

## Economic Commission for Europe

### Inland Transport Committee

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

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Item 6 (b) of the Provisional agenda

**Proposals for amendments to annexes A and B of ADR:  
miscellaneous proposals**

22 April 2016

### Special Provision 376 for lithium cells and batteries

#### Transmitted by the Government of Switzerland

##### *Summary*

**Executive summary:** Lithium cells and batteries carried according to the last paragraph of SP376 should not benefit from the same exemptions as lithium cells and batteries that are in conformity with ADR rules.

**Action to be taken:** Assign lithium cells and batteries carried according to the last paragraph of SP376 to transport category 0.

**Background documents:** ECE/TRANS/WP.15/231.

### Introduction

1. The Special provision 376 has being modified for 2017 based on a proposal of Germany (ECE/TRANS/WP.15/AC.1/2015/28 and INF.42) by the Joint meeting in September 2015. The amendment reads as follows:

*“SP 376 Amend the end of the last sentence to read as follows: “...shall not be carried except under conditions approved by the competent authority of any ADR Contracting Party who may also recognize an approval granted by the competent authority of a country which is not an ADR Contracting Party provided that this approval has been granted in accordance with the procedures applicable according to RID, ADR, ADN, the IMDG Code or the ICAO Technical Instructions.”.”*

Before the adoption of this text the transport of lithium cells or batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of transport was defined by each competent authority concerned by the consignment. Following this new version any competent authority from any Contracting Party to ADR is entitled to define for the whole domain of the ADR the transport conditions. This is so also in case the consignment does not concern the country to which the competent authority belongs. A consignor can choose independently from where the

carriage is going to take pace any competent authority from any Contracting Party to ADR to define the transport conditions.

2. Examples of such transport conditions can already be found at the UN-ECE homepage [http://www.unece.org/trans/danger/publi/adr/country-info\\_e.html](http://www.unece.org/trans/danger/publi/adr/country-info_e.html) . Besides the packing provisions they also define specification for vehicles, drivers, marking and placarding not only of the packaging but also of the vehicle, transport document, tunnel restriction codes. Even before the above change in SP376 is in force, in some of the listed specifications for SP376 listed in the Homepage of the UN-ECE, the scope of the specification is already defined as not limited for carriage in the country where the competent authority is acting but for carriage within all ADR Contracting Parties.

3. Besides the fact that some specifications are going far beyond the scope one expects for packing provisions and of the actual scope expected in SP376, we wonder if the carriage of the kind of dangerous goods described in the last paragraph of SP376 could follow exactly the same exemptions as lithium cells and batteries not damaged and conforming to the ADR requirements. We are not convinced that the competent authority of any ADR contracting country (even if this country has no tunnel restrictions) should be entitled to define for those particularly dangerous goods the tunnel restriction code. For the moment being we have not observed cases where the tunnel restrictions code diverges from the one already assigned to the corresponding UN-Number for lithium batteries. But even if this has not happened we don't think there should be an automatism for dangerous lithium cells and batteries in assigning the tunnel restriction code based simply on the corresponding UN-Number for lithium cells and batteries.

4. Before the above mentioned change adopted for 2017 it was not relevant what tunnel restriction code some competent authority of some country decide for the carriages of dangerous lithium batteries because the scope of the specification was limited to the country defining the transport conditions (even if in the specification the scope was wrongly defined as applying to the whole ADR domain). With the new text the content of the specifications decided in any country will determine the transport conditions elsewhere in the ADR domain.

5. Actually the entries to which SP376 is assigned to are all defined as transport category 2 and with a tunnel restriction code E. This means that, by applying the automatic assignment of transport category and tunnel restriction code to lithium cells or batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of transport, they could be carried up to 333 kg per transport unit without applying most of the ADR rules. Up to 333 kg of this kind of danger, one only needs a 2 kg fire extinguisher and a transport document. That means no orange-coloured plates, no need of a safety advisor, no ADR training certificate for the driver, no instruction in writing for the drivers crew, no security provisions, no need of notifications of occurrences involving dangerous goods following 1.8.5, and no tunnel restriction in any kind of tunnel category (B, C, D or E), etc. We don't think this is the right solution to guarantee a safe carriage of 333 kg of such dangerous goods.

