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Draft revised version of the ADR Road Map

Note by the secretariat*

1. As discussed at the previous session based on informal document INF.20, the secretariat presents in annex a revised version of the ADR Road Map for consideration by the Working Party.
2. Delegations are invited to comment on this draft revised version and provide additional contributions. Delegations who wish to do so may also propose an additional paragraph on the benefits of ADR for the economy of countries acceding to ADR.
3. The Working Party may wish to finalise it and adopt it as a tool to advance the implementation of the Inland Transport Committee (ITC) Strategy until 2030 (see ITC document ECE/TRANS/2021/3).

* A/75/6 (Sect.20), para 20.51.

Annex

Road map for accession to and implementation of the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

This Road Map aims to provide comprehensive information to experts and legal advisers in ministries in charge of transport, as well as staff in relevant other ministries (e.g. environment, interior, foreign affairs), presidential administrations and national parliaments in countries interested in accession to ADR. It also aims to provide useful information to the Contracting Parties to ADR in their implementation process.

Introduction

Transport of dangerous goods by road presents a risk of major accident. Road traffic crashes cause deaths and injuries and damage to property and the environment. The consequences may be even more serious when dangerous goods such as fuel, gases, chemicals or fertilizers are involved, with dangerous consequences resulting from spillage, explosion, fire or a toxic cloud.

Fortunately, solutions exist to reduce these risks.

The Agreement concerning the International Transport of Dangerous Goods by Road (ADR) is well-established and a best practice United Nations instrument that for over 50 years has helped to prevent such accidents and reduce the severity of their consequences.

Incidents involving ADR vehicles carrying dangerous goods often result in no or minimum spillage, no people injured and even in many cases no significant damage to the cargo, people or the environment. On the contrary, accidents involving vehicles, cargo and crew not complying with ADR requirements often have catastrophic consequences.

The key purpose of ADR is to reduce the risk and consequences of dangerous goods accidents during transport operations.

Initially adopted as the European Agreement Concerning the International Carriage of Dangerous Goods by Road, ADR entered into force on 29 January 1968 and since then has been open to accession by all United Nations Member States. Acknowledging that the “European” title of the agreement had proven to be a barrier to joining ADR for parliaments and legislative bodies in a number of non-European countries, Contracting Parties adopted in 2019 an amendment to change the title of ADR to read “Agreement concerning the International Transport of Dangerous Goods by Road”, removing the “European” prefix.

Contents

ADR contains:

- General principles for acceptance of dangerous goods in international carriage by road;
- Carriage conditions;
- Conditions for derogations (special agreements);
- Conditions for application of additional rules (for reasons other than safety during carriage);
- Procedure for solving disputes;
- Two technical annexes regularly amended since 1968:

Annex A contains the provisions related to the goods (classification, packing, labelling, documentation, construction, testing and approval of packagings/tanks, carriage operations) (Parts 1 to 7).

Annex B contains the provisions for the vehicle crew (training, equipment) and for the vehicle (construction, equipment and operation conditions) (Parts 8, 9).

The electronic files of ADR in English, French and Russian may be consulted on the UNECE Transport Division website: <https://unece.org/transport/dangerous-goods>

2030 Agenda for Sustainable Development and road safety

Road safety has been specifically addressed in the 2030 Agenda for Sustainable Development adopted on 25 September 2015 by the United Nations General Assembly in resolution 70/1 “Transforming our world: the 2030 Agenda for Sustainable Development”. Target 3.6 seeks to halve the number of global deaths and injuries from road traffic accidents by 2030. The United Nations General Assembly adopted a new resolution (A/74/299) on road safety on 31 August 2020 reaffirming the key role of ADR in the United Nations Road Safety Strategy.

Indeed, one of the fundamental dimensions of road safety is to ensure the safe transport of dangerous goods. Road transport is essential for the distribution of these goods. It also represents a significant road safety risk.

ADR offers high quality standards to be respected for an optimal prevention of the impacts of possible accidents.

