



Department  
for Transport

# The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 – RID / ADR 2021 amendments



Figure 1 Type caption here



Department for Transport  
Great Minster House  
33 Horseferry Road  
London  
SW1P 4DR



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## Introduction

1. The 2021 editions of RID and ADR came into force on 1 January 2021 with the mandatory implementation required from the Contracting Parties (countries signatories to the above agreements) by 30 June 2021. In Great Britain, these regulations are legally enforced through The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 as amended (CDG 2009). Since 2009, CDG 2009 has been amended a further two times in 2011 and 2020.
2. Although CDG 2009 uses ambulatory referencing to RID and ADR 'as amended from time to time', to ensure these changes to RID and ADR are implemented, there is still an expectation to produce and issue a Call for Evidence 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.
3. Finally, a summary of the amendments introduced to RID and ADR 2021 that may impact industry are detailed in Annex C. To note, Annex C should be used for guidance purposes only, and RID and ADR 2021 should be consulted for these provisions to be followed.

## How to respond

The consultation period began on [9 May 2022](#) and will run until [3 June 2022](#). Please ensure that your response reaches us before the closing date. Please contact us at the address below if you would like further copies of this consultation document, or if you need alternative formats (Braille, audio CD, etc.).

Please send consultation responses to:

Name David Pope

Address 3<sup>rd</sup> Floor, Great Minster House, 33 Horseferry Rd, London SW1P 4DR

Phone number 07970 322148

Email address [david.pope@dft.gov.uk](mailto:david.pope@dft.gov.uk)

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.

## Freedom of Information

Information provided in response to this consultation, 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 (DPA) and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

## Confidentiality and data protection

The Department for Transport (DfT) is carrying out this consultation to gather evidence on the effects of The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. This consultation and the processing of personal data that it entails is necessary for the exercise of our functions as a government department. If your answers contain any information that allows you to be identified, DfT will, under data protection law, be the Controller for this information.

As part of this consultation we're asking for your name and email address. This is in case we need to ask you follow-up questions about any of your responses. You do not have to give us this personal information. If you do provide it, we will use it only for the purpose of asking follow-up questions. Your answers will be anonymised for the purposes of reporting.

DfT's privacy policy has more information about your rights in relation to your personal data, how to complain and how to contact the Data Protection Officer. You can view it at <https://www.gov.uk/government/organisations/department-for-transport/about/personal-information-charter>

We will not use your name or other personal details that could identify you when we report the results of the consultation. Your information will be kept securely on an IT system within DfT and destroyed within 12 months after the consultation has been completed.





## What will happen next

A summary of responses, including the next steps, will be published within three months of the consultation closing. Paper copies will be available on request.

If you have questions about this consultation, please contact us at the address given under 'How to respond'.

## Annex A: Full list of consultation questions

We are seeking your input on the potential cost / benefit impacts of the adopted RID / ADR 2021 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. It is our intention to ensure that all parties affected by these amendments are notified and that this call for evidence document is clear and concise.

We would also like you to tell us if there any other RID / ADR 2021 amendments that have not been included in the attached Summary of Changes and whether these amendments resulted 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.

### Questionnaire

(a) About you

Name of organisation or company:

Your name:

Address:

Telephone number:

e-mail address:

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:

If you are an employer, how many employees are there in your organisation? If you are a trade association, how many companies do you represent?

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| 0 – 50                   | 51 - 200                 | > 200                    |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Is your organisation involved in the carriage of dangerous goods by road or rail?

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| Road                     | Rail                     | Both                     |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| Domestic                 | International            | Both                     |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(b) About the regulations

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

Question 1 Do any of the adopted RID / ADR 2021 amendments, listed in the attached Summary of changes, have significant costs implications to your business / organisation? Please provide details.

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| Yes                      | No                       | Don't know               |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Question 2 Do any of the adopted RID / ADR 2021 amendments, listed in the attached Summary of changes, 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 2021 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 2021 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 2021 amendments that are likely to have an impact on your business / organisation but have not been listed in the Summary of changes? Please provide details including costs / savings involved.

