Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Geneva, 17-27 September 2013 Item 6 (b) of the provisional agenda **Proposals for amendments to RID/ADR/ADN:** new proposals

Waste Lithium Batteries SP 636 and SP 377

Transmitted by RECHARGE, the International Association for the Promotion and Management of Rechargeable Batteries.

Introduction

- 1. The eighteenth revised edition of the Model Regulations contains the new SP 377 which addresses the conditions for transporting waste lithium ion and lithium metal cells and batteries (either packed together with or packed without non-lithium batteries) when they are being transported for disposal or recycling.
- 2. The draft text for harmonization with the Model Regulations (ECE/TRANS/WP.15/AC.1/2013/31/Add.1) will add SP 376 and SP 377 in column (6) and insert packing instructions "P908 P909 LP903 LP904" in column (8) for UN Nos. 3090, 3091, 3480 and 3481.
- 3. It is clearly indicated under SP 377 that "identified" damaged or defective batteries shall be transported in accordance with Special Provision SP 376 and packaged in accordance with P908 of 4.1.4.1. or LP904 of 4.1.4.3, as applicable.



- 4. Considering the collection of lithium batteries in a mix with non-lithium batteries at first collection facilities such as commercial distribution or civil amenities drop-off points, it will happen that the damaged or defective lithium battery will not be identified at this collection location. Such non-identified damaged or defective lithium battery will be transported within the large majority of other batteries, e.g. zinc-based batteries.
- 5. In this respect the proposal of Switzerland under ECE-TRANS-WP15-AC1-2013-50e is justified. There is a need for the waste battery collection operators to be able to maintain the current transport condition defined by SP 636 (b).
- 6. This practice would tolerate the presence of non-identified damaged and defective lithium batteries in a mix of waste batteries with a limit by weight of 333 kg of waste lithium batteries as accepted in principle by SP 377.
- 7. As formulated, the proposal of Switzerland leaves an ambiguity regarding the presence of "identified" lithium batteries in the battery mix. Therefore it seems appropriate to add the word "unidentified" in front of the reference to damaged and defective lithium batteries in the text of the proposal of Switzerland.
- 8. There is also a need to adapt the Packaging Instructions taking the new P909 into consideration by making reference to it in SP636 (b) (i), removing P903(b) but keeping the possibility to carry the used lithium batteries "together with other used non-lithium batteries or alone without being individually protected" as allowed in P903(b) for lithium cells and batteries with a gross mass of not more than 500 g each
- 9. It may also be advisable to harmonize the technical characteristics of waste batteries to be transported and the 500 g limit should be completed by using the energy content for lithium-ion batteries and the lithium content of lithium-metal batteries.
- 10. There is also a need to amend the labelling requirements according to the new wording of SP 377. In this respect, SP 636 should be modified by using in its paragraph (b) (iii) the marking requirements "*LITHIUM BATTERIES FOR DISPOSAL*" or *LITHIUM BATTERIES FOR RECYCLING*" as appropriate.
- 11. In order to give to the Competent Authority the possibility to control if the weight limit of 333 kg is respected in practise as a result of the existence of a quality control system, it is proposed that the information gathered by the collectors under the current SP 636 (b) is made available to the Authority upon request. This would ensure that the quality control procedure shall be traceable and properly recorded.
- 12. To reach this objective, it seems appropriate to amend 1.1.3.6.3. of ADR with a specific requirement that Competent Authorities may have access upon request to the registered data recorded by the transport operator of waste batteries.

Proposals

1. Amend the wording of SP 636 (b) as follows,

"636 (b) Modified. Up to the intermediate processing facility, used lithium cells and batteries of not more than 500 g each or lithium ion cells with a Watt-hour rating of not more than 20 Wh, lithium ion batteries with a Watt-hour rating of not more than 100 Wh, lithium metal cells with a lithium content of not more than 1 g and lithium metal batteries with an aggregate lithium content of not more than 2 g, as well as unidentified damaged or defective lithium ion and lithium metal cells and batteries, whether or not contained in equipment, collected and handed over for carriage for disposal or recycling without being individually protected, together with or without other used non-lithium cells or batteries or alone, are not subject to the other provisions of ADR if they meet the following conditions: ..."

- (i) the provisions of packing instruction **P909** apply,
- (ii) a quality assurance system is in place to ensure that the total amount lithium cells or batteries per transport unit does not exceed 333 kg,
- (iii) packages shall be marked "LITHIUM BATTERIES FOR DISPOSAL" or LITHIUM BATTERIES FOR RECYCLING" as appropriate.
- 2. Amend § 1.1.3.6.3. of ADR first paragraph at page 11 as follow, completed by a new footnote: In the above table, "maximum total quantity per transport unit" means:
 - For articles, gross mass in kilograms (for articles of Class 1, net mass in kilograms of the explosive substance; for dangerous goods in machinery and equipment specified in this Annex, the total quantity of dangerous goods contained therein in kilograms or litres as appropriate; for used lithium cells and batteries under UN 3090, 3091, 3480, 3481, collected and handed over for carriage for disposal or recycling, together with other non-lithium cells or batteries the total quantity of lithium batteries contained in the mix in kilograms (Footnote (1));
 - For solids, liquefied gases, refrigerated liquefied gases and dissolved gases, net mass in kilograms;
 - For liquids and compressed gases, nominal capacity of receptacles (see definition in 1.2.1) in litres.

(1) Footnote:

"The total quantity of lithium batteries in the mix may be assessed by means of a statistical method included in a quality assurance system. A copy of the quality assurance records shall be made available to the competent authority upon request."

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