



# **INLAND TRANSPORT SECURITY**

## **SECURITY PROVISIONS FOR THE TRANSPORT OF DANGEROUS GOODS**

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# **INTERNATIONAL MULTIMODAL TRANSPORT OF DANGEROUS GOODS**

Key factor: harmonization



Achieved through UN Model Regulations on the TDG



UN Model Regulations implemented by



international modal transport organizations; and  
national governments

## INTERNATIONAL MODAL TRANSPORT OF DANGEROUS GOODS

- UN Model Regulations implemented by:
    - Mandatory IMDG Code for maritime transport
    - ICAO Technical Instructions for air transport
    - ADR/RID/ADN for inland transport:
      - ADR: for international road transport
      - ADN: for international inland waterways transport
      - RID: for international rail transport
- All harmonized with the UN Model Regulations

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## NATIONAL MODAL TRANSPORT OF DANGEROUS GOODS

- RID/ADR applicable to domestic traffic in EU countries:
  - Directive 94/55/EC (road transport: ADR)
  - Directive 96/49/EC (rail transport: RID)
- ADN: expected entry into force in 2007. Provisions already applicable on the Rhine (ADNR) and on the Danube (ADND)
- New EU directive RID/ADR/ADN currently under preparation. Expected adoption in 2007
- Other national legislation (e.g. CFR 49)

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## TRANSPORT OF DANGEROUS GOODS

### Major areas of harmonization

- Classification
- Labelling/marketing
- Transport documentation
- Packagings
- Tanks
- Vehicles/inland waterway vessels
- Training
- Loading/unloading/transport operations
- Emergency procedures

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## TRANSPORT OF DANGEROUS GOODS

### Security concerns

- Security has been traditionally addressed in transport regulations through safety provisions such as:
  - Requirements for construction, testing, approval of packagings, tanks, vehicles, vessels...
  - Mandatory training requirements for vehicle/vessel crew
  - Reporting duty on accidents or incidents involving dangerous goods
  - Identification of safety obligations of the participants in the transport chain (consignor, carrier, consignee, loader...)

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## TRANSPORT OF DANGEROUS GOODS

### Security concerns

- After terrorist attacks in September 2001, call for international cooperation and action to prevent terrorist acts:
  - General Assembly Resolution 56/1 of Sept. 2001; and
  - Security Council Resolutions:
    - 1368(2001) of 12 Sept. 2001; and
    - 1373(2001) of 28 Sept. 2001

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## TRANSPORT OF DANGEROUS GOODS

### Major security risks identified

- Vehicle theft
- Vehicle misuse as bombs
- Theft of dangerous substances during transport
- Illegal border crossing of elements contributing to terrorist attacks
- Attacks to key infrastructure points (bridges, tunnels)

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## TRANSPORT OF DANGEROUS GOODS

### General security provisions

- New Chapter 1.4 on security provisions introduced in 2003 (UN Model Regulations, Rev.13)

Security defined as: measures or precautions to be taken to minimise theft or misuse of dangerous goods that may endanger persons or property

- In modal regulations, security provisions introduced as from:
  - 2005: RID/ADR/ADN (inland transport) and ICAO TI (air transport)
  - 2006: IMDG Code (maritime transport) as a recommended supplement to the International Ship and Port Facility Security Code (ISPS Code)

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## TRANSPORT OF DANGEROUS GOODS

### General security provisions

- Applicable to all modes and all goods:
  - Consignors shall only offer dangerous goods to properly identified carriers
  - Transit sites shall be properly secured, well lit and where possible not accessible to the general public
  - Mandatory security awareness training for all individuals involved in the transport chain
- Applicable to all modes and some goods:
  - Definition and listing of high consequence dangerous goods
  - Provisions for a security plan for high consequence dangerous goods

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## TRANSPORT OF DANGEROUS GOODS

### High consequence dangerous goods

Goods which have the potential for misuse in a terrorist incident and which may, as a result, produce serious consequences such as mass casualties or mass destruction.

Indicative list:

- Class 1: Explosives of divisions 1.1, 1.2, 1.3 (comp. group C), 1.4 (UN 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455, 0456 and 0500) and 1.5
- Division 2.1: Flammable gases in bulk
- Division 2.3: Toxic gases (excluding aerosols)
- Class 3 : Flammable liquids (packing groups I and II) in bulk
- Class 3 and Division 4.1 desensitized explosives
- Division 4.2 goods (packing group I) in bulk

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## TRANSPORT OF DANGEROUS GOODS

### High consequence dangerous goods

- Division 4.3 goods (packing group I) in bulk
- Division 5.1 oxidizing liquids (packing group I) in bulk
- Division 5.1 perchlorates, ammonium nitrate, ammonium nitrate fertilisers and ammonium nitrate emulsions or suspensions or gels, in bulk
- Division 6.1 toxic substances (packing group I)
- Division 6.2 infectious substances of Category A (UN 2814 and 2900)
- Class 7 radioactive material in quantities greater than 3 000 A1 (special form) or 3 000 A2, as applicable, in Type B(U) or Type B(M) or Type C packages
- Class 8 corrosive substances (packing group I) in bulk

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## TRANSPORT OF DANGEROUS GOODS ADR/RID/ADN Specific provisions

- Safety obligations of all participants clearly identified
- Mandatory training (including security awareness training) for the vehicle/vessel crew
- Obligation of the crew members to be clearly identified during transport
- Use of tracking methods (e.g. telemetry) to monitor the movement of high consequence dangerous goods
- Use of equipment to prevent the theft of the vehicle/wagon/vessel or its cargo
- Safety inspections covering security measures
- Safety advisers

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## TRANSPORT OF DANGEROUS GOODS ADR/RID/ADN Specific provisions

- Contracting Parties retain the right to:
  - further regulate or prohibit entry of certain dangerous goods into its territory (e.g wastes, nuclear material...) for reasons other than safety during transport
  - Require accompanied transport (approved official, police escort...) of highly sensitive dangerous goods (military weapons, primary explosives, nuclear material...)
  - Include restrictions concerning:
    - the use of certain infrastructures (bridges, tunnels)
    - The movement of goods traffic on certain days or through commercial or residential areas

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## FINAL CONSIDERATIONS

- National security measures should be harmonized
- Gaps between national regulations should be avoided
- Introduction of further restrictions or tighter controls should be carefully considered since they might establish new barriers to international transport and trade
- Priority should be given to measures increasing security at the lowest possible cost (political, social and economic)

*(Extract from document TRANS/2002/15 containing the proposals submitted by the secretariat to the Inland Transport Committee on how to proceed with the issue of transport and security in the framework of the Committee and its subsidiary bodies.)*

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**Thank you**

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