Title:

# The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009: Proposed amendment

Lead department or agency:

DfT

Other departments or agencies:

**HSE** 

## Impact Assessment (IA)

**IA No:** DFT00020

Date: 12/01/2011

Stage: Development/Options

Source of intervention: EU

Type of measure: Secondary legislation

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## **Summary: Intervention and Options**

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

There is the potential for conflicting regulations on the equipment used for transporting dangerous goods by road and rail so there is a need to update technical provisions and clarify responsibilities for those involved and maintain the current 'level playing field' for operators.

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

The policy objectives are to promote safety, safeguard the environment, and provide a 'level playing-field' for the dangerous goods land transport (road and rail) logistics industry. The common rules are intended to eliminate unnecessary costs and administrative procedures relevant to the equipments (re)approval, remove technical barriers to trade and minimise the risk of road and rail accidents from the movement of dangerous goods Regulators and industry will all be affected by these minor changes.

What policy options have been considered? Please justify preferred option (further details in Evidence Base) The UK Parliament has three options:

Do Nothing: Not desirable as it would end the level playing-field for everyone involved in this global market. Option 1: Transpose Directive 2010/35/EU into domestic legislation by amending CDG 2009. Amendment regulations have been drafted to enable 1) the above desired objectives to be achieved without adding non-essential additional requirements 2) the separate revocation of 'The Classification and Labelling of Explosives Regulations 1983'.

Option 2: Transpose Directive 2010/35/EU into domestic legislation by revoking and replacing CDG 2009. The changes considered necessary are minor, so the extra cost and time involved with this option, in comparison with Option 1, mean it hasn't been considered further.

Option 1 is the preferred way forward as it is the simplest and least costly way of achieving the objectives.

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will not be reviewed
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	No

**SELECT SIGNATORY Sign-off** For consultation stage Impact Assessments:

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	SELECT SIGNATORY:	Date:
2101160 07 1116 163001131016		Dale

## Policy Option 1

#### **Description:**

Amendment of 'The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009' (CDG 2009) to transpose Directive 2010/35/EU on transportable pressure equipment.

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
<b>Year</b> 2011	ear 2011   Year 2011   Years 20		Low:	High:	Best Estimate: -0.662		
COSTS (£	m)	<b>Total Tra</b> (Constant Price)	ansition 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 Estima	te	N/A		0.045	0.662		

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

The main costs to affected parties are the estimated increase of £500 for a new legally compliant tank and possible increase in the number required as the comparative volume capacity is less. About 45 mainly small hauliers operating in the UK would be affected directly - but as these tanks serve many customers and have a 20 year lifespan the gradual increase in costs that is likely to be passed to individual consumers is expected to be very small.

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

As the new compliant tanks have a slightly smaller capacity more will be required to transport the same amount of, for example, liquefied petroleum gas (LPG). Therefore to carry the same quantity there will be a small increase in the number of journeys and consequently a small increase in fuel costs and carbon emissions.

BENEFITS (£m)	Total Tra (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low	N/A		N/A	N/A
High	N/A		N/A	N/A
Best Estimate	N/A		0.020	0.294

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

The Health and Safety Executive estimate revocation of 'The Classification and Labelling of Explosives Regulations 1983' (S.I. 1983/1140) as amended, will enable a direct £20k annual saving to industry from its classification application charges.

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

Builds on current domestic regulations; harmonises and removes the conflict that would otherwise occur between EU Directive 1999/36 and recent wider European agreements (ADR and RID)on the approval and certification requirements of this equipment. The level playing-field enhances industry's ability to operate efficiently and safely, and reduce costs responsibly in this global market. There were 61 reported incidents in 2009/10 involving the carriage of dangerous goods via road and rail.

