working across the US. As an independent regulatory agency, it is somewhat independent of Government decision-making. It is nevertheless accountable to the Department of Transportation.

There are a number of different approaches to organising the rail safety regulatory role. In some jurisdictions, there are executive agencies (USA, New Zealand), in others there are non-Ministerial Government Departments (GB), while in others there are independent corporate bodies (Ireland, South Africa, Australia). Given the different network sizes, approaches to organisation and the fact some regulators sit within larger agencies, it is difficult to compare organisational size. In saying that, it would appear as expected that the larger the network the greater number of regulatory employees. One common theme across all rail safety regulators is their regulatory independence from political decision-making. While there are differences in organisational form, all regulators are broadly organised in a way as to minimise the potential from political interference in the day-to-day regulatory decision-making process.

The independence from Government decision-making is in contrast to how the rail safety regulator role is organised in Northern Ireland. As set out in Section 3.1.3, the

Northern Ireland rail safety regulatory role is fulfilled by Rail Safety Branch within the Department for Infrastructure reporting within the organisational structure to the Minister for Infrastructure, coming under their control and direction. While it has not occurred during the lifetime of this review, nor is there any record of previous conflicts of interest, it is possible that a future Minister could disagree with a regulatory decision of the Head of Branch and put pressure on the regulatory decision-making process. Additionally, the Department is also the main funding body for capital and resource expenditure by the Public Transport holding company. Consequently, there is limited separation from both Ministers and regulated entities. This is not something which appears to be an issue for those case study organisations considered in this report due to their independence from Government decision-making.

3.2.4. Functions of regulator

The functions of the regulators in each jurisdiction considered is set out by legislation and each regulator is accountable to either a government minister or legislature for the effective delivery of these functions. Table 4 below provides a summary of the key functions of each of the case study regulators.

Table 4: Summary of key functions of each case study regulator

Regulator/ Jurisdiction	***Summary of functions***
Commission for Rail Regulation, Ireland	The CRR is the National Safety Authority, Competent Authority for Interoperability and licensing authority for Train Drivers. Their principal functions are to: • foster and encourage railway safety; • to enforce the legislation relating to railway safety; and, • to investigate and report on railway incidents.
Waka Kotahi New Zealand Transport Agency, New Zealand	The main functions of the New Zealand Transport Agency are: • managing entry to and exit from the rail system through licensing and restricting operations. • approving, replacing, and varying 'safety cases' (documents that describe a licensee's safety approach) • setting or guiding the development of safety standards for infrastructure, vehicles, and practices • monitoring and assessing compliance with safety cases and standards. • investigating safety accidents • directing improvements or imposing restrictions in response to safety breaches by licensees and other • participants • prosecuting breaches railways legislation

	• monitoring risks and the overall level of safety in the rail system • providing advice and information on rail system safety
Office of Rail & Road, Great Britain	The ORR is the National Safety Authority, Competent Authority for Interoperability and licensing authority for Train Drivers. Their principal functions are: • Health and Safety for the entire mainline rail network in Britain and London Underground, light rail trams and heritage sector. • Provide health and safety guidance and conduct research to promote continuous improvement. • Publish reports on the rail industry's health and safety performance. • Carry out inspections, and audit to ensure that the train and freight operating companies and Network Rail manage both passenger and occupational health and safety risks appropriately. • Investigate breaches of health and safety regulation on the railways. • Take informal and formal enforcement action, including improvement notices and prosecutions to ensure compliance with where it is justified. • ORR has economic regulatory functions in relation to railways in Northern Ireland and for the northern half of the Channel Tunnel situated in the UK. • ORR also work with the Competition and Markets Authority to apply the competition Act 1998 and the Enterprise Act 2002 in relation to the railways.
Rail Safety Regulator, South Africa	The remit of the RSR covers the following: • Overseeing the system of safety permits for railway operators. • Oversee occupational health and safety matters on the railways. • Continuous monitoring of the network, conducting regular inspections performing audits of rail operators' systems. • Development and enforcement of regulations and safety standards. • Investigate rail safety incidents and find the cause and establish protocols to prevent reoccurrences. • Advise the Minister on rail safety matters. • Oversee safety in relation to transportation of dangerous goods. • Provide education and public-awareness activities relating to safe railway operations. • Collect and disseminate information relating to safe railway operations.

Office of the National Rail Safety Regulator, Australia	The responsibilities of the ONRSR were set out in the first Australia wide rail safety legislation and their key functions are as follows: • Administer, audit and review the accreditation regime for railways; • Work with rail transport operators, rail safety workers and others involved in railway operations, to improve rail safety nationally; • Conduct research, collect and publish information relating to rail safety; • Provide or facilitate the provision of advice, education and training in relation to rail safety; • Monitor, investigate and enforce compliance with the 2012 Act; • To engage in, promote and coordinate the sharing of information to achieve the objects of the 2012 Act, including the sharing of information with a prescribed authority; • At the request of the Commonwealth or a jurisdiction to carry out any other function as agreed between ONRSR and the jurisdiction.
Federal Railroad Administration, USA	The functions of the FRA are to promote and regulate safety throughout the railroad industry. It executes Regulatory and inspection responsibilities through railroad safety experts including safety inspectors to determine compliance for: • Track Structure; Rails, track work, tie plates and rail fastening systems. • Track Geometry; Track gage, alignment, elevation, curvature and track surface. • Roadbed; Ballast, drainage and vegetation i.e. obstruction of signs or signals. • Track Inspection: Frequency and quality of a railroad's inspection, special inspections, and recordkeeping. Other functions include: • Railroad safety and stakeholder training (including State safety inspectors); • Accident and employee fatality investigations and reporting. • Partnerships between labour, management and the agency that address systemic initiatives. • Development and implementation of safety rules and standards. • Provision of grants to improve rail safety and oversee the consolidated Rail Infrastructure and Safety Improvements Workforce Development Grants

Broadly speaking, the rail safety functions across all regulators are very similar with few areas of difference. Where difference does occur, it is generally around a split with the regulator investigating incidents and another body investigating accidents, and in some instances, regulators are responsible for education and public awareness of rail safety.

