

The background of the slide features a large, faint, blue-toned United Nations emblem. It consists of a world map centered on the Atlantic Ocean, surrounded by a laurel wreath. The text is overlaid on this background.

Safety of Navigation and Environmental Security in a Transboundary Context in the Black Sea Basin

Odesa, Ukraine, 24-26 June 2008

The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)

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Introduction

Transport of dangerous goods

Dangerous goods:

- are produced and transported in very large quantities;
- cover a very large range of products;
- present risks for the population in general, property and the environment (at all stages of their lifecycle)

Explosives



Military ammunitions, bombs, etc (all types); Industrial explosives (dynamite...), Fireworks...

Gases



Gases compressed, liquefied or refrigerated

Flammable gases (propane, LPG, cigarette lighters)

Non-flammable, non-toxic gases (air, oxygen, nitrogen, helium)

Toxic gases (ammonia, chlorine)



Flammable liquids

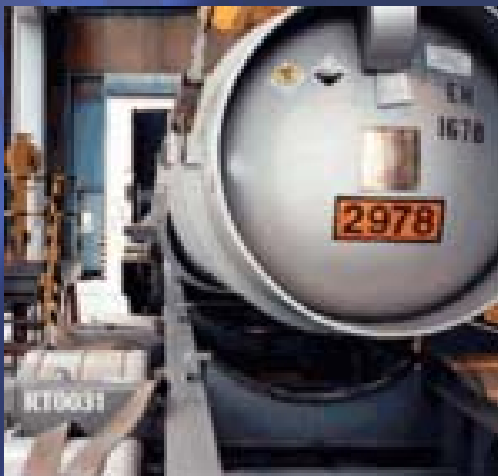


Petroleum products, Paints, Alcoholic beverages

Radioactive material



Nuclear fuel,
Uranium hexafluoride,
Medical radioisotopes



But also



Cosmetics, perfumes, cleaning products...

Statistics EU15

Recent statistics are not available, but to give an indication, in the period 1990-2002, transport of dangerous goods increased from 98 to 111 billion tonnes:

- road: + 27%
- inland waterways: + 11%
- rail: - 9%

Substances transported (2002):

- Petroleum products: 54% of all dangerous goods carried
- Gases: 12%
- Flammable liquids (excluding petroleum products): 10%
- Corrosive substances: 8%

Share of dangerous goods in total transport: 8%

Accidents

Accidents have negative effects on the environment.

Well-known examples are oil spillages:

- Torrey-Canyon;
- Amoco Cadiz;
- Exxon Valdez;
- Erika...

although small spillages of highly toxic substances may also have disastrous effects.



Accidents

Accident which happened on Monday, 12 November 2007, involving Russian ships in the Kerch Straights to the Azov Sea. A fierce storm on Sunday resulted in massive 18-foot waves, which split a Russian oil tanker in two and sank two Russian freighters. The tanker spilled at least 560,000 gallons of fuel. The two ships were carrying a total of around 7,150 tonnes of sulphur.

How is the transport of dangerous goods regulated?

The United Nations created in 1953 the UN Committee of Experts on the Transport of Dangerous Goods, as a subsidiary body of the Economic and Social Council:

To elaborate recommendations:

- addressed to all governments and international organizations concerned with the safety of transport of dangerous goods;

Regulatory framework

Maritime transport:
IMDG Code

(mandatory 155 countries)

Air transport: ICAO
Technical Instructions

(mandatory 188 countries)

Rail transport:
COTIF

(mandatory 42 countries)

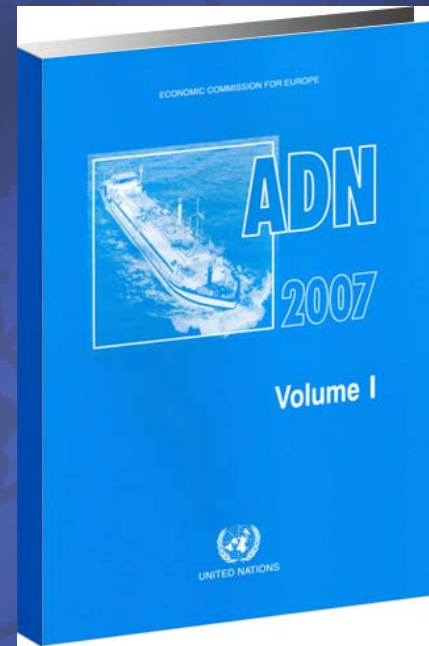
Regulatory framework

United Nations Economic Commission for Europe

Road: ADR
(43)



