



ECONOMIC COMMISSION FOR EUROPE

Evaluation of the global and regional impact of UNECE regulations and United Nations recommendations on the transport of dangerous goods (2005 – 2014)

I. Purpose

The evaluation will assess the significance of international cooperation in the field of transport of dangerous goods, and the global and regional impact of United Nations agreements and recommendations for the transport of dangerous goods. The evaluation will identify gaps and weaknesses, if any, resulting from the deficient harmonization of national regulations or international legal instruments with the UN Recommendations on the transport of dangerous goods. It will further identify potential initiatives and activities for enhancing the impact of United Nations Recommendations on the Transport of Dangerous Goods and UNECE Agreements (ADR and ADN).

II. Scope

The evaluation will cover UNECE and UN agreements and Recommendations related to the transport of dangerous goods, and their impact at both the regional (UNECE member States) and global levels. The period to be covered by the review is 2005 to 2014. The recommendations from the evaluation will focus on areas addressed by intergovernmental bodies serviced by the UNECE secretariat.

III. Background

As per the UNECE Evaluation Policy (2014), the secretariat of the Commission conducts one programme-level and three sub-programme-level evaluations each biennium. These evaluations assess the impact of the activities in a particular area, build knowledge and give recommendations for further improvements. “The global and regional impact of the regulations on the transport of dangerous goods” was selected for evaluation because it is a significant area of work for the Transport Division which has not been self-evaluated in the past 10 years.

Within the Transport Division, the Dangerous Goods and Special Cargoes Section services the UNECE Working Party on the Transport of Dangerous Goods (WP.15) responsible for regulating road, rail (in cooperation with the Intergovernmental organisation for international carriage by rail (OTIF) (WP.15/AC1) and inland waterways transport of dangerous goods (in cooperation with the Central Commission for the Navigation on the Rhine (WP.15/AC.2), as follows:

- (a) WP.15: European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR);
- (b) WP.15/AC.2: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN); and
- (c) WP.15/AC.1: Harmonization of ADR, ADN and the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) (Appendix C of the Convention concerning international carriage by rail (COTIF)).

The Transport Division also provides secretariat services to the Economic and Social Council (ECOSOC) [Committee of Experts on the Transport of Dangerous Goods \(TDG\) and on the Globally Harmonized System of Classification and Labelling of Chemicals \(GHS\)](#), and its two sub-committees (TDG and GHS sub-committees). The Committee formally endorses the recommendations of its two sub-committees and channels these recommendations to governments, UN specialized agencies and other relevant entities of the UN system through ECOSOC. The Committee was created in 1953 when the international community realized that the Governments of countries most interested in the international transport of dangerous goods were independently developing national regulations for the safe transport of dangerous goods by various modes, and recognized that the incompatibilities between these regulations would ultimately present significant barriers to trade.

The mandate of the ECOSOC Committee is to elaborate recommendations addressed to all Governments and international organizations concerned with the safe transport of dangerous goods, to allow the uniform development of national and international regulations. These recommendations are contained in the [United Nations 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. They apply to all modes of transport while remaining flexible enough to accommodate any special additional requirements that have to be met by specific modes of transport, or at national or regional level.

Although not legally binding per se, the United Nations Recommendations on the Transport of Dangerous Goods are applied worldwide when transposed into international, regional or national legislation for:

- (a) **Maritime transport:** International Maritime Dangerous Goods Code, (International Maritime Organization) (IMO)
- (b) **Air transport:** Technical Instructions for the Safe Transport of Dangerous Goods by Air (International Civil Aviation Organization) (ICAO)
- (c) **Inland international transport** (road, rail, inland waterways):
 - (i) [European Agreement concerning the International Carriage of Dangerous Goods by Road \(UNECE\)](#) known as **ADR**;
 - (ii) [European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways \(UNECE\)](#) known as **ADN**;
 - (iii) Regulations concerning the International Carriage of Dangerous Goods by Rail , Intergovernmental Organization for International Carriage by Rail (OTIF) known as **RID**.

