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**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

Geneva, 23-27 March 2009

Item 6 of the provisional agenda

**PROPOSALS FOR AMENDMENTS TO RID/ADR/ADN**

Used batteries

Transmitted by the Government of Sweden<sup>1,2</sup>

**Introduction**

1. Batteries used in the household are typically alkali-manganese, zinc-carbon, nickel-metal hydride or nickel-cadmium. The alkali-manganese and zinc-carbon batteries are commonly used in several consumer products such as radios, cameras, flashlights, remote controls, smoke detectors, etc. They have voltages of 1.5, 4.5, 6 or 9 volts.

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<sup>1</sup> In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.7 (c)).

<sup>2</sup> Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2009/7.

2. Nickel-metalhydride and nickel-cadmium batteries are also used in consumer products such as wireless telephones, video cameras, shavers, electrical toothbrushes, etc.

3. These "household" types of batteries are classified as UN 3028, BATTERIES, DRY, CONTAINING POTASSIUM HYDROXIDE SOLID, electric storage.

4. The batteries are exempted from the provisions of ADR/RID when transported, provided they are securely packed and protected against short circuits. This is stated in special provision 304, which applies to UN 3028. An exemption for used batteries is also stated in special provision 598, provided that certain conditions are fulfilled.

5. The used batteries are exempted if:

- (a) Their cases are undamaged;
- (b) They are secured in such a way that they cannot leak, slip, fall or be damaged, e.g. by stacking on pallets;
- (c) There are no dangerous traces of alkalis or acids on the outside of the articles; and
- (d) They are protected against short circuits.

6. Due to the special provisions 304 and 598 new household batteries are in nearly every case exempted from the provisions in ADR/RID, since it is feasible to securely pack and protect them against short circuits.

7. However, for used household batteries no exemption from the regulations is possible, since it is difficult to protect them against short circuits. In Sweden the used batteries are collected at public collection points such as grocery stores or local municipal collection sites. These batteries loosely lie in packagings when transported for recycling. They are not for example, shrink-wrapped and sorted like new batteries are.

8. Special provisions 598 also states that these batteries are exempted when secured, when stacked on pallets. This requirement seems not to be valid for these small types of batteries, rather it seems to pertain to batteries used in cars.

9. For used lithium metal batteries and lithium ion batteries classified as UN 3090, UN 3091, UN 3480 and UN 3481 special provision 636, applies. These batteries are exempted from the provisions if they are collected and transported for disposal from the consumer collecting point to intermediate processing facility, together with other non-lithium cells or batteries, provided that certain conditions are met:

- (a) Used lithium cells and batteries shall not have a gross mass of not more than 500g each;
- (b) The provisions of packing instruction P903b are complied with;

- (c) A quality assurance system is in place to ensure that the total amount of lithium cells or batteries per transport unit does not exceed 333 kg;
- (d) Packages shall bear the inscription: "USED LITHIUM CELLS".

10. When the used batteries are collected at the public collection point most batteries are of the household types, but a few lithium batteries make their way to the packaging as well.

11. There is no special provision for the entry UN 3028 that specifies the conditions for carriage of household batteries solely or together with lithium metal batteries and lithium ion batteries.

12. The Government of Sweden would therefore like to ask for an exemption from the regulations for used household batteries that can be applied. We propose a new special provision similar to the already existing special provision 636 paragraph (b), which already applies to used lithium metal batteries and lithium ion batteries.

### **Proposal**

13. In the Dangerous Goods List of Chapter 3.2:

In column (6) for UN 3028, add a new special provision XXX

14. Insert in section 3.3.1 the following new special provision XXX:

“XXX Used batteries containing solid potassium hydroxide with a gross mass of not more than 500 g each collected and presented for carriage for disposal between the consumer collecting point and the intermediate processing facility, solely or together with other lithium cells or batteries, are not subject to the other provisions of ADR if they meet the following conditions:

- (a) The provisions of packing instruction P903b are complied with;
  - (b) A quality assurance system is in place to ensure that the total amount of batteries per transport unit does not exceed 333 kg;
  - (c) Packages with solely batteries containing potassium hydroxide shall bear the inscription: "USED BATTERIES"
  - (d) Packages with a mixture of batteries containing potassium hydroxide and lithium cells or batteries shall bear the inscription: "USED LITHIUM CELLS"."
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