International transport of dangerous goods by road
ADR Agreement
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ADR

• Agreement
  - Done in September 1957
  - Entered into force on 29 January 1968
  - General principles for acceptance of dangerous goods in international transport by road
  - Conditions for derogations (special agreements)
  - Conditions for application of additional rules (for reasons other than safety during transport)
  - Solving disputes

• Protocols of amendments

• Annexes A and B
  - Regularly amended since 1968 (last edition 2017)
  - Annex A: Conditions specific to the goods (packing, labelling, classification) (Parts 1 to 7)
  - Annex B: Conditions specific to vehicle construction, equipment and operation (Parts 8, 9)
Scope and application
49 Contracting Parties
Contracting parties

• 49 Contracting Parties
  – All European Union (EU) and most non-EU European countries
  – 2 non-European countries (North Africa: Morocco and Tunisia)
• Open to all UN Member States
• Geographical extension linked to territorial proximity
• National application in some countries (Thailand, South America)
Advantages

- Annexes harmonized with other modal regulations (sea, air, rail)
- Border-crossing and transit facilitation
- Mutual trust and cooperation between Contracting Parties
- High level of safety, without excessive burden for countries
Advantages
Multimodal harmonization

Provisions implemented since January 2017
Multimodal harmonisation

General provisions based on the UN Model Regulations

Annex A

1. General
2. Classification
3. List of Dangerous Goods
4. Use of packagings/Gas receptacles/Tanks
5. Consignment procedures (Labelling, Marking, Documents)
6. Construction, testing and approval of packagings/tanks
7. Transport operations
Provision specific to road transport
General provisions based on the UN Model Regulations

Annex B, Part 8-9
Provisions concerning transport equipment and transport operations:

- Vehicle crew, including training
- Operation and equipment
- Supervision of vehicles
- Road tunnel restrictions
- Construction, approval and inspections of vehicles
Advantages
Facilitation of international road transport

Agreement: article 2

Dangerous goods barred from carriage by Annex A not accepted for international transport (very few; only extremely dangerous goods)

Other dangerous goods authorized subject to compliance with conditions of Annexes A and B (very wide range of goods of commercial importance)

Vehicles carrying dangerous goods in accordance with Annexes A and B must be accepted on the territory of all transit and destination countries which are Contracting Parties
Advantages
Facilitation of international road transport

Reservations in articles 4 (1) and (5)

Article 4 (1)

Each Contracting Party retain the right to regulate or prohibit, for reasons OTHER than safety during carriage, the entry of dangerous goods on its territory.

Article 5

Transport operations shall remain subject to national or international regulations applicable in general to road traffic, international road transport and international trade.
Advantages

Mutual recognition of certificates

- Packaging certificates
- Vehicle certificates
- Tank certificates
- Driver training certificates
Advantages

Trust and confidence

• Mutual trust between contracting parties
• Framework for administrative controls (section 1.8.1)
  - Without endangering persons, property or the environment
  - Without major disruption of road services
• Mutual administrative support (section 1.8.2)
  - Dialogue and communication between Competent authorities
  - Participation in WP.15
• Procedure for solving disputes (Article 11)
• Possibility of concluding multilateral/bilateral agreements
Advantages
Safety and Security

• How to provide a high level of safety
• Prevent accidents to persons and property and damage to the environment during loading, unloading, transport
• Keep the effects of an accident as low as possible
Advantages

Safety and Security: Dangerous goods

Starting point: the dangerous goods
- Classification in accordance with the UN Model Regulations
- Identification of the goods with the UN Number which is recognised internationally
- Identification of the danger with the danger labels
- Packagings and tanks meet the UN Model Regulations requirements or requirements harmonised between ADR and RID/SMGS
Advantages

Safety and Security: Vehicles and equipment

Construction requirements for vehicles and tanks:

  – Tanks: design criteria for shells, minimum thickness, service equipment and safety devices
  – Vehicles: Approval required for carriage in tanks and carriage of explosives, electrical equipment, breaking equipment, prevention of fire, speed limitation device

Prescriptions for the equipment:

  – Fire-fighting equipment
  – Personnal protection
Advantages
Safety and Security: Vehicles

Identification of the danger: orange plate marking
Identification of the type of danger: placarding
Advantages

Safety and Security: Vehicle crew

Additional equipment adapted to the goods transported: gloves, eye protection, emergency escape mask