Yes          No          Don't Know  
                   

Additional Comments

## Annex B: Consultation principles

The consultation is being conducted in line with the Government's key consultation principles which are listed below. Further information is available at <https://www.gov.uk/government/publications/consultation-principles-guidance>

If you have any comments about the consultation process, please contact:

Consultation Co-ordinator  
Department for Transport  
Zone 1/29 Great Minster House  
London SW1P 4DR  
Email [consultation@dft.gsi.gov.uk](mailto:consultation@dft.gsi.gov.uk)

# Annex C: Summary of changes for RID/ADR 2021

## Part 1: General Provisions

### Chapter 1.2 Definitions

Amended definition in 1.2.1, Goods should be classified according to the seventh revised edition of the "Manual of Tests and Criteria". You can find a list of the amendments on [https://www.unece.org/trans/danger/publi/manual/rev7/manrev7-files\\_e.html](https://www.unece.org/trans/danger/publi/manual/rev7/manrev7-files_e.html)

RID only: Definition for "Operator of a tank-container, portable tank or tank-wagon" replaced with two new definitions: "Tank-container or portable tank operator" and "Tank-wagon operator".

### Chapter 1.6 Transitional Measures

#### Deleted transitional measures

All amendments considered as no cost or cost reduction.

- 1.6.1.22 – provision for inner receptacles of composite IBCs manufactured before 1 July 2011
- 1.6.1.30 – provision for pre-2015 style labels; already expired 30 June 2019
- 1.6.1.36 – provision for driver training certificates issued pre-2014
- 1.6.1.47 – provision for lithium cells and batteries not meeting requirements of 2.2.9.1.7 (g)
- 1.6.5.21 – provision for pre-July 2019 EX/III vehicle certificates of approval

#### New transitional measures

Subsection 1.6.1.44 explains that consignors will also now need to appoint a safety advisor no later than 31 December 2022.

## Chapter 1.8. Compliance with safety measures

Unloader added into the list in 1.8.5.1 of those individuals obliged to ensure a report is made in the case of a serious accident or incident.

References to EN and EN ISO standards in 1.8.6.4.1 and 1.8.7.8 updated.

## Part 2: Classification

### Chapter 2.1 Classification – general provisions

New paragraph added to 2.1.3.4.3, which means used articles containing certain classified dangerous goods can still be transported as Class 9, provided they do not have certain hazard characteristics. New text stating that used articles can be classified and transported as Class 9 when containing polyhalogenated dibenzodioxins and dibenzofurans of Class 6.1, or components of PG III [various classes]. This will allow used articles such as condensers and transformers which may have been contaminated with Class 6.1 compounds through use (e.g. polychlorinated biphenyls (PCBs)) to be carried, unpackaged, in metal trays.

The following new sentence was added to 2.1.5.4 “ this section applies to articles containing explosives which are excluded from Class 1 in accordance with 2.2.1.1.8.2.”. This amendment facilitates the classification of self-inflating recovery devices under recently added UN nos. 3537-3548. UN 3537 to UN 3548 are for articles containing [dangerous goods] N.O.S. Their use is governed by ADR 2.1.5 Transport of articles containing dangerous goods N.O.S. 2.1.5.4 states that this section does not apply to goods containing Class 1. Amendment confirms that this section does apply to articles containing explosives excluded from Class 1. Reason for this was to solve a classification question for self-inflating recovery devices which contain a receptacle filled with a non-flammable gas which is opened pyrotechnically to yield the inflation.

### Chapter 2.2 Class specific provisions

#### ADR 2.2.1 Class 1 Explosives

Section 2.2.1.1.7.2. amended meaning assignment of articles to UN 0431 ARTICLES PYROTECHNIC for technical purposes, can now be made on the basis of analogy in accordance with the default fireworks classification table (i.e. without the need for Test Series 6 testing) provided they meet the following criteria:



- Designed for theatrical use
- Meet the definition of an article
- Meet 1.4G criteria as per the table in 2.2.1.1.7.5

#### ADR.2.2.52- Class 5.2 Organic Peroxides

The list of currently assigned organic peroxides in packaging has been updated. Amended packing method and UN entry for DI-(4-tert-BUTYLCYCLOHEXYL) PEROXYDICARBONATE in 2.2.52.4

- OP7 replaced with OP8 (packing methods of packing instruction P520)
- UN 3116 replaced by UN 3118

Two new substances added to packing instruction IBC520 under UN 3119 ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED.