6. In order to avoid the possibility to define by means of the last paragraph of SP376 less stringent transport conditions and particularly to avoid the automatic assignment of tunnel restriction codes based simply on the UN-Number to which the lithium battery belongs, we propose to exclude specifically this possibility in the SP376 as follows:

## **Proposal**

7. In SP376 in Chapter 3.3 at the end of the last paragraph add the following sentence:

“In this case the cells and batteries are assigned to transport category 0.”

8. In order to explain to the drivers and interested users of the ADR such a case we believe the text in 8.6.3.1 should be adapted to the existing text in 1.9.5.3.6. The actual text in 1.9.5.3.6 says the following:

“1.9.5.3.6 Tunnel restrictions shall apply to transport units for which an orange-coloured plate marking in accordance with 5.3.2 is required, except for the carriage of dangerous goods for which ‘(-)’ is marked in Column (15) of Table A of Chapter 3.2. For the dangerous goods assigned to UN Nos. 2919 and 3331, restrictions to the passage through tunnels may, however, be part of the special arrangement approved by the competent authority(ies) on the basis of 1.7.4.2. For tunnels of category E, they shall apply also to transport units for which a marking in accordance with 3.4.13 is required or carrying containers for which a marking in accordance with 3.4.13 is required.”

8.6.3.1 says almost the same but not exactly:

“8.6.3.1 The restrictions for the transport of specific dangerous goods through tunnels are based on the tunnel restriction code of these goods, indicated in Column (15) of Table A of Chapter 3.2. The tunnel restriction codes are put between brackets at the bottom of the cell. When ‘(-)’ is indicated instead of one of the tunnel restriction codes, the dangerous goods are not subject to any tunnel restriction; for the dangerous goods assigned to UN Nos. 2919 and 3331, restrictions to the passage through tunnels may, however, be part of the special arrangement approved by the competent authority(ies) on the basis of 1.7.4.2.”

9. For the actual case, that is for a SP376 assigned to specific UN-Entries having already a tunnel restriction code and a transport category in column (15) of table A of chapter 3.2, where in the SP376 the transport category is changed to “0”, the information in 1.9.5.3.6 is enough because any carriage bearing orange-coloured plates according to 5.3.2 will be subject to tunnel restriction according to this text.

10. The same is however not clear according in 8.6.3.1. The first sentence is only partly true in that case: “The restrictions for the transport of specific dangerous goods through tunnels are based on the tunnel restriction code of these goods, indicated in Column (15) of Table A of Chapter 3.2.” This is because even of for the concerned entries transport categories 2 are assigned in column (15), due to the conditions fixed in the new SP376 they are submitted to transport category “0”. This implies they are carrying an orange-coloured plate in any case and they are forbidden in any restricted tunnels independently of the quantity carried and of the tunnel restriction code appearing in column (15). In order to take care of this case, we propose to adapt the text of 8.6.3.1 to the text in 1.9.5.3.6 as follows:

“8.6.3.1 **Tunnel restrictions shall apply to transport units for which an orange-coloured plate marking in accordance with 5.3.2 is required, and on the transport category of these goods, indicated in Column (15) of Table A of Chapter 3.2 or defined in special provisions of Chapter 3.3.** The tunnel restriction codes are put between brackets at the bottom of the cell. When ‘(-)’ is indicated instead of one of the tunnel restriction

codes, the dangerous goods are not subject to any tunnel restriction; for the dangerous goods assigned to UN Nos. 2919 and 3331, restrictions to the passage through tunnels may, however, be part of the special arrangement approved by the competent authority(ies) on the basis of 1.7.4.2.”

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