



Department
for Transport

National Technical Specification Notice

<Rail Interoperability Specifications for Northern Ireland>

Issue [1]

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Rail Interoperability – The Railways (Interoperability) Regulations 2011

Notice to all:

- Manufacturers and distributors of railway equipment
- Infrastructure managers and railway undertakings who operate subsystems in Northern Ireland
- Railway infrastructure and train: builders, designers, operators, owners and managers
- Certifying authorities, approved bodies, designated bodies, recognised organisations and railway consultants

This Notice has been published by the Secretary of State for Transport pursuant to regulation 3B of the Railways (Interoperability) Regulations 2011 (RIR 2011).

Summary

1. Objectives and target outcomes of rail interoperability in Northern Ireland

RIR 2011 supports the railway to function as one modern integrated system through rail equipment meeting common baseline requirements of technical compatibility, reliability and availability, accessibility, environmental protection, health, and safety (“Essential Requirements”) (See Schedule 2 to RIR 2011 ‘Essential Requirements’ for further details). By taking a long-term whole-system view, it seeks to progressively improve Northern Ireland’s (NI) railway in the following ways:

- More consistently reliable, efficient and accessible services for rail customers
- Reduced technical barriers to trade on the island of Ireland in line with the objectives of the Windsor Framework
- Reduced industry production, delivery and maintenance costs through use of standardised products and economies of scale

- An open and competitive supply chain for rail projects
- Reduced environmental impact.

2. Function of this National Technical Specification Notice (NTSN)

RIR 2011 requires new, upgraded or renewed rail vehicles, infrastructure and some components to meet minimum specifications linked to the six Essential Requirements of interoperability: i.e. technical compatibility, reliability and availability, accessibility, environmental protection, health, and safety.

In February 2023, the United Kingdom and the European Union agreed the Windsor Framework. To facilitate dual access to both the UK internal market and the EU single market, Northern Ireland applies EU Directive 2016/797¹ on the interoperability of the rail system, insofar as conditions and technical specifications for the placing on the market, putting into service and free movement of railway products are concerned. This means that the EU's Technical Specifications for Interoperability (TSIs) are directly applicable in NI and that 'interoperability constituents' and the 'subsystems' into which they are assembled must demonstrate conformity with applicable TSIs to fulfil the Essential Requirements of RIR 2011.

This NTSN lists the TSIs that apply in relation to the placing on the market, putting into service and free movement of different 'subsystems' of NI's rail system, and key components referred to as 'interoperability constituents' within the TSIs. It also refers to the supplementary standards that must be applied in NI for relevant 'open points' and 'specific cases' in the TSIs. The TSIs also set requirements in relation to third party assessment of conformity to the Essential Requirements, the placing of interoperability constituents on the market, and operation and maintenance of railway 'subsystems'.

3. How this NTSN should be read

This NTSN consists of two parts: the Articles and the Annex. The Articles set out relevant information concerning scope and application. The Annex lists the TSIs and supplementary standards for meeting the Essential Requirements in NI.

Rail projects should check articles 1 'Scope' and 2 'Application' of this NTSN to identify whether they are legally obliged to apply the TSIs and supplementary standards listed in the Annex. Projects in scope should review the applicable requirements listed in the Annex at the earliest stage of project development and factor these into cost benefit analyses on designs and procurements specifications so that implementation, or a need for an exemption, can be planned accordingly.

4. Relationship with rail safety obligations

¹ Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (recast) (Text with EEA relevance)

Conformity to the TSIs and supplementary standards listed in the Annex to meet obligations under RIR 2011 does not guarantee that safety obligations under all relevant rail safety legislation are met, including (but not limited to) the Railways (Accident Investigation and Reporting) Regulations 2005; the Railway Safety Act (Northern Ireland) 2002; The Railways (Safety Management) Regulations (Northern Ireland) 2006; and the Health and Safety at Work (Northern Ireland) Order 1978. Some specifications set out in the TSIs are intended to fulfill the 'Essential Requirement' of safety, ensuring a common baseline of safe design. However, meeting these requirements alone does not mean that a railway subsystem meets its legislative requirements.

