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I am pleased to introduce the Commission's Statement of Strategy 2018 – 2020. This is the fifth statement of strategy prepared by the Commission under the Railway Safety Act 2005. It has been developed with the participation of staff and in consultation with stakeholders.

In developing this Strategy, the Commission recognises that the regulation of the rail sector continues to develop both at national and European level. This Strategy has been prepared against the background that is challenging in the context of key legislative and policy developments. These include the implementation of the 4th European Railway Package, the Government's National Development Plan 2018 – 2027 and Brexit. In addition, it is expected that the time frame for this Strategy will be a period of continued economic growth and recovery bringing with it increased demands for public transport and increased traffic on the national light and heavy rail systems.

The Commission's main aim is to ensure that the national rail infrastructure and the railway organisations in the country operate under effective safety management systems that deliver safe and sustainable rail transport. Since 2015, the Commission is also responsible for the economic regulation of the sector in respect of State compliance with the provisions of the European railway system.

During the lifetime of this Strategy, the Commission will be the national lead on the transition to a central European authorisation and certification approvals system for the rail sector. In addition, it will have a significant role in overseeing the safe and sustainable implementation of the proposed development and investment in the nation's rail transport system, and it will be a key member of the national stakeholders who must work together to achieve the intended outcomes in the National Development Plan.

In developing this Strategy, the Commission has actively sought the contribution of key stakeholders and we will continue to work with railway organisations, the infrastructure manager, government departments and agencies, and other representative bodies to promote and achieve our mission.

We will continue our work to represent Irish interests at EU level and to contribute to the development of practical, proportionate and appropriate solutions and legislation.

The CRR is committed to advancing railway safety, fostering the maintenance and further development of high performing and sustainable railway systems and ensuring fair access to the Irish conventional railway network through regulation, monitoring, encouragement and promotion.

This Statement of Strategy 2018–2020 sets out the Commission's mandate, mission, vision, and key priorities to the end of 2020. It will be the basis of the Commissions activity over this time period and will be implemented through the development of its' annual work programme.

We look forward to working together to implement the objectives set out in this Statement of Strategy.

#### **Brian Higgisson**

Commissioner



The Commission for Railway Regulation (CRR) was established on 1st January 2006 under the provisions of the Railway Safety Act 2005. The CRR is the National Safety Authority (NSA) for the railway sector in the Republic of Ireland. It is the independent regulatory agency charged with oversight of the safety of heavy and light railway organisations and the associated infrastructure that provided over 80 million passenger journeys in the State in 2017. It also has tasks assigned to it under the EU Railway Interoperability Directive.

The CRR is a small independent State body comprising 15 staff. It has an organisational structure that is designed to facilitate the delivery of its mandates under legislation. It is primarily staffed with technical specialists possessing a very broad knowledge of the heavy and light railway sectors. Our strategy of growing our own expertise is central to the continuing development of the CRR. Our continuous professional development approach is based on the levels of qualification and experience expected for each grade of railway safety Inspector. It also takes account of the need to develop added skills in the areas of railway economics, human factors, and risk assessment. This has provided the means of developing and increasing railway-specific technical knowledge to meet the business needs of the organisation, an approach that will be continued in the period of this strategy.

The CRR is required to ensure that each railway organisation operating in the State understands and effectively manages the risk to safety associated with its activities. This is primarily achieved in the following ways:

- Conformity Assessment This involves assessing the Safety Management Systems (SMS) of railway organisations to ensure that they conform to all the requirements prior to awarding safety authorisation or safety certification.
- Authorisation to Place in Service (APIS) –
   This involves assessing applications for new or
   altered railway infrastructure, command
   control and signalling equipment, energy supply
   equipment and rolling stock in accordance with
   National and EU legal provisions.
- Compliance Supervision & Enforcement –
   This involves both audit and inspection for compliance with the procedures and standards prescribed in each SMS approved in conformity assessment. Also central to this is the inspection of railway assets to assess compliance with fitness for purpose criteria, as well as ensuring compliance with safety recommendations through the monitoring of implementation plans and by taking enforcement proceedings where necessary. Accident and incident investigation are also an important aspect of this activity.

