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## **Economic Commission for Europe**

### **Inland Transport Committee**

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

5 September 2014

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

Geneva, 15-19 September 2014

Item 5 (a) of the provisional agenda

#### **Proposals for amendments to RID/ADR/ADN: pending issues**

### **Lithium batteries in Battery powered Vehicles under UN 3166 and UN 3171**

#### **Comments to the proposal from France ECE/TRANS/WP.15/AC.1/2014/51**

#### **Transmitted by RECHARGE**

#### **Introduction**

1. The Working Paper WP.15/AC.1/2014/51 proposed by the Government of France is intended to clarify the status of Lithium batteries contained in Vehicles by providing a specific special provision in RID/ADR for UN Numbers UN3166 and UN 3171.
2. RECHARGE supports the approach to clarify some aspects of the Transport Regulation for Battery Powered Vehicle or Battery Powered Equipment under the ADR/RID/ADN transport mode, in a broad sense. Indeed UN Numbers 3166 and UN 3171 are covering a large variety of vehicles and equipments as described in SP240.
3. RECHARGE considers that the clarifications should concentrate on the issue of testing requirements for Lithium batteries installed in Vehicles and Equipments and the scope of exemptions from the regulation.
4. Three types of clarifications are proposed in this Informal Paper.
  - (a) Clarification about the types of vehicles powered by Lithium batteries that are exempted from the regulation.
  - (b) Clarification about the transport of damaged and defective batteries when installed in a vehicle.
  - (c) Clarification of the testing requirements for the batteries installed in certain types of vehicles and equipment.
5. RECHARGE suggests the introduction of the clarifications in the current text of the ADR Regulation. With this proposal RECHARGE would like to contribute to the on-going discussion on the subject as suggested by the French Authority in the Working Paper WP.15/AC.1/2014/51.

**Types of Battery Powered Vehicle exempted from the regulation**

6. The first proposal concerns the confirmation that Battery Powered Vehicles and Equipment are exempted from ADR under certain conditions, as suggested below this could be introduced as a new sub-paragraph in § 1.1.3. of ADR.

**The transport of damaged and defective batteries, when installed in a Battery Powered Vehicle (vehicle otherwise damaged or defective)**

7. There is a need for clarification about the transport conditions in the case where the battery installed in the damaged « Battery Powered Vehicle » is diagnosed as damaged or defective, in particular, when the battery cannot be removed from the vehicle and transported separately under SP376. This request for clarification applies evenly to defective « Battery Powered Vehicle » diagnosed with a damaged or defective battery.

8. In proposal 2 below, we are suggesting to add one paragraph in SP376 in order to cover the cases where such battery powered vehicles have to be transported.

**The transport of batteries when installed in vehicles such as E-bikes, Wheel-chairs, Segways, quadricopters...**

9. All lithium batteries used in type-approved and non-type approved Battery Powered Vehicles and Equipment should be compliant with the requirements of the UN Manual for Tests and Criteria, part III, subsection 38.3 and with all other requirements as listed in section 2.2.9.1.7 of the ADR/RID/AND (except for small production runs and prototypes). In fact these batteries have to be transported separately within the logistic chain, e.g. as parts for production supply or spare parts for after-sales reasons.

10. NB. There is already an applicable transport regulation in case of intercontinental transport of these batteries by sea mode (see SP 962 in IMDG code, requiring the Lithium batteries to be tested according to the UN manual of test and criteria, III, § 38.3).

11. The proposal 3 below intends to confirm that lithium batteries installed in certain types of vehicles have to comply with the regulation and in particular with § 2.2.9.1.7 of ADR/RID.

**Proposals**

*Proposal 1*

*Introduce in Section 1.1.3. a new sub-section*

*1.1.3.(X)- new: Exemptions related to Battery Powered Vehicle and Equipment.*

*(a) Lithium batteries powered vehicles or equipment under UN3166 & UN3171, where the battery is in conformity with 2.2.9.1.7. or is part of small Production Runs or is a Prototype, are exempted from ADR.*

*Proposal 2*

*Introduce in SP376 the following new paragraph.*

*After identification that a battery is Damaged or Defective when installed in a Battery Powered Vehicle, the Battery Powered Vehicle shall be allowed for transport with the battery installed in the vehicle when,*

*a) the battery cannot be removed from the vehicle under safe conditions, or*

*b) the vehicle body is offering sufficient protection for safe transport of the vehicle with the battery inside.*

*Appropriate safety measures shall be undertaken to secure a safe transport of the battery powered vehicle, when necessary. Paragraph 1.1.3.1.d. remains applicable (towing of a vehicle after an accident).*

*Proposal 3*

*Add the following sentence in Paragraph 2.2.9.1.7. :*

*Lithium batteries used to power Vehicles and installed in or packed with vehicles such as E-bikes, wheelchairs, segways, quadricopters, etc... need to comply with the above provisions of paragraph 2.2.9.1.7.*

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