#### Key assumptions/sensitivities/risks

Discount rate (%)

3.5

There are around 600 tanks currently in service, which are estimated to have a 20 year life-span. These tanks can be used until the end of their useful life, so the assumption has been made that there is a 5% replacement rate of tanks per year. It has also been estimated that an extra 5% of tanks are needed due to the reduction in capacity of the new tanks. This assumption has been applied across the whole industry for the purpose of this IA. If the UK does not comply with Directive 2010/35/EU the European Commission is likely to commence infraction proceedings - see 'Risks' in the 'Evidence Base'.

Impact on admin burden (AB) (£m):

Impact on policy cost savings (£m):

In scope

# **Enforcement, Implementation and Wider Impacts**

What is the geographic coverage of the policy/option?			Great Bri	tain		
From what date will the policy be implemented?			01/07/20	11		
Which organisation(s) will enforce the policy?			HSE, VC	SA, F	Police	
What is the annual change in enforcement cost (£m)?			No chan	No change		
Does enforcement comply with Hampton principles?  Yes						
Does implementation go beyond minimum EU requirements?  No						
What is the CO <sub>2</sub> equivalent change in greenhouse gas (Million tonnes CO <sub>2</sub> equivalent)	emissions?	)	Traded: Non-traded: not q*			
Does the proposal have an impact on competition?			No			
What proportion (%) of Total PV costs/benefits is direct primary legislation, if applicable?	ly attributab	ole to	Costs: Benefits: n/a n/a			efits:
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	Micro 0	< <b>20</b>	Small 0	Med 0	dium	<b>Large</b> 0
Are any of these organisations exempt?	No	No	lo No No No			No

# **Specific Impact Tests: Checklist**

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on?	Impact	Page ref within IA
Statutory equality duties <sup>1</sup>	No	8
Statutory Equality Duties Impact Test guidance		
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	8
Small firms Small Firms Impact Test guidance	No	8
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	Yes	9
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development	No	
Sustainable Development Impact Test guidance		

<sup>&</sup>lt;sup>1</sup> Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

## **Evidence Base (for summary sheets) – Notes**

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

#### References

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

No.	Legislation or publication
1	The Carriage of Dangerous Goods and Transportable Pressure Equipment Regulations 2009
2	Directive 2010/35/EU on transportable pressure equipment
3	Council Directive 1999/36/EC on transportable pressure equipment
4	Directive 2008/68/EC - inland transport of dangerous goods — OSHA —
5	ADR 2011
6	RID 2011 (OTIF website)

#### + Add another row

#### **Evidence Base**

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

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

	Y <sub>0</sub>	<b>Y</b> <sub>1</sub>	$Y_2$	$Y_3$	<b>Y</b> <sub>4</sub>	$Y_5$	$Y_6$	<b>Y</b> <sub>7</sub>	$Y_8$	$Y_{9}$
Transition costs	0	0	0	0	0	0	0	0	0	0
Annual recurring cost	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
Total annual costs	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
Transition benefits	0	0	0	0	0	0	0	0	0	0
Annual recurring benefits	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total annual benefits	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

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



## **Evidence Base (for summary sheets)**

#### Introduction

The European Parliament and the Council of the European Union have adopted Directive 2010/35/EU on transportable pressure equipment. This equipment includes pressurised cylinders and tanks used to transport dangerous goods by road and rail, such as liquefied petroleum gas (LPG), and needs to be regulated to ensure that dangerous goods can be transported safely on our busy road and rail networks. This Directive harmonises and removes any possible conflict on the requirements for the approval and certification of this equipment arising from an older EU Directive (1999/36/EC on transportable pressure equipment) and more recent wider European agreements on the transport of dangerous goods by road and rail (known as ADR and RID respectively).

Directive 2010/35/EU repeals five earlier directives relevant to transportable pressure equipment including Directive 1999/36/EC which is transposed in GB by *The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009* (CDG 2009). Directive 2010/35/EU requires Member States to implement the directive by 30 June 2011.