In terms of common functions across case study regulators in each of the jurisdiction considered, each regulator is responsible for occupational health and safety on their rail networks. In addition, each regulator is responsible for authorising or approving the infrastructure and rolling stock deployed on the network, as well as monitoring regulatory compliance and undertaking enforcement action where necessary. Finally, most regulators have some investigatory responsibilities, as well as collecting and publishing information or statistics on the safety of the rail network.

While these functions are common across all case study regulators, the arrangements in Northern Ireland are quite different with an organisational split in the delivery of rail safety responsibilities. The Department is responsible for delivering licensing and certification and authorising and approving new/ upgraded infrastructure and rolling stock and is not responsible for undertaking enforcement action across these areas. Further, the HSENI is responsible for occupational health and safety on the rail network while the Department is responsible for rail safety matters, such as systems and processes. Similarly, both the Department and HSENI have education and public awareness raising responsibilities for rail safety. The current allocation of responsibilities has the potential to create confusion around the overlap in responsibilities. More worryingly, it also leaves the potential for gaps in delivering these responsibilities. However, the Department and HSENI have an extensive MOU to address these issues and ensure both organisations work collaboratively to deliver respective rail safety responsibilities. Nevertheless, it could be considered that the current arrangements are sub-optimal as they create particular challenges which other rail safety regulators do not experience.

3.2.5. Funding mechanism(s) for regulator

Each of the case study Rail Safety Regulators in the jurisdictions considered had a mixed funding model receiving grant allocation from the sponsoring Government Department, as well as applying a levy on the industry and in some instances additional income through fees or penalties. Table 5 below summarises the funding model for each case study organisation.

Table 5: Summary of funding model for case study regulators			
Case Study Regulator	***Government Funding***	***Levy***	***Other funding streams***
Commission for Rail Regulation, Ireland	Exchequer grant from sponsoring Government Department	Annual Safety levy set each year by regulation	Licence fees, authorisations/ approvals fees
Waka Kotahi New Zealand Transport Agency, New Zealand	Government provides most of the agency funding, except for regulatory activity	Annual safety charge set by distance covered on the network	Licence fees, safety case fees
Office of Rail & Road, Great Britain	No Government Funding	Annual safety levy based on company turnover	Licence fees, authorisations/ approvals fees
Rail Safety Regulator, South Africa	Allocation of funding from Government Department	Fees for safety permits set annually by Minister for Transport	Fees/ penalties for other rail regulatory activities
Office of the National Rail Safety Regulator, Australia	Receives Government funding (central and state) on a reducing basis until 100% industry funded	Annual safety fees for industry	Accreditation fees for operators, fees for other regulatory activity and penalties
Federal Railroad Administration, USA	Funding is allocated as part of the presidential budget, approved by Congress. Allocation for safety includes budget to pay for network and fleet improvements.	Railroad user safety fee. This is based on train miles and proportioned for regulatory activity.	Does not appear to be other funding streams.

Most case study organisations appear to have a mixed funding model with elements of direct Government funding and industry funding through a levy/ charge or fees, although GB is fully industry funded and Australia is moving in this direction. Where case study regulators do have a mixed funding model, in the main the majority of funding comes from industry rather than Government. The USA is an exception, and it appears the majority of the Federal Railroad Administration funding comes from Government. However, unlike other regulators the FRA is also responsible for providing grants to make safety improvement from this budget. It is therefore a little less clear the extent to which regulatory activity like audit and inspection is funded by Government or industry.

In contrast, the funding model in Northern Ireland is quite different. The entire budget for rail safety regulation is provided by Government coming through Departmental allocations. The standard EU approach of applying an annual safety levy was not included in NI legislation, unlike GB and Ireland. Further, while there is the option to charge fees for certain services the NI regulator does not apply fees or charges to authorising/ approving new/ upgraded infrastructure or rolling stock given the Department's funding relationship with regulated entities. As such, there is an ongoing reliance on Government funding to subsidise the sector.

3.2.6. Regulatory compliance and enforcement

There is a great deal of similarity in the types of regulatory compliance activity undertaken by each of the case study regulators. Generally, regulators control entry to the sector through licences (or permits, certificates, etc), ensure compliance through monitoring and supervising the activity of rail operators by means of audit and inspection, and enforce legislative requirements up to and including prosecution.

Commission for Rail Regulation, Ireland

The CRR in Ireland is solely focussed on railway regulation and is required to ensure that each railway organisation and infrastructure manager that operates in their jurisdiction is certified or authorised and that they effectively manage the risks to safety of persons associated with its activities. It has a small team that is focused on supervising railway organisations.

A railway organisation is required to have a certified Safety Management System which documents how they manage the risks to safety associated with its activities. CRR supervises the application and effectiveness of these safety management systems and carries out inspections.

CRR have frequent interaction with railway organisations and their inspectors audit them against European and national requirements to check they are implementing their own standards processes and procedures. They also undertake sample inspections of key assets and meet with company executives to review their safety performance.

Improvement notices can be issued or where there is immediate and substantial risk to the safety of persons a prohibition notice or in extreme cases to revoke a safety authorisation or safety certificate or make an application to the High Court to seek and order for restriction or prohibition of operations.

