

ADR Syllabus Review 2019 — Amendments Table

Core	
Original text	Revised text
<p>C.1.4 ADR, RID, IMDG, ICAO & Domestic Regulations. Information on multi-modal transport operations, the interrelation of road/sea/rail/air Regulations and operations at points of interchange.</p>	<p>C.1.4 GHS and UN Model Regulations, ADR, RID, IMDG, ICAO & Domestic Regulations. Information on multi-modal transport operations, the interrelation of road/sea/rail/air Regulations and operations at points of interchange.</p>
<p>Training note</p>	<p>Updated to mandate showing of a video clip or DVD on both initial and refresher courses.</p>
<p>C.5.2 RIDDOR requirements and reporting procedures.</p>	<p>Removed as content subsumed into C.11.7</p>
<p>C.6.2 Use of the Dangerous Load Card.</p>	<p>C.6.2 Use of the Dangerous Load Card and driver's advice sheet.</p>
<p>Training note</p>	<p>Updated to read DfT Lock Down video clip or DVD.</p>
<p>Training note</p>	<p>Update to read video clip, DVD or instructor demonstration.</p>
<p>C.9 The administration of basic emergency first aid techniques.</p>	<p>C.9 The administration of emergency first aid techniques to include CPR and recovery position.</p>
<p>C.9.1 Assess the situation including any dangers to the driver, casualties and bystanders.</p>	<p>C.9.1 Assess the situation including any dangers to the driver, casualties and bystanders, as detailed in the Instructions in Writing.</p>
<p>C.9.8 CPR and Recovery Position.</p>	<p>C.9.8 Participation of CPR and Recovery position</p>
<p>Training note</p>	<p>Updated to improve sentence structure.</p>
<p>Training note</p>	<p>Update to read video clip or DVD</p>
<p>C.10.4 Identification and correct use of fire extinguishers.</p>	<p>C.10.4 Identification, correct and practical use of fire extinguishers.</p>
<p>Training note</p>	<p>Updated to clarify mandatory requirements.</p>
<p>Training note</p>	<p>Updated to clarify when fire practicals are required.</p>
<p>C.11.7 Reporting procedures and notification of occurrences involving the transport of dangerous goods, informing the Carrier and RIDDOR requirements.</p>	<p>C.11.7 Reporting procedures and notification of occurrences involving the transport of dangerous goods, informing the Carrier.</p>

Common Characteristics	
Original text	Revised text
<p>CC.1.1 Sources of information about individual substances, their dangers, and the precautions to be exercised when transporting them.</p>	<p>CC.1.1 The classes, their dangers, and the precautions to be exercised when transporting them.</p>
<p>CC.1.4 Dangerous substances may have subsidiary hazards in addition to their primary hazard, and that these may include toxicity, flammability, explosion, corrosivity, oxidation and asphyxiation.</p>	<p>CC.1.4 Dangerous substances may have subsidiary hazards in addition to their primary hazard.</p>
<p>CC.1.5 Effects of the escape of dangerous substances and products and the action to be taken in the event of an escape of product.</p>	<p>CC.1.5 Effects of the escape of dangerous substances and the action to be taken in the event of a loss or potential loss.</p>
<p>CC.1.6 Significance of the miscibility or immiscibility, specific gravity, flammability, volatility and asphyxiant qualities of dangerous substances, and how to relate these properties to the work place.</p>	<p>CC.1.6 Significance of the miscibility or immiscibility, specific gravity, flammability, volatility and asphyxiant qualities of dangerous substances.</p>
<p>CC.1.7 Need to avoid overheating substances or causing them to ignite, including the avoidance of sources of ignition.</p>	<p>CC.1.7 Need to avoid overheating substances or causing them to ignite and avoid sources of ignition.</p>

