# **Economic Commission for Europe**

# **Inland Transport Committee**

# **Working Party on the Transport of Dangerous Goods**

Ninety-sixth session Geneva, 6–9 May 2014 Item 6 (b) of the provisional agenda Proposals for amendments to Annexes A and B of ADR: Miscellaneous proposals 31 March 2014

## Revision of ECE/TRANS/WP.15/AC.1/2014/27

Transmitted by the Government of Switzerland





# **Economic and Social Council**

Distr.: General 31 December 2013

English

Original: French

### **Economic Commission for Europe**

**Inland Transport Committee** 

**Working Party on the Transport of Dangerous Goods** 

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods Bern, 17–21 March 2014 Item 4 of the provisional agenda Interpretation of RID/ADR/ADN

# Exemption of electric energy storage and production systems for vehicles and their equipment

Transmitted by the Government of Switzerland<sup>1 2</sup>

Summary

**Executive summary**: At present only lithium batteries are exempt under 1.1.3.7. Other electric

energy storage and production systems are also used in vehicles and their

equipment, however, and ought also to be exempt.

**Decision to be taken**: Extend the scope of the exemption in 1.1.3.7 to all electric energy storage

and production systems.

GE.14-20043 (E) 270114 270114







<sup>&</sup>lt;sup>1</sup> In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94, ECE/TRANS/2012/12, programme activity 02.7 (A1c)).

<sup>&</sup>lt;sup>2</sup> Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2014/27.

#### Introduction

- 1. Generally speaking, vehicle equipment components containing dangerous goods are exempt from section 1.1.3 of ADR and RID. These are mainly tanks, lithium batteries and receptacles containing gas, and are explicitly referred to in RID/ADR/ADN.
- 2. Other such storage systems now in use are not, unlike those mentioned above, covered by these exemptions, most notably metal hydride storage systems installed in vehicles, wagons, boats and aircraft and corresponding to UN No. 3468 HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM or HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM CONTAINED IN EQUIPMENT or HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM PACKED WITH EQUIPMENT. Moreover, under special provision 356 of Chapter 3.3, such systems must always be approved by the competent authority in the country of manufacture before being accepted for transport.
- 3. There are other similar systems in vehicles and their equipment, for example electric double layer capacitors (UN No. 3499) and fuel cells (UN Nos. 3473, 3476-3479). Asymmetric capacitors (UN No. 3508) are also to be introduced in RID/ADR/ADN 2015. None of these systems are exempt from these provisions when they form part of the equipment of a means of transport.
- 4. In order to allow for these various energy sources, which are becoming ever more common, it would seem appropriate to establish an exemption to 1.1.3 covering electric energy storage systems of any kind installed in a vehicle/wagon/boat and destined for its propulsion or for the operation of any of its equipment. To that end, 1.1.3.7 could be reworded as follows.

## **Proposal**

- 5. Replace the text of 1.1.3.7 by the following text:
  - "1.1.3.7 Exemptions related to the carriage of lithium batteries dangerous goods used in electric energy storage and production systems (e.g., lithium batteries, electric capacitors, asymmetric capacitors, metal hydride storage systems, fuel cells, etc.)

The provisions laid down in ADR do not apply to <u>electric energy storage and</u> <u>production systems (e.g., lithium batteries, electric capacitors, asymmetric capacitors, metal hydride storage systems, fuel cells, etc.)</u>:

- (a) <u>Lithium batteries</u> installed in a vehicle/means of transport, performing a transport operation and destined for its propulsion or for the operation of any of its equipment;
- (b) <u>Lithium batteries</u> contained in equipment for the operation of this equipment used or intended for use during carriage (e.g. a laptop)."

**G**E.14-20043