New Zealand Transport Agency, New Zealand

The New Zealand Rail Safety Authority sits within the wider Transport agency and manages the entry and exit of rail licence holders via a licensing system. The licensing function is supported by an assessment of railway operators' safety cases. Each licence holder must have a safety case that explains the system it will use to ensure it properly identifies, assesses and controls the safety risks of its operations; consult and/ or communicate safety risks with its rail personnel, representatives of rail personnel; and provide assurance to the Transport Agency that it is compliant with its safety case.

In order to ensure compliance with the Rail Safety Act and its requirements, the New Zealand Rail Safety Authority undertakes monitoring and supervisory activities. These activities consist of field inspections, safety assessment or special safety assessment, risk monitoring, and investigations. These monitoring activities are conducted by safety assessors and depending on the severity of an incident they may be undertaken in coordination with other investigatory bodies such as Transport Accident Investigation Commission, the Coroner, Police and/ or Worksafe (the New Zealand Health & Safety regulator).

The New Zealand Rail Safety Authority within the wider Transport Agency has a number of options to encourage or enforce compliance as a result of their monitoring activities. Typically, the first level of enforcement activity is around education and capacity building to spread best practice. Beyond that, the Agency can issue a compliance advice letter or a formal warning letter to operators. The Agency can also vary an operators' safety case or require an operator to develop an improvement plan to improve safety practices. In more serious cases the Agency can prohibit activity, place temporary or permanent licence conditions, suspend or revoke a licence, and prosecute operators if required.

Office of Rail & Road, Great Britain

The ORR regulates both road (bus and freight) and railways, and like other rail regulators controls entry to the market through a licensing and certification regime. Each operator is required to have a Safety Management System (SMS) that meets the regulatory requirements of the Railway and other Guided Transport Systems Regulations 2006 (ROGS). The requirements of the SMS are set out in the Common Safety Methods (CSMs) which were developed while the UK was part of the EU.

ORR Inspectors use a wide selection of compliance and enforcement strategies ranging from information, advice, persuasion, co-operation, inspection, audit, providing permission, verification and compulsion through to deterrence activities of formal enforcement. Their approach is generally to assist industry to comply with its occupational health and safety obligations through verbal and written advice but are prepared to adopt stricter methods where duty holders fail to respond to ORR advice or where the seriousness of the non-compliance justifies it. However, in most circumstances, ORR can secure compliance without recourse to formal enforcement tools. ORR can take several types of enforcement action:

- information and advice – a verbal, or written warning of non-compliance.
- improvement notices – a written notice of non-compliance and identification of required action to make improvement.
- prohibition notices – completely stopping work until an issue has been addressed.
- where ORR find an article or substance that they believe may be a cause of imminent danger, they can require it to be made harmless.
- seize plant equipment and substances.
- issue cautions – statements issued by inspectors and accepted in writing by the duty holder, that the duty holder has committed an offence for which there is a realistic prospect of conviction.
- revocation of a safety certificate or safety authorisation issued under ROGS.
- prosecution – the final stage when ORR act under health and safety legislation. Cases can be prepared against both companies and individuals. They can be heard in either magistrates or crown courts. Those being prosecuted can be fined, although breaches of enforcement notices can result in prison sentences.

In addition, ORR can use their economic regulatory enforcement powers to impose a penalty where an operator has breached an ORR decision, direction or notice or impose financial penalties or revoke licences under the Railways (Access Management and Licensing of Railway Undertakings) Regulations 2016.

Rail Safety Regulator, South Africa

The RSR is solely a rail regulator and like each of the previous regulators covered in this sub section it controls entry to the market via a safety permit system. Each network operator, train operator and/ or station operator must hold a safety permit. In order to obtain a safety permit, an operator must have a Safety Management System (SMS) that meets the criteria set out by the RSR.

The RSR has a mandate to enforce safety regulations and protocols. RSR Inspectors proactively monitor the South Africa rail network to anticipate and prevent major incidents before they occur, conducting regular inspections of the rail network and performing audits of rail operators' systems. The RSR also develop regulations and safety standards to ensure that innovations and improvements to infrastructure do not compromise safety. In addition to routine monitoring, the RSR is responsible for investigating rail safety incidents, seeking out the root causes of major incidents so that protocols can be established to prevent reoccurrence.

Failure to adhere to safety requirements will result in the RSR issuing appropriate enforcement notices and directives. Interventions can range from reduced speed limits or suspensions of services to suspending or revoking an operator's safety permit. Like other rail safety regulators, RSR inspectors can require an operator to undertake action to remedy an unsafe condition or make improvements to their operations or prohibit an operator from undertaking a specific activity. Again like other regulators, RSR inspectors can prosecute operators for offences listed under the National Railway Safety Act 2002 (as amended).

Office of the National Rail Safety Regulator, Australia

The ONRSR is solely a rail safety regulator without responsibilities for any other transport mode. ONRSR has responsibility for regulatory oversight of rail safety in every Australian state and territory, to promote and improve national rail safety and ensure the safety of the community. This includes:

- protecting public safety; and
- promoting improvement in rail safety; and
- removing incentive for any unfair commercial advantage that might be derived from contravening the rail safety requirements under this Law; and
- influencing the attitude and behaviour of persons whose actions may have adverse impacts on rail safety; and
- securing compliance with rail safety law through effective and appropriate compliance and enforcement measures.

In order to deliver these principles, the ONRSR obtains regulatory compliance through the work of its safety officers (similar to inspectors in other jurisdictions). Safety officers have powers to conduct audit and inspection, search railway premises, conduct any tests required and seize evidence. An ONRSR safety officer can issue an improvement notice, prohibition notice, or a non-disturbance notice to a railway operator or take remedial action to improve safety. They can also close works or services. Further, a safety officer can apply to the court for an injunction or may prosecute a railway operator for a breach of rail safety law, as well as issuing fines.