Packages	
Original text	Revised text
<p>P1.2 Awareness of the UN Packaging scheme including IBCs, the performance testing and certification.</p>	<p>P1.2 Awareness of the UN Packaging scheme, the performance testing and certification.</p>
<p>P.1.6 The allocation and purpose of transport categories and exemptions related to quantities carried per transport unit including mixed transport category loads 1.1.3.6.</p>	<p>P.1.6 The allocation and purpose of transport categories and exemptions related to quantities carried per transport unit including different transport category loads.</p>
<p>P.1.8 The correct markings for vehicles carrying packages, bulk and containers subject to ADR, IMDG and GB regulations.</p>	<p>Changed to P.1.9 The correct marking and placarding of vehicles carrying packages, bulk and containers subject to ADR, IMDG and Domestic regulations.</p>
<p>New Knowledge</p>	<p>P.1.8 Segregation methods and responsibilities of all persons involved.</p>

Class 2	
Original text	Revised text
2.1.1 Characteristics of Class 2 and the three divisions.	2.1.1 Characteristics of Class 2 and the three divisions. Levels of Danger according to their hazardous properties, as packing groups are not allocated.
2.1.2 Danger labels, marking and placards.	2.1.2 Marking and labelling.
2.1.3 Why gases need to be compressed, liquefied, dissolved under pressure, refrigerated or a combination of these.	2.1.3 Why gases need to be compressed, liquefied, dissolved, chemicals/articles under pressure, refrigerated and adsorbed gases or a combination of these.
2.1.6 Hazardous properties including toxicity, flammability, explosiveness, corrosivity, oxidation and asphyxiation.	2.1.6 Hazardous properties including toxicity, flammability, corrosivity, oxidation and asphyxiation.
2.1.12 Appropriate Personal Protective Equipment to include respiratory protective devices for toxic gases.	2.1.12 Appropriate personal protective equipment to include respiratory protective equipment.

Class 3	
Original text	Revised text
3.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 3.	3.1 Preventative and safety measures appropriate to the various types of hazards — Class 3.
3.1.1 Characteristics of UN Class 3 substances.	3.1.1 Characteristics of Class 3 materials.
3.1.2 Danger labels, marking and placards.	3.1.2 Marking and labelling.
3.1.7 Other possible dangers including toxicity and corrosivity.	3.1.7 Possible subsidiary hazards including toxicity and corrosivity.
3.1.9 Flashpoint, auto-ignition temperature, flammability limits (the explosives limit) and liquid to vapour volumes/ratios.	3.1.9 Flashpoint, auto-ignition temperature, flammability limits and liquid to vapour volumes/ratios.
3.1.12 The need for containment, prevention of escape/ exposure to situations giving rise to dangers, and the action to be taken in the event of such circumstances arising.	3.1.12 Containment of material and actions to be taken on exposure to flammable liquids.
3.1.13 Types of ignition sources, in particular sparks, naked flames, hot surfaces, electrical equipment, smoking and static electricity.	3.1.13 Sources of ignition.
3.1.14 Appropriate Personal Protective Equipment (PPE) to include respiratory devices for toxic vapours.	3.1.14 Appropriate personal protective equipment to include respiratory protective equipment.

Class 4	
Original text	Revised text
4.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 4.	4.1 Preventative and safety measures appropriate to the various types of hazards — Class 4.
4.1.1 Characteristics of UN Class 4 and the three divisions.	4.1.1 Characteristics of Class 4.1, 4.2 and 4.3.
4.1.2 Danger labels, marking and placards.	4.1.2 Marking and labelling.
4.1.3 Dangers and precautions to be exercised when transporting the three divisions of UN Class 4 substances.	4.1.3 Dangers and precautions to be exercised when transporting Class 4 materials.
4.1.4 Other possible dangers including toxicity, explosiveness and corrosivity.	4.1.4 Possible subsidiary hazards including toxicity, explosiveness and corrosivity.
4.1.5 Drivers duties in relation to temperature control for certain UN Class 4.1 products (SADT requirements).	4.1.5 Drivers duties in relation to temperature control for certain Class 4.1 materials (SADT and SAPT requirements).
4.1.9 Appropriate personal protective equipment (PPE).	4.1.9 Appropriate personal protective equipment to include respiratory protective equipment.

