

Department for Transport

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2013 amendments

Call for Evidence

DfT-2013-10

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2013 amendments

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Introduction

The 2013 editions of RID, ADR and ADN came into force on 1st January 2013 with the mandatory implementation required from the Contracting Parties (countries signatories to the above agreements) by 1st July 2013. In GB this is now automatically done through The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 as amended (CDG 2009) by directly implementing the latest regulatory amendments.

Although CDG 2009 does not need amending, there is still an expectation to produce an Impact Assessment detailing the impact of the latest adopted amendments on the dangerous goods industry. Therefore, the purpose of this exercise is to gather industry-specific data to feed into the cost / benefit impact analysis and complete the Impact Assessment.

Who should read this consultation document?

This is of relevance to anyone who is involved in the transport of dangerous goods.

How to Respond

The call for evidence period began on 13 May 2013 and will run until 10 June 2013, please ensure that your response reaches us by that date. If you would like further copies of this document, it can be found at https://www.gov.uk/government or you can contact us at the address below if you need alternative formats (Braille, audio CD, etc).

Please send your responses to:

By Email: <u>cdg_call_for_evidence_2013@dft.gsi.gov.uk</u>

By Post: Department for Transport Dangerous Goods Division 3/19 Great Minster House 33 Horseferry Road London SW1P 4DR

Please mark the envelope "Call for evidence response".

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation please make it clear who the organisation represents, and where applicable, how the views of members were assembled.

A list of those consulted is attached at Annex C. If you have any suggestions of others who may wish to be involved in this process, please contact us.

Background

Dangerous goods are vital to our economy, whether they are the ingredients for the chemical industry or consumer goods like batteries for powering our gadgets. However, they are unlikely to stay safe if they are not transported securely. That is why this Government strives to promote safety and minimise risks associated with the transport of dangerous goods through effective regulation whilst at the same time supporting trade and economic growth.

Dangerous goods need to be carried across international borders and by different modes of transport, so it is only appropriate that there are internationally agreed rules for doing it safely and securely. The Department for Transport deals with the policy for the safe and secure carriage of dangerous goods by road and rail and works closely with the dangerous goods industry to ensure that these international rules remain fit for purpose. These rules are revised on a two year cycle. The latest amendments listed in the Annexes to Directive 2008/68/EC on the inland transport of dangerous goods have been adopted by the European Commission as per Directive 2012/45/EU of 3 December 2012. The Annexes are: RID (Regulations concerning the International Carriage of Dangerous Goods by Rail) and ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road). ADN (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) is also an Annex but the UK is not required, as permitted by the Directive 2008/68/EC, to implement any part of ADN except that part which relates to the granting of safety advisor qualifications.

The agreed amendments came into force on 1 January 2013. The UK is required, because of its European obligations, to implement the agreed amendments for its domestic as well as for international carriage of dangerous goods by 1 July 2013. These are currently implemented in GB through The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 as amended (CDG 2009). There are similar but separate regulations in Northern Ireland. The regulations directly implement latest editions of RID, ADR and ADN, thus enabling GB and NI to have in place domestic legislation that does not require transposition of the relevant EU Directives every 2 years.

The latest set of amendments has been adopted by the European Commission with the support of the UK which includes input from the dangerous goods industry through regular briefing sessions run by the Department. We are now looking to summarise the high impact changes to RID / ADR 2013 as listed in Annex B and monetise their potential costs / benefits based on the industry-specific data.

Freedom of Information

Information provided in response to this call for evidence, including personal information, may be subject to publication or disclosure in accordance with the Freedom of Information Act 2000 (FOIA) or the Environmental Information Regulations 2004.

If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the Data Protection Act and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

Call for evidence Questions

The Questionnaire is at Annex A.

What will happen next

We will complete the Impact Assessment based on the data received from this exercise and publish it within three months of the closing date for this exercise on https://www.gov.uk/government Paper copies will be available on request.