According to this agreement, apart from some excessively dangerous goods, other dangerous goods may be carried internationally in road vehicles, subject to compliance with the conditions laid down in the annexes as regards packaging, labelling of the goods and construction, equipment and operation of the vehicles.

Contracting parties and territorial applicability

On [date on publication], there were [...] Contracting Parties to ADR:

[Insert list / insert map]. The status of ADR may be consulted on the United Nations Treaty Collection website at

https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-14&chapter=11&clang=_en

ADR is open to all United Nations’ Member States.

ADR applies to transport operations performed on the territory of at least two of its Contracting Parties.

In addition, in the interest of uniformity and free trading across the European Union (EU), Annexes A and B of ADR have also been adopted by EU Member States as the basis for regulation of the carriage of dangerous goods by road within and between their territories (Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods, as amended).

A few non-EU countries have also adopted the requirements in Annexes A and B of ADR as the basis for their national legislation.

Benefits of acceding to ADR

Safety and security

ADR provides for a high level of safety and security during international carriage of dangerous goods.

ADR provisions are developed to prevent accidents during loading, transport and unloading, and to mitigate as much as possible the effects should an incident or accident occur.

Safe road user behaviour

Capacity building and training are key components to road safety. ADR contains detailed provisions for training of personnel involved in transport operations of dangerous goods, according to their duties and obligations. This includes for instance: drivers, vehicle crew and safety advisers. ADR training provisions intend to enable them to behave safely in their functions and take appropriate measures to protect themselves and to avoid or prevent damage, risk to people or to the environment in case of an incident.

Safe vehicles

The provisions of ADR aim at ensuring that the load is carried safely. Tank-vehicles and vehicles intended for the carriage of explosives shall meet specific construction requirements (e.g. in relation to braking systems, electrical installations, stability). They undergo an annual inspection to certify that they are roadworthy and that they conform to the ADR prescriptions.

Vehicles used for transport of dangerous goods must also carry specific safety equipment including fire extinguishers and protective equipment such as masks and gloves.

Safe road infrastructure

ADR vehicles may be subject to specific traffic restrictions defined locally in the case of special risks at certain locations. This includes special speed limitations, additional provisions, or restrictions for special structures like bridges or areas with special local risks and restrictions for the transport of dangerous goods on certain weekdays.

Following the major accidents in the alpine tunnels in 1999 (Montblanc, Tauern) and 2001 (Gotthard) - which incidentally were not caused by the transport of dangerous goods – the concerns on the transport of dangerous goods in tunnels increased and resulted in the addition of specific tunnel restrictions in ADR.

Post-crash care

Harmonized hazard communication, appropriate signalisation of the vehicle carrying dangerous goods and standardized instructions in writing in accordance with ADR help to ensure rapid, effective and appropriate emergency response in the case of accidents.

Regular amendments to ADR also consider the consequences of incidents and accidents that highlighted limitations in the existing regulations and gained experience.

Trade and border-crossing facilitation

ADR is an important tool of trade and border-crossing facilitation. It allows carriers of one country Contracting Party to carry dangerous goods from its country through and to any other country Contracting Party without additional requirements imposed by transit or destination countries. Nonetheless, transport operations remain subject to national or international regulations applicable in general to road traffic, international road transport and international trade.

Being Contracting Party to ADR implies mutual recognition of certificates and approval issued by ADR Competent authorities such as vehicle certificates of approval, tank type approvals or driver's training certificates.

Relationship with other international agreements and conventions

Transport of dangerous goods needs to be regulated to prevent, as far as possible, accidents involving persons or property or resulting in damage to the environment, other goods or the transport units. With different national legislation for the different modes of transport, international trade of chemicals and dangerous products would be seriously impeded, if not made impossible and unsafe. Moreover, dangerous goods are also subject to other regulations, such as labour safety regulations, consumer protection regulations, storage regulations, environment protection regulations.

