International transport of dangerous goods by road
ADR Agreement
Sabrina Mansion
Geneva, 5 July 2017

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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)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Organic peroxides</td>
<td>Risk of exothermic decomposition at elevated temperatures, contact with other substances (such as metals, heavy-metal compounds or minerals), friction or shock. This may result in the evolution of flammable gases or vapours or self-ignition.</td>
<td>Avoid mixing with flammable or combustible substances (e.g. solvent).</td>
</tr>
<tr>
<td>5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic peroxides</td>
<td>Risk of severe reaction, ignition and explosion in contact with combustible or flammable substances.</td>
<td>Avoid mixing with flammable or combustible substances (e.g. solvent).</td>
</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 ≥ 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

WP.15
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