

<b>Title:</b> <b>Transposing European Directives on Railway Safety and Interoperability to the Channel Tunnel</b> <b>IA No:</b> DfT00189 <b>Lead department or agency:</b> Department for Transport <b>Other departments or agencies:</b> Channel Tunnel Intergovernmental Commission Office of Rail Regulation	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 13/02/2013		
	<b>Stage:</b> Final		
	<b>Source of intervention:</b> EU		
<b>Type of measure:</b> Secondary legislation			
<b>Contact for enquiries:</b> Chris Angell, 020 7944 0082 christopher.angell@dft.gsi.gov.uk			
<b>Summary: Intervention and Options</b>	<b>RPC: GREEN</b>		

Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies as One-Out?
- £0.023m	- £0.0005m	£0.0005m	No
			NA

**What is the problem under consideration? Why is government intervention necessary?**

The UK is required, in order to fulfil its obligations as a European Union Member State, to transpose Directives 2008/110/EC and 2009/149/EC which amend the Railway Safety Directive (2004/49/EC) and elements of the recast Railway Interoperability Directive (2008/57/EC) for the Channel Tunnel. These relate to the introduction of a harmonised system of railway vehicle maintenance, a common methodology for the assessment of safety performance and the economic impact of accidents, and provisions relating to the additional authorisation in the Channel Tunnel of rail vehicles already authorised in another Member State.

**What are the policy objectives and the intended effects?**

The objectives of the European Union in introducing the Directives are to **(a)** improve safety by harmonising rail vehicle maintenance regimes and establishing “entities in charge of maintenance”; **(b)** improve data quality following accidents and **(c)** ensure that only appropriate compatibility checks can be carried out during additional authorisation and that they are carried out on time. UK objectives are to **(a)** introduce a compliant maintenance regime; **(b)** establish a compliant method of data collection and **(c)** apply minimal checking during additional authorisation. The intended effects are to **(1)** provide reassurance that rail vehicles are maintained safely; **(2)** provide a more accurate measure of safety performance and **(3)** ensure the safety and interoperability regulation of the Channel Tunnel remains compliant.

**What policy options have been considered, including any alternatives to regulation?**

**Option 1:** Do nothing;  
**Option 2:** Transpose by bi-national regulation; or  
**Option 3:** Transpose by extending the scope of national measures.

**Option 2** is preferred since it is the best option to transpose the UK’s obligations in a clear and consistent manner while taking into account the bi-national governance of the Tunnel.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** 03/2017

Does implementation go beyond minimum EU requirements?	No				
Are any of these organisations in scope?	<b>Micro</b> No	<b>&lt; 20</b> No	<b>Small</b> No	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)	<b>Traded: 0</b>		<b>Non-traded: 0</b>		

*I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.*

Signed by the responsible Minister: \_\_\_\_\_ Date: \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 2

**Description:** Transpose by bi-national regulation

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: minus 0.023
2012	2012	5 Years			

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	5	N/A	N/A
High	N/A		N/A	N/A
Best Estimate	0.025		0	0.023

### Description and scale of key monetised costs by 'main affected groups'

The Order will extend provisions which are already in force throughout mainland UK and France to the Channel Tunnel. These relate to the identification of the entity in charge of maintenance in a national vehicle register and establishing an appropriate maintenance regime for each vehicle. In practice, the Order will not result in any significant costs for those companies which operate on the infrastructure since the provisions are already applicable to them on either side of the Tunnel. The only business costs envisaged relate to operators familiarising themselves with the requirements. These are one-off in the first year only, and given the small number of operators affected, are assessed as negligible (£576). Further costs of £20,000 will fall to the public sector from undertaking a statutory review of the requirements after five years. After this period there are no identifiable monetised costs or benefits arising and so this impact assessment is limited to a five year horizon.

### Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	5	N/A	N/A
High	N/A		N/A	N/A
Best Estimate	0		0	0

### Description and scale of key monetised benefits by 'main affected groups'

The monetised impacts of the Order are so small that their quantification is not practicable and these are therefore treated as being equal to zero.

### Other key non-monetised benefits by 'main affected groups'

The benefits of the Order are that it will **(a)** bring the Channel Tunnel into line with provisions already in place in the UK and France; **(b)** achieve consistency of approach to rail vehicle maintenance across the European Union; **(c)** assist railway undertakings to better control risks and costs through assurance that any vehicles they haul have an appropriate maintenance regime in place; and **(d)** alleviate barriers to trade in the form of duplication, unnecessary costs and delay in the safety authorisation process.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
<p>Since railway undertakings will already be familiar with the provisions which the Order introduces as they are already in place in the UK and France, costs are likely to be minimal and restricted to familiarisation. There is a risk of infraction from the European Commission for late transposition of the Directives which the Order transposes. Were formal infraction proceedings instigated, the UK would be at risk of a minimum lump sum of around €9.666 million (based on the UK's GDP) and potentially substantial daily fines of thousands of pounds for continued non-compliance.</p>		

## BUSINESS ASSESSMENT (Option 1)

<b>Direct impact on business (Equivalent Annual) £m:</b>	<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 0.0005	No	NA
Benefits: 0		
Net: - 0.001		

# Summary: Analysis & Evidence

# Policy Option 3

**Description:** Transpose by extending the scope of national measures

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: minus 0.023
2012	2012	5 Years			

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	0.025	0	0.023

### Description and scale of key monetised costs by 'main affected groups'

In essence, the only variance with **Option 2** is the fact that, under **Option 3**, there is a greater risk of inconsistency in the implementation of the safety and interoperability regimes. That difference is extremely difficult to assess and the costs and benefits are therefore assessed as being identical to those of **Option 2**.

### Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	0	0	0

### Description and scale of key monetised benefits by 'main affected groups'

As for **Option 2** since the impacts of the Order have been assessed as materially extremely small, quantification of the benefits is not practicable – and these are therefore treated as being equal to zero.

### Other key non-monetised benefits by 'main affected groups'

The benefits are the same as for **Option 2**.