Class 5	
Original text	Revised text
5.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 5.	5.1 Preventative and safety measures appropriate to the various types of hazards — Class 5.
5.1.1 Characteristics of UN Class 5 and the two divisions.	5.1.1 Characteristics of Class 5.1 and 5.2 .
5.1.2 Danger labels, marking and placards.	5.1.2 Marking and labelling
5.1.4 Other possible dangers including flammability, explosiveness, toxicity and corrosivity.	5.1.4 Possible subsidiary hazards including explosiveness, toxicity and corrosivity.
5.1.7 Drivers duties in relation to temperature control for certain UN Class 5.2 products.	5.1.7 Drivers duties in relation to temperature control for certain Class 5.2 materials (SADT requirements).
5.1.10 Containment and actions on exposure to Class 5 substances.	5.1.10 Containment systems and actions to be taken on exposure.
5.1.11 Appropriate personal protective equipment (PPE) and the specific dangers of Class 5.2 and in particular eye damage.	5.1.11 Appropriate personal protective equipment to include respiratory protective equipment, and the specific dangers of Class 5.2 and in particular eye damage.

Class 6	
Original text	Revised text
6.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 6.	6.1 Preventative and safety measures appropriate to the various types of hazards — Class 6.
6.1.1 Characteristics of UN Class 6 and the two divisions.	6.1.1 Characteristics of Classes 6.1 and 6.2.
6.1.2 Danger labels, marking and placards.	6.1.2 Marking and labelling.
6.1.3 Dangers and precautions to be exercised when transporting UN Class 6 substances.	6.1.3 Dangers and precautions to be exercised when transporting Class 6 materials.
6.1.4 Other possible dangers including flammability, and corrosivity.	6.1.4 Possible subsidiary hazards including flammability, oxidising and corrosivity.
6.1.5 Entry into the body may be through inhalation, ingestion, absorption or needle stick injuries.	6.1.5 Entry into the body may be through inhalation, ingestion, absorption, injection and instillation.
6.1.7 Category A and B substances for UN Class 6.2.	6.1.7 Category A and B substances for Class 6.2.
6.1.8 Waste products from human or animal health care and/or related research.	6.1.8 Clinical waste products derived from human or animal treatment and bio research.
6.1.11 Containment of product and actions on exposure to UN Class 6 substances.	6.1.11 Containment of material and actions to be taken on exposure to Class 6 substances.
6.1.12 Appropriate personal protective equipment (PPE) to include respiratory devices for toxic vapours.	6.1.12 Appropriate personal protective equipment to include respiratory protective equipment.
6.1.13 Avoiding contamination when putting on and removing personal protective equipment (PPE).	6.1.13 Avoiding contamination when putting on and removing personal protective equipment.
6.1.14 Containment of used sharps to prevent needlestick injuries.	6.1.14 Containment of used sharps.
6.1.15 The need for rapid decontamination and/or the use of an antidote in the event of exposure to certain UN Class 6 products.	6.1.15 The need for rapid decontamination and/or the use of an antidote in the event of exposure to certain UN Class 6 materials.

Class 8	
Original text	Revised text
8.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 8.	8.1 Preventative and safety measures appropriate to the various types of hazards — Class 8.
8.1.1 Characteristics of UN Class 8 substances and the importance of the three packing groups.	8.1.1 Characteristics of Class 8 materials.
8.1.2 Danger labels, marking and placards.	8.1.2 Marking and labelling.
8.1.3 Dangers and precautions to be exercised when packing, handling and transporting UN Class 8 substances.	8.1.3 Dangers and precautions to be exercised when transporting Class 8 materials.
8.1.4 Other possible hazards including toxicity, flammability, and oxidation.	8.1.4 Possible subsidiary hazards including toxicity, flammability, and oxidation.
8.1.6 Contains mostly acids and alkalis although chemical opposites have very similar corrosive effects.	8.1.6 Chemical reactions of corrosive materials.
8.1.7 Effects on many materials including human tissue may be immediate or delayed and the rate of reaction may depend on concentration and temperature.	8.1.7 The effects on many materials and human tissue, may be immediate or delayed depending upon the concentration, duration and temperature.
8.1.9 Specific hazards with Hydrofluoric acid which must be handled with extreme care.	Knowledge removed
8.1.10 Segregation methods and responsibilities of all persons involved.	Changed to 8.1.9
8.1.11 Containment systems, actions to be taken on exposure and the importance of neutralisation and/or decontamination.	Changed to 8.1.10 Containment systems and actions to be taken on exposure.
8.1.12 Appropriate personal protective equipment to include respiratory protective devices.	Changed to 8.1.11 Appropriate personal protective equipment to include respiratory protective equipment.