To ensure consistency between all these regulatory systems, the United Nations has developed mechanisms for the harmonization of hazard classification criteria and hazard

communication tools (Globally Harmonized System of Classification and Labelling of Chemicals) as well as the transport conditions for all modes for transport (United Nations Recommendations on the Transport of Dangerous Goods).

The transport of dangerous goods is governed by national and international regulations based on the United Nations Recommendations for the Transport of Dangerous Goods, Model Regulations (UN Model Regulations). These UN Model Regulations are prepared by the Subcommittee of Experts on the Transport of Dangerous Goods of the United Nations Economic and Social Council (ECOSOC), which is serviced by UNECE. They are updated every two years and implemented at worldwide level for all modes of transport, through the applicable international legal instruments.

These recommendations contain the basic provisions for the safe carriage of dangerous goods:

- classification and identification of dangerous goods;
- packing conditions (including standards for packaging and tank construction);
- labelling, marking and placarding of packages and transport equipment; and
- transport documentation.

They are formatted into the form of “Model regulations” with a view to be applied to all modes of transport and they are available in the six official languages of the United Nations (Arabic, Chinese, English, French, Russian and Spanish). This allows:

- direct integration into all modal, national and international regulations and easier updating;
- enhanced harmonization between the regulations that govern the transport of dangerous goods;
- overall resource savings for the Governments of the Member States, the United Nations and other international organizations;
- improvement in the “user-friendliness” of the regulations;
- better identification of responsibilities in transport operations; and,
- improvement of compliance with the regulations in multimodal operations.

Most countries in the world concerned by maritime carriage, including UNECE countries, are parties to the International Convention for the Safety of Life at Sea (SOLAS 74), and are bound to apply the International Maritime Dangerous Goods (IMDG) Code to maritime transport.

Similarly, parties to the Convention on International Civil Aviation apply the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by air (ICAO TIs).

The three main inland mode regulations in force in UNECE region and beyond are ADR for road transport, the Regulations concerning the International Transport of Dangerous Goods by Rail (RID) and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).

These international conventions and agreements are based on the UN Model Regulations and supplemented by requirements specific to each mode of transport.

RID, ADR and ADN contain the seven parts of the UN Model Regulations and additional chapters for RID/ADR tanks, specific provisions for carriage by road, rail, and inland waterways, and for loading and unloading vehicles, wagons and vessels. In addition, ADR contains a Part 8 concerning requirements for vehicle crews, equipment, operation and documentation, and a Part 9 concerning the construction and approval of vehicles.

ADR provisions are harmonized with those applicable to transport by air, maritime routes, rail and inland waterway based of the UN Model Regulations. This helps to ensure safety throughout their intermodal journey without creating unnecessary barriers and delays.

Trust and confidence

ADR encourages negotiation and mutual trust between Contracting Parties. It provides a framework for administrative controls and mutual administrative support.

The Working Party on the Transport of Dangerous Goods (see below) which administers the ADR is a place of dialogue and communication between competent authorities.

Article 11 of ADR defines a procedure for solving disputes between Contracting Parties.

Administration of ADR at international level

The development and updates of ADR are discussed by a subsidiary body of the UNECE Inland Transport Committee, the Working Party on the Transport of Dangerous Goods (WP.15).

The Working Party on the Transport of Dangerous Goods (WP.15) works on safety and security of the carriage of dangerous goods and develops and updates the ADR. The Working Party adopts draft amendments to ADR annexes and proposes them to Contracting Parties for final adoption and entry into force in accordance with the treaty legal procedure. Issues of implementation and interpretation of ADR are also discussed in the sessions of the Working Party.

The rules of procedure of the Working Party are published in document ECE/TRANS/WP.15/190/Add.1 [Insert link]. According to these rules, any country member of the United Nations can participate in its activities. All UNECE member States, including those which are not Contracting Parties to ADR, may vote on proposals of amendments to ADR. Non-UNECE countries which are Contracting Parties to ADR may also vote on such proposals, but not on other issues discussed by WP.15 that are not related to ADR.