Waterways: ADN
(9)



Regulatory framework –EU level

At the EU level, a single directive applicable to inland transport of dangerous goods (road, rail, inland waterways) has been developed making the requirements of ADR, RID and ADN applicable to domestic and intracommunitary traffic by reference. It is in the final stages of adoption

Regulations for inland waterways – development of the ADN

Until 2000, only recommendations addressed to the Governments of European countries with inland waterway networks and to the international river Commissions such as the Central Commission for the Navigation of the Rhine (CCNR) and the Danube Commission.

ADN

These recommendations have now been upgraded to a formal European Agreement, similar to ADR, which was adopted on 25 May 2000 and signed by 10 countries (France, Germany, Italy, Czech Republic, Croatia, Luxembourg, Netherlands, Republic of Moldova, Slovakia and Bulgaria)

ADN

The ADN entered into force on 29 February 2008.

9 Contracting Parties: Austria, Bulgaria, France, Germany, Hungary, Luxembourg, Moldova, Netherlands and Russian Federation.

The annexed Regulations will become applicable one year later on 28 February 2009

ADN objectives

- (a) increasing the safety of international carriage of dangerous goods by inland waterways;
- (b) contributing effectively to the protection of the environment, by preventing any pollution resulting from accidents or incidents during such carriage; and
- (c) facilitating transport operations and promoting international trade

ADN

Open to Member States of the Economic Commission for Europe whose territory contains inland waterways, other than those forming a coastal route

Around the Black Sea - Bulgaria, Russia and Moldova are already Contracting Parties. Romania and Ukraine have still to become Parties.

The inland waterways concerned are the Danube obviously but also the Dnieper, the Dniester and the Bug

Selected ADN Requirements

1. Obligations of participants
2. Classification societies
3. Certificate of approval
4. Marking and labelling
5. Transport documents
6. Instructions in writing
7. Training, safety advisor, ADN expert
8. Notification of occurrences
9. Monitoring compliance with ADN
10. Security provisions

ADN defines clearly the responsibilities of all participants in the carriage of dangerous goods

For example:

Consignor — goods are classified and consignment conforms to ADN, furnish carrier with required documentation, use only approved packagings, tanks, etc.

Carrier — goods are authorized under ADN, documentation on board, vessel and load have no defects, marking requirements for vessel, etc.

Consignee — timely acceptance of goods, cleaning and decontamination of vessel, surveillance during discharging, etc.

As well as for loader, packer, filler

ADN – Classification societies for vessels

To be recognised by ADN, they must:

Demonstrate extensive knowledge and experience in assessing design and construction of inland navigation vessels

Have rules for design, construction and periodical inspection (should be published and updated through R&D)

Approved classification societies: Bureau Veritas, Germanischer Lloyd, Lloyds Register, Russian River Register, Russian Maritime Register of Shipping

ADN – Certificate of approval

All vessels carrying dangerous goods shall carry a certificate of approval certified by a recognized classification society and approved by the competent authority where the vessel is registered
Validity shall not exceed five years.

ADN – classification, marking and labelling

One of the keys to the safe transport of dangerous goods is classification (this is harmonized across all modes. 9 classes, 7 is radioactive, 2 is gases, for example) and clear marking and labelling (according to the classification) so that all participants in the transport chain are aware of the special conditions required (if any) and of special measures to be taken in the case of an incident/accident/spillage.