While the United Nations Recommendations on the Transport of Dangerous Goods are applied through national legislation on domestic inland transport in a number of countries, the level of implementation is more difficult to assess as the information available to the UNECE secretariat is largely reliant upon submissions from countries (i.e. information may be incomplete or not up-to-date for those countries which do not provide information at all or on a regular basis). Nonetheless, all EU countries are bound to apply ADR, RID and ADN to domestic traffic, and most non-EU contracting parties to ADR, RID and ADN do so as well. Globally, countries economically interested in international trade of dangerous goods use the United Nations Recommendations for their national legislation, although evidence is available to the UNECE secretariat only for USA, Canada, Mexico, Colombia, Brazil, Australia, New Zealand, South Africa, Malaysia, and Thailand.

Although the international transport of dangerous goods is facilitated by the harmonization of the major international conventions and agreements concerning the transport of dangerous goods with the Model Regulations and their simultaneous updating, the fact that certain national regulations applicable to inland transport are not brought in line simultaneously or completely, continues to cause problems in international trade, in particular in the case of multimodal transport. For that reason, the Committee maintains an item on global harmonization of regulations on the transport of dangerous goods with the Model Regulations in its programme of work.

For these reasons, this evaluation will be a timely review of the impact the United Nations Recommendations on the transport of dangerous goods and related UNECE legal instruments. It will enable the secretariat to consider and propose adjustments to the work programme to further improve coverage and reduce critical gaps in the application of regulations, to ultimately improve safety and reduce barriers to trade in the UNECE region and beyond.

IV. Issues

The evaluation will focus on the *relevance, efficiency, and effectiveness* of the activities serviced by the UNECE secretariat in the field of transport of dangerous goods, and the global and regional *impact* of these related agreements and recommendations.

Key overarching questions have been elaborated to guide the evaluator in its work and to facilitate a common understanding of the objectives of the evaluation between the evaluators and the secretariat. However, the evaluator may propose supplementary or alternative approaches to elicit answers to these questions.

Question 1: Evaluate the *relevance* of the work of the ECOSOC Committee and UNECE in promoting international cooperation in the field of transport of dangerous goods:

- To what extent are dangerous goods transported internationally, including multimodal and modal transport worldwide? What are the types of dangerous goods most commonly transported internationally (by mode)?
- How does the international cooperation among international/inter-governmental organizations work? Which organizations involved? To what extent has the work of the ECOSOC Committee and UNECE contributed to this international cooperation?

Question 2: Assess the *efficiency* and *effectiveness* of the ECOSOC Committee and UNECE efforts to contribute to harmonising national and international regulations with the Model Regulations annexed to the United Nations Recommendations on the Transport of Dangerous Goods:

- To what extent have national regulations applicable to inland transport and legal instruments applicable to international transport have been brought into line simultaneously or completely with the UN Model Regulations?
- To what extent have the ECOSOC Committee and UNECE efforts in this regard promoted the application of the United Nations Recommendations and UNECE legal instruments in a) UNECE member States, and b) all UN member States? What particular areas of work contributed to harmonisation? What areas of work have been less effective?
- How can further harmonization and implementation be improved or achieved?

Question 3: Evaluate the global and regional *impact* of United Nations agreements and recommendations for the transport of dangerous goods:

- To what extent are the United Nations Recommendations on the Transport of Dangerous Goods implemented globally? What are the impacts on multimodal transport (e.g. economic consequences, delays, etc.)?
- To what extent have the UNECE legal instruments for inland transport i.e.: road and inland waterways transport (ADR/ADN) and RID for rail transport been implemented and/or been used as models for the development of national/regional legislation in countries which are not Contracting Parties?
- To what extent are the United Nations regulatory and capacity building activities on transport of dangerous goods by inland modes of transport are effective regionally and worldwide?
- How well are the governance structures aligned with the market trends of growing transport of dangerous goods on roads, railroads and inland waterways?
- To what extent have the United Nations Recommendations and the UNECE legal instruments concerning the transport of dangerous goods contributed to international cooperation in this field? Are there any areas for improvement?
- How could awareness on the United Nations Recommendations, ADR, ADN and RID be raised in developing countries/regions worldwide? How could their implementation be encouraged? What

would be the specific role of UNECE and the transport subprogramme in particular, to raising this global awareness?