Federal Railroad Administration, USA

The FRA's Office of Railroad Safety promotes and regulates safety throughout America's railroad industry. The office executes its regulatory and inspection responsibilities through a diverse staff of 400 Federal safety inspectors. The FRA enforces safety regulations, such as speed limits and requirements for safety features such as positive train control. The FRA's Safety Management Teams serve as the Office of Railroad Safety's main liaison with the senior leadership of America's railroads. The Safety Management Teams represent FRA with the railroads, and they communicate and coordinate with FRA's Staff Directors, Accident Analysis Branch, Audit Management Program, and other Safety Management Teams.

The safety management teams oversee and direct the work of the Federal Safety Inspectors.

The inspectors carry out audit and inspection work for their specialism across the range of operators on the part of the network they are responsible for regulating. As well as periodic audit and inspection work, they also conduct investigations and review incidents or accidents. In the event an inspector identifies a defect they can issue compliance orders, emergency orders, or precursor agreements against the railway operator. In some instances where there is a breach of rail safety regulation, the case may be passed to the Attorney General for civil or criminal prosecution where penalties against the operator will be sought.

Summary

In general, Rail Safety Regulators across the case study organisations included in this report have similar compliance and enforcement functions and powers. They control entry to the sector through licences, permits, certificates, etc. They employ inspectors who undertake monitoring and supervising activity of rail operators through audit and inspection, and investigation of incidents and accidents. Further, regulators enforce legislative requirements usually by means of notices or orders, the placing of conditions on licences or certificates (or suspension or revocation) and in some instances issue fines, seize equipment and undertake prosecution of operators. This is quite different from the organisation of compliance and enforcement in Northern Ireland. In contrast, the compliance and enforcement functions are split across separate organisations. This is managed through an MOU between the Department and HSENI who exercise the enforcement function. This has the potential to create challenges when the Department may seek the use of enforcement powers where HSENI may not be in a position to exercise such powers or may take a decision not to exercise such powers.

3.2.7. Engagement/ co-operation with other bodies

As highlighted in previous sections, the Department works with other regulatory bodies, such as the HSENI, to fulfil its statutory duties as National Safety Authority, Competent Authority for Interoperability and Competent Authority for Train Driver Licensing. The case study organisation examined for Phase 2 of the review have a range of different engagement/ cooperation agreements with partner organisations although these arrangements are quite different to those in place in Northern Ireland.

Commission for Rail Regulation, Ireland

The CRR continually engages with stakeholders to promote and support a cohesive approach to the maintenance and future development of the railway system as a key contributor to a safe and sustainable land transport network. Also, as part of its Statement of Strategy development and in line with the Code of Practice for

Corporate Governance of State Bodies, the CRR sought submissions from stakeholders in relation to its new Strategy. While the CRR engages with industry and partner organisations, this is in a requirement for the delivery of its statutory functions.

Waka Kotahi New Zealand Transport Agency, New Zealand

The New Zealand Transport Agency is formally required to have an MOU in place between the Transport Agency (Rail Safety Authority), the Ministry for Transport, and the Health and Safety Authority in relation to Railway Safety. In addition, the Rail Industry Safety and Standards Board Limited (RISSB) supports and works hand in hand with the Australian and New Zealand rail industry to provide the essential tools rail organisations need – good practice Standards, Codes of Practice, Guidelines and Rules. The MOU between the New Zealand Transport Agency and the Health and Safety Authority clarifies their respective roles and responsibilities and sets out the arrangements for these bodies to work together towards improving rail safety. In this instance, the arrangements for working together ensure that the work of each agency complements the other.

Office of Rail & Road, Great Britain

ORR have in place a range of agency agreements and Memoranda of Understanding to engage with different government departments and agencies. They are part of the UK Regulators' Network for economic regulators to ensure effective co-operation between sectors. Like other case study regulators ORR has an MOU with the Health and Safety Executive in Great Britain. The MOU establishes the principles for working together and allocates responsibilities for the monitoring and enforcement of health and safety regulations. It commits both organisations to working together on railway matters and sets consistent standards of protection for people at work and members of the public affected by work activities on the railway and places a duty on each organisation to share information. Again, this is to minimise duplication between the organisations and ensure their work complements the other.

Rail Safety Regulator, South Africa

In South Africa there is a legislative requirement for "Co-operative Governance" which ensures that any relevant government bodies or departments with any stakeholder interest of link to any matter related to or likely to impact on Railway Safety should co-operate with the Railway regulator as required.

The relationship between the RSR, government and other regulators is managed through agreements, as provided for in legislation. These agreements are critical to ensure that there is no duplication of functioning or misunderstanding of the relative roles and responsibilities of the various parties. Like previous case study organisations this ensures that the work of RSR complements the work of other regulators who have a role in relation to railway matters.

Office of the National Rail Safety Regulator, Australia

In Australia the ONRSR has a number of MOUs in place with a variety of other bodies including the Australian Transport Safety Bureau, National Transport Commission and Workplace Safety Authorities to improve national rail safety performance. In addition, the Rail Industry Safety and Standards Board Limited (RISSB) supports and works hand in hand with the Australian and New Zealand rail industry to provide the essential tools rail organisations need – good practice Standards, Codes of Practice, Guidelines and Rules. Like regulators in other jurisdictions, the MOUs in place between the ONRSR and Australian state level workplace safety authorities help to improve communication between organisations, reduce duplication and influence a reduction in the quantity and severity of safety incidents on the railway.

Federal Railroad Administration, USA

The FRA has a specific Memorandum of Agreement with the Occupational Safety and Health Administration (U.S. Department of Labor) to facilitate coordination and cooperation concerning the employee protection provision of the Federal Railroad Safety Act 1980. Like other jurisdictions, the FRA and OSHA have complementary responsibilities in the area of protecting the safety and health of railway employees. The FRA exercises authority over railway operations and OSHA exercises authority over occupational safety and health issues related to working on a railway. These organisations share information on the complaints they receive, the investigations undertaken, and any orders issued, or cases passed to the Attorney General for prosecution.