WP.15 usually meets twice a year in May and November. It gathers around 60 participants per session representing Contracting Parties and their competent authorities and other countries, specialized agencies, intergovernmental organizations and non-governmental organizations interested in its work. Countries intending to accede to ADR are welcome to participate in the session of the Working Party.

Access to the information on WP.15 meetings (schedule, agenda, documentation and reports) is free and unrestricted on the UNECE website: <https://unece.org/info/events/unece-meetings-and-events/transport/dangerous%20goods>

The provisions which are common to RID, ADR and ADN are discussed and elaborated first in the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods serviced by both OTIF and UNECE. These provisions are further endorsed by the Working Party on the Transport of Dangerous Goods before final adoption.

Participation in the sessions of the Working Party and the Joint Meeting is the best way to meet each other, exchange experience and discuss implementation issues. It is important for representatives of Contracting Parties and of the Industry to be involved early in the process of adoption of new amendments so that the impact of these amendments can be anticipated at country level.

It is recommended that countries Contracting Party to ADR, countries wishing to accede to ADR and countries applying or intending to apply the provisions of ADR annexes as national regulations participate in these meetings.

Languages

The authentic texts of ADR are English and French for the agreement itself, and French only for the requirements contained in annexes A and B (Parts 1 to 9). As requested by the agreement, the Secretary General, as depositary of ADR prepare and update an authoritative translation of the annexes into English. UNECE also produces a Russian version of ADR, but this translation has no authoritative status.

Translation in national languages other than French, English and Russian is left to the Contracting Parties themselves bearing in mind that most text of ADR originates from the UN Model Regulations which are available in all six UN languages.

Accession steps

Formal and structured coordination at national level

The regulations on the transport of dangerous goods may be under the responsibility of different ministries or administrations depending on the nature of the goods (chemicals, explosives, radioactive material, wastes, medicines, pesticides), of the purpose of the carriage and of the administrative structure in place. The ministries, administrations and bodies concerned need to be identified and their representatives should be invited to participate in the process of accession.

A non-exhaustive list of the ministries, administrations and bodies usually concerned by the transport of dangerous goods would include: authorities and bodies in charge of transport, road control and inspection, training of drivers, industry, interior, environment, trade, defence, finance, agriculture, labour, science, education, public health, nuclear safety.

Representatives of the private sector and of associations should be consulted and be involved if possible in the process as representatives of the users of the regulations: chemical/petroleum/gas industry; transport sector; packaging/tank/vehicle manufacturers; workers unions, associations for the prevention of accidents in the workplace, training bodies, etc.

A formal coordination of all the participants involved in the process of accession should be organized.

Preliminary steps

Each State wishing to implement ADR should:

- Develop procedures for implementing ADR for the international transport of dangerous goods. These procedures may include the process for translation of the initial text and amendments, checks on road and on sites, interpretation, administrative practices for enforcement, follow-up of updates, timetable for the entry into force, impact of transitional periods...);
- Establish implementation bodies as necessary;
- Designate the relevant competent authorities or bodies for classification of goods, approval, testing and certification of packagings, tanks and vehicles, training and certification of drivers and dangerous goods safety advisers, etc. and make sure they are appropriately trained and have appropriate procedures in place for the certificates they may have to deliver in accordance with ADR. These competencies may be attributed to a single administrative body which may also be in charge of other modes of transport of dangerous goods;
- Designate a coordination focal point for national implementation and cooperation with the other States (through the UNECE Working Party on the Transport of Dangerous Goods) considering the availability of expertise and resources. This focal point may represent the competent authority in international meetings and, in that case, should be allowed to take decisions on its behalf;
- Provide the necessary financial and human resources to ensure participation of experts in the sessions of the appropriate international bodies responsible for the development of the regulations and of the standards supporting these regulations.