### Key assumptions/sensitivities/risks

Discount rate (%) 3.5

Since railway undertakings will already be familiar with the provisions which the Order introduces since they are already in place in the UK and France, costs are likely to be minimal and restricted to familiarisation. Pursuit of this option could result in the introduction of different regimes within the UK and French sections of the Channel Tunnel which could complicate the authorisation process for both industry stakeholders and the safety authorities.

## BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0.0005	Benefits: 0	Net: - 0.001	No	NA

# Evidence Base (for summary sheets)

## References

No	Legislation or publication
1	<b>European Commission explanatory memorandum</b> ( <a href="http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&amp;lg=EN&amp;type_doc=COMfinal&amp;an_doc=2006&amp;nu_doc=0784">http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&amp;lg=EN&amp;type_doc=COMfinal&amp;an_doc=2006&amp;nu_doc=0784</a> )
2	<b>European Commission impact assessment</b> ( <a href="http://www.europarl.europa.eu/registre/docs_autres_institutions/commission_europeenne/ec/2006/1641/COM_SEC(2006)1641_EN.pdf">http://www.europarl.europa.eu/registre/docs_autres_institutions/commission_europeenne/ec/2006/1641/COM_SEC(2006)1641_EN.pdf</a> )
3	<b>Working Group Final Report</b> ( <a href="http://www.otif.ch/otif/epdf/dir_tech_adm_2007/2007-10_WG_Keeper_final_report.pdf">http://www.otif.ch/otif/epdf/dir_tech_adm_2007/2007-10_WG_Keeper_final_report.pdf</a> )
4	<b>Treaty of Canterbury 1986</b> ( <a href="http://www.channeltunneligc.co.uk/Essential-texts,24.html?lang=en">http://www.channeltunneligc.co.uk/Essential-texts,24.html?lang=en</a> )
5	<b>Commission Regulation 445/2011 (Certification of Freight Wagon ECMs)</b> ( <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:122:0022:0046:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:122:0022:0046:EN:PDF</a> )

## Annual profile of monetised costs and benefits\* - (£m) constant prices

	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>
<b>Transition costs</b>	0.0005	0	0	0	0	0.0020	0	0	0	0
<b>Annual recurring cost</b>	0	0	0	0	0	0	0	0	0	0
<b>Total annual costs</b>	0.0005	0	0	0	0	0.0020	0	0	0	0
<b>Transition benefits</b>	0	0	0	0	0	0	0	0	0	0
<b>Annual recurring benefits</b>	0	0	0	0	0	0	0	0	0	0
<b>Total annual benefits</b>	0	0	0	0	0	0	0	0	0	0

\* For non-monetised benefits please see summary pages and main evidence base section

# Evidence Base

## 1. Title of Proposal

- 1.1. Transposing European Directives on railway safety and interoperability to the Channel Tunnel (“the Tunnel”).

## 2. Purpose and intended effect

### Problem addressed

- 2.1 A glossary of terms used throughout this impact assessment can be found at **Annex 2**.
- 2.2 The Channel Tunnel (Safety) (Amendment) Order 2013 (“the Order”) is intended to implement Directive 2009/149/EC on a revised methodology to calculate common safety indicators (“the CSI Directive”) and Directive 2008/110/EC (“the Directive on vehicle maintenance”) which requires an entity in charge of maintenance (“ECM”) to be identified in the National Vehicle Register (“NVR”) and the ECM to establish an appropriate maintenance regime. It is also intended to transpose those parts of the recast Railway Interoperability Directive (2008/57/EC, “the recast Directive”) which deal with the authorisation of railway vehicles for use in the Channel Tunnel (“the Tunnel”).
- 2.3 That transposition is intended to take place through a bi-national regulation of the Intergovernmental Commission for the Channel Tunnel (“IGC”), made under Article 10(3)(e) of the Treaty of Canterbury of 1986 (“the Treaty”). The Order would give effect to that bi-national regulation.
- 2.4 The above provisions have already been transposed for mainland Great Britain through the Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2011 [S.I. 2011/1860] (“ROGS Amendment Regulations”) and the Railways (Interoperability) Regulations 2011 [S.I. 2011/3066] (“RIR 11”). However, the former is not applicable to the Tunnel since, in accordance with the Treaty and in recognition of the cross-border nature of the Tunnel, it has been agreed that transposition should be on a bi-national basis following negotiation and agreement with the French government. The latter is applicable to the Tunnel with the exception of the provisions relating to the additional authorisation of vehicles first authorised in another Member State (see **paragraph 2.11**).
- 2.5 There have been a number of previous bi-national regulations of the IGC but those currently in force are the Channel Tunnel (International Arrangements) Order 2005<sup>1</sup> and the Channel Tunnel (Safety) Order 2007<sup>2</sup> (“the 2007 Order”) which the Order will amend. This impact assessment does not consider provisions which have remained unchanged since they do not create any new regulatory or cost burdens on business and the amendments will come into force simultaneously in both the UK and France. The Department’s intention is to complete this process by no later than March 2013.

### **Common Safety Indicators**

- 2.6 The CSI Directive simply amends the methodology and format of calculation for statistics which are already collected in Great Britain by RSSB<sup>3</sup>. Its implementation

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<sup>1</sup> S.I. 2005/3207 (available from [www.legislation.gov.uk/ukxi/2005/3207/contents/made](http://www.legislation.gov.uk/ukxi/2005/3207/contents/made)).

<sup>2</sup> S.I. 2007/3531 (available from [www.legislation.gov.uk/ukxi/2007/3531/contents/made](http://www.legislation.gov.uk/ukxi/2007/3531/contents/made)).

<sup>3</sup> Previously the Rail Safety and Standards Board.

does not represent any additional resource or cost impact on business (indeed, administrative provisions have already been put in place to ensure data is recorded in the new format in advance of transposition). However, it will benefit duty holders and the IGC, as safety authority for the Tunnel, by ensuring data is provided on a consistent basis across the European Union (“EU”) which can then be used to inform policy development. More information can be found in **Section 3**.