#### **Transportable Pressure Equipment**

This term includes:

- transportable cylinders
- tubes
- · gas cartridges
- cryogenic vessels
- tanks, and
- associated valves and cylinders

used for transporting gases as well as hydrogen cyanide, hydrogen fluoride and hydrofluoric acid.

#### **Background**

The regulatory framework for the global transport of dangerous goods is agreed by the UN Sub-Committee of Experts for the Transport of Dangerous Goods. Its provisions are set out in the UN Model Regulations which are revised and re-published every two years and form the basis of the internationally agreed mode-specific requirements.

Detailed rules for the international transport of dangerous goods by road are set out in the United Nations Economic Commission for Europe (UNECE) publication known, from its French title, as ADR (Accord dangereux routier). The text for each edition of ADR (re-issued every two years) is agreed by a UNECE committee which usually meets twice per year in Geneva and the UK is represented at these meetings by DfT, which consults key dangerous goods stakeholders before the UK position on the various agenda items is decided. Currently the UK and 46 other States are signatories to ADR (which are known as 'Contracting Parties'). This Agreement between States has no overall enforcing authority; in practice checks are carried out by Contracting Parties and non-compliance is dealt with by national authorities against offenders in accordance with their domestic legislation.

Detailed provisions for the international transport of dangerous goods by rail are published under the OTIF (Organisation intergouvernementale pour les Transports Internationaux Ferroviaires) Convention in a document known from its French title, as RID (Reglement International concernant le transport de marchandises Dangereuses par chemin de fer). OTIF is an intergovernmental organisation with a mainly European membership that includes the UK. The RID Committee usually meets once a year, in different locations, and the UK is again represented by DfT. The text of RID is almost identical to that of ADR, varying only to reflect modal differences.

The EU has adopted the UNECE/OTIF rules in a series of Directives, which extended the scope of ADR and RID to apply to national as well as intra-Community transport. A new combined Directive for the inland transport of dangerous goods (covering road, rail and inland waterways) – 2008/68/EC -

(published in 2008) is transcribed into GB domestic legislation via 'The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009'.

The separate EU legislation on transportable pressure equipment has been revised – with UK support - by Directive 2010/35/EU. To ensure harmonisation for transportable pressure equipment requirements within GB, the Department for Transport considers the proposed amendment to the domestic regulations by 30 June 2011 – the EU transposition deadline – to be the best option.

In addition to transposing EU law, the Option 1 draft regulations – following close co-operation between the Health and Safety Executive (HSE) and the Department for Transport – include a provision to revoke The Classification and Labelling of Explosives Regulations 1983 (S.I. 1983/1140), as amended: HSE's review of health and safety legislation has identified these explosives regulations as no longer having practical use and imposing unnecessary burdens on industry.

The main purpose of these Regulations (*at Annex 2*) is to ensure explosives are classified so they can be transported safely and that the packaging of those explosives is labelled with specific information. But since these Regulations came into force, the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) which includes provisions on the classification of explosives has been introduced. ADR, which has been implemented in Great Britain via The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations, has evolved since 2004, and domestic legislation on the classification of explosives needs to fully align with it.

## **Current legislation**

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 regulates the carriage of dangerous goods by road and rail in Great Britain, and the training, examining and certification of dangerous goods safety advisers. It transposes Directive 2008/68/EC (known as 'the Dangerous Goods Directive' as it consolidated and replaced five directives relevant to dangerous goods). And it re-transposes Directive 1999/36/EC relating to common provision for transportable pressure equipment and methods for inspection and parts of Directives 89/618/Euratom and 96/29/Euratom which relate to measures to be taken for a radiological emergency previously transposed by the *The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007* (S.I. 2007/1573) which the 2009 Regulations revoked.

