Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Geneva, 13-23 September 2011 Item 6 (a) of the provisional agenda

Proposal for amendments to RID/ADR/ADN: pending issues

Transport of Damaged Lithium Batteries

Transmitted by the Government of Germany

Introduction

- 1. The Government of Germany transmitted the informal document INF.27 for the last Joint Meeting in March 2011 to inform about the discussions of the Sub-Committee of Experts on the Transport of Dangerous Goods on damaged lithium batteries and to trigger a discussion of possible solutions within the framework of ADR/RID/ADN.
- 2. The Sub-Committee of Experts on the Transport of Dangerous Goods continued their discussion during the 39th session on the basis of two further documents (ST/SG/AC.20/C.3/2011/15 (Germany) and INF. 13 (PRBA/RECHARGE), but could not decide on a text for adoption, as provisions for the transport of waste batteries (similar to the existing P903b and SP 636 of ADR/RID/ADN) also had to be considered.
- 3. The transport of larger batteries which show evidence of damage raises a lot of questions. These batteries cannot be considered in compliance with the requirements of special provision 230 (text will be moved to 2.2.9.1.7). Due to their defect, they can no longer be regarded as batteries of a type proved to meet the requirements of each test of the Manual of Test and Criteria Part III sub-section 38.3. Therefore, P 903 or P 903a is usually not sufficient to ensure safe transport and additional measures are necessary. These measures may differ depending on the type and size of the battery and the possible defect.
- 4. As a first step P 099 could be used for damaged batteries. Furthermore, a special provision which includes a definition of damaged lithium batteries should be introduced. The scope of the proposal is limited to damaged batteries with a gross mass of more than 500 g, because especially larger batteries raise concerns.
- 5. The adoption of this proposal will not interfere with the discussions of the Sub-Committee of Experts on the Transport of Dangerous Goods. The proposed description of damaged batteries is based on the definition in the ICAO-TI. Even if the definition is further developed by the Sub-Committee of Experts on the Transport of Dangerous Goods, the proposed wording will essentially be already existing text and provide at least some assistance for the users to decide if a used lithium battery can still be considered safe for transport as a new battery. Until now, the decision is left completely to the consignor.
- 6. Another question which proved to be a problem was to define generally suitable packing conditions for damaged batteries, as the possible risks depend on the type of defect. For such cases, P 099 is an already existing adequate legal instrument. The use of P 099



will avoid a great many individual exemptions and will enable the competent authorities to gain more experience with packagings for damaged lithium batteries.

7. The discussions of the Sub-Committee of Experts on the Transport of Dangerous Goods will take some more time. In view of the amount of requests and the urgent need to transport such batteries, the Joint Meeting should decide on an appropriate intermediate solution as proposed below as soon as possible.

Proposal

- 8. For UN 3090 and UN 3480, a new line should be inserted in the Dangerous Goods List with the same name, class, classification code, labels and requirements for limited quantities and excepted quantities as well as the hazard identification code (for RID only); in column (2) the description "damaged batteries" should be added.
- 9. No packing group should be indicated in column (4).
- 10. The new special provision 6xx should be indicated in column (6).
- 11. P099 should be inserted in column 8.
- 12. Instead of a transport category and tunnel restriction code, the following should be added in column (15): "(see special provision 6xx)".
- 13. The following special provision should be inserted in Chapter 3.3:
 - "Carriage of damaged batteries is permitted only under the conditions defined by the competent authority of the country of origin. The competent authority approval shall include the applicable transport category and the tunnel restriction code.

Damaged lithium batteries are in particular:

- Batteries identified by the manufacturer as being defective for safety reasons,
- Batteries with damaged or considerably deformed cases,
- · Leaking or venting batteries,
- Batteries that are not diagnostic-capable."