Rulemaking

The national coordination body should develop or adapt existing national legislation/regulations which might affect the international transport of dangerous goods in line with ADR. The status of existing regulations which may overlap with ADR should be

assessed: regulations for security, waste, tunnels, postal services, transport of dangerous goods by other modes, road safety, traffic restrictions, etc.

To facilitate the implementation of ADR, it is recommended to align the legislation applicable to the national transport of dangerous goods with ADR as far as possible.

Acceding

To ratify the ADR, countries should deposit an instrument of accession.

The procedure for accession should be launched in accordance with national law/constitution in consultation with the administrations competent for international affairs (e.g. Department of international relations or Ministry of Foreign Affairs).

To allow the entry into force of the Protocol of amendment of 1993 amending article 1 (a), articles 14 (1) and article 14 (3) (b) of ADR, it is necessary that the State deposits an instrument of accession to both ADR and the Protocol of 1993.

The Head of State or Government or the Minister of Foreign Affairs or a person exercising the power of one of these authorities *ad interim* signs the instrument of accession which should be deposited with the Secretary-General.

Useful information on the steps to follow to accede to an international treaty may be found in the Treaty Handbook prepared by the Treaty Section of the Office of Legal Affairs. The Treaty Handbook is available in the six official languages of the United Nations at:

https://treaties.un.org/pages/Resource.aspx?path=Publication/TH/Page1_en.xml

A model instrument of accession is contained in the Treaty Handbook.

There are no costs associated with the accession procedure.

Entry into force

ADR enters into force for the acceding country one month after the deposit of the instrument of accession. Ratification legally binds a State to implement the Agreement, subject to valid reservations, understandings, and declarations.

The ratification of the ADR should have no negative impact on current trade relations if special arrangements exist already with certain countries. To maintain current trade with neighbouring countries, temporary derogations from the requirements of ADR may be negotiated on the case by case basis with other Contracting Parties by the way of bilateral/multilateral agreements (Article 4, paragraph 3 of ADR and section 1.5.1 of Annex A), provided that safety is not compromised.

The procedure for the signature and notification of such bilateral or multilateral agreements is reproduced in annex [...] [The corresponding annex will be inserted in final version].

Implementation / practical consequences resulting from accession to ADR

The annexes to ADR contain the conditions of transport which must be observed by the various parties involved. It is up to the Contracting Parties to put in place the administrative structures necessary for the implementation of ADR in the country, for example for the examinations of drivers who want to obtain an ADR training certificate, that of dangerous goods safety advisers, approval of packagings manufactured in the country, approval of vehicles, organization of controls, etc.

The text of ADR may be consulted on the UNECE website. See <https://unece.org/about-adr>

The most important parts for the administration are Part 1, Part 6 for the approval of packagings, tanks etc., Chapter 8.2 for the training of drivers, and Part 9 for the approval of vehicles.

Updating

Annexes A and B of ADR are regularly amended and updated in accordance with the decisions of the Working Party on the Transport of Dangerous Goods (WP.15) and of the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods (RID/ADR/ADN Joint Meeting) (WP.15/AC.1).

A mechanism for follow-up should be put in place. This implies *inter alia* regular participation in the sessions of WP.15 and of the Joint Meeting, giving information to stakeholders and putting in place procedures to implement the sets of amendments adopted every two years by Contracting Parties.

Designation and approval of competent authorities and of designated bodies

The designation and approval of competent authorities and of the various bodies such as training institutes, examination bodies, packaging or tank testing institutes, vehicle approval bodies is the sole responsibility of Contracting Parties, the UNECE is not involved in this process and does not approve training institutes.

For countries divided in regions, it is recommended that the competent authority be defined at the national level.

In accordance with section 1.8.3 of ADR, the Contracting Parties shall communicate to the UNECE the addresses of the authorities and bodies designated by them which are competent in accordance with national law to implement ADR, referring in each case to the relevant requirement of ADR and giving the addresses to which the relevant applications should be made. See Annex [...][The corresponding annex with the list of information to be communicated to the UNECE secretariat will be inserted in final version].