#### Chapter 2.3 Test Methods

Two new special provisions that have been introduced which mandate chemical stability testing for nitrocellulose entries of Class 1 and Class 4.1 (see Chapter 3.3 – special provisions for full details). Therefore, consequential amendments have been made to 2.3.2. These provisions concern stability tests for nitrocellulose mixtures (e.g. thermal decomposition and ignition temperature tests). They previously only applied to nitrocellulose mixtures of Division 4.1.

- The amendments:
- Extend the application of 2.3.2 to nitrocellulose to mixtures of Class 1 as well as Division 4.1.
- Confirm that, as per the new special provisions, the Bergmann-Junk or methyl violet paper test should be carried out, but only if there is confidence that the ignition temperature is sufficiently high for these tests to be safe.
- Keep in the existing provisions for ignition temperature testing but delete methodology provisions for other heat stability testing, since the Bergmann-Junk and methyl violet paper test in the Manual of Tests and Criteria are now referenced.

## Part 3: Dangerous Goods List, Special Provisions, LQ and EQ

### Chapter 3.1 General

#### Proper Shipping Names

New proper shipping name option for UN 3363: DANGEROUS GOODS IN ARTICLES has been added, in addition to existing name options for machinery and apparatus. Reminder that UN 3363 is only to be used for articles containing dangerous goods in their limited quantity amounts.

Generic names allowed in lieu of technical names for UN 3077 and UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID/LIQUID N.O.S. The provisions of 3.1.2.8 require the N.O.S. proper shipping name to be supplemented with the technical name. A new paragraph, 3.1.2.8.1.4, has been added which provides amended provisions for UN 3077 and UN 3082: the generic name, e.g. PAINT or INK can be used instead of the technical name.

The word 'STABILISED' has been added to the proper shipping name of UN 2522.

### Chapter 3.2 Dangerous Goods List

#### New entries

New UN entry 3549 for infectious waste of category A.

New entries for electronic detonators. UN 0511-0513: Electronic detonators programmable for blasting. It was decided that these detonators did not fit under the existing entries for different detonator types including electric detonators, which have significantly different design characteristics and lesser safety/security benefits than electronic ones.

#### Amended descriptions

Amendment to harmonise the name and description of UN 1010 in the ADR with that in the Model Regulations. Consequences for carriage of stabilised butadienes <40% which will now need to go under the appropriate N.O.S. entry. Not known in practice whether this will affect any commercial products.

## Packing group amendments

All amendments considered as no cost or cost reduction.

## Hazard identification number amendments

The hazard identification number (HIN) of UN 2683 AMMONIUM SULPHIDE SOLUTION is changing. HIN is changing from 86 (corrosive; toxic) to 836 (corrosive; flammable toxic). Label 3 is already prescribed for a subsidiary hazard of flammability for UN 2683 in the dangerous goods list. This change is simply aligning the HIN with the recognised hazards as per labelling.

## Chapter 3.3 Special Provisions

. Details regarding new and amended special provisions are provided below according to the relevant substances or groups of substances.

□ Two new special provisions have been introduced which mandate chemical stability testing for nitrocellulose entries of Class 1 and Class 4.1\* Previously not mandatory but in practice the Bergmann-Junk test was already being used. SP 393: applies to 0340, 0341, 0342, 0343 (various NITROCELLULOSE entries, Class 1)

□ SP 394 applies to SP 394: 2555, 2556, 2557 (various NITROCELLULOSE entries, Division 4.1) and 3380 (DESENSITIZED EXPLOSIVE, SOLID, N.O.S, Division 4.1)

\* Not including UN 1324 FILMS, NITROCELLULOSE BASE; UN 1352 FIBRES/FABRICS IMPREGNATED WITH WEAKLY NITRATED NITROCELLULOSE N.O.S. or UN 3270 NITROCELLULOSE MEMBRANE FILTERS

Special provision 376 is for lithium ion/metal cells or batteries identified as being damaged or defective such that they do not conform to the type tested. Notes have been added to this special provision to support users in deciding whether this SP is appropriate for a certain cell or battery.

Special provision 653 will now require the provisions for filling to be observed. Special provision 653 applies to four asphyxiant gases:

UN 1006: ARGON, COMPRESSED

UN 1013 CARBON DIOXIDE

UN 1046 HELIUM, COMPRESSED

## UN 1066 NITROGEN, COMPRESSED

- It allows these gases to be carried in cylinders without being subject to the provisions of ADR other than those noted in the special provision
- One of the requirements of SP 653 is that the provisions for construction and testing of cylinders be observed. The provisions for filling have now also been added to the list.