Entity in Charge of Maintenance –
 This involves providing certification and annual surveillance of entities in charge of maintenance in Ireland.

European & Legislative Harmonisation –
 This involves supporting the harmonisation of
 legislation with EU Directives and Regulations,
 and ensuring that the consequent
 implementation of related technical and
 procedural measures conforms to mandatory
 EU requirements.

The CRR is the Regulatory Body, Licensing Authority and Independent Monitoring Body for the heavy rail sector in the State in terms of the EU Single European Railway Area Directive. In this context it has the following regulatory functions:

- Licensing of Railway Undertakings seeking to access the national railway network.
- Independent Monitoring of the Multi-Annual Contract between the Minister and the Infrastructure Manager.
- Oversight of the larnród Éireann track access allocation and pricing regime and adjudication on appeals by Railway Undertakings.

The CRR is also the Competent Authority designated for transport by rail of dangerous goods of specified classes, train driver certification, and cableway installations designed to carry persons.





The Commission for Railway Regulation has been granted a broad mandate under a range of national and European legislation, which include:

- To act as the competent authority in the State, so as to -
- ensure the development and improvement of railway safety; <sup>1</sup>
- foster and encourage railway safety; 1
- enforce legislation relating to railway safety, including the Railway Safety Act <sup>1</sup> and EU requirements on:
  - > railway safety; 2
  - > railway interoperability; 3

- transport by rail of dangerous goods of specified classes;<sup>4</sup>
- > train driver certification; 5 and
- cableway installations designed to carry persons. <sup>6</sup>
- investigate and report on railway accidents and incidents for the purpose of determining compliance with safety management systems and safety targets; 1,2.
- To act as the regulatory body, licensing authority and independent monitoring body for the use of the heavy rail network in the State.
- New cableway installations designed to carry passengers are also subject to regulation as they are governed by specific EU Regulations. <sup>6</sup>

- 1. S.I. No. 31 RAILWAY SAFETY ACT 2005.
- 2. S.I. No. 444 EUROPEAN UNION (RAILWAY SAFETY) REGULATIONS 2013.
- 3. S.I. No. 419 EUROPEAN COMMUNITIES (INTEROPERABILITY OF THE RAIL SYSTEM) REGULATIONS 2011.
- 4. S.I. No. 651 EUROPEAN COMMUNITIES (TRANSPORT OF DANGEROUS GOODS BY RAIL) REGULATIONS 2010.
- 5. S.I. No. 399 EUROPEAN COMMUNITIES (TRAIN DRIVERS CERTIFICATION) REGULATIONS 2010.
- 6. REGULATION (EU) 2016/424 ON CABLEWAY INSTALLATIONS AND REPEALING DIRECTIVE 2000/9/EC.
- 7. S.I. No. 249 EUROPEAN UNION (REGULATION OF RAILWAYS) REGULATIONS 2015.

The CRR in meeting its mandate seeks to adopt a harmonised regulatory approach. The operation of the national railway network as indicated is governed by comprehensive and detailed National and EU legislation. The operation of isolated railway networks and tramways is governed by national rules, some of which reflect the EU approach.

The CRR are committed to working under the principles for supervision to be applied by national safety authorities as defined in Commission Regulations. These include being:

- proportionate in applying legislation and securing compliance;
- consistent in terms of our approach;
- targeted to areas of risk,
- transparent about how we operate and what those regulated may expect; being
- accountable for our decisions or actions, and
- co-operating with equivalent competent authorities.

We are committed to open engagement and dialogue with sector organisations, clearly explaining our processes and governance and responding to current concerns.

# The following entities are subject to regulation by the CRR:

larnród Éireann - Infrastructure Manager, Iarnród Éireann - Railway Organisation, Transdev, Balfour Beatty Rail Ireland Limited, NIR Translink, Bord na Móna, Assenta Rail (maintenance body for the Belmond Grand Hibernian Tourist Train), the Railway Preservation Society of Ireland, and operational isolated heritage railways.