Some examples of marking and labelling:

Labelling and marking of tanks



Labelling and marking

“Classic packagings”



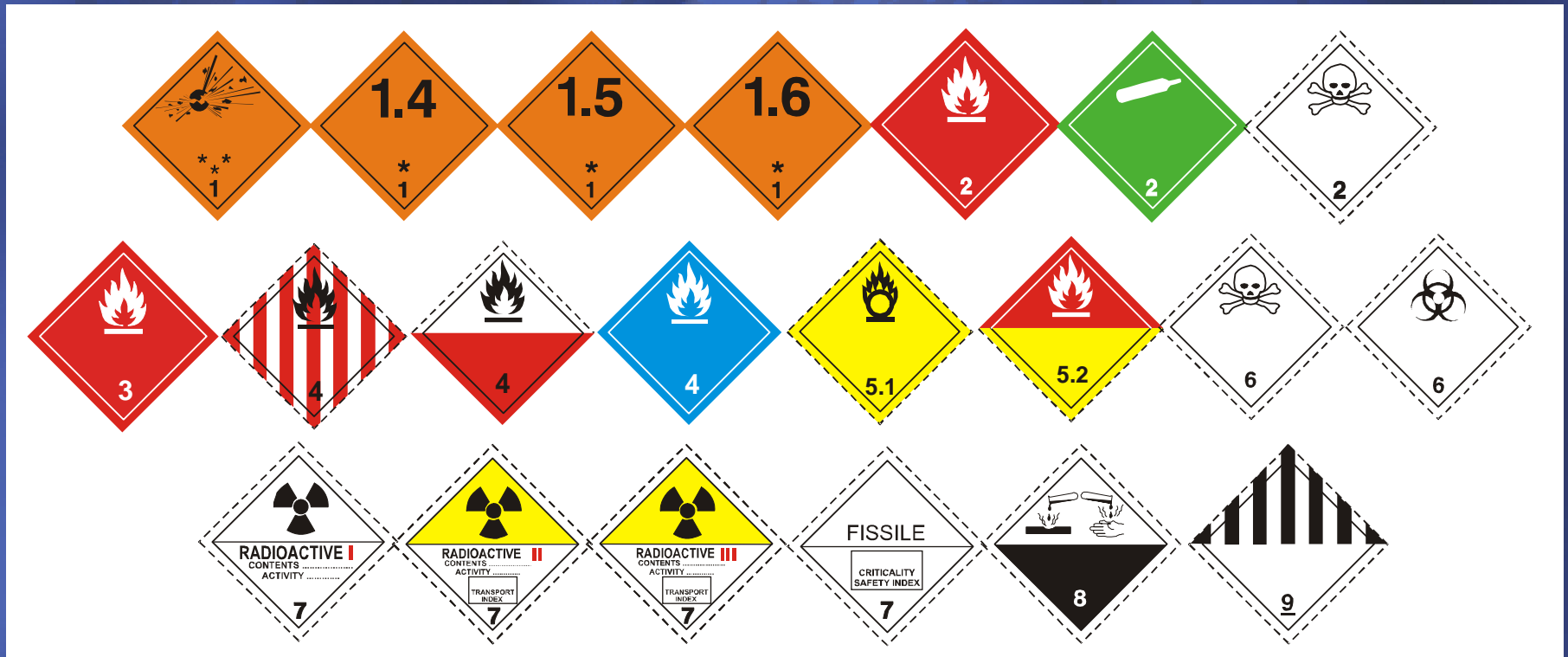
Up to 400 kg/450 l,
such as drums,
jerricans, boxes,
bags, etc.



ADN - Labelling and marking

Hazard labels

Affixing appropriate hazard label(s) on the packages:



ADN Requirements Transport document

MULTIMODAL DANGEROUS GOODS FORM

* FOR DANGEROUS GOODS you must specify UN No., proper shipping name, hazard class, packing group (where assigned) and any other element of information required under applicable national and international regulations