Summary

In Northern Ireland, like all other jurisdictions and case study regulators, there are arrangements in place to ensure the cooperation of rail safety authorities and workplace health and safety authorities. These arrangements reflect good practice seen across these jurisdictions with good collaboration and cooperation between the Department as Safety Authority and HSENI. The key difference is in relation to enforcement powers and the reliance on HSENI as the enforcement authority for safety authority functions. While these arrangements have proved sufficient, there is the potential for disagreement to arise over enforcement action leaving the Department as safety authority without access to enforcement action despite its responsibilities for ensuring compliance with rail safety regulation.

3.2.8. Rail accident investigation

There were generally quite similar arrangements for rail accident investigations for most regulators and jurisdictions. Table 6 below provides an overview of the rail accident investigation arrangements for each case study regulator.

Table 6: Case Study Regulators & Rail Accident Investigation Bodies

Case Study Regulator	Rail Accident Investigation Body	Relationship between bodies
Commission for Rail Regulation, Ireland	Rail Accident Investigation Unit (RAIU)	The RAIU is an independent body separate from CRR and Government Department and is responsible for investigating serious rail accidents.
Waka Kotahi New Zealand Transport Agency, New Zealand	Transport Accident Investigation Commission (TAIC)	TAIC is a separate body from the New Zealand Transport Agency and Government Department and has responsibility for investigating rail accidents.
Office of Rail & Road, Great Britain	Rail Accident Investigation Branch (RAIB)	The RAIB is a branch of the Department for Transport and forms part of a Government Department but is separate from ORR and rail safety regulation.
Rail Safety Regulator, South Africa	Rail Safety Regulator	The RSR forms a Board of Inquiry to investigate serious accidents. RSR staff are allocated to the investigation and are joined by external experts. Ultimately, the RSR investigates serious accidents, although with external subject matter experts when required.
Office of the National Rail Safety Regulator, Australia	Australian Transport Safety Bureau (ATSB)	The ATSB is functionally separate from the ONRSR, and other Transport regulators. ATSB is responsible for investigating the most serious accidents which may result in significant improvements to safety.
Federal Railroad Administration, USA	National Transportation Safety Board (NTSB)	NTSB are separate from the Federal Railroad Administration and have responsibility for investigating serious accidents.

Each case study jurisdiction had fairly similar arrangements with the exception of South Africa. The RSR in South Africa was the only regulator who also had responsibility for investigating the most serious of accidents. In saying that, the arrangements for investigating rail accidents in South Africa provide an opportunity to draw on external experts as part of the process. With that exception, in all other jurisdictions there are separate bodies for rail safety regulation and investigating the most serious rail accidents. There were some minor differences with some jurisdictions having specialist rail investigation bodies with other jurisdictions combining rail accident investigation with other transport modes such as aviation and maritime. RAIB are the Rail Accident Investigation Body for both Great Britain and also for Northern Ireland. The have an MOU in place with RAIU in Ireland to facilitate cooperation for investigating serious accidents on cross border routes/ services.

3.3. Overview of NI regulators in other fields

In addition to examining how other jurisdictions arrange rail safety regulation, it was felt prudent to look at other regulatory models deployed in Northern Ireland to explore what lessons cold be learned in terms of how regulation is organised, structured, and the systems and process deployed for regulation. To that end this element of phase two considered regulators on the basis that they were regulating either large public service organisations, regulating safety or regulating in the field of transport. On this basis, the review examined the following regulators:

- Health & Safety Executive Northern Ireland
- Utility Regulator Northern Ireland
- Transport Regulation Unit, Department for Infrastructure

3.3.1. Type of regulating organisation, its size, and degree of regulatory independence

Health & Safety Executive Northern Ireland

The Health and Safety Executive Northern Ireland is a Non-Departmental Public Body (NDPB) of the Department for the Economy Northern Ireland (DfE). The HSENI Board has nine members including a chairman, independent members appointed for three years which is renewable for further three years by the Departmental Minister, in line with the code of Practice by the Commissioner for Public Appointment for NI. It has an Audit and Risk management Committee, a senior management team, which meets monthly and a quarterly oversight and liaison meeting with the sponsoring body DfE officials. HSENI employ 100 staff across teams that reflect the vast range of their responsibilities. As an NDPB, HSENI carries out its regulatory functions set out in the Health and Safety at Work (Northern Ireland) Order 1978 at arm’s length from NI Government Ministers. This means that HSENI is independent from Ministerial direction and decision-making, although is accountable to the Minister for the Economy and NI Assembly.

Utility Regulator Northern Ireland

The Northern Ireland Authority for Utility Regulation (The Utility Regulator) is the Authority for energy Regulation (NIAER) and was established as a body corporate under Article 3 of the Energy Order (NI) 2003. This legislation establishes the Utility regulator as “the authority” to carry out the functions of the Director General of Gas for NI and the Director General of Electricity Supply for NI and also includes the economic and consumer regulation of water and sewerage service under Article 3 of the Water and Sewerage Services (Northern Ireland) Order 2006.

The Utility Regulator consists of a Board with one executive member – the Chief Executive, and no fewer than 3 other members (currently 6) appointed by Department of Finance. The Chief Executive is the Accounting Officer, accountable to Northern Ireland Assembly and an Annual report must be laid before the NI Assembly by the Department for Economy on behalf of the Utility Regulator. Much like HSENI, the Utility Regulator is independent of Ministerial direction in terms of regulatory decisions, although is accountable to the NI Assembly.