Call for evidence process

This call for evidence is being conducted in line with the Government's key consultation principles. Further information on these is available on the Better Regulation Executive's web site at https://www.gov.uk/government/publications/consultation-principlesquidance

If you have comments about this process please contact:

Chris Simon Consultation Co-ordinator Department for Transport Zone 1/14 Great Minster House 33 Horseferry Road London, SW1P 4DR

email: consultation@dft.gsi.gov.uk

Annex A

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2013 amendments

Questionnaire

We are seeking your input on the potential cost / benefit impacts of the adopted RID / ADR 2013 amendments to your business / organisation. Your feedback will be essential in providing us with the evidence-based cost / benefit analysis and will equip the Government with the information to shape future policy developments.

We would also like you to tell us if there any other RID / ADR 2013 amendments that have not been included in the attached Impact Assessment and whether these amendments are likely to result in additional costs / benefits to your business / organisation.

Please use the questionnaire which begins on the next page. By completing this form it will enable us to assess responses more efficiently and provide a quicker response to your comments; please ensure you complete it clearly. You can add extra pages with comments if necessary.

Please send your completed questionnaire to us by one of the following methods (it should reach us by **10 June 2013**):

By e-mail: <u>cdg_call_for_evidence_2013@dft.gsi.gov.uk</u>

By post: Dangerous Goods Division Department for Transport Zone 3/19 Great Minster House 33 Horseferry Road LONDON SW1P 4DR



The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2013 amendments

Questionnaire

| а | |
|-------------------------|--|
| Name of organisation or | |
| company: | |
| Your name: | |
| | |
| Address: | |
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| Telephone number: | |
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| e-mail address: | |

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| Which best describes your | | |
|---------------------------|-------------------------------|--|
| organisation's role? | | |
| | | |
| | Govt Department | |
| | Other Govt organisation | |
| | LA Association | |
| | Small firm / self-employed | |
| | association | |
| | Employer organisation / trade | |
| | association | |
| | Trade Union | |
| | Training provider | |
| | Consultancy | |
| | Private company | |
| | Tunnel manager | |
| | Other (*) | |
| | | |

| *Please specify : |
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|---------------------------------|--------------|--------|----------|-------|--|
| If you are an employer, how | | | | | |
| many employees are there in | | 0 – 50 | 51 - 200 | > 200 | |
| your organisation? If you are a | \checkmark | | | | |
| trade association, how many | | | | | |
| companies do you represent? | | | | | |

| d | | | | | |
|-------------------------------|--------------|------|------|------|--|
| Is your organisation involved | | | | | |
| in the carriage of dangerous | | Road | Rail | Both | |
| goods by road or rail? | \checkmark | | | | |
| | | | | | |

| е | |
|-------------------------------|--|
| Is your organisation involved | |
| in the domestic or | |
| international carriage of | |
| dangerous goods? | |

Please take time to complete the questions and, if necessary, expand on your answers using another page.

Question 1 Do any of the adopted RID / ADR 2013 amendments, listed in Annex B, have significant costs implications to your business / organisation? Please provide details.

| Yes | No | Don't know |
|-----|----|------------|
| | | |

Question 2 Do any of the adopted RID / ADR 2013 amendments, listed in Annex B, have significant cost savings to your business / organisation? Please provide details.

| Yes | No | Don't know |
|-----|----|------------|
| | | |

Question 3 Do any of the adopted RID / ADR 2013 amendments create any other significant benefits to your business / organisation? Please provide details.

Yes No Don't Know

Question 4 Do any of the adopted RID / ADR 2013 amendments create any other significant dis-benefits to your business / organisation? Please provide details.

| Yes | No | Don't Know |
|-----|----|------------|
| | | |

Question 5 Are there any other RID / ADR 2013 amendments that are likely to have an impact on your business / organisation but have not been listed in Annex B? Please provide details including costs / savings involved.

| Yes | No |
|-----|----|
| | |

Additional Comments

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2013 amendments summary

The majority of the changes to RID/ADR 2013 are minor in nature and have minimal impact in terms of cost and administrative burden to industry. For the purpose of this exercise, these changes are not summarised here.

We have identified below changes that may have some impact in potential costs to industry. We have also identified changes that should reduce costs to industry (e.g. through relaxations and transitional measures). Having already extensively engaged with the dangerous goods industry on the formulation of the latest RID / ADR amendments, our assumption is that any impacts would balance each other out resulting in minimal additional costs to the industry overall. However, in order to check the validity of this assumption, we need your input into the analysis of costs and benefits by giving supporting evidence wherever possible.