# **CURRENT LEGISLATION**

The Commission for Railway Regulation acts as the competent authority under a range of national and European legislation, i.e.:

- i) Railway Safety Act 2005;
- ii) Railway Safety Directive 2004/49;
- iii) Railway Interoperability Directive 2008/57;
- iv) Train Drivers' Certification Directive 2007/59;
- v) Single European Railway Area Directive 2012/34;
- vi) EU Cableway Installations designed to carry persons Regulation 2016/424.

The relevant national legislation which transposed the European Directives normally consists of regulations to amend the relevant national law, plus stand-alone regulatory instruments, e.g.:

- i) EC Railway Safety Regulations S.I. 61/2008, S.I. 444/2013 and S.I. 258/2014:
- ii) EC Transport of Dangerous Goods by Rail Regulations S.I. 651/2010;

- iii) EC Train Drivers' Certification Regulations S.I. 399/2010;
- iv) EC Railway Safety Regulations S.I. 70/2011;
- v) EC Interoperability of the rail system Regulations S.I. 419/2011;
- vi) EU Regulation of Railways Regulations S.I. 249/2015.

Both the railway interoperability and railway safety directives require supplementary European regulations to facilitate their implementation. These EC/EU regulations are highly technical in nature, and apply to all actors in the EU rail system. They primarily consist of technical specifications for interoperability and common safety methods. The CRR actively represents Ireland in the process of review of the draft implementing acts and delegated acts proposed to this end by the European Commission.

# FOURTH RAILWAY PACKAGE

The fourth railway package effectively recasts the three primary railway directives and their associated regulations in a way that further opens up the railway market to competition while maintaining a high level of safety. The CRR will continue to act as a technical advisor to the Department of Transport Tourism and Sport (DTTAS) in this regard.

The fourth railway package is the external event most likely to have an impact on the CRR within the lifetime of this Strategy. This will require an update of CRR guidance to reflect the new directives, implementing acts and other guidance and arrangements emanating from European Union Agency for Railways (ERA). Dissemination of this information internally and to external stakeholders will be needed. Additionally, the NSAs will come under the supervision of ERA.

#### COOPERATION WITH NATIONAL AND INTERNATIONAL

The CRR is an active member of the safety-oriented International Liaison Group for Governmental Railway Inspectors and the market-oriented Independent Regulatory Group for rail. These groups provide the opportunity for railway safety and market regulators from EU member States and the European economic area to liaise on points of common interest. This liaison is particularly important during the current period as the regulatory role of the CRR continues to evolve.

The CRR remains active in the International Railway Safety Council, which conducts an annual worldwide conference for railway safety regulators and railway safety managers. The CRR will host this conference in October 2018.

The CRR actively seeks to retain and develop its liaison with the relevant engineering, operating and safety professional bodies, such as Engineers Ireland and the Institutions for Mechanical Engineering, Civil Engineering, Engineering and Technology, Railway Signal Engineering, Railway Operators, and the Institution of Occupational Safety and Health. The CRR will seek to represent the State at meetings of

international bodies such as the Intergovernmental Organisation for International Carriage by Rail (OTIF) and UNECE when the subject matter is mutually beneficial.

In a number of specific areas we have sought close engagement through the development of Memorandum of Understanding with other State bodies.

#### EU COOPERATION AT AGENCY AND COMMISSION LEVEL

The CRR represents the State at the DG-MOVE Railway Interoperability and Safety Committee together with the associated expert group on the fourth railway package, and on the European Network of Rail Regulatory Bodies.

The CRR participates in NSA Network meetings at ERA and participates in its working groups dealing with a range of developments of particular interest. CRR members serve on the ERA Administration Board and on the Joint Network Secretariat of the ERA, and the CRR will seek to maintain its level of influence in the Agency.

#### BREXIT

On 29th March 2017, the United Kingdom submitted notification of its intention to withdraw from the European Union pursuant to Article 50 of the Treaty on the European Union. Subject to any transitional arrangement that may be contained in a possible withdrawal agreement, as of the withdrawal date, the EU rules in the field of rail transport may no longer apply to the United Kingdom. This may have particular consequences for the regulation of the Dublin/Belfast Enterprise service.