Transport Regulation Unit, Department for Infrastructure

The Transport Regulation Unit is neither an independent body nor corporate body, it is a branch with Safe and Accessible Travel Division in the Department of Infrastructure. As such, it is subject to the Ministerial priorities and decisions as well as the budget priorities which are allocated by the Northern Ireland Executive and Assembly and is not formally independent.

3.3.2. Functions/ legislative basis of regulator

Health and Safety Executive Northern Ireland

The HSENI was established under Article 12 of the Health and Safety at Work (Northern Ireland) Order 1978. It’s statutory functions under Article 13 of the H&S (NI) Order 1978 include:

- Proposing new or updated laws and standards.
- Providing an information and advisory service.
- Making arrangements for enforcement of health and safety law in relation to specified work activities.
- Preparation and issue of codes of practice, research, provision of training and information, and
- Making adequate arrangements for the enforcement of health and safety law in relation to specified work activities.

HSENI is the lead body responsible for the promotion and enforcement of health and safety at work standards in Northern Ireland. It shares this responsibility with the 11 local councils to cover all work situations in NI that are subject to the Health and Safety at Work (NI) Order 1978.

Responsibility involves the proposing and setting of necessary standards and securing compliance with those standards and undertaking other forms of activity designed to stimulate or support necessary action on the part of people and organisations that create risk.

The main areas within their remit include: -Manufacturing, construction, agriculture, quarries, docks, chemical plants, education, fairgrounds, hospitals and nursing homes, local Councils, railways, the Fire Authority, the Police Service, and Crown bodies. (District councils promote and enforce health and safety law in workplaces allocated to them by the Health and Safety (Enforcing Authority) Regulations (NI) 1999 – including offices, shops, retail, and wholesale distribution centres. Leisure, hotel, and catering premises.)

Utility Regulator Northern Ireland

The Utility Regulator was established through a combination of the Energy Order (Northern Ireland) 2003 and the Water and Sewerage Services (Northern Ireland) Order 2006. It is an independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

The Utility Regulator is responsible for:

- issuing and maintaining licences for gas, electricity and water companies to operate in Northern Ireland;
- making sure that these companies meet relevant legislation and licence obligations;
- challenging these companies to keep the prices they charge as low as they can be;
- encouraging regulated companies to be more efficient and responsive to customers;
- working to encourage competition in the gas, electricity, water and sewerage services markets;
- setting the standards of service which regulated companies provide to customers in Northern Ireland; and
- acting as an adjudicator on certain customer complaints, disputes and appeals.

Transport Regulation Unit, Department for Infrastructure

The Three key objectives of the TRU are as follows:

- Road Safety – (including Financial Viability)
- Fair Competition
- Environmental matters

TRU issues goods vehicle operator's licences and works to ensure that licence holders meet the standards set for entry into the commercial vehicle operator industry and to minimise the environmental and road safety impact around goods vehicle operating centres.

TRU works with statutory bodies to monitor licence holder compliance and has the authority to call operators to hearings and public inquiries and take regulatory action including the curtailment, suspension and revocation of operator's licences and, in extreme cases, disqualification of people from holding a goods vehicle operator's licence.

TRU also has responsibility for developing and maintaining policy in respect of the relevant legislation. It is around this policy and legislation that the licencing, compliance and regulation functions have been developed.

3.3.3. Funding mechanism(s) for regulator

HSENI operates within the budget allocated to it by its sponsor department, the Department for the Economy (DfE). Each year HSENI submits a budget request to DfE to deliver its corporate strategy and business plan. This is considered alongside other Departmental and NI Executive priorities and a budget is allocated. HSENI does not typically charge fees for its regulatory work, although legislative powers exist to facilitate a fees/ charging regime. Nevertheless, the HSENI budget is entirely funded by Government.

In a similar fashion, TRU is entirely funded by the Departmental Budget of DfI, although there is a small operator’s licence fees that also provides revenue for DfI. However, as Driver Vehicle Standards Agency (DVSA) staff in Leeds carry out the licensing function on behalf of DfI, their salaries are paid from DfI to DVSA at around £925k per annum.

In contrast, the Utility Regulator receives most of its income comes from electricity, gas and water licence holder’s fees, although there is a small capital allocation from the NI Executive. The Utility Regulator retain the receipts collected from the fees following a Treasury Direction, using powers under the 1920 Treasury Act as DfE nominate the Utility Regulator (previously Director General of Electricity Supply and Director General of Gas) to collect receipts on its behalf.

In addition, the licence issued by the DfI to NI Water in respect of water and sewerage services provides for licence fees under that licence to be paid to the Utility Regulator. Licence fees are set annually by a determination made by the Utility Regulator.

Further, the Utility Regulator recovers and retains the cost of administering the Northern Ireland Renewables Obligation (NIRO) scheme from a buy-out fund. This is funded by electricity suppliers that elect to meet their NIRO obligations by paying a buy-out fee. The suppliers pay in at a rate per megawatt hour.

3.3.4. Regulatory compliance and enforcement

Health & Safety Executive Northern Ireland

HSENI carry out investigations of serious and fatal injuries across all work sectors. In terms of enforcement, HSENI can issue improvement notices, prohibition notices or recommend prosecution where there has been a serious breach of the law. This is done in accordance with an MOU with Public Prosecution Service N.I.

HSENI's Enforcement Guidelines enshrine the principles contained in the Regulators' Code produced by the Better Regulation Delivery Office of the Department for Business Innovation and Skills (now the Department for Business, Energy, and Industrial Strategy) in April 2014.

The division of enforcement responsibilities under Article 20 of the Health and Safety at Work (NI) Order 1978 ensure these Guidelines have the status of mandatory guidance and must therefore be followed by other enforcing authorities in NI with responsibilities for the enforcement of health and safety statutory legislation (mainly the District Councils).