Chapter 1.1 – Scope and applicability

Sub-section 1.1.3.6.2 has been amended to require security provisions to apply to Class 7 excepted packages of UN 2910 and 2911 if the total activity carried exceeds the A₂ value and to Class 1 explosives of UN 0029, 0030, 0059, 0065, 0073, 0288, 0290, 0360, 0364 and 0439 irrespective of the quantity carried. Sub-section 1.1.3.6.3 has been amended accordingly.

Chapter 1.6 - Transitional measures

New transitional measures have been added including:

 1.6.2.12 to permit construction and approval of salvage pressure receptacles in accordance with national regulations up to 31 December 2013. Those constructed and approved before 1 January 2014 are permitted for continuous use subject to competent authority approval.

We are anticipating XX number of such salvage receptacles being affected, for which competent authority approval will be required.

 1.6.3.41to allow fixed tanks and demountable tanks constructed before 1 July 2013 in accordance with the requirements in force up to 31 December 2012 continue to be marked according to the requirements applicable up to 31 December 2012 until the next periodic inspection after 1 July 2013 when the marking should be done in accordance with the new marking provisions of 6.8.2.5.2 or 6.8.3.5.6. [Numbers affected and potential costs / savings?]

- 1.6.4.42 to allow tank-containers constructed before 1 July 2013 in accordance with the requirements in force up to 31 December 2012 continue to be marked according to the requirements applicable up to 31 December 2012 until the next periodic inspection after 1 July 2013 when the marking should be done in accordance with the new marking provisions of 6.8.2.5.2 or 6.8.3.5.6. [Numbers affected and potential costs / savings?]
- 1.6.4.43 to allow portable tanks and MECGS manufactured before 1 January 2014 not to comply wit the new requirement for marking the cross sectional flow area of the pressure-relief devices. [Numbers affected and potential savings?]
- at 1.6.5.14 allowing continued use of MEMUs which have been approved before 1 July 2013. [Number affected and potential savings?]

Chapter 2.2

Class 3 Flammable Liquids

Sub-section 2.2.3.3 has been amended to include articles containing flammable liquids that include fuel cell cartridges contained in equipment or packed with equipment. [Potential costs to the industry?]

Class 6.2 Infectious substances

New sub-section 2.2.62.1.5.7 has been added to exempt uncleaned medical devices (such as surgical instruments) which are carried for purposes of disinfection, cleaning or sterilization before their subsequent reuse from the provisions of RID/ADR if packed in rigid, puncture-resistant packagings of metal or plastic, which shall be designed to meet the construction requirements listed in 6.1.4.

This provision does not apply to uncleaned medical devices containing infectious substances in Category A or to medical devices contaminated or filled with other dangerous goods that meet the definition of another class.

[We anticipate that this will save the industry £xx.]

Class 9 Miscellaneous dangerous substances and articles

A new sub-section 2.2.9.1.7 has been added on Lithium batteries including a requirement in (e) for the cells and batteries to be manufactured under a quality management programme. [Potential costs to the industry?]

<u>Chapter 3.3 - Special Provisions applicable to certain articles and</u> <u>substances</u>

• <u>A new special provision SP 363</u> has been added which exempts from the requirements of ADR machinery or equipment containing liquid fuel, other than those exempted under paragraphs (a) or (b) of ADR 1.1.3.3, subject to certain conditions. One of those conditions is a requirement to display dangerous goods labels depending on the capacity of the means of containment.

[This exemption would be applicable, for example, to owners / operators of xx, saving the industry in the region of £xx. However, there maybe some costs involved when the use of labels is required. What are these costs?]

- <u>A new special provision SP 366</u> has been added which exempts manufactured instruments and articles containing not more than 1kg of mercury from the requirements of ADR. [This is relevant to the carriage of dangerous goods in light bulbs and will save the industry in the region of £xx.]
- <u>Amendment to SP 636(b)</u> exempts from the requirements of ADR the carriage of used lithium batteries together with other non-lithium batteries for disposal to the intermediate processing facility subject to certain conditions. [Potential industry savings?]
- <u>A new special provision SP 658</u> has been added which permits the carriage of UN 1057 LIGHTERS and UN 1057 LIGHTER REFILLS in accordance with certain provisions applicable to the carriage in LQ subject to certain conditions. [Potential industry savings?]