### ***Freight Wagon Maintenance***

- 2.7 The Convention concerning International Carriage by Rail (“COTIF”) stated in 2006 that the keepers<sup>4</sup> of wagons were no longer obliged to register their wagons with a railway undertaking. This created the present situation where different maintenance regimes exist within the UK and across the EU in which vehicle keepers have to meet the requirements of individual railway undertakings (freight operators) to gain access to the railway network.
- 2.8 The nature of rail freight operations means that it is common for freight wagons to traverse Europe in an irregular and random manner since they tend not to be used on the set routes like passenger vehicles. As a result, they are regularly used by numerous railway undertakings which may all have different maintenance regimes with which the keeper must comply. Keepers have asserted that the presence of these multiple maintenance regimes at both a national and EU-wide level imposes significant cost burdens on them in demonstrating compliance, a situation which is more prevalent in mainland Europe than the UK. This is inconsistent with broader UK and EU aspirations of improving access to rail markets through harmonisation of requirements, increasing the competitive position of rail freight in relation to other modes of transport and improving safety.
- 2.9 Adopting a consistent approach to vehicle maintenance across the EU is likely to lead to significant benefits to consumers since it will contribute to greater certainty within the rail industry and reduced whole industry costs. The impact of a consistent approach to establishing vehicle maintenance standards and safety will particularly benefit international traffic, although it is envisaged that some benefits may also be realised at a UK domestic level. The Order is designed to address these industry concerns by providing the foundations for the introduction of an EU-wide freight wagon ECM certification scheme.
- 2.10 This is of vital importance to the Tunnel since it is the sole direct physical link between the UK rail network and mainland Europe, and as only a limited number of railway undertakings currently operate on its infrastructure, the UK welcomes any initiative to make it more attractive to other railway undertakings.

### ***Vehicle Additional Authorisation***

- 2.11 The recast Directive makes a number of changes to the regulatory framework surrounding interoperability. These have already been transposed for the Tunnel through RIR 11 with the exception of the provisions relating to rail vehicle additional authorisation. It was not possible to transpose these requirements through this mechanism since the vehicle additional authorisation provisions were originally contained within article 14 of the Directive 2004/49/EC (“the Railway Safety Directive”). This was transposed through a bi-national regulation of the IGC and given effect by the 2007 Order. In view of the cross-border nature of the Tunnel, and to ensure consistency throughout the Tunnel infrastructure, the UK and French Governments have decided to implement the changes to the European authorisation

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<sup>4</sup> The “keeper” of a vehicle is defined as the person who owns it, or has a right to use it, and operates it as a means of transport.

provision through the bi-national regulation process. They are therefore intended to be part of the bi-national safety regulation, as amended, and are included in the Order.

- 2.12 Member States may still choose to apply additional authorisation, but the recast Directive places strict limits on the areas which a national safety authority (“NSA”; the IGC in respect of the Tunnel) can check to only those which are relevant to ascertain the vehicle’s compatibility with the infrastructure on which it is intended to operate.
- 2.13 The options considered for vehicle authorisation for the Tunnel are considered in more detail in **Section 3**.
- 2.14 As these measures are designed to transpose European requirements, which the UK is obliged to implement as a result of its status as an EU Member State, and wherever possible follow a minimal “copy out” approach, the Order does not fall within the scope of the Government’s “One In, Two Out” requirement.
- 2.15 It is noted that, with the exception of those rail vehicles which operate solely within the confines of the Tunnel concession area, rail vehicles which transit the Tunnel are already subject to similar transposing legislation already in force within Great Britain and France. Railway undertakings will therefore already be familiar with the requirements which the Order contains. Since it replicates, as far as possible, the provisions of the relevant Directives, it is not anticipated that the introduction of the Order will, in itself, create any new legislative or cost burdens on industry. However, this impact assessment nevertheless assumes no prior knowledge in order to assist understanding of its impacts for potential new entrants to the market.
- 2.16 The Order will directly impact upon the following groups who do, or may in future wish to, operate on Tunnel infrastructure:
- Safety authorities;
  - Freight wagon owners and operators;
  - Entities in charge of maintenance;
  - Railway undertakings and rolling stock leasing companies; and
  - Railway infrastructure owners/managers and those responsible for maintenance.

## **Purpose & Intended Effect**

### ***Common Safety Indicators***

- 2.17 The CSI Directive introduced amendments to Article 5(2) of the Railway Safety Directive requiring the introduction of common definitions of CSIs and methods to calculate the economic costs of accidents. CSIs are collected to help assess the achievement of common safety targets (“CSTs”) which will, in future, define the minimum safety levels and safety performance that must at least be reached by the railway system in each Member State.
- 2.18 The CSI Directive included a revised Annex I to the Railway Safety Directive which has been recognised in the Order through the definition of CSIs. The amendments are designed to improve data quality and consistency in reports from Eurostat (the statistical office of the European Union situated in Luxembourg) which provide the Commission with statistics at a European level to enable a comparison of safety performance between individual Member States and geographic regions. More detail about the changes can be found in **Section 3**.

## ***Freight Wagon Maintenance***

- 2.19 The purpose of the amendments introduced by the Order is largely preparatory to create the legislative and administrative foundation on which the Commission's EU-wide certification system for freight wagon ECMs. This was subsequently introduced through European Regulation 2011/445<sup>5</sup> which came into effect in May 2012.
- 2.20 More specifically, the purpose of the Order is to:
- clarify and make transparent who is responsible for the maintenance of a railway vehicle by introducing the concept of an ECM; and
  - pave the way for a scheme for the certification of freight wagon ECMs.
- 2.21 The intended effect is to ensure that each ECM is registered on an NVR, a database of rail vehicles operated in each Member State whose establishment is required under the recast Directive, and has a system in place for maintaining vehicles it is responsible for. This will provide assurance to the railway undertaking and the national safety authority<sup>6</sup> that the ECM is able to safely maintain the railway vehicle it is responsible for. Having this assurance will enable the railway undertaking to better control safety risks and costs. The presence of an ECM certificate will mean that it will no longer be necessary for the railway undertaking to carry out rigorous checking of wagons every time they are hauled as only simple visual safety check will subsequently be necessary.
- 2.22 It is anticipated that the introduction of the ECM concept and the certification scheme for freight wagon ECMs will help to make rail transport more competitive by reducing the administrative costs associated with establishing rail vehicle safety and preventing delays and/or bottlenecks.