V. Methodology

The evaluation will build on existing reviews and relevant information gathered previously to minimize duplication in the data-gathering phase. This shall include information from United Nations sources (e.g. background information provided by the secretariat, information available from other UN bodies or agencies) as well as from other national or international governmental bodies or stakeholders (e.g.: non-governmental organisations).

The evaluator shall provide the secretariat with an inception report within the first two weeks of his/her assignment outlining the final methodology to be conducted to facilitate agreement with the secretariat on the proposed approach to the work. In particular, the evaluator will provide specific methodology for measuring the impact of the activities serviced by the UNECE secretariat and of related recommendations and legal instruments

A. A **desk review** will be conducted of:

- Mandates, legal instruments, and regulations provided on the UNECE [website](#) as regards the documentation of the UNECE bodies or ECOSOC Committees dealing with the development of transport of dangerous goods regulations, their status of implementation, etc.
- The [biennial reports of the Secretary-General](#) to the ECOSOC on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals.
- Relevant mandates and reports of other organizations active in international cooperation on these issues. The available documents will be provided to the evaluator by the secretariat.
- Any other documents requested by the evaluator for the purpose of conducting the review, if available within the UNECE secretariat.

B. **New data** will be gathered from both internal, and external stakeholders:

- Electronic surveys of relevant stakeholders will be conducted. The evaluator will propose an appropriate methodology during discussions with the secretariat in the inception phase. The secretariat will provide the evaluator with the details of stakeholders relevant to the agreed methodology. Consideration shall be given to the equitable geographical coverage of the evaluation.
- The evaluator will interview relevant UNECE staff working in the area of work of the evaluation based on a methodology to be defined by the evaluator.

VI. Evaluation Schedule

It is expected that the evaluation be completed in a period of two months. The final report is due by 30 October 2015.

<i>A. Preliminary research:</i>	To be agreed with evaluator
<i>B. Inception report:</i>	Two weeks following the start of work
<i>C. Data Collection:</i>	May-June (TBC)
<i>D. Data Analysis:</i>	July-September (TBC)
<i>E. Draft Report:</i>	15 October 2015
<i>F. Final Report:</i>	30 October 2015

Consultation between the secretariat and the evaluator on any issue related to the evaluation may be facilitated at any time.

Consultation with an informal advisory group comprised of a restricted number of delegates during forthcoming meetings (ECOSOC Sub-Committee of Experts on the Transport of Dangerous Goods, WP.15 and/or RID/ADR/ADN Joint Meeting) may also be envisaged.

At the end of the evaluation period, the evaluator shall prepare a final report. The evaluation report shall be written in English, following the template for evaluation reports in UNECE (to be provided by UNECE upon signing of the contract).

VII. Resources

An expert evaluation consultant will be engaged to conduct the evaluation under the management of the Transport Division. One P5 staff, Mr. Olivier Kervella, Chief of the Dangerous Goods and Special Cargoes Section, Transport Division, will manage the exercise, with a total budget of US\$20,000. Half payment will be made upon submission of the draft report, and the other half payment will be made upon satisfactory completion of the work and approval of the final report by the secretariat.

VIII. Intended Use/Next Steps

The results of the evaluation, together with its conclusions and recommendations, will be communicated to the UNECE Working Parties dealing with the transport of dangerous goods and to the ECOSOC Sub-Committee of Experts on the Transport of Dangerous Goods for information. They will be used to assess the level of implementation of the UNECE agreements and UN Recommendations on the transport of dangerous goods worldwide, as well as the relevance and efficiency of current working practices. The evaluation report and the management response by UNECE will be publicly available on the UNECE website.

Provisional Timetable for the Review ¹

Week beginning	Action
TBC	Desk Review
TBC (2 weeks after the start date)	Inception report
May 2015	Development of survey to stakeholders
June 2015	Interviews with stakeholders
July – September 2015	Data Analysis
15 October 2015	Draft report submitted to UNECE
30 October 2015	Final report submitted to UNECE

¹ Final timetable to be agreed following engagement of the evaluator.