Chapter 3.4 – Dangerous Goods packed in limited quantities

Sub-section 3.4.1 has been amended to include a reference to a new subsection 7.5.2.4 which prohibits mixed packing of LQs with any type of explosive substances and articles other than those of Division 1.4 and UN 0161 and UN 0499. [Is this going to affect the industry and how? Any potential costs implications?]

Chapter 3.5 – Dangerous Goods packed in excepted quantities

This chapter has been amended to include a new sub-section 3.5.1.4 exempting certain dangerous goods carried in excepted quantities under certain circumstances from the requirements of ADR except for provisions of 3.5.2 and 3.5.3. [Any potential cost savings here?]

Chapter 4.1 - Packing Instructions

New sub-section 4.1.1.20 has been added on the use of salvage pressure receptacles in accordance with 6.2.3.11.

New packing instructions have been added to this chapter:

- P206 applicable to UN Nos 3500, 3501, 3502, 3503, 3504 and 3505 authorising the use of cylinders and pressure drums conforming to requirements of Chapter 6.2 subject to certain conditions;
- P207 applicable to UN 1950 which requires the use of UN approved fibreboard packagings for a maximum net mass of 55kg and other than fibreboard for packagings with a maximum net mass of 125kg. [We anticipate very little impact on GB aerosol industry as most aerosols are transported in limited quantities].

New entries have been added to the packing instruction IBC520 in the subsection 4.1.4.2 for UN 3119:

- UN 3119 Diisorbutyryl peroxide, not more than 28% as a stable dispersion in water;
- UN 3119 Diisorbutyryl peroxide, not more than 42% as a stable dispersion in water.

<u>Chapter 4.2 – Use of portable tanks and UN multiple-element gas</u> <u>containers (MEGGs)</u>

Sub-section 4.2.2 has been amended to include "chemicals under pressure".

Portable tank instruction T50 in sub-section 4.2.5.2.6 has been amended to include new entries for UN 3500, UN 3501, UN 3502, UN 3503, UN 3504 and UN 3505.

New portable tank special provisions have been added to 4.2.5.3 - TP38 and TP39 allowing instructions T9 and T4 to be applied until 31 December 2018 respectively. [This allows the industry to carry on with the current arrangements in place until 2018 – potential savings?]

Chapter 5.4 – Documentation

This chapter has been amended to permit the use of the term 'marine pollutant/environmentally hazardous' on the transport document.

Chapter 5.5 – Special Provisions

New sub-section 5.5.3 has been introduced on the special provisions applicable to packages and vehicles and containers containing substances presenting a risk of asphyxiation when used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951)). These provisions include a requirement for the vehicles and containers containing dangerous goods used for cooling or conditioning to be marked with a warning mark.

However, the UK has initiated a Multilateral Agreement 260 (MLA 260) which, once signed, would be valid until 31 December 2014 and which exempts from requirements in sub-sections 5.5.3.6 and 5.5.3.7 subject to the risk assessment for asphyxiation. Packages containing dry ice (UN 1845) as a

coolant are assumed not to present such a risk in the MLA 260. [Potential costs / savings to the industry approximately £XX?]

Chapter 6.2 – Requirements for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas.

Sub-section 6.2.1.15 has been amended to include reference to the testing of pressure of cylinders, tubes, pressure drums and bundles of cylinders in accordance with packing instruction P200 and for chemicals under pressure in accordance with packing instruction P206. [Any potential cost to the industry here?]

New sub-section 6.2.3.9 has been added on marking of bundles of cylinders on a plate permanently attached to the frame of the bundle. [Any potential cost to the industry?]

New sub-section 6.2.3.11 has been added to recognise and specify requirements for salvage pressure receptacles. A new transitional measure has been inserted in ADR 1.6.2.12 to permit construction of salvage receptacles according to national provisions up until 31 December 2013.

There are changes to the tables of standards in ADR 6.2.4.1 used for design, construction and testing of non-UN pressure receptacles and in ADR 6.2.4.2 for periodic inspection and testing of refillable LPG cylinders and valves, which are mandatory from 1 January 2015.