## ***Additional Authorisation for Vehicles***

- 2.23 "Additional authorisation" is the process which occurs when a rail vehicle has already received an authorisation to be placed in service in one Member State and the applicant wishes it to operate in a second Member State. The recast Directive enables Member States to decide whether or not an additional authorisation is necessary within its territory. There are good reasons why a Member State might wish to make additional authorisation mandatory, for example, if the infrastructure or operating conditions differ significantly or there are additional safety issues which must be addressed. Previously, this would have involved requiring the applicant to go through a completely new authorisation process requiring independent third party assessment of the compatibility of the rail vehicle with common technical standards (technical specifications for interoperability or "TSIs") and any applicable national technical rules.
- 2.24 However, since conformity with many of these standards, and TSIs in particular, will have already been assessed during the initial authorisation process and would not be relevant to the additional authorisation, the recast Directive places restrictions on those areas which the NSA can check during the process to only those issues which affect the technical compatibility of the rail vehicle with the infrastructure on which it is

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<sup>5</sup> See <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:122:0022:0046:EN:PDF>.

<sup>6</sup> "Safety authority" is defined in the Railway Safety Directive as meaning the national body entrusted with the tasks regarding railway safety in accordance with that Directive or any bi-national body entrusted by Member States with these tasks to ensure a unified safety regime for specialised cross-border infrastructures. The IGC performs this function for the Tunnel.



intended to operate. The measure is designed to avoid duplication and unnecessary costs.

- 2.25 The recast Directive also provides that, in the absence of a decision of the NSA within specified time limits, authorisation is deemed to have been granted. This provision is intended to remove unnecessary delays and is reflected in the Order.

### 3. Background

#### Problems addressed

- 3.1 Different national procedures in the EU for the approval of railway vehicles can hinder the free movement of trains. Railway undertakings assert that these procedures can be bureaucratic and expensive when vehicles are placed in service. Vehicle keepers have identified that meeting multiple maintenance regimes of different railway undertakings is onerous and expensive, a barrier to the creation of new railway undertakings in the freight sector and a stumbling block affecting the interoperability of the European rail system. As no Member State has the power to determine unilaterally that the operating authorisation it has issued will be valid in another Member State, an EU-wide initiative is being taken to harmonise and simplify existing national procedures. The ROGS Amendment Regulations implement European provisions that are part of the solution to this problem for mainland GB but the bi-national nature of the Tunnel means that it is best to progress transposition separately.

#### *The Position in the Tunnel*

- 3.2 The problem involves<sup>7</sup>:

- 1,732 UK-registered international wagons (i.e. registered in the UK to travel through the Tunnel); and
- 6,477 foreign-registered international wagons (i.e. registered outside the UK for travel through the Tunnel).

According to figures from the Railway Industry Monitor there were 21 billion tonne/km of rail freight traffic in the UK in total during 2008.

The Tunnel has one infrastructure manager (Eurotunnel) and four railway undertakings currently authorised to operate services (Eurostar, EWSI, DB Schenker UK Ltd and Europorte Channel). Using a typical railway undertaking as an example, four types of checks on wagons it does not own are usually carried out:

- supplier assurance (in accordance with Railway Group Standard GT/RT2450);
- documentation review of certification and a detailed examination of the maintenance records/arrangements;
- fitness-to-run examination (a detailed examination of the vehicle); and
- Level 1 traffic examination (a visual check of the vehicle to ensure that it is safe to operate).

- 3.3 A supplier assurance audit could take two person-days to conduct; a documentation review could take between half to two person-days; a fitness-to-run examination could take between 10 and 50 person-days depending on the level of intervention, which

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<sup>7</sup> Source: UK Rolling Stock Library; as a comparator, there are 19,319 UK-registered wagons which are only used for domestic transport.

would be determined by the supplier assurance and documentation review. The introduction of an ECM certification regime would mean that the railway undertaking could benefit by not having to conduct the supplier assurance audit, documentation review or the fitness-to-run examination. If the keeper leasing or hiring out a wagon to the railway undertaking presented them with an ECM Certificate, the railway undertaking would only need to carry out a Level 1 traffic examination prior to operating the vehicle. This is likely to result in significant cost and time savings for the railway undertaking.

### ***The Position in Europe***

- 3.4 COTIF stated in 2006 that wagon keepers were no longer obliged to register their vehicles with a railway undertaking. This led to representatives of the freight wagon community lobbying the EU to amend the Railway Safety Directive to introduce a system that would help provide assurance of the safety of freight wagons across EU Member States. In October 2006 a working group<sup>8</sup> was set up by the European Commission (“the Commission”) to look at ways to clarify the role of the keeper of wagons and the maintenance of wagons. It consisted of representatives from the freight community, national safety authorities, Member States and the European Railway Agency<sup>9</sup> (“ERA”). The UK, represented by the Office of Rail Regulation (“ORR”), was active in the group and strongly expressed a desire for the person or body responsible for maintenance to be defined in the same way “contracting entity” is defined in RIR 11<sup>10</sup>.
- 3.5 Across the EU, the problem concerns<sup>11</sup> a total of:
- 536 contracting parties, which include 83 railway undertakings, 354 private wagon keepers and 99 railway undertakings who are also wagon keepers; and
  - 705,168 declared wagons of which 201,698 are owned by private wagon keepers.

### **Objectives**

- 3.6 The following objectives have been set by the Department for Transport:
- ensure any amendments to the Tunnel legislation are compliant with European legislation, and where possible, follow a minimal “copy out” approach;
  - recognise common maintenance regimes compliant with European legislation; and
  - establish provisions in preparation for the introduction of the European certification regime for freight wagon ECMs.