#### **OPERATIONAL PROFILE**

Based on the data notified to the European Railway Agency database of interoperability and safety (ERADIS) the level of activity on the national network has remain relatively consistent in recent years, with the exception of passenger travel rates which are increasing.

The total train-km travelled in 2017 was 18.7 million, with carryings of 101 million freight tonne-km. There were 45.5 million passengers carried with a total of 2121 million passenger-km.

Reported accident and incident rates are lower than average In the EU context. Reported deaths and serious injuries involving trains in motion result chiefly from intentional acts. The fatality rate per million train-km was 0.3 in 2016, rising to 0.5 in 2017 compared to a reported EU average of 1.0.

In 2016, the rate of reportable precursor incidents (e.g., signal passed at danger, wrong-side signal failure, broken rail, track misalignment, broken wheel or axle) per million train-km was 2.07 compared to a reported EU average of 2.7.

The largest carrier of passengers on an isolated railway network is the Dublin light railway system (LUAS), with 37.6 million passenger journeys made in 2017.

## ASSET PROFILE

The larnród Éireann network includes main line, Dublin suburban and commuter passenger routes, together with freight-only routes. larnród Éireann's Network Statement 2018 reports that there are 372 platforms, 145 passenger stations and 13 tunnels; 4,440 bridges, 1,100 point ends and 970 level crossings, and more than 3,300 cuttings and embankments on the national railway network. Track configuration consists of: mainline – single extends to 1178 track-km; mainline – double extends to 886 track-km mainline and – multiple extends to 60 track-km.

There are two freight-only lines: Drogheda to Tara Mines and Waterford to Belview Port, in addition to four freight terminals/depots.

There is one cross-border connection to the railway system in Northern Ireland between Dundalk and Newry.

The Dublin suburban rail system in the area bounded by Malahide, Howth and Greystones is electrified at 1,500V DC.

About 53% of train kilometres are run with Train Protection Systems providing warning, with a further 11% providing warning and automatic stop and speed control.

The heavy rail rolling stock fleet consists of diesel locomotives, DMU intercity railcars, DMU commuter, EMU (DART), carriages (Mark IV and De Dietrich) and freight wagons.

The Dublin light railway, LUAS, is mainly double-tracked throughout. The Red Line consists of 20km of double track running from Tallaght/Saggart to The Point/Connolly. There are 32 stops on the Red Line. The Green Line consists of 22km of track running from Brides Glen to Broombridge; approximately 20km of which is double track and 2km of which is single track. There are 37 stops on the Green Line.

There are three depots, at Red Cow, Sandyford and Broombridge. The rolling stock fleet, all Alstom Citadis trams consists of forty 40m trams, twenty-six 43.6m trams and seven 54.7m trams. There is a Central Control Room at the Red Cow Depot.

There are in addition nine heritage railways, of which six are currently operational, consisting of narrow gauge track from 1 km to 4.5km in length and one monorail trackway.

#### PLANNED ASSET DEVELOPMENT

The National Development Plan 2018 – 2027 has particular relevance to planned new assets and impacts on the activity of the CRR in the context of this new Strategy and its future strategies.

Specifically the National Strategic Outcome 4 - Sustainable Mobility, identifies the following planned new rail development:

**Metrolink** – a safe, high frequency, high capacity, fast, efficient and sustainable public transport service connecting Swords, Dublin Airport, Dublin City Centre and Sandyford

**DART Expansion** – priority elements of the DART Expansion programme including electrification, reconfiguration of track, re-signalling, level crossing elimination and investment in new rolling stock.

**National Train Control Centre** – complete construction and bring into use.

**LUAS Network Expansion** - In line with the National Transport Authority's Transport Strategy for the Greater Dublin Area 2016-2035, undertake appraisal, planning and design of LUAS network expansion to

Bray, Finglas, Lucan, Poolbeg and a light rail corridor for Cork in the later stages of the period of the Cork Transport Strategy which is being finalised.