<u>Chapter 6.5 – Requirements for the construction and testing of intermediate bulk containers (IBCs)</u>

This chapter has been amended to include minimum dimensions of the stacking mark to be 100mm x 100mm. [Any potential costs here?]

Section 6.5.1.1.3 has been amended to clarify that IBC tests and inspections can be performed in countries other than the country in which IBC has been approved without that country's competent authority's recognition of the inspection body as long as these are in accordance with the requirements specified in IBC's approval.

<u>Chapter 6.6 – Requirements for the construction and testing of large</u> packagings

This chapter has been amended to include minimum dimensions of letters, numerals and symbols used on the packaging marks in sub-section 6.6.3.1. New sub-section 6.6.3.3 has been added to this chapter with the requirements for stacking marks for large packagings. Any additional costs that may have arisen as the result of these changes have been at least partially off set by the transitional measure in sub-section 1.6.1.26 which allows until 1 January 2014 to comply with the size specification on packaging markings and until 1

January 2015 to comply with the stacking load symbol requirement. [Any costs / savings here?]

<u>Chapter 6.7 – Requirements for the design, construction, inspection and testing of portable tanks and UN multiple-element gas containers</u> (MEGCs)

A new requirement has been added to the marking of pressure-relief devices sub-section 6.7.2.13.1 requiring the cross sectional flow areas of the spring loaded pressure-relief devices to be clearly and permanently marked. Transitional measure in sub-section 1.6.4.43 excludes valves manufactured before 1 January 2014 from this requirement. [Any costs / savings here?]

<u>Chapter 6.8 – Requirements for the construction, equipment, type</u> <u>approval, inspections and tests, and marking of tanks, bulk containers</u> <u>and special compartments for explosives of Mobile Explosives</u> <u>Manufacturing Units (MEMUs)</u>

Sub-sections 6.12.3.1.2 and 6.12.3.2.2 have been amended with the requirement for the competent authority approval of the bursting discs or other means of pressure relief for tanks carrying UN 1942 or UN 3375. There is a new transitional measure in 1.6.5.14 which allows continued use of tanks approved before 1 July 2013. [Any cost implications / savings here?]

Chapter 7.3 - Provisions concerning carriage in bulk

Sub-section 7.3.3, special provision VV15 has been amended to include carriage of solid substances in bulk. We anticipate this will benefit the industry to the cost of £xx.

Chapter 7.5 - Provisions concerning loading, unloading and handling

Sub-section 7.5.2.4 has been added which prohibits mixed loading of dangerous goods packed in limited quantities with any type of explosive substances and articles, except those of Division 1.4 and UN 0161 and UN 0499.

<u>Chapter 8.5 – Additional requirements relating to particular classes of</u> <u>substances</u>

Special provisions S1, S11 and S12 have been amended to remove requirement for Class 1 and Class 7 driver specialization training. However, the unintended consequence of those amendments resulted in drivers carrying UN 2915 and UN 3332 (UN numbers subject to S12) eing required to comply with the general requirements concerning the training of drivers as set out in 8.2.1 except for 8.2.1.4. The UK competent authority is aware of this issue and we are looking into possible solutions.

<u>Chapter 8.6 – Road tunnel restrictions for the passage of vehicles</u> <u>carrying dangerous goods</u>

Sub-section 8.6.4 has been amended to restrict passage through tunnels of category E for transport units which are required to display limited quantity markings in accordance with 3.4.13. Transport units carrying dangerous goods packed in limited quantities and marked in accordance with IMDG code are not subject to this tunnel restriction. [Potential implications for the industry?]

<u>Chapter 9.7 – Additional requirements concerning fixed tanks, battery-</u> vehicles and complete vehicles used for carriage of dangerous goods in demountable tanks with a capacity greater than 1m³ or in tank containers, portable tanks or MECGs of a capacity greater than 3m³ (EX/III, FL, OX and AT vehicles)</u>

New section 9.7.9 has been inserted requiring that EX/III vehicles should be equipped with automatic fire extinguisher systems for the engine compartment and that the load should be protected by metal thermal shields against tyre fire.

This new requirement has a standard 6 months transitional period. [How many of those vehicles are currently approved in GB and what the impact is going to be on the operators?]