### **The CSI Directive**

- 3.7 Article 5(2) of the Railway Safety Directive (as amended) requires the revision of Annex I to include common definitions of the CSIs and methods to calculate costs of accidents. CSIs are collected to help assess the achievement of common safety targets (“CSTs”). CSTs will, in future, define the minimum safety levels and safety performance that must at least be reached by the railway system in each Member State.

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<sup>8</sup> Working Group Final Report – See ‘References’ section.

<sup>9</sup> ERA has been established to provide EU Member States and the Commission with technical assistance in the fields of railway safety and interoperability.

<sup>10</sup> The Railways (Interoperability) Regulations 2006 [S.I. 2006/397] were in force at this time.

<sup>11</sup> 2007 figures from Working Group Final Report – See ‘References’ section.

- 3.8 ERA has been working with NSAs to define the CSIs listed in Annex I and the CSI Directive reflects the outcome of these discussions.
- 3.9 The CSI Directive contains the amended Annex I to the Railway Safety Directive. It aims to improve reporting and data quality and consistency in Eurostat (the statistical office of the European Union situated in Luxembourg) data. It provides the Commission with statistics at a European level to enable a comparison of safety performance between individual Member States and geographic regions).
- 3.10 The 2007 Order contained CSIs that related to the costs of accidents borne by the railway. The revisions change the emphasis of CSIs from the impact of accidents on the railway to the impact of accidents on society. The aim of this amendment is to assist measurement of safety performance and make the economic impact assessment of CSTs more effective.
- 3.11 Since the CSI Directive simply amends the methodology and format of calculation for statistics which are already collected, its implementation does not represent any additional resource or cost impact (indeed, administrative provisions have already been put in place to ensure data is recorded in the new format in advance of transposition), but it benefits duty holders and NSAs by providing data collected on a consistent basis across the EU which can then be used to inform policy development.

### **Directive on vehicle maintenance (2008/110/EC)**

- 3.12 The nature of the problem identified above, and the objectives set suggested that an EU-wide approach was more appropriate.
- 3.13 The outcome of industry lobbying was a consultation by the Commission in early 2006. Responses to the consultation favoured a Commission initiative. Non-legislative options considered included:
- close monitoring of the use of the mutual recognition principle and, where appropriate, launch of infringement procedures; and
  - assigning ERA the role of coordinating parallel acceptance procedures.
- 3.14 In December 2006, the Commission<sup>12</sup> tabled a package of revisions to the Common Transport Policy. The driving force behind these revisions was to improve cross-acceptance for freight wagons. This is to allow free movement of rail services in an integrated common railway area. The legislative package included amendments to the Railway Safety Directive, in the form of the Directive on vehicle maintenance (as well as the recast Directive).
- 3.15 The Directive on vehicle maintenance establishes a common system for maintenance arrangements across EU Member States. Under its requirements, all vehicles need to be assigned an ECM before they are placed in service or used on the network. The ECM must be registered on the NVR of the Member State in which it is first placed in service. The ECM must also establish a system of maintenance, which ensures that the vehicles for which it is responsible are safe to run on the network.
- 3.16 In respect of the maintenance of freight wagons only, the ECM will need to hold an ECM certificate. The ECM certificate will provide assurance that the maintenance requirements of the Directive on vehicle maintenance are being met for any freight wagon for which the ECM has responsibility.

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<sup>12</sup> European Commission explanatory memorandum and impact assessment – See 'References' section.

## Vehicle Additional Authorisation

3.17 As noted in **paragraph 3.14**, the revisions to the Common Transport Policy including amendments to the additional authorisation provisions, are designed to facilitate the free movement of rail vehicles across borders. Whilst the European rail network is moving towards harmonisation through the introduction of common harmonised standards and assessment processes, there remains significant divergence between individual Member States' networks. The Commission has recognised this issue but the recast Directive ensures that, where additional authorisation is applied, the checks that a NSA can make are limited solely to those areas which relate to the compatibility of the rolling stock with the infrastructure on which it is intended to operate and that a decision is made in good time.

## 4. Options

### Option 1: Do nothing

- 4.1 A "do nothing" option would result in the UK failing to meet its EU treaty obligations through failure to transpose the requirements of European law. The existing, un-amended, legislative regime would remain in place for the Tunnel which would be out of step with both mainland Great Britain and France where these provisions are already in place and with practice in other EU Member States.
- 4.2 Although there would be no associated costs related to this option, it would result in a failure to realise the benefits which the legislation is designed to deliver and leave the UK at substantial risk of infraction (fines) by the Commission. Doing nothing would maintain in place a vehicle authorisation regime in the Tunnel that train operators, manufacturers and neighbouring infrastructure managers have identified<sup>13</sup> as a key barrier to developing services via the Tunnel. It would also result in legal uncertainty for operators seeking to run services through the Tunnel as the provisions for the Tunnel would be out of step with the system in place elsewhere across the European Union.

### Option 2: Transpose by bi-national regulation

- 4.3 Due to the method chosen to transpose the Railway Safety Directive for the Tunnel, and the cross-border nature of the Tunnel, this is the best option for implementation at the present time which also meets the UK Government's obligations under EU law.

#### **Costs**

- 4.4 The only costs envisaged as a result of the introduction of the Order are those associated with the familiarisation of stakeholders with the revised requirements. Only a limited number of railway undertakings are currently authorised to operate in the Tunnel, and the IGC has confirmed that in fact only one ECM, Eurotunnel, is likely to need to familiarise itself with the new requirements (as all other ECMs will be familiar with them due to their current operations within either the United Kingdom or France). It is therefore expected that the costs of the Order will be materially very small and have therefore been classed as negligible (£576 assuming a middle manager earning £15.01 per hour<sup>14</sup> (plus overheads at a rate of 30 per cent) taking three days (24 hours) to become entirely familiarised with the legislation. These are one-off costs. Since the requirements for the certification of freight wagon ECMs are

<sup>13</sup> IGC Market Monitoring Survey (2012).