Class 9	
Original text	Revised text
9.1 Preventative and safety measures appropriate to the various types of hazards — UN Class 9.	9.1 Preventative and safety measures appropriate to the various types of hazards — Class 9.
9.1.1 Characteristics of UN Class 9 substances.	9.1.1 Characteristics of Class 9 substances and articles.
9.1.2 Danger labels, marking and placards.	9.1.2 Marking and labelling.
9.1.6 Containment systems, actions to be taken on exposure and the importance of neutralisation and/or decontamination.	9.1.6 Containment systems and actions to be taken on exposure.
9.1.7 Appropriate personal protective equipment (PPE)	9.1.7 Appropriate personal protective equipment to include respiratory protective equipment.
New Knowledge	9.1.8
New Knowledge	9.1.9

Tanks	
Original text	Revised text
T.1.1 The definitions of tanks in terms of construction and size.	T.1.1 The definitions of tanks and structural equipment as defined in 1.2 of ADR in terms of construction and size.
T.1.3 National and international requirements for tanks and vehicles to be inspected and certified. The documentation and plating of vehicles, and the information displayed on the data plate.	T.1.3 National and international requirements for tanks and vehicles to be inspected and certified. The documentation, plating of tanks and vehicles, and the information to be displayed on the data plate.
T.1.4 The general application of national and international (ADR, IMDG, RID) requirements to the operation of tanks and tank containers.	T.1.4 The scope and applicability of national and international (ADR, IMDG, RID) requirements to the operation of tanks and tank containers.
T.1.5 The requirements for vehicles to carry fire extinguishers and other safety equipment.	T.1.5 The requirements for vehicles to carry fire extinguishers and miscellaneous equipment.
T.1.6 The requirement for vehicles to carry documentation, including Instructions in Writing about the load. The ADR Driver Training Certificate, transport documentation, and 'Certificate of Approval'.	T.1.6 The requirement for vehicles to carry documentation, including Instructions in Writing, the ADR Driver Training Certificate, transport document, and 'Certificate of Approval'.
T.1.8 The UK Emergency Action Code system, the layout and content of Hazard Warning Panels, emergency action codes, the number and positioning of panels/plates on tankers and tank containers, for both single and multiple loads and the voluntary scheme for low hazard substances.	T.1.8 The placarding and marking as required in accordance with domestic regulations, ADR and IMDG.