Annex C

The Consultees List

Agility Chemicals **Agility Logistics** Agricultural Industries Confederation (AIC) Air Products Ltd Allianz Cornhill Amber Engineering Consultancy Ltd Arnison James Ltd Arrowhead Industrial Services Limited Association of British Pharmaceutical Industry (ABPI) AstraZeneca BAE Systems, Global Combat Systems Munitions Ltd **BASIS** (Registration) Limited **Black Cat Fireworks BOC Gases Europe** British Adhesives and Sealants Association (BASA) British Aerosol Manufacturers Association (BAMA) British Battery Manufacturers Association British Coatings Federation Ltd (BCF) British Compressed Gases Association (BCGA) **British Fireworks Association** British International Freight Association (BIFA) **British Shipping Organisation British Standards Institution** Bureau Veritas Inspection Ltd Calor Gas Limited Cameon Ltd CBI – Explosives Industry Group Chemfreight DGT Ltd Chemical Business Association Chemical Industries Association ChemRegs (UK) Ltd Chemring Marine Ltd Civil Aviation Authority (CAA) Class 7 Ltd Colas Rail Ltd Corridans Ltd **Croda International Plc** Davas Ltd DB Schenker Rail (UK) Ltd Department for Environment Food and Rural Affairs (DEFRA)

Department of Enterprise, Trade and Investment Northern Ireland (DETINI) Department of Justice (Northern Ireland) **Det Norske Veritas** DGSA Consultancy Ltd Doncaster, Rotherham & District Motor Trades Group Training Association Ltd Energas Ltd Engineering Equipment and Materials Users' Association (EEMUA) Environment Agency **Environmental Scientifics Group Ltd EP Training Services Ltd** EPC-UK plc E-T-A Circuit Breakers Ltd Eurotunnel Evans Training and Consultancy Ltd Explosives Industry Group **Exponent International Limited** Federation of Petroleum Suppliers Ltd Fedex First GB Railfreight Freight Transport Association Ltd Freightliner Group Ltd Gardner Denver Gas Container Services Ltd Gas Package Solutions (GPS) Ltd **GE Healthcare** GlaxoSmithKline Global Express Association **Greater Manchester Police** Hampshire Constabulary Hazardous Cargo Bulletin Health & Safety Executive Health Protection Agency **ICHCA** International Industrial Packaging Association **INEOS** ChlorVinyls International Cargo Handling Coordination Association International Tank Container Organisation Joseph Merritt Group plc Lancaster Training Services Ltd Leicestershire Constabulary

Lexington (UK) Limited LGC Ltd Lloyds Register LRT Training Ltd Ludgate Consultancy & Training Ltd Luxfer Cylinders M.J. Waters & Chesterfield Special Cylinders Maritime and Coastguard Agency Martin-Baker Aircraft Co. Ltd Maxam UK Ltd Metal Packaging Manufacturers Association Ministry of Defence National Health Service **Network Rail** New Alchemy Training and Consultancy Organisation Nobel Enterprises Ltd Norbert Dentressangle Norkem Ltd Oil & Chemical Recycling Association Office for Nuclear Regulation Orica Ltd Peter East Associates Ltd **Peter Harris Logistics** Peters and May PHS Group Ltd Port Skills & Safety Powerhaul International Ltd Premium UK **Private Wagon Federation** Radioactive Materials Transport Users Committee Rentokil Initial plc **Ritchies Training Centre** Road Haulage Association **RSA** Group Sanitary Medical Disposal Services Association Sankey Safety Consultants Ltd SCA Packaging Scotch Whisky Association Scottish Qualifications Authority Shell Ltd Sigma Studies Society of Motor Manufacturers and Traders (SMMT) Solvay Interox Ltd

Solvents Industry Association Syngenta AG Thames Water Utilities The Cosmetic, Toiletry & Perfumery Association Ltd The Packaging Society, Environment and Safety Forum Total Oil UK Transport & General Worker's Union TUV UK Ltd **UK Cleaning Products Industry Association UK Liquid Petroleum Gas** UK Petroleum Industry Association (UKPIA) Unipart Vehicle and Operator Services Agency (VOSA) Vehicle Certification Agency Vertellus Specialties UK Ltd VTG Rail UK Welsh Water Wincanton DGSA World Nuclear Association World Nuclear Transport Institute **Zurich Risk Services**