An updated list of the contact details of competent authorities received from the Contracting Parties is published at <https://unece.org/transport/dangerous-goods/country-information-competent-authorities-notifications>

Issuance of certificates

In some cases, ADR requires the issuance of certificates which will be recognized by the other Contracting Parties (certificates of approval of tanks, packagings, type approval of vehicles, certificates for the training of drivers, etc). It may be useful to define an organization which will enable the fast and efficient issuance of these certificates and which should also include a mechanism for appropriate data collection. The issuance of certificates may be under the responsibility of local agencies or authorities. In that case a central authority should ensure harmonization and gather the necessary data.

In accordance with 8.2.2.8.5 of ADR, Contracting Parties shall provide the UNECE secretariat with an example of the ADR drivers' training certificates delivered in their countries. Contracting Parties shall also provide explanatory notes to enable the verification of conformity of certificates against the examples provided. See Annex [...][The corresponding annex with the list of information to be communicated to the UNECE secretariat will be inserted in final version].

These models and related information are published at <https://unece.org/adr-certificates-0>

Controls and compliance

ADR is an Agreement between States, and there is no overall enforcing authority. In practice, highway checks are carried out by the competent authorities of Contracting Parties, and non-compliance may then result in legal action by national authorities against offenders in accordance with their domestic legislation.

Controls or other enforcement actions are normally carried out under the direct responsibility of national authorities designated for these purposes. The number of controls and the level of penalties in case of infringement may vary considerably from one country to the other, but controls are deemed necessary to ensure compliance. They are also an effective tool in revealing problems connected with the safety of the transport of dangerous goods or with the practicability of regulations, and in improving them.

Procedures for checks and procedures to prevent, identify, monitor, and manage cases of infringement should be defined.

Procedures in case of accident

Accidents involving dangerous goods often require the intervention of different emergency responders and procedures for the mutual exchange of information and coordination should be put in place. Cooperation between neighbouring States should also be studied.

Emergency preparedness may also include participation in programmes related to the application of Intelligent Transport Systems for the tracing and tracking of dangerous goods.

Reporting of serious accidents or incidents that happen during loading, filling, carriage or unloading of dangerous goods is mandatory under ADR. In accordance with 1.8.5 of ADR, the loader, filler, carrier, or consignor as appropriate has to submit a report to the competent authority of the country where the event happened.

Conclusion

Accession to ADR and thorough implementation of the provisions contained in Annexes A and B for international transports are expected to help countries avoid the time consuming and costly process of elaborating and updating separate regulations for transport of dangerous goods. ADR provisions have already proven successful in ensuring safety and security and are aligned on other modal regulations.

Problems of compliance might occur in countries where the requirements applicable to international transport differ from those applicable nationally to domestic transport. This might pose problems for implementation, compliance with safety and security provisions and road checks. Aligning the regulations applicable to domestic transports of dangerous goods and the national vehicle safety standards on ADR is highly recommended and has proven an asset to improve road safety.

Countries wishing to achieve a high level of safety and security in the transport of dangerous goods and road safety in general are invited to join and fully implement ADR, supporting progress towards road safety targets of the Sustainable Development Goals.

Where to get additional information

Any query concerning the application of ADR should be directed to the relevant competent authority. Additional information may be found on the UNECE Transport Division website: <https://unece.org/transport/dangerous-goods>

This website is regularly updated and contains the following information:

- General information on ADR
- Agreement
- Protocol of signature
- Status of ADR
- Depositary notifications
- Country information (competent authorities, notifications)
- Linguistic versions (ADR, instructions in writing)
- Multilateral agreements
- Current and previous editions of ADR (files) and amendments
- Publication details and Corrigenda

For questions of interpretation of ADR provisions, the national competent authorities for ADR should be consulted. See <https://unece.org/transport/dangerous-goods/country-information-competent-authorities-notifications>