Tanks (cont)	
Original text	Revised text
<p>T.1.9 Placarding and marking of tankers and tank containers under the IMDG code for journeys by sea (including those to islands off the UK mainland), the number, positioning and use of placards for primary and subsidiary risks and for single and multiple loads, proper shipping names, UN numbers and marine pollutant labels, and resistance to sea water.</p>	<p><i>Removed and content subsumed into T.1.8</i></p>
<p>T.1.10 Placarding and marking of tankers and tank containers under ADR, the size, layout and content of orange plates, hazard identification numbers, fire resistance and the positioning and use of placards.</p>	<p><i>Removed and content subsumed into T.1.8</i></p>
<p>T.2.1 The types of loads for which tanks may be designed, including liquefied petroleum gas (LPG), flammable liquids, gases transported at very low temperatures, powders and granules, insulated or heated loads, refrigerated loads, foodstuffs (eg alcoholic beverages), corrosive substances, and wastes.</p>	<p>T.2.1 The types of loads for which tanks may be designed, taking in account the physical state of the substance or mixture, temperature and pressure requirements.</p>
<p>T.2.4 The application of regulations concerning the construction and approval of tanks and tank vehicles, including stipulations regarding engines and fuel systems, exhausts, electrical systems, stability, rear end projection, fire resistant cabs and ullage space.</p>	<p>T.2.4 The construction and approval of tanks and tank vehicles to AT and FL regulations.</p>
<p>T.2.5 The requirements for maximum filling ratios and when minimum filling ratios apply.</p>	<p>T.2.5 The requirements for maximum and minimum filling ratios and ullage space.</p>
<p>T.2.6 The significance to the loading, unloading and transport of materials of the Maximum Allowable Working Pressure (MAWP).</p>	<p>T.2.6 The significance of not exceeding the Maximum Allowable Working Pressure (MAWP) during loading and unloading.</p>
<p>T.2.7 The fitting and use of sun shields.</p>	<p>T.2.7 Knowledge removed.</p>
<p>T.2.8 The purpose, operation, precautions and drivers' responsibilities in relation to items of equipment, including: man lids, seals and bolts, dip sticks, pressure relief equipment, and pressure and vacuum relief valves, bursting discs, flame traps and gauzes, fusible elements, pressure connections and pressure gauges, temperature gauges, outlet valves and manifolds, valve controls, seals, hoses, hose connections and blanking caps, emergency shut off valves and excess flow valves.</p>	<p><i>Changed to T.2.7</i> The purpose, operation, precautions and drivers' responsibilities in relation to all service and safety equipment.</p>

Tanks (cont)	
Original text	Revised text
<p>T.3.1 Loading vehicles, including the responsibilities of the driver for obeying site rules, reporting to a responsible person, locating emergency equipment, obtaining Instructions in Writing, securing the vehicle against accidental movement, ensuring that the correct substance is loaded, taking precautions against contamination of the load, using the appropriate personal protective equipment (PPE), earthing the vehicle and taking appropriate action in case of danger and during an electrical storm. Ensuring that there is sufficient capacity for the load and the vehicle is not overloaded and that there is adequate ullage space. Controlling the rate of filling, and taking all necessary precautions against fire or explosion.</p>	<p>T.3.1 Procedures at the loading point.</p>
<p>T.3.2 Checks during the journey, including ensuring that hoses are secured and have blanking caps secured in place, that there are no leaks, that components are not overheating, that all documentation is available, and that vehicle markings in place are clean and clearly visible.</p>	<p>T.3.2 Checks during the journey.</p>
<p>T.3.3 Discharging tanks, including the drivers' responsibility for: reporting to the person in charge, following site rules, locating the emergency equipment, using the appropriate personal protective equipment, ensuring that the load is discharged into the correct tank, and that there is sufficient space for it, providing a sample of the load if required, making the correct connections, taking precautions against accidental movement, fire or explosion or implosion (due to the formation of a vacuum), and following the correct procedures for unattended driver discharge/ attended driver discharge including obtaining a certificate from a responsible person).</p>	<p>T.3.3 Procedures at the unloading point.</p>
<p>T.3.5 The causes of static electricity, and the specific precautions to be taken to avoid its dangers, including the use of anti-static and non-sparking tools and clothing.</p>	<p>T.3.5 The causes of static electricity, and the specific precautions to be taken.</p>
<p>T.3.6 The avoidance of overloading and overfilling, including the use of dipsticks, ullage bars, sight glasses, gauges, meters and weigh-bridges.</p>	<p>T.3.6 The avoidance of overloading and overfilling.</p>

