International transport of dangerous goods

(Item 4.10 of the Agenda)

Note by UNECE

The UN Recommendations on the Transport of Dangerous Goods, Model Regulations

1. Dangerous goods are often seen as a very special and mysterious category of goods, to which the public is rarely exposed. The term itself inspires fear, and any accident or even minor incident involving such goods immediately entails reactions from the media and public opinion. In fact, dangerous goods are produced and transported in very large quantities and they cover an extensive range of products which present risks for the population in general, property and the environment. These risks are present at the stage of extraction, production, transport, and use at the workplace and when handled by consumers. Transport is a delicate part of the lifecycle of such goods, since it, or part of it, takes place in areas where people and the environment are particularly exposed.

2. A number of catastrophic accidents in the past have prompted Governments to develop regulations intended to eliminate, or to minimize to the extent possible, such risks. Nevertheless, due to the economic importance of dangerous goods and to the importance of international transport, it has been necessary to discuss these regulations internationally in order to ensure a high level of safety acceptable to all countries and authorities responsible for different modes of transport while making international and multimodal transport possible through the harmonization of transport conditions.

3. Realizing that the Governments of countries most interested in international transport of dangerous goods were separately developing regulations intended to ensure the safe
transport of dangerous goods by various modes and recognizing that the incompatibilities between these regulations would sooner or later constitute important technical barriers to trade, the United Nations Economic and Social Council (ECOSOC) decided to create in 1953 a Committee of Experts on the Transport of Dangerous Goods. The mandate of the Committee was to elaborate recommendations addressed to all Governments and international organizations concerned with the safe transport of dangerous goods that would allow the uniform development of national and international regulations governing the various modes of transport.

4. These recommendations are now contained in the “UN Recommendations on the Transport of Dangerous Goods, Model Regulations”, also known as the “Orange Book”. They contain all necessary provisions concerning the classification and identification of dangerous goods; their packing conditions, including standards for packaging and tank construction; labelling, marking and placarding of packages and transport equipment; and transport documentation. Although they apply to all modes of transport, they nevertheless remain flexible enough to accommodate any special additional requirements that have to be met by specific modes of transport, or at national or regional level.

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

5. The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), done at Geneva on 30 September 1957 under the auspices of the United Nations Economic Commission for Europe, is intended to increase the safety of international transport of dangerous goods by road. It entered into force on 29 January 1968 and now has 48 Contracting Parties:
Albania, Andorra, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland.
6. The Agreement contains 17 articles, the most important of which is the second, which says in effect that, apart from some excessively dangerous goods, other dangerous goods may be moved internationally in road vehicles provided that the packaging, labelling, vehicle construction, equipment and operation are all in accordance with Annexes A and B to the Agreement, which contain all the detailed provisions. ADR is an Agreement between States, and there is no overall enforcing authority. In practice, highway checks are carried out by Contracting States, and non-compliance may then result in action by national authorities against the driver in accordance with their domestic legislation. ADR itself does not prescribe any penalties.

7. ADR is intended primarily to increase the safety of international transport by road, but it is also an important trade facilitation instrument. Except for dangerous goods which are totally prohibited for carriage, and except when carriage is regulated or prohibited for reasons other than safety, the international carriage of dangerous goods by road is authorized by ADR on the territories of Contracting Parties, provided that the conditions laid down in Annexes A and B, that is, the detailed provisions of the Agreement, are complied with.

8. ADR contains the seven parts of the UN Model Regulations, with more elaborated Parts 1 and 2 and additional chapters for RID/ADR metal and fibre-reinforced plastic tanks, specific provisions for carriage by road, rail, and inland waterways, and for loading and unloading vehicles, wagons and vessels. Most of the provisions contained in these parts are common to RID (Regulations concerning the International Transport of Dangerous Goods by Rail), ADR and ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways). 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.

9. The intergovernmental body responsible for amending ADR to keep it in line with the UN Recommendations and to update it in the light of technical progress or of specific needs of the European industry or governments is the UNECE Inland Transport Committee Working Party on the Transport of Dangerous Goods (WP.15). The provisions which are common to RID, ADR and ADN, are discussed and elaborated first by the so-called “RID/ADR/ADN Joint Meeting”.
10. All member countries of ECE can participate and vote in WP.15 meetings. Non-member countries of ECE which are Contracting Parties to ADR may also participate and vote in WP.15 meetings.

11. The priority of the WP.15 is to ensure and improve both safety and security of the carriage of dangerous goods. Its work includes inter alia:
   - the consideration of proposed amendments to ADR;
   - the consideration of administrative and technical questions relating to its implementation;
   - the harmonization of its provisions on the basis of the United Nations Model Regulations on the Transport of Dangerous Goods so as to bring it into line with the rules applicable to the different transport modes worldwide.

12. The WP.15 also participates in the standardization of the rules concerning inland transport of dangerous goods (by road, rail and inland waterways) in the UNECE region and beyond. Therefore its work has a direct effect on transport facilitation.

13. As far as ADR is concerned, the work of the WP.15 is concluded every two years by the adoption of a set of draft amendments to Annexes A and B. At the end of 2011, the WP.15 adopted a new set of draft amendments for entry into force on 1 January 2013. These amendments include new or revised provisions concerning chemicals under pressure, electric double layer capacitors, mercury contained in manufactured articles, dangerous goods used as a coolant or conditioner, salvage pressure receptacles, lithium batteries, dangerous goods packed in limited quantities, dangerous goods packed in minute quantities and packing instructions, as well as revised provisions for portable fire extinguishers and new restrictions in road tunnels for dangerous goods carried in limited quantities.

The Project Working Group may wish to

- Encourage SPECA countries to intensify their efforts to accede all of the agreements relating to the transport of dangerous goods;
- Establish some coordination mechanisms for the proper implementation/enforcement of these international agreements.