Utility Regulator Northern Ireland

The Utility Regulator has investigative powers through Article 51 of the Energy (NI) Order 2003 which provides power to require information from a regulated person, essentially any energy provider or energy producer. The enforcement capability is provided for by Part V1 of the Energy (NI) Order 2003 which provides power to make an enforcement order, to impose a financial penalty.

The Utility Regulator also has powers under 'The Competition Act 1998' to include a power to direct a company to modify or terminate agreements to modify or cease a particular conduct and power to impose a financial penalty.

The Utility Regulator Financial Penalties Policy is required by statute, as outlined above, and covers both whether to impose a financial penalty, a process for determining the amount of the penalty and an appeals process.

Transport Regulation Unit, Department for Infrastructure

The role of TRU is regulatory and focussed on compliance and they can hold various types of "hearings". In chambers hearings are less formal discussions with operators for minor issues or education of operators. They are presided over by deputy heads of TRU.

TRU can also hold 'Preliminary Hearings' are to formally discuss more serious issues and can be used to ascertain if the Regulator needs to take further action against the operator. These are presided over by the Head of TRU.

In addition, TRU can hold 'Public Inquiries' which allow the regulator to take regulatory action against licensed operators that are usually inquisitorial with the operator transport manager (if appropriate) in attendance. The presiding officer (NICS Principal Officer or Transport Commissioner) makes decisions based on the paper evidence provided on the day. The Head of TRU or a Deputy Traffic Commissioner from GB presides over PI's. TRU has the power to disqualify a Transport Manager as well as operators.

TRU cannot act against an unlicenced vehicle, this must be done by DVA or PSNI. Enforcement in these instances is carried out by Driver Vehicle Agency NI which is an agency within DfI with power to stop and inspect vehicles, issue fixed penalty notices in respect of maintenance or driver hours infringements and can impound vehicles if they are discovered on the public road without a goods vehicle operator's licence when one is required.

3.3.5. Engagement/ co-operation with other bodies

Health & Safety Executive Northern Ireland

While HSENI is the lead body responsible for the promotion and enforcement of health and safety at work standards in Northern Ireland, it shares this responsibility with the 11 local councils. Together, HSENI and the local councils cover all work situations in Northern Ireland that are subject to the Health and Safety at Work (Northern Ireland) Order 1978. In addition, HSENI also has a formal MoU with the RSA and ORR to assist in the delivery of its statutory duties for railways.

HSENI work in partnership across the public sector and are an advisory contact and provide briefings for:

- the Interdepartmental Health and Safety Forum (IDHSF),
- the Local Authority Safety Advisors Network (LASAN),
- the Health Trusts Safety Forum, (HTSF),
- the Education Authority Safety Forum (EASF) and
- the Department of Justice Health and Safety Forum (DoJ HSF).

Utility Regulator Northern Ireland

The Utility Regulator works with Ofgem – assessing evidence to rate of return estimates for renewable generator, the consumer council for NI as their role as advocate for consumers in complementary to their regulatory powers. They also work with Department for the Economy and Department for Infrastructure as well as wider government departments in GB including OFGEM, OFWAT and the Water Industry Commission for Scotland and the Republic of Ireland including the Commission for Energy Regulation, and the non-governmental organisations such as the Energy Savings Trust. In addition, the Utility Regulator also works with the Northern Ireland Audit Office (NIAO) and the Public Accounts Committee (PAC) to deliver its statutory duties.

Transport Regulation Unit, Department for Infrastructure

The DfI Transport Regulation Unit works with other bodies such as Driver Vehicle Standards Agency (DVSA), Driver Vehicle Agency (DVA), Border Force, HMRC, NIEA, PSNI, and HSE(NI) to deliver it statutory duties. In addition, TRU also has MOUs or Service Level Agreements (SLAs) with other agencies and bodies such as:

- Border force/ SVSA/ TRU – data sharing agreement in place;
- HMRC – data sharing agreement in place;
- DSA with DVSA – MOU;
- DVA – Statement of Service in place for services that they carry out; and
- PSNI – data sharing agreement which is under consideration.

4. Summary & Conclusions

4.1. Summary & Conclusions from Phase 2 case studies

The Phase 2 case studies examined the rail safety regulatory role in Northern Ireland, to establish our base line for comparison, and rail safety regulators in Ireland, New Zealand, Great Britian, South Africa, Australia and the USA. These other jurisdictions were selected as the provide a range of different regulatory models and approaches, as well as ease of access to documentation in English. In addition, the Phase 2 case studies examined other NI based regulators such as the Health & Safety Executive for Northern Ireland, the Utility Regulator, and the Transport Regulation Unit (Department for Infrastructure).

A desk-based case study approach was adopted for Phase 2 of the review. The case studies commenced with a shortlisting process to identify potentially suitable regulators to include as a case study, as outlined above. Once suitable case study organisations were identified a data extraction tool was developed to ensure the review obtained the necessary information in a consistent format. On completion of the data collection stage of Phase 2, the data was subject to extraction from the data extraction tool, it was then consolidated and analysed thematically, and section 3 reports the findings from the analysis. The remainder of this section summarises the key conclusions from the case studies.

Type of regulating organisation, its size, and degree of regulatory independence

There are a number of different approaches to organising the rail safety regulatory role. In some jurisdictions, there are executive agencies (USA, New Zealand), in others there are non-Ministerial Government Departments (GB), while in others there are independent corporate bodies (Ireland, South Africa, Australia).

One common theme across all rail safety regulators is their regulatory independence from political decision-making. While there are differences in organisational form, all regulators are broadly organised in a way as to minimise the potential from political interference in the day-to-day regulatory decision-making process.