#### HIGH SPEED RAIL

In addition a feasibility study of high speed rail between Dublin-Belfast, Dublin-Limerick Junction-Cork and an evaluation of its economic benefits against improvements to existing line speeds will also be carried out against relevant appraisal processes and value-for-money tests required under the Public Spending Code.

# SAFETY PERFORMANCE

The CRR is a data and evidence-based organisation in respect of our regulatory functions. We lead on the collection, validation, analysis and dissemination of safety performance data which also influences our engagement and focus.

The CRR keeps key safety performance indicators under review as a means of monitoring the safety of railway organisations who operate conventional railways, heritage railways and light railway in Ireland. The statistics are published in the CRR Annual Report to the Minister and the CRR Railway Safety Performance Report. For conventional railways, the European Union Agency for Railways also publishes statistics on railway safety performance in Ireland and the EU. The data indicates Ireland compares favourably when measured against other European Union member States.

The safety performance indicators for heavy railway include operational fatality and injury statistics, employee injuries, train collisions, signals passed at danger, train derailments, rolling stock incidents, broken rail and fishplates and bridge strikes. For the LUAS, performance indicators include road traffic collision, tram pedestrian contact, tram derailments and emergency brake application.

Post-incident investigation also provide valuable information on safety performance. These indicators will continue to be kept under review and direct the engagement of the CRR with the railway sector during this Statement of Strategy.

There have been no passenger fatalities reported to CRR since it first came into existence. However, in

2016, 5 people lost their lives due to unauthorised entry onto the railway, and this number increased to 9 in 2017. Signals Passed at Danger (SPADs) has plateaued since 2012, after trending downward for the previous decade. This trend is being monitored as part of specific supervision activities by the CRR.

LUAS safety performance in 2016 was broadly consistent with previous years, and trending in a positive direction.

Over the life of this Statement of Strategy the CRR will, in addition to our routine auditing and inspection programmes, pay particular attention to risk areas based on our knowledge of trends in safety performance. These will include:

#### Railway Interfaces

While the number of level crossings across the mainline network continues to decline, they are a significant area of risk given the reliance on third parties to operate and use the level crossing correctly. Misuse by level crossing users remains a cause for concern and we will continue to work with larnród Éireann and the Road Safety Authority on reducing risk at level crossings.

## Structural Failure

In recent times there has been an increase in the numbers of embankment failures, usually following some form of adverse weather event. Inspection, monitoring and maintenance of assets including older assets presents in some cases unique challenges.

#### **Platform-Train Interface Hazards**

Increasing passenger numbers, particularly on the highest density passenger routes, will pose a challenge. Platforms in particular present hazards relating to the interface between the platform and train and the safe dispatch of trains.

# **Operational Occurrences**

This category includes occurrences such as signals passed at danger / movements beyond limits of authority and train over-speeds. These pre-cursor indicators have seen fluctuation in recent years and will continue to be a key indicator of operational safety.

#### Maintenance

The railway system, to operate at a steady state, requires routine inspection, maintenance and renewal of physical assets. Infrastructure maintenance takes place daily on Ireland's railways and this area will continue to be a focus of attention.

## NEW AND EMERGING RISKS

With the imminent publication by the EU of revised Common Safety Methods that include new safety management requirements in the area of human factors, we will promote and continue to support efforts to improve the industry's capability in this area. Moreover we will promote the characteristics of high reliability organisations encouraging railway organisations to improve their internal communication and consultation.

Further areas warranting attention include fatigue management and safety critical communications. We will also be mindful of new human factor risks emerging relating to automation and the digital railway when deciding what supervision activities to undertake over the lifetime of this Statement of Strategy.

There are increasing instances and reports of antisocial behaviour on the rail network. These can result in a direct effect on passenger and staff safety and also have a broader effect on people's willingness to use public rail transport. The CRR will work with all stakeholders in the sector to develop appropriate initiatives to address this rising concern.

# ECONOMIC REGULATION ANALYSIS

Since 2014, the CRR has undertaken the role of the Railway Regulator, pursuant to the contract between DTTAS and IÉ-IM.