<sup>14</sup> Annual Survey of Hours and Earnings.

contained in other legislation, the costs of certification will be assessed in a separate impact assessment.

- 4.5 The introduction of the Order will not result in any material impact on cost for an ECM to be identified in the NVR<sup>15</sup> and for an ECM to establish a maintenance system since these requirements are already in place as a result of other legislation.
- 4.6 The IGC does not charge industry on a per authorisation basis but these costs (and all other IGC expenses) are funded by Eurotunnel through its concession agreement. Any costs to industry would be incurred largely through the employment of an independent third party, a “notified body”, which undertakes conformity assessments but the recast Directive minimises these as far as possible if the rolling stock is otherwise in conformity with the relevant TSIs. These costs have been assessed as negligible since the rolling stock will already have been checked for conformity with the vast majority of the relevant standards during the first authorisation process.

#### ***Existing arrangements for the NVR***

- 4.7 The requirement to assign an ECM to a vehicle and register it as such in an NVR complements mandatory provisions already in force. Details must be recorded in the NVR of the European Union Member State where the vehicle was first authorised as well as information on which other Member States it is authorised to operate. European Commission Decision 2007/756/EC (as amended by Decision 2011/107/EU) includes a common specification for all NVRs which are managed the relevant Member State.
- 4.8 Great Britain already has a comprehensive rolling stock library which plays an integral role in the management of access to, and operations on, the rail network and is overseen by ORR. Train and freight operating companies are therefore already accustomed to providing detailed information about their vehicles since failure to do so generally means that these cannot be granted operational status.
- 4.9 The information that must be recorded in the NVR in relation to ECMs is basic and concerns only contact details and covers name, postal and e-mail addresses and registered business number. These requirements have been added to the list of other pieces of information already supplied by the sector.
- 4.10 ECM details for all existing trains and freight wagons has already been recorded in the NVR (in respect of the Tunnel, either the GB or French NVRs; a separate NVR will not be established for the Tunnel itself). Since a statutory obligation to provide this data already exists in other legislation, the Order creates no new regulatory burdens or costs in this respect.

#### ***Existing arrangements for a system of maintenance***

- 4.11 The requirement for an ECM to ensure that, by means of a system of maintenance, any vehicle for which it has responsibility is safe to run formalises measures already in place either through legislation or administratively in Great Britain as follows:
- a) Sections 2 and 3 of the Health and Safety Act Work etc Act 1974 require duty holders to do all that is reasonably practicable to conduct their undertaking safely. Implicit in this will be the requirement to maintain railway vehicles.

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<sup>15</sup> The Recast Directive requires Member States to establish a register of basic information about all rail vehicles which are operated in their territories. NVRs are operated and maintained by Registration Entities (a function performed in Great Britain by Network Rail Infrastructure Limited).

- b) Regulation 5(1)(d)(i) of ROGS requires that a duty holder has a safety management system that ensures the control of risks relating to the supply of maintenance and material. The safety management system is established to ensure that it conforms to relevant national safety rules and relevant safety requirements laid down in Technical Specifications for Interoperability (“TSIs”).
- c) Railway Group Standard GM/RT 2004 has been used by the railway industry to demonstrate that they comply with the requirement to keep vehicles for which they are responsible safely maintained.
- d) It is a condition of an operator’s licence issued under section 8 of the Railways Act 1993 (as amended) to comply with Railway Group Standards that are applicable to its licensed activities.
- e) Under section 4.2.8 of the TSI for freight wagons (Commission Decision 2006/861/EC, as amended) all maintenance activities undertaken on freight wagons must be performed in accordance with the provisions of the TSI.

4.12 The Department for Transport considers that the regulatory burden created by the requirements of the Order are negligible since railway undertakings are already required to comply with the new obligations it creates in respect of the other countries in which they operate, including mainland GB and France. Aside from the costs of familiarisation with the Order, it is envisaged that no other new costs will be created for business as a result of its coming into force.

***Existing arrangements for additional authorisation***

- 4.13 Any train operator wishing to operate trains through the Tunnel must currently get its rolling stock authorised by three NSAs: ORR for UK territory, the IGC for the Tunnel and EPSF, the French NSA, for French territory.
- 4.14 The Order does not make any changes to these arrangements although consideration has been given to allow the existing national safety authorities (ORR and EPSF) to replace the IGC as the national safety authority for the Tunnel. However, this option has been rejected at this time since it would result in two authorisations being required for the same infrastructure and the possibility of the introduction of inconsistent regimes for the British and French sections of the Tunnel.
- 4.15 However, the Order will introduce the provisions of the recast Directive which strictly limit the ability of the NSA to check the conformity of vehicles to only those which are relevant to ascertain the vehicles compatibility with the Tunnel infrastructure. Since a vehicles’ conformity to with TSIs and the other standards to which it has been built will already have been assessed by an independent third party during the first notification, this measure is designed to avoid duplication and unnecessary costs if mandatory additional authorisation is applied. Given these limits, we might expect additional authorisation costs for the Tunnel to be reduced but it is impossible to quantify these savings since the size and scope of an authorisation depends on the size and scope of the works being undertaken. The Order will also impose strict time limits on the length of the authorisation process.
- 4.16 The Department for Transport believes the new provisions represent a significant improvement to the legislation concerning vehicle authorisation for the Tunnel which should, in turn, lead to the establishment of clearer requirements and a more efficient authorisation process to that which is currently in place.

***Benefits***

- 4.17 The major benefit of introducing the Order is that it will assist in the achievement of consistency of approach to rail vehicle maintenance across the EU, in particular by assisting railway undertakings to better control safety risks and costs. These will be further enhanced once the certification scheme for freight wagon ECMs becomes fully operational in May 2013. For freight wagon keepers, it will reduce the need to meet different maintenance requirements of different railway undertakings when transiting through the Tunnel. For railway undertakings, it will provide assurance that there is a suitable maintenance regime in place for any vehicles it hauls. It will also help to increase competition and the flow of rail traffic by reducing the potential barriers for new entrants to the market.
- 4.18 Implementing the CSI Directive will also benefit the Department for Transport, duty holders and NSAs through the collection of more accurate data on safety performance, which can then be used to inform policy development.
- 4.19 Finally, the changes to the additional authorisation regime will reduce duplication, unnecessary costs and delays.