#### CDG 2009 provides:

- requirements for transportable pressure equipment;
- requirements and prohibitions for the carriage of dangerous goods by road and rail which include explosives, gases, flammable liquids, toxic and infectious substances and radioactive material;
- packaging, labelling and marking requirements for the carriage of dangerous goods;
- duties for participants in this industry;
- documentation requirements;
- vehicle approval and construction rules;
- security responsibilities for consignors, carriers and others involved in transporting dangerous goods;
- authority for the Secretary of State to issue a separate guidance document detailing derogations and transitional provisions for the carriage of dangerous goods which can be provided under specific circumstances.

The Classification and Labelling of Explosives Regulations 1983 (S.I. 1983/1140), as amended, consists of a single regulation on explosives classification; three regulations on labelling the packaging of explosives, with others that cover enforcement, definitions and exemptions.

#### **Options**

There are two options:

#### Option One

Transpose the Directive into UK law by amending CDG 2009. The changes required by the Directive are relatively minor and the proposed amendment regulations only seek to implement what we have to do to comply and ensure we have a clear legal framework for the benefit of regulators, the industry, and customers. Separately, the opportunity has been taken to include within the draft CDG 2009 amendment regulations a provision to revoke *The Classification and Labelling of Explosives Regulations* 1983, as amended.

### Option Two

There is potentially another option which is to transpose Directive 2010/35/EU into domestic legislation by revoking and replacing CDG 2009. However, it is considered unworkable in view of the timescale. The preferred Option One (amending CDG 2009) is the simplest and least costly way of transposing this directive. It avoids the need for current industry documentation that cites CDG 2009 to be changed. The effect of incorporating aspects of Directive 1999/36/EC into RID and ADR were consulted on in the process of making CDG 2009; Option One completes that process by transposing those aspects of regulations that have EU rather than wider international application (as in RID and ADR).

#### Costs

These include the increased cost of tanks meeting the new requirements and the increased number of them required to transport the same amount of liquefied petroleum gas (LPG). The incremental cost of the new tanks is relatively small, estimated by one company to be £500 per tank (an increase from £19,500 to £20,000). It is estimated that there are approximately 600 tanks currently operating in the UK which each have a 20 year lifespan. The policy allows for current tanks to be used until the end of their life; therefore we have estimated 5 per cent of tanks are replaced each year (equal replacement rate each year for 20 years).

There is an assumption that an extra 5 per cent of tanks would be required to maintain the same capacity, as the new smaller tanks are introduced. The cost of the extra tanks has been spread evenly across the whole period, in line with the assumption that replacement tanks will be purchased evenly across the period. This implies that there will also be extra fuel costs and CO2 emissions but our current figures are from one company.

The cost of enforcing the proposed CDG amendment regulations is not estimated to be significantly different to the current enforcement costs associated with CDG 2009.

#### **Benefits**

The financial benefits envisaged from adopting Option 1 have not all been quantified but include:

- Maintaining a safe 'level playing field' for the movement of dangerous goods by road and rail in this 'global market'. The current domestic regulations and its predecessors have played an important part in ensuring no deaths from the carriage of dangerous goods in GB since 1989; the proposed amendment regulations build on the current legal requirements. GB's road and rail networks are very busy with traffic including pedestrians and passengers and the Department has policies specifically to promote safety including *Tomorrow's Roads Safer for Everyone* which have been very successful in reducing accidents. Together with the increasing threat of terrorist incidents, it is important for the transport of dangerous goods which include explosives, gases and flammable liquids to be sensibly regulated.
- Enabling British operators involved in the manufacture and sale of new transportable pressure
  equipment to continue in business as otherwise certification and approval for their products
  within the UK and EU markets would not be possible. That would make such equipment unsaleable and therefore jeopardise the ability of such companies to compete in this 'global
  market'.
- Revocation of The Classification and Labelling of Explosives Regulations 1983 (as amended) is expected to reduce the number of classification applications made to HSE by approximately 20-

25 per cent. Early indications, based on the 2009-10 figures for classification applications, are that the changes should result in an annual reduction of approximately £20k in costs to industry of HSE charges as well as a commensurate reduction in associated costs incurred by industry during the processing phase of applications such as providing more information and handling queries. There should also be additional savings by industry being able to design the labelling requirements to suit logistical needs rather than the current prescriptive approach under these Regulations.