Instructions in writing

<table>
<thead>
<tr>
<th>Danger labels and placards</th>
<th>Hazard characteristics</th>
<th>Additional guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Oxidizing substances</td>
<td>Risk of vigorous reaction, ignition and explosion in contact with combustible or flammable substances.</td>
<td>Avoid mixing with flammable or combustible substances (e.g. sawdust).</td>
</tr>
<tr>
<td>5.1</td>
<td></td>
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</tr>
<tr>
<td>5.1 Oxidizing substances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 Organic peroxides</td>
<td>Risk of exothermic decomposition at elevated temperatures, contact with other substances (such as acids, heavy-metal compounds or amines), friction or shock. This may result in the evolution of harmful and flammable gases or vapours or self-ignition.</td>
<td>Avoid mixing with flammable or combustible substances (e.g. sawdust).</td>
</tr>
<tr>
<td>5.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 Organic peroxides</td>
<td></td>
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</tr>
</tbody>
</table>
Advantages

Safety and Security: Appropriate behaviour

Training of drivers
- Know the goods and their danger
- Preventive and safety measures
- What to do in case of an accident (first aid, road safety, basic knowledge about the use of protective equipment, instructions in writing)
- Marking, labelling, placarding and orange-coloured plate marking
- What a driver should and should not do during the carriage of dangerous goods
- Prohibitions on mixed loading
- Precautions during loading and unloading, handling and stowage
- Traffic restrictions in tunnels and instructions on behaviour in tunnels
- Security awareness
Advantages

Safety and Security: Dangerous goods safety adviser

Required for undertakings with the following activities: carriage, packing, loading, filling or unloading of dangerous goods

Certificate issued by the competent authority after training and examination

Role of the DGSA:

• Help to prevent the risks
• Know the regulations
• Advisory services
• Annual report on activities related to transport of dangerous goods

Exemption for small activities
Advantages

Safety and Security: Obligations for the participants

• All participants in the carriage of dangerous goods
  – Consignor, carrier, loader, filler, …
• Safety obligations: clear identification of the duties of the participants in the transport chain
• Training appropriate to the responsibilities and duties
  – General awareness
  – Function-specific training
  – Safety training: safe handling and emergency procedure
Working Party on the TDG (WP.15)

Amendment procedure

Agreement: Review Conference

Annexes:
- Proposal by one Contracting Party to other CPs through depositary
- Acceptance if no objection from $\geq 5$ CPs 3 months after notification

BUT

Protocol of signature recommends that amendment proposals be submitted first to meeting of experts of:
- All CPs
- If necessary UNECE countries which are not CPs
- Transport International Organisations
- NGOS
Working Party on the TDG (WP.15)

• Develop and update ADR
• Encourage the accession of new countries
• Encourage participation in its activities
• Any country, that is member of the United Nations, may participate in its activities and is invited to accede to ADR

• Participants
  – Member countries of ECE and all ADR Contracting Parties: full participants
  – Any other Member of the United Nations: may participate in a consultative capacity
  – Specialized agencies, intergovernmental organizations and non-governmental organizations: consultative status
Implications for Contracting Parties

- Administrative procedures for:
  - packagings, tanks and vehicles approval/certificates
  - dangerous goods safety adviser certificates
  - driver training certificates
  - enforcement (controls and checks; penalties)
  - cooperation with other Contracting Parties

- Notifications to the UNECE secretariat

- Regular participation in the Working Party on the Transport of Dangerous Goods (WP.15)
Implications for Contracting Parties

• Notifications to the UNECE secretariat
  – Driver training certificates
  – Contact details of the Competent Authorities, restrictions of circulation, tunnel classification
  – Instructions in writing
  – Multilateral agreements
  – Accident reports

• Information on WP.15 meetings
  – Schedule of meetings
  – Reports (may contain questions of interpretation)
  – Documentation for the sessions
    • Official documents
    • Informal documents
Recommendations

• Apply the ADR Road Map for Implementation

• Establish administrative procedures for certificates
  – Packagings
  – Tanks
  – Vehicles
  – Training of drivers
  – Dangerous Goods Safety Advisers

• Participation in the sessions of WP.15

• Apply ADR also for national transports
Thank you!

http://www.unece.org/trans/danger/danger.htm