### **Option 3: Transpose by extending the scope of national measures**

- 4.20 As noted above, in view of the cross-border nature of the Tunnel and to ensure consistency throughout Tunnel infrastructure, the UK and French Governments have decided to implement the amendments to the European authorisation provision through the bi-national regulation process. They are therefore intended to be part of the safety bi-national regulation, as amended, and are included in the Order.
- 4.21 In theory, pursuing this option could allow the UK to make additional authorisations for the UK half of the Tunnel voluntary. However, given that our clear understanding is that the French Government would maintain mandatory additional authorisations for its half, introducing voluntary arrangements in the UK half would not result in any practical benefits for applicants for authorisations. This is because, without an authorisation from IGC or another French authority for the French section, the ability to operate in the UK section only would be practically worthless.
- 4.22 In essence the only variance with **Option 2** is the fact that, under **Option 3**, there is a greater risk of inconsistency in the implementation of the European safety and interoperability regimes. That difference is extremely difficult to assess and the costs and benefits are therefore considered to be practically identical to those of **Option 2**.

## **5. Summary of preferred option**

- 5.1 **Option 2** is preferred since it ensures that the provisions of the Directives are transposed for the Tunnel whilst recognising the bi-national governance of the Tunnel infrastructure. This choice is based on legal and practical considerations and not on monetary costs and benefits which are assessed as being identical with **Option 3**.

## **6. Statutory Review**

- 6.1 The Government's policy is that there should be a statutory obligation on the Secretary of State to review, no later than five years after coming into force, regulations implementing EU obligations. The Order therefore contains provision requiring that, within five years of the Order coming into force, the Secretary of State must review its provisions and publish the conclusions. In undertaking the review the Secretary of State must, so far as is reasonable, have regard to how the Directives are implemented in other EU Member States. It is intended that this will be achieved through a survey of stakeholders in tandem with similar provisions in the relevant

domestic implementing instrument and to gather evidence through workshops and questionnaires.

- 6.2 The Post Implementation Review Plan (at **Annex 1**) sets out more information about the proposed review which the Department expects will take 0.33 person-years to complete. The estimated costs of the review, including the required publication of the results as a Command Paper, will be around £20,000<sup>16</sup>.
- 6.3 The benefits of a Ministerial duty to review the Order are that it will assist to:
- prevent over-regulation;
  - ensure the Order is working as intended;
  - determine whether the assessment of impacts was accurate; and
  - assess where burdens on business and others might be further reduced.

## 7. Specific impact tests

- 7.1 The Department for Transport has considered the potential impact of the Order on the following areas in line with relevant guidance. No specific disproportionate impacts have been identified given the nature of the proposed measure.

### ***Equality***

- 7.2 The Order does not create any disproportionate impacts on protected characteristics under the Equality Act 2010.

### ***Competition***

- 7.3 The Order is unlikely to have a material impact on competition in the UK rail industry, although it is intended to assist in the development of international railways by harmonising and simplifying the regulatory regimes across the EU. Among other issues, the Order's provisions are a precursor to the introduction of a broader certification regime for freight wagon ECMs which is likely to have a positive impact on competition in the UK and European rail freight markets. In particular, this will reduce barriers to entry for firms wishing to operate across national borders by increasing confidence in an ECM's ability to control the process of freight wagon maintenance.
- 7.4 The Directives which the Order transposes are specifically designed to apply in a non-discriminatory manner to all infrastructure managers and railways undertakings. The Order reflects this transparent and non-discriminatory approach.

### ***Impact on Small Firms***

- 7.5 The Order applies only to those companies operating, or seeking to operate, through the Tunnel (currently Eurostar, EWSI, Europorte Channel and DB) and does not go beyond what is required to transpose European requirements with which these companies would, in any event, have to comply – in a coherent manner for the Tunnel environment.

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<sup>16</sup> This assumes: salary of £42,491 (plus overheads at a rate of 30 per cent); full time equivalent required is 0.33; an additional £2,000 for publication of the Command Paper.



- 7.6 The Order is therefore not applicable to any small firms and this impact assessment indicates that it will not create any new regulatory costs or burdens on business beyond familiarisation with its requirements.

### ***Greenhouse Gas***

- 7.7 The Order does not have a material impact on greenhouse gas emissions. However, the broader introduction of a harmonised approach to rail vehicle maintenance across the EU should facilitate easier cross-boarder rail traffic, which in turn may encourage the movement of traffic and particularly freight from the roads onto the rail network. This may result in environmental benefits from lower carbon emissions.

### ***Wider Environmental Impact***

- 7.8 The Order does not have a material impact on the wider environment (although it is noted that the CSI Directive requires a separate assessment of the costs of restoring any damage to the environment which must be included in any evaluation of the overall cost of an accident).

### ***Health & Well Being***

- 7.9 Major incidents in the Tunnel are rare, but when they occur, they have the potential to cause a large impact on the confidence of users. In addition, they can lead to injuries and fatalities as well as physical disruption of the railway. Indirectly, such incidents can also undermine public confidence in the operation of the railways. Implementing the measures in the Order is likely to provide further assurance that safety risks are being managed appropriately, in accordance with mature, proportionate and well-understood EU requirements.

### ***Human Rights***

- 7.10 The proposal has no human rights implications.

### ***Justice Impact***

- 7.11 The Ministry of Justice has agreed that no new impacts will be created on the justice system since the offences of placing in service of using a vehicle without an ECM being assigned to it and registered in the NVR and an ECM that does not ensure that a vehicle it is responsible for has been maintained in a safe condition and is safe to run on the network (Articles 55A and 55B of the schedule to the draft Order) are already in place for the rest of the UK. ORR is the enforcing authority for the UK section of the Tunnel.