1. Shipper / Consignor (Sender)		2. Transport document number	
3. Page 1 of Pages		4. Shipper's reference	
5. Freight Forwarder's reference			
6. Consignee		7. Carrier (to be completed by the carrier)	
8. SHIPPER'S DECLARATION I hereby declare that the contents of this consignment are fully and accurately described below by the proper shipping name, and are classified, packaged, marked and labeled, stowaged and are in all respects in proper condition for transport according to the applicable international and national governmental regulations.			
9. This shipment is within the limitations prescribed for: (Delete non-applicable) PASSENGER AND CARGO AIRCRAFT		9. Additional handling information	
10. Vessel / flight no. and date	11. Port / place of loading		
12. Port / place of discharge	13. Destination		
14. Shipping marks * Number and kind of packages, description of goods Gross mass (kg) Net mass Cube (m³)			
15. Container identification No./ vehicle registration No.			
16. Seal number (s)			
17. Container/vehicle size & type			
18. Tare (kg)			
19. Total gross mass (including tare) (kg)			
20. CONTAINER/VEHICLE PACKING CERTIFICATE I hereby declare that the goods described above have been packed/stowed into the container/vehicle identified above in accordance with the applicable provisions *** MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING		21. RECEIVING ORGANISATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition unless stated herein. RECEIVING ORGANISATION REMARKS:	
22. Name of company		Hauler's name	
Name / Status of declarant		Vehicle reg. no.	
Place and date		Signature and date	
Signature of declarant		DRIVER'S SIGNATURE	
		Signature of declarant	

*** See 3.4.2.

All vessels shall be accompanied by the transport document providing details of the dangerous goods in the **consignment** (i.e. proper shipping name, UN No., hazard class, packing group, etc).

Electronic forms are allowed provided legal requirements are met).

ADN - Training

Human errors are the main cause of accidents.

The ADN:

- (a) requires training of all persons engaged in the transport of dangerous goods:
 - in the contents of dangerous goods requirements;
 - commensurate with their responsibilities; and
- (b) lays down specific provisions regarding:
 - general awareness/familiarization training,
 - function specific training,
 - safety training, records of training, etc.

Training can be provided by the employer

ADN – Safety advisor

ADN requires:

- Each undertaking/company shall appoint one or more safety advisors responsible for helping to prevent risks to persons, property and environment.
- Responsibilities include monitoring compliance with requirements, preparing reports on accidents/incidents, monitoring procedures for checking equipment, emergency procedures and implementation of training.
- Safety advisors shall hold a vocational training certificate, issued after training and examination, by the competent authority.

ADN - Expert

In addition to the training of employees of enterprises and the appointment of a Safety Advisor(s), every tank consignment of chemicals or gas must be accompanied by an expert in the ADN

ADN – notification of occurrences

If a serious accident or incident occurs, a report shall be made to the competent authority concerned and, if necessary to the UNECE so that other Contracting Parties can be informed. These include cases of : personal injury, loss of product (release of dangerous goods), environmental damage, and when authorities are involved.

ADN – Monitoring compliance

Article 4 – Contracting Parties shall ensure that a representative proportion of consignments of dangerous goods is subject to monitoring.

Checks shall be random and cover an extensive portion of the inland waterway network. A checklist is available for checking purposes.

Vessels in infringement may be detained until brought into compliance. Checks may also be carried out at the premises of companies.

Contracting Parties shall cooperate – for serious or repeat violations, they are required to contact the competent authority which issued certificate.

How is ADN administered, kept up to date?

Joint Meeting of Experts on the Regulations annexed to the ADN (Safety Committee) meets twice a year in Geneva and agrees on updates to the Regulations

Since the entry into force of the ADN, the ADN Administrative Committee has been formed (first meeting 19-20 June 2008)

Harmonization with the ADR (road) and RID (rail) is assured by a joint meeting for the three modes (meets twice a year, once in Geneva, once in Berne)

ADN – some examples of new amendments

Double hull vessels will be required for more products, including petroleum products, after transition periods.

A model report on occurrences during the carriage of dangerous goods.

New provisions regarding the carriage of radioactive materials (class 7)

A new environmentally hazardous substance mark



Recommendations

It is recommended that States become parties to ADN: both to facilitate transport and trade, and to put in place regulations that help prevent accidents and pollution. They are then able to participate in the development of the ADN.

In line with EU Directive, EU States should apply ADN regulations for domestic transport even if not parties to ADN.

Non-EU States also recommended to use ADN for domestic legislation to ensure high standards.



Thank you for your attention!

Further information on the UNECE activities related to transport of dangerous goods is available at:

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