Commission Regulation (EU) No 321/2013 of 13 March 2013 concerning the technical specification for interoperability relating to the subsystem 'rolling stock — freight wagons' of the rail system in the European Union and repealing Decision 2006/861/EC (Text with EEA relevance) (revoked)

Article 1	The technical specification for interoperability (TSI) relating to		
	the 'rolling		
Article 2	(1) The TSI shall apply to the 'rolling stock —		
Article 3	The TSI shall apply to all new freight wagon rolling		
Article 4	(1) With regard to 'open points' set out		
Article 5	(1) With regard to specific cases set out in Section		
Article 6	(1) Without prejudice to the agreements which have already		
	been		
Article 7	In accordance with Article 9(3) of Directive 2008/57/EC, within		
	one		
Article 8	(1) An EC certificate of verification for a subsystem that		
Article 8a	(1) Notwithstanding the provisions in Section 6.3 of the Annex,		
Article 8b	(1) Until the expiry of their current approval period, '		
Article 8c	(1) Notwithstanding the provisions in Section 6.3 of the Annex,		
Article 9	The declaration of verification and/or conformity to type of a		
Article 9a	The EC-type or EC design examination certificate for the '		
Article 10	(1) The Agency shall publish on its website the list		
Article 10a	(1) In order to keep pace with technological progress, innovative		
Article 11	Decision 2006/861/EC is repealed with effect from 1 January 2014		
Article 12	This Regulation shall enter into force on the day following Signature		

#### **ANNEX**

Technical specification for interoperability for the 'rolling stock — wagons' subsystem

- 1. INTRODUCTION
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  - 1.3. Content of this TSI
- 2. SCOPE AND DEFINITION OF SUBSYSTEM
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- 3. ESSENTIAL REQUIREMENTS
- 4. CHARACTERISATION OF THE SUBSYSTEM
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#### 4.2.6.2. Protection against electrical hazards

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- 4.3.3. Interface with the subsystem 'control, command and signalling'
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- 4.5. Maintenance rules
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  - 5.3.2. Wheelset
  - 5.3.3. Wheel
  - 5.3.4. Axle
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#### 6. CONFORMITY ASSESSMENT AND EC VERIFICATION

- 6.1. Interoperability constituent
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  - 6.1.2. Conformity assessment procedures
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    - 6.1.2.3. Wheel
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      - (b) Other types of wheels: Other types of wheels are permitted...
    - 6.1.2.4. Axle
    - 6.1.2.4a
    - 6.1.2.5. Friction elements for wheel tread brakes
    - 6.1.2.6. Automatic variable gauge system
  - 6.1.3. Innovative solutions
- 6.2. Subsystem
  - 6.2.1. Modules
  - 6.2.2. EC verification procedures
    - 6.2.2.1. Strength of unit
    - 6.2.2.2. Safety against derailment running on twisted track
    - 6.2.2.3. Running dynamic behaviour

On-track tests

- 6.2.2.4. Axle box/bearings
- 6.2.2.4a Automatic variable gauge systems
- 6.2.2.5. Running gear for manual change of wheelsets

Changeover between 1 435 mm and 1 668 mm track... Changeover between 1 435 mm and 1 524 mm track...

- 6.2.2.6. Thermal capacity
- 6.2.2.7. Environmental conditions
- 6.2.2.8. Fire safety
  - 6.2.2.8. Barriers

- 6.2.2.8.2 Materials
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- 6.2.2.8.4Flammable liquids
- 6.2.3. Innovative solutions
- 6.3. Subsystem containing components corresponding to interoperability constituents not holding an...
- 6.4. Project phases where assessment is required
- 6.5. Constituents holding an EC declaration of conformity

#### 7. IMPLEMENTATION

- 7.1. Authorisation for placing on the market
  - 7.1.1. Authorisation for placing in service of a new vehicle in...
  - 7.1.2. Mutual recognition of the first authorisation of placing on the...
- 7.2. General rules for implementation
  - 7.2.1. Substitution of constituents
    - 7.2.2. Changes to an existing unit or to an existing unit...
      - 7.2.2.1. Introduction
      - 7.2.2.2. Rules to manage changes in both a unit or a...
      - 7.2.2.3. Particular rules for existing units not covered by an EC...
      - 7.2.2.4. Rules for the extension of the area of use for...
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      - 7.2.3.1. Rolling stock subsystem

7.2.3.1. Phase A

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7.2.3.2. Interoperability constituents

- 7.3. Specific cases
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  - 7.3.2. List of specific cases
    - 7.3.2.1. General specific cases
    - 7.3.2.1a.Gauging (point 4.2.3.1)

Specific case Ireland and UK for Northern Ireland

- 7.3.2.2. Axle bearing condition monitoring (point 4.2.3.4)
  - (a) Specific case Sweden
  - (b) Specific case Portugal
- 7.3.2.3. Safety against derailment running on twisted track (point 4.2.3.5.1)

Specific case UK for Great Britain

7.3.2.4. Running dynamic behaviour (point 4.2.3.5.2)

Specific case UK for Great Britain

Specific case Ireland and UK for Northern Ireland

7.3.2.5. Characteristics of wheelsets, wheels and axles (points 4.2.3.6.2 and 4.2.3.6.3)...

Specific case UK for Great Britain

7.3.2.6. Characteristics of wheels (point 4.2.3.6.3)

Specific case UK for Great Britain

7.3.2.6. Attachment devices for rear end signals (point 4.2.6.3)

Specific case Ireland and UK for Northern Ireland

7.3.2.7. Rules to manage changes in both rolling stock and rolling...

Specific case the United Kingdom (Great Britain)

7.4. Specific environmental conditions

Specific conditions Finland and Sweden

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#### Specific conditions Portugal and Spain

- 7.5. Freight wagons operating under national, bilateral, multilateral or international agreements...
- 7.6. Aspects that have to be considered in the revision process...
  - 7.6.1. Rules for implementation

#### Appendix A

Not used

#### Appendix B

Not used.

### Appendix C

#### Additional optional conditions

- 1. Manual coupling system
  - Interaction of buffers and draw gear
- 2. UIC footsteps and handrails
- 3. Ability to be hump shunted
- 4. Free space under lifting points
- 5. Marking of units
- 6. G1 gauge
- 7. Compatibility with train detection systems
  - (a) The unit shall be compatible with the train detection systems...
  - (b) The distance between two adjacent axles of the unit shall...
- 8. Tests concerning longitudinal compressive forces
- 9. UIC brake
- 10. Location of parking brake handles
- 11. Temperature ranges for air reservoirs, hoses and grease
- 12. Welding
- 13. Track gauge
- 14. Specific brake thermal capacity
- 15. Specific product properties concerning the wheel
- 16. Tow hooks
- 17. Protective devices on protruding parts
- 18. Label holders and attachment devices for rear-end signal
- 19. Axle bearing condition monitoring
- 20. Running dynamic behaviour

#### Appendix D

Mandatory standards or normative documents referred to in this TSI...

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# Appendix E

# Rear-end signal

- Lamps
- 2. Reflective plates

# Appendix F

Assessment assigned to the production phases

# Appendix G

List of fully approved composite brake blocks for international transport...

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