### ***Rural Proofing***

- 7.12 The Order applies only in relation to the Tunnel environment and therefore does not have any material impact on rural communities.

### ***Sustainable Development Impact***

- 7.13 The Order does not have a material impact on sustainable development. However, it is a precursor to the introduction of a broader certification regime for freight wagon ECMs which is likely to have a positive impact on competition in the UK and European rail freight markets.

- 7.14 A more competitive rail transport sector will also help the EU to fulfil its commitments with regard to sustainable development and the struggle against climate change<sup>17</sup>. A consistent approach to rail vehicle maintenance across the EU should allow for easier cross-border rail traffic, which may in turn encourage the movement of freight traffic in particular from the roads onto the rail network. This would result in environmental benefits from lower carbon emissions.

## 8. Regulatory Policy Committee

- 8.1 The Regulatory Policy Committee, an independent body created in 2009 to scrutinise the impacts of regulatory proposals, agreed (in its regulatory triage confirmation of 16 October 2012) that these provisions meet its criteria as a low cost measure. Following consultation, where all those respondents who expressed a preference indicated that they agreed with the costs presented in the impact assessment, the Committee concluded, in its validation opinion of 17 January 2013, that the anticipated costs are reasonable.
- 8.2 In delivering its validation opinion, the Committee noted a number of minor drafting issues which have been rectified in the final text. For completeness, these are in relation to:

**Paragraph 4.4:** The costs of familiarisation, originally assessed with a 1.6 multiplier in relation to staff, have been corrected in line with the HM Treasury Green Book guidance on valuing staff costs. The figure now includes overheads at a rate of 30%.

**Paragraph 6.2:** The original costs of £24,000 to the public sector of conducting the statutory review of the provisions, which also used the 1.6 multiplier, has also been corrected in line with the HM Treasury Green Book guidance on valuing staff costs. The overall costs have accordingly been reduced to £20,000. The associated assessment of annual average costs has been removed since it is not relevant to the calculation of these costs, which will only fall in the fifth year following coming into force.

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<sup>17</sup> European Commission Explanatory Memorandum – see “References”.

## Annex 1: Post Implementation Review (“PIR”) Plan

### **Basis of the review:**

The Order contains a requirement to review the implementation of the bi-national regulation as it applies to the British half of the Tunnel five years from the date on which the Order came into force. See **Section 6** of this impact assessment for more information.

### **Review objective:**

It is intended that a proportionate check of the Order’s provisions will be undertaken to ensure they are operating as intended.

### **Review approach and rationale:**

It is intended that the review will consider each of the Order’s provisions in turn and determine whether they have been implemented successfully in practice. It is noted that there are likely to be additional changes, arising from amendments to the overarching European legislative framework within the review period which would necessitate further amendments to the Order.

Given the minor amendments which the Order contains which are driven by European requirements and transposed following a “copy out” approach, it is anticipated that an initial desktop review will be the most appropriate method to commence the review. This will involve the collation and updating of existing evidence on the operation of the Order, seeking new material from regulatory bodies, and an approach to stakeholders for additional information in the form of workshops and questionnaires.

### **Baseline:**

The baseline position is the introduction (in 2012) of the requirement to assign an ECM to a railway vehicle; to ensure that the ECM is registered on a NVR; and for the ECM to ensure that the rail vehicles for which it is responsible are safely maintained through a system of maintenance.

### **Success criteria:**

Success criteria for the Order will be to demonstrate that:

- (a) the amendments have a positive or neutral impact on business costs; and
- (b) Standards of safety are maintained, and where possible, improved.

### **Monitoring information arrangements:**

The Department for Transport’s approach to maintaining health and safety on Britain’s railways is to ensure that the industry manages risks satisfactorily, and continuously improves its health and safety performance as far as is reasonably practicable. ORR, as the independent health and safety regulator for Great Britain, monitors the safety performance of duty holders and investigates incidents and complaints to find out why failures have occurred and if the law has been broken.

The IGC also has responsibilities in its role as the NSA for the Tunnel and will be a key partner in providing evidence to support the review.

### **Reasons for not planning a review:**

Not applicable.

## Annex 2: Glossary of Terms

<b>2007 Order</b>	-	Channel Tunnel (Safety) Order 2007
<b>Commission</b>	-	European Commission
<b>COTIF</b>	-	Convention on International Carriage by Rail
<b>CSIs</b>	-	Common Safety Indicators
<b>CSI Directive</b>	-	Directive 2009/149/EC
<b>CSTs</b>	-	Common Safety Targets
<b>Directive on Vehicle Maintenance</b>	-	Directive 2008/110/EC
<b>ECM</b>	-	Entity in Charge of Maintenance
<b>ERA</b>	-	European Railway Agency
<b>EU</b>	-	European Union
<b>IGC</b>	-	Intergovernmental Commission for the Channel Tunnel
<b>NSA</b>	-	National Safety Authority
<b>NVR</b>	-	National Vehicle Register
<b>Order</b>	-	Channel Tunnel (Safety) Order
<b>ORR</b>	-	Office of Rail Regulation
<b>PWF</b>	-	Private Wagon Federation
<b>PWRA</b>	-	Private Wagon Registration Agreement
<b>Railway Safety Directive</b>	-	Directive 2004/49/EC
<b>Recast Directive</b>	-	Directive 2008/57/EC (Railway Interoperability)
<b>Regulation 445/2011</b>	-	Certification system for freight wagon ECMs
<b>RIR 11</b>	-	Railways (Interoperability) Regulations 2011
<b>ROGS</b>	-	Railways and Other Guided Transport Systems (Safety) Regulations 2006
<b>ROGS Amendment Regulations</b>	-	Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2011
<b>RSSB</b>	-	Previously the Rail Safety & Standards Board
<b>Treaty</b>	-	Treaty of Canterbury 1986
<b>TSIs</b>	-	Technical Specifications for Interoperability
<b>Tunnel</b>	-	Channel Tunnel