5. Relationship with other rail standards

Entities that are obliged to apply the TSIs and supplementary standards listed in the Annex of this NTSN may have other obligations concerning the application of standards covering the same topics. Within the context set out in articles 1 and 2, the TSIs take precedence over all other standards unless otherwise indicated in the TSI itself (e.g. there is an applicable NI specific case), or if indicated in the National Implementation Plan, or if there is a formal exemption granted by the Department for Infrastructure or, in the case of international rail services, the Convention Concerning International Carriage by Rail (COTIF) applies.

National Technical Specification Notice Northern Ireland

Articles

Article 1

Scope

1. The geographic scope of this NTSN is the NI railway system, except for parts named on the approved list of exclusions published by the Secretary of State (this can be found here: [Heritage and Tourist Railways | Department for Infrastructure](#)) pursuant to Regulation 3(2) or described in Regulation 3(5) of RIR 2011.
2. The TSIs listed in the Annex have direct effect in NI and cover all structural and functional subsystems of the railway, associated maintenance subsystems and interoperability constituents.

Article 2

Application

1. The TSIs and supplementary standards listed in the Annex principally apply to rail projects that require an authorisation to be placed into service as per Regulation 4 (requirement for authorisation) of RIR 2011.
2. Compliance with the TSIs and supplementary standards listed in the Annex is mandatory for rail projects that will place new subsystems in service. Compliance with the TSIs and/or supplementary standards is required from the point of publication on the relevant website (provided in the Annex) and is without prejudice to any transitional arrangements specified in the TSIs or exemptions granted by the relevant competent authority.
3. Compliance is also mandatory for rail projects meeting the definitions of 'upgrading' (i.e. any major modification work on a subsystem or part of a subsystem which improves the overall performance of the subsystem) or 'renewal' (i.e. any major substitution work on a subsystem or part of a subsystem which does not change the overall performance of the subsystem) under Regulation 2 of RIR 2011 'Interpretation', that will seek authorisation to place into service after the relevant TSI publication date, without prejudice to any transitional arrangements specified in the TSIs or exemptions granted by the relevant competent authority.
4. Operators of structural and/or functional subsystems that were authorised to be placed into service against the TSIs listed in the Annex are required to operate and maintain the subsystems in conformity with the TSIs specified in this NTSN (or an updated version

of this NTSN), as per Regulation 20 of RIR 2011 'Continuing duty on operator in relation to standards'.

Article 3

Verification of conformity

1. A structural and/or functional subsystem's conformity to the TSIs and supplementary standards listed in the Annex shall be confirmed by an EC declaration of verification.
2. The procedures specific to each listed TSI for assessment of conformity, suitability for use and EC verification are set out in each TSI.
3. It is the responsibility of the applicant for an authorisation to place a subsystem into service to choose the conformity assessment module(s) that should be applied by the notified body from the options listed within the relevant TSIs. The applicant should consider which module is most proportionate and cost effective for the project.
4. Where interoperability constituent specifications in the relevant TSIs are equivalent to those of the corresponding GB NTSNs, an EC declaration of conformity or suitability for use is valid for demonstrating compliance with the GB NTSNs and for placing these interoperability constituents on the market in GB. See official guidance² for details of TSI versions with equivalent interoperability constituent specifications.

² [Guidance is in the process of being drafted – link to be inserted here once finalized and published]

Annex

Technical specifications for Interoperability

Infrastructure: [technical specification for interoperability relating to the ‘infrastructure’](#)

Energy: [technical specifications for interoperability relating to the ‘energy’](#)

Noise: [technical specification for interoperability relating to the subsystem rolling stock — noise](#)

Rolling stock – locomotives and passengers: [technical specification for interoperability relating to the rolling stock — locomotives and passenger rolling stock](#)

Rolling stock – freight wagons: [technical specification for interoperability relating to the subsystem rolling stock — freight wagons](#)

Safety in railway tunnels: [technical specification for interoperability relating to safety in railway tunnels](#)

Command control and signaling: [technical specification for interoperability relating to the control-command and signalling](#)

Persons with disabilities and with reduced mobility: [technical specifications for interoperability relating to accessibility of the Union's rail system for persons with disabilities and persons with reduced mobility](#)

Operation and traffic management: [technical specification for interoperability relating to the operation and traffic management](#)

Telematics applications for passenger services: [technical specification for interoperability relating to the subsystem telematics applications for passenger services](#)

Telematics applications for freight: [technical specification for interoperability relating to the telematics applications for freight](#)

Supplementary standards

NI National Technical Rules