Addition of SP 386, special provisions for carriage V8 [packages] and S4 [operation].

### Chemical kits and first aid kits transport category

An amendment to UN 3316, CHEMICAL KIT or FIRST AID KIT, for ADR 2019 has been corrected for ADR 2021. This resolved an issue for kits which only contain dangerous goods which have not been assigned to a packing group. They will now be assigned to transport category 2 by default in this case, meaning the 1.1.3.6 exemption can be used. This was previously dealt with by an multi-lateral agreement, which expired 01 Jan 2021.

### Waste gas cartridges

Special provision 327, applicable to waste aerosols, has been extended to include waste gas cartridges. It allows these goods to be transported without being protected against movement and inadvertent discharge, provided measures are taken to prevent the build-up of dangerous pressure and atmospheres. Reminder - waste gas cartridges filled with non-flammable and non-toxic gases which have been pierced are not subject to ADR at all.

## Part 4: Packing and Tank Provisions

### Chapter 4.1 Packing provisions – use of packagings

#### New packing instructions

There is a new special packing provision PP97 in packing instruction P206, which has increased the maximum test period for fire extinguishing agents under UN 3500 CHEMICAL UNDER PRESSURE N.O.S. from five to ten years.

Packing instruction P801 amended including new provisions for used batteries. Used batteries may now be transported in accordance with new provisions under packing instruction P801(2). Under new provisions, used batteries can be transported in stainless steel or plastics bins provided they are resistant to the battery electrolyte and are filled not above the stated limit. There are also new provisions for the movement of batteries on pallets. Measures shall still be taken to prevent short circuits for batteries used or unused in bins or on pallets.

New closure types allowed under packing instructions P400 and P404 which apply for pyrophoric liquids and pyrophoric solids respectively. For combination packagings, threaded closures have been required for metal or glass receptacles when used as inner packagings. New option allows for other types of closures to be used, physically held in place to prevent their back-off or loosening during transport. Amendment was made out of concern that for some pyrophoric substances dangerous friction could result from the act of screwing the closure back on.

## Large Packagings

Large packing instruction LP101 now authorised for an additional 35 Class 1 entries. For UN Nos. 0005, 0007, 0012, 0014, 0033, 0037, 0136, 0167, 0180, 0238, 0240, 0242, 0279, 0291, 0294, 0295, 0324, 0326, 0327, 0330, 0338, 0339, 0348, 0369, 0371, 0413, 0414, 0417, 0426, 0427, 0453, 0457, 0458, 0459 and 0460, “LP101” added into column (8).

New packing instruction LP622, meaning it is possible to transport UN 3549 in large packaging. This is the first large packaging option for category A waste. Intended to support movement of large amounts of waste in the case of an outbreak (recent Ebola crisis is an example). Two new packing instructions added and consequential amendments elsewhere. Both packing instructions are for three-layer packaging. Transport category zero: as per current provisions for category A infectious substances; 1.1.3.6 exemption cannot be used.

## Chapter 4.2 Use of portable tanks and UN MEGCs

All amendments considered as no cost or cost reduction.

## Part 5: Consignment Procedures

## Chapter 5.2 Marking and Labelling

Amendments have been made to the lithium battery mark requirements to make provisions more generous/relaxed

Label shape can now be square or rectangle

Reduced standard size:

120 mm x 110 mm  100 mm x 100 mm

Reduced minimum size:

105 mm x 74 mm  100 mm x 70 mm

Existing labels will still meet the requirements of the amended provisions.

## Chapter 5.4 Documentation

All amendments considered as no cost or cost reduction.

## Chapter 5.5 Special provisions

### Consignment provisions for dry ice

Minor amendments to 5.5.3 to clarify that the provisions apply to dry ice when carried as a consignment and not just as a coolant for a consignment. You may not have been following the intended provisions, as many simply referred to dry ice when used as a coolant.