#### **Risks**

If the UK fails to comply with the regulations by 30 June 2011, the Commission could recommend to the European Courts of Justice (ECJ) a lump sum payment as a penalty for failing to comply with the first ECJ judgment up to the date of the second ECJ judgment and a penalty payment as a daily fine continuing from the date of the second judgment until compliance. The lump sum payment would be the minimum level set for the UK: currently €9,666,000. This is the figure that has been used in this IA.

For penalty payment, the formula for the daily fine from the date of the second ECJ judgment is the multiple of:

Basic flat rate penalty payment (€640 per day) x coefficient for seriousness (on a scale 1 to 20) x coefficient for seriousness (1 to 3 calculated at a rate of 0.1 per month from the date of the first judgment to the second) x 'n' factor (18.31 for the UK).

This means the daily rate could vary between €1,171 and €70,310, hence the low and high estimates of costs having such a large variation.

The cost of non-compliance is shown in the table below:

	One off cost (constant price)	Annual costs (constant price)	Total (PV)
Low	N/A	0.371	13.847
High	N/A	22.276	336.061
Best Estimate	8.390	11.323	174.954

#### **Specific Impact Tests**

The Specific Impact Tests (referred to on page 3) have been considered and this is a summary of the main ones:

#### Statutory Equality Duties

It is confirmed that this proposal has been screened for its likely impact (positive or adverse) on the equality groups and an Equality Impact Screening Proforma (see Annex 3) has been completed.

#### Competition

Following consideration of the guidance the Department considers that the preferred Option 1 would not have a significant negative impact on competition:

- 1. Option 1 would not directly limit the number or range of suppliers.
- 2. Option 1 would not indirectly limit the number or range of suppliers.
- 3. Option 1 would not limit the ability of suppliers to compete.
- 4. Option 1 would not reduce suppliers' incentives to compete vigorously.

In 2007 there were an estimated 53 000 international journeys undertaken by GB operators carrying dangerous goods. Foreign hauliers also transport dangerous goods within the UK. These draft amendment regulations help to:

• ensure there is a level playing-field across European transport markets;

- promote competition in the provision of transport services to the benefit of users;
- clarify who is responsible for what in the transport chain;
- enable better control on imported goods from outside the EU.

#### Small Firms

The Department considers that Option 1 could impose modest extra charges for some small businesses. But overall this Option is expected to assist them in competing for business in this 'global market' as it enables the various multi-national requirements for approval and certification of transportable pressure equipment to be harmonised.

Exemptions for small / micro companies have been considered to be unnecessary and unworkable; meetings with industry representatives are held regularly by the Department. The consultation document includes questions to enable smaller companies to provide feedback on any concerns they may have on negative impacts, including additional costs.

#### Greenhouse Gas

There will be increased trips due to the legally compliant types of tank in the draft regulations being of smaller capacity than some of those which are currently compliant. One company has estimated that there will be 5 per cent more tanks required to transport the same maximum quantity; therefore a small increase in fuel costs and carbon emissions is expected. However, the Department does not currently have data available to calculate an estimate for Option 1 of greenhouse gases.

## **Annexes**

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

# **Annex 1: Post Implementation Review (PIR) Plan**

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

<b>Basis of the review:</b> [The basis of the review could be statutory (forming part of the legislation), it could be to review existing policy or there could be a political commitment to review];
<b>Review objective:</b> [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]
Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]
Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]
<b>Success criteria:</b> [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]
<b>Monitoring information arrangements:</b> [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]
Reasons for not planning a PIR: [If there is no plan to do a PIR please provide reasons here] As no further domestic regulation on the carriage of dangerous goods by road and rail is currently thought to be necessary, on efficiency grounds, a PIR has not been planned.

Add annexes here.