Similarly, both HSENI and the Utility Regulator both have a significant degree of regulatory independence from political decision making, as HSENI are an NDPB and the Utility Regulator is a corporate body. Consequently, the degree of regulatory independence is set in legislation, although both organisations are accountable to Ministers and the Northern Ireland Assembly.

In contrast, TRU are like Rail Safety Branch in that they are a branch within a Government Department. As such, both are subject to Ministerial priorities and decisions as well as the budget priorities which are allocated by the Northern Ireland

Executive and Assembly. This manner of organising a regulatory function retains a risk of political influence on regulatory decision-making.

Functions of regulator

Broadly speaking, the rail safety functions across all regulators are very similar with few areas of difference. In terms of common functions, each regulator is responsible for occupational health and safety on their rail networks, authorising or approving the infrastructure and rolling stock deployed on the network, as well as monitoring regulatory compliance and undertaking enforcement action where necessary. Finally, most regulators have some investigatory responsibilities, as well as collecting and publishing information or statistics on the safety of the rail network.

Similarly, NI based regulators in other fields have a clear and consistent set of responsibilities and they are responsible for monitoring regulatory compliance and undertaking enforcement action, sometimes in partnership with other organisations.

In contrast, the delivery of rail safety responsibilities is split across organisational boundaries. Rail Safety Branch performs much of the regulatory functions as those delivered by regulators in other jurisdictions, although it has very limited enforcement powers relating solely to train driver licensing.

Funding mechanism(s) for regulator

Most case study organisations appear to have a mixed funding model with elements of direct Government funding and industry funding through a levy/ charge or fees, although rail regulation in GB is fully industry funded and Australia is moving in this direction. Where case study regulators do have a mixed funding model, in the main the majority of funding comes from industry rather than Government. The USA is an exception, and it appears the majority of the Federal Railroad Administration funding comes from Government. However, unlike other regulators the FRA is also responsible for providing grants to make safety improvement from this budget. It is therefore a little less clear the extent to which regulatory activity like audit and inspection is funded by Government or industry.

In terms of the other NI based regulators of other fields, the Utility Regulator receives most of its funding from industry with a small grant from its sponsoring Government Department. In contrast, both HSENI and TRU are entirely funded by their Government Departments. Likewise, the funding model for rail safety regulation in Northern Ireland is provided by Government coming through Departmental allocations.

Regulatory compliance and enforcement

In general, Rail Safety Regulators across the case study organisations included in this report have similar compliance and enforcement functions and powers. They control entry to the sector through licences, permits, certificates, etc. They employ inspectors who undertake monitoring and supervising activity of rail operators through audit and inspection, and investigation of incidents and accidents. Further, regulators enforce legislative requirements usually by means of notices or orders, the placing of conditions on licences or certificates (or suspension or revocation) and in some instances issue fines, seize equipment and undertake prosecution of operators.

Similarly, NI based regulators in other fields have a range of compliance and enforcement powers that reflect their role and remit. For HSENI this includes issuing improvement and prohibition notices, as well as prosecution, while the Utility regulator can issue fines and penalties, and TRU can disqualify Transport Managers and Operators.

In contrast, the compliance and enforcement functions for rail safety in Northern Ireland are split across separate organisations. Rail Safety Branch exercises compliance monitoring powers while HSENI is responsible for undertaking any enforcement activity. This has the potential to result in differing views on the requirement for possible enforcement action.

Engagement/ co-operation with other bodies

In Northern Ireland, like all other jurisdictions and case study regulators, there are arrangements in place to ensure the cooperation of rail safety authorities and workplace health and safety authorities. These arrangements reflect good practice seen across these jurisdictions with good collaboration and cooperation between the Department as Safety Authority and HSENI. The key difference is in relation to enforcement powers and the reliance on HSENI as the enforcement authority for safety authority functions.

Rail accident investigation

Each case study jurisdiction had fairly similar arrangements with the exception of South Africa. The RSR in South Africa was the only regulator who also had responsibility for investigating the most serious of accidents. In saying that, the arrangements for investigating rail accidents in South Africa provide an opportunity to draw on external experts as part of the process. With that exception, in all other jurisdictions there are separate bodies for rail safety regulation and investigating the most serious rail accidents. There were some minor differences with some jurisdictions having specialist rail investigation bodies with other jurisdictions combining rail accident investigation with other transport modes such as aviation and maritime. Nevertheless, the practice in Northern Ireland reflects that in other case study jurisdictions.

4.2. Next Steps – Preparing for Phase 3

Phases 1 and 2 of the review have identified the current scope and potential for greater clarity around the scope of the role and remit for rail safety branch, as NSA. Phase 1 highlighted the full extent of the statutory duties and functions of the NSA, as well as potential gaps. Phase 2 offered some insights into potential options for organising these duties and functions based on the lessons from rail safety regulators in other jurisdictions as well as other NI base regulators in other fields.

Overall, Phases 1 and 2 have highlighted some key questions that need to be addressed. Specifically, these are around issues such as the level of regulatory independence from Government; regulatory compliance and enforcement powers for the NSA; how the NSA should be funded; and how legislative gaps in rail safety regulation should be closed.

In order to address these questions Phase 3 will consist of stakeholder engagement across the sector in Northern Ireland. The stakeholder engagement in Phase 3 will employ qualitative research methods including 1-2-1 and small group interviews to obtain data and insights from key stakeholders. While these conversations will have key areas to cover, such as those outlined above, they will take a less structured approach to ensure participating stakeholders can focus their response on those issues or ideas they view as most important/ relevant. Each interview will be transcribed to capture they key ideas/ issues discussed and, like Phases 1 and 2, will be subject to thematic analysis to identify key concepts to inform possible options for the future organisation of the rail safety function.