Tanks (cont)	
Original text	Revised text
<p>T.3.7 The cleaning and purging of tanks and ancillary equipment, eg pumps, hoses, etc including the driver's individual responsibilities; techniques, precautions (with particular reference to tank entry), avoidance of implosion, and compliance with and awareness of COSHH.</p>	<p>T.3.7 The cleaning and purging of tanks and ancillary equipment.</p>
<p>T.3.8 Using appropriate routes, avoiding built up areas, low bridges other hazards and routes with restrictions relating to the transport of dangerous goods.</p>	<p>T.3.8 Using appropriate routes including tunnel codes.</p>
<p>Training note</p>	Updated wording to reflect video clip/DVD.
<p>T.4 Knowledge of the various and different loading and discharge systems.</p>	<p>T.4 Knowledge of the various and different filling and discharge systems.</p>
<p>T.4.1 Closed and open systems.</p>	<p>T.4.1 Advantages and disadvantages of open and closed filling.</p>
<p>T.4.2 Loading and discharging using gravity or pumps, including the use of pumps or compressors either on the vehicle or external to it.</p>	<p>T.4.2 Top and bottom filling and discharging by gravity, pumps, pressure and vacuum operated (waste tanks) including the use of pumps or compressors either on the vehicle or external to it.</p>
<p>T.4.3 The use of tipping tanks, including the use of pressure, stabilising legs, precautions in high winds and the dangers of sticking loads and overhead obstructions.</p>	<p>T.4.3 The use of and precautions to be taken whilst operating tipping tanks.</p>
<p>T.4.4–T.4.8</p>	Knowledge removed as covered within learning outcome T.3.
<p>T.5.1 Surge during braking and acceleration, and the need for the driver to anticipate and acclimatise.</p>	<p>T.5.1 Anticipation of product movement whilst cornering, braking and accelerating, and the need for the driver to adjust his driving techniques accordingly.</p>
<p>T.5.2 The need for clutch control and appropriate braking techniques, with and without ABS.</p>	<p>T.5.2 Knowledge subsumed into T.5.1.</p>
<p>T.5.3 Lateral movement due to sudden steering manoeuvres and roll-over.</p>	<p>T.5.3 Knowledge subsumed into T.5.1.</p>
<p>New learning outcome added to reflect practice.</p>	<p>T.6</p>

Class 1	
Original text	Revised text
1.1.3 The UN Class 1 divisions, the hazards of each division, and examples of each division. Unclassified explosives.	1.1.3 The Class 1 divisions, the risks of each division, and examples of each division. Unclassified explosives.
1.2.7 The relationships between UK regulations, the IMDG code and ADR.	1.2.7 The relationships between Domestic regulations, the IMDG code and ADR.
1.4.1 The use of mechanical handling.	1.4.1 The use of mechanical handling equipment.
1.4.7 Basic mixed load of explosives.	1.4.7 Basic mixed load of explosives in accordance with mixing rules.
Training note	Clarification on when should be taught. Mandatory for initial and refresher.

Class 7	
Original text	Revised text
7.1.3 The Ionising Radiation Regulations, and operating within the rules, which may apply to a controlled area.	7.1.3 The Ionising Radiations Regulations 2017, designation of controlled areas and working in compliance with local rules and other requirements as determined from the radiation risk assessment.
7.1.4 The concept of radiation dose, the use of personal dose meters and measurements.	7.1.4 The concept of radiation dose, the use of personal dose meters and measurements. Including, radiation and contamination, internal and external dose pathways and impact of different physical forms of the radioactive material.
7.2.2 The IAEA safety standards and other modal regulations applying to the transportation of radioactive materials.	7.2.2 The IAEA safety standards and other modal regulations applying to the transportation of radioactive materials, including reference to the most current relevant CDG provisions.
7.2.3 The responsibilities of consignors, carriers and drivers in relation to packaging, documentation, vehicle marking, supervision, HCDG and tunnel codes.	7.2.3 The responsibilities of consignors, carriers and drivers in relation to packaging, documentation, vehicle marking and supervision. The additional requirements for HCRM in compliance with ADR 1.10.3.
Table B created to highlight the need for practical exercise.	
7.3.3 Duties of consignors and carriers with regards to emergency arrangements.	7.3.3 Duties of consignors and carriers with regards to emergency arrangements as required by CDG.
7.3.4 Duties of drivers, carriers and consignors in a radiological emergency, RADS SAFE.	7.3.4 Duties of drivers, carriers and consignors in a radiological emergency in accordance with ONR guidance on emergency arrangements.