Under this role, the CRR has carried out independent monitoring of the Infrastructure Manager's Multi Annual Contract (IMMAC) since 2014. During that time the reporting format has evolved through consultation with both IÉ-IM and DTTAS. The CRR is contributing to the development of the next IMMAC with regards to reporting requirements and the revision of KPIs and targets. The CRR will continue to carry out the role of Independent Monitor of the IMMAC for the next contract, 2019 – 2024, and will interface with both the IÉ-IM and the DTTAS.

The CRR is a member of IRG-Rail and of the ENRRB, attending meetings with both groups in order to learn from other regulatory bodies' experiences and to have an input in changes to legislation which is continually evolving.

# CONSULTATION

The CRR sees a clear need for continued engagement 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.

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. Four submissions were received from IÉ Infrastructure Manager, Transport Infrastructure Ireland, the Rail Safety Advisory Council and Translink. The submissions received consideration as part of the strategy development process. The CRR would like to extend its thanks to the organisations that made these submissions, which will be published on our website.



# MISSION

The CRR is committed to advancing railway safety, the maintenance and further development of high performing and sustainable railway systems and ensuring fair access to the Irish conventional railway network in Ireland through regulation, monitoring, encouragement and promotion.

# VISION

Railways that safely deliver.





#### PRIORITY 1

Ensure continuous improvement in the safety performance of heavy and light railway systems.

#### **Key Objectives**

- Within its certification, authorisation and supervision activity the Commission will ensure compliance with legislation and standards.
- We will develop working relationships and partnerships with stakeholders where opportunities for safety initiatives exist.
- Support the development of reporting and business intelligence systems to ensure safety risk is known and understood by the industry and the public.
- Promote the use of risk based thinking amongst all railway organisations.
- Ensure that our programmes and the allocation of resources are based on evidence, research, analysis and evaluation.
- Selected areas of high and emerging risk will receive additional focus.

## PRIORITY 2

Effective monitoring relating to rail infrastructure, access and licencing requirement of the single European network area.

# **Key Objectives**

- Update the key performance criteria within the Infrastructure Manager Multi Annual Contract. (IMMAC)
- Ensure that performance criteria are monitored in the delivery of steady state infrastructure.
- Report to the Minister on the operation of the IMMAC
- Enhance the oversight program relating to our role as Independent Monitor.



## PRIORITY 3

To support government public transport policy initiatives directed at the needs of society and the economy through safe, sustainable and competitive railway transport networks and services.

#### **Key Objectives**

- To engage with and advise the DTTAS in relation to the safety aspects of railway transport network maintenance and new development.
- Early engagement with those responsible for delivery of key new subsystems for light and heavy rail.
- Ensure those delivering new subsystems have a clear understanding of the approvals process.

#### PRIORITY 4

Ensure industry awareness and understanding of changing national and European railway Regulatory environment.

#### **Key Objectives**

- Workwith the DTTAS to support the harmonisation of legislation with European Directives and Regulations.
- Continue our engagement with the rail sector on new and developing legislative change.
- Support the implementation of technical and procedural measures so as to conform to European Union requirements.
- Promote a stable and well understood overall regulatory framework.
- Continued engagement and cooperation with regulatory agencies within Ireland and abroad.
- Avail of opportunities offered through Directorate-General for Mobility and Transport (DG-MOVE) and ERA for awareness raising activity on new developments in the context of the fourth railway package.



## PRIORITY 5

Be a high performing organisation delivering quality and value in what we do.

#### **Key Objectives**

- Manage the Commission in line with corporate governance requirements and ensure that the Commission is adequately resourced.
- Perform Commission functions and tasks consistently to the highest standards.
- Ensure continued staff development through an effective competency management system.
- Deliver all services efficiently and effectively through the review of our business processes and our use of technology, together with the implementation of a Quality Management System.
- Collaborate with stakeholders and influence national and international bodies, government departments and agencies, to achieve our vision.
- Consult with the railway sector to ensure guidance produced is understood and applied correctly.