### Deregulating dataloggers

Dangerous goods (e.g. lithium batteries) contained in equipment in use or intended for use during carriage and included in or attached to packages now subject to new minimal provisions. These provisions are contained in new section 5.5.4. The contained dangerous goods (e.g. lithium batteries, fuel cell cartridges) shall meet the applicable construction and test requirements specified in ADR. This should be easily met, as when the packaging was carried as a consignment originally, it would have needed to meet the provisions of the ADR. Whilst full provisions of ADR apply when the goods are carried as a consignment, the UK considers the relaxation to apply when a consignment has been unloaded and the packages are being returned to a warehouse (e.g. if trackers are on pallets).

## Part 6: Requirements for Construction and Testing of Packagings, Tanks and Bulk Containers

### Chapter 6.7 Construction and Testing of Portable Tanks and UN MEGCs

#### Portable tanks to re-enter into service

Amendment to 6.7.2.19.6 to allow portable tanks which have missed the timeframe of their scheduled 5 or 2.5 year periodic inspection and test to be filled and offered for transport if a new 5 year periodic inspection and test is performed.

### Chapter 6.8 ADR Tanks

#### New guidelines

Additional sentence added to 6.8.2.1.18 (footnote 3) which means that ADR now allows the cross section of tank shells to contain recesses or protrusions, in order to allow the design and construction of shells to deviate from referenced standards and allow for scientific and technical progress. A guideline is included alongside the new provision to help ensure safe construction. This guideline is as per the wording in the new draft standard (EN 13094:2020, not yet included in ADR) to help ensure continuity of regulation.

### Chapter 6.9 – FRP fixed tanks, demountable tanks, tank containers and tank swap bodies

#### Tank plate marking on FRP tanks

Amendment in subsection 6.9.6.1 to tank plate marking for fibre-reinforced plastic tanks. New indent stating that the second part of tank code – the calculation pressure – shall indicate the highest value of the calculation pressure for the substance(s) permitted for carriage according to the type approval certificate (rather than the calculation pressure of the tank). This is because substances with a calculation pressure higher than that of the FRP tank are sometimes permitted due to the design criteria for FRP tanks and the selection criteria for substances permitted in tanks. Old marking can remain on FRP tanks constructed before 1 July 2021 until the next periodic inspection.

## Part 7: Conditions of Carriage, Loading, Unloading and Handling

## Chapter 7.5 Loading, unloading and handling

### Additional provisions applicable to Class 2 & 9

Amendment to CV36 to require gas exchange to be prevented between the loading space and driver's cab when closed vehicles are used and CV36 applies. CV36 is an SP for loading, unloading and handling (column 18 of the dangerous goods list). CV36 applies to a number of Class 2 entries and also two Class 9 entries which evolve flammable vapour (UN 2211 and UN 3314).

## Part 8: Vehicle Crews, Equipment, Operation and Documentation

### Chapter 8.2 Training of vehicle crew

Explanatory notes for ADR driver training certificates

All amendments considered as no cost or cost reduction.

### Chapter 8.5 Additional Requirements

S1, S15 and S21 amended - constant supervision requirement now limited to high consequence dangerous goods loads. For non-HCDG loads to which S1, S16 or S21 apply, supervision provisions still apply, but the requirement for goods to be "supervised at all times to prevent any malicious act and to alert the driver and competent authorities in the event of loss or fire" now only applies for high consequence dangerous goods loads under 1.10. These high consequence dangerous goods loads shall be supervised in accordance with their security plan of 1.10.3.2 at all times. (This means that the 1.1.3.6 loads which are exempt from 1.10 requirements but not the security provisions [S1, S16 and S21 under column (19) operation special provisions for carriage] do not need to be supervised at all times. This does not apply to all 1.1.3.6 loads, some Class 1 and Class 7 goods are still subject to 1.10 under 1.1.3.6).

## Part 9: Construction and Approval of Vehicles

### Chapter 9.1 – Scope, definitions, and requirements for approval

ADR vehicles not to be used for carriage of dangerous goods in the month grace period between inspections following nominal expiry of the annual technical inspection. ADR allows a vehicle's annual technical inspection to be scheduled up to one month before or



after the nominal expiry date on the certificate of approval. Provided the inspection is performed within this time, the day/month of the next expiry date is unchanged. ADR now confirms that vehicles should not be used to carry dangerous goods after their nominal expiry date, even if it remains in the one-month window. Amended in subsection 9.1.3.4.