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**SPECIAL PROVISIONS 230 AND 636: TRANSPORT OF
LITHIUM CELLS AND BATTERIES**

Transmitted by the Government of Germany*

The secretariat has received from the Central Office for International Carriage by Rail (OCTI) the proposal reproduced below.

* Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2003/25.

SUMMARY

Analytical summary: Correction of a mistake which slipped in when the United Nations Recommendations were harmonized (in the interval between the tenth and the eleventh editions) during the restructuring of RID/ADR and has gone unnoticed until now. It resulted in the limitations of quantities of lithium for lithium cells and batteries permitted for carriage being deleted in special provision 230; consequently, approval by the competent authority is required for nearly every transport operation involving lithium cells and batteries.

Action to be taken: Delete (a) from special provision 636 and renumber accordingly (b) to (d) as (a) to (c).

Related documents: None.

Introduction

Special provision 230 in the tenth edition of the United Nations Recommendations established a quantity of 12 g of lithium or lithium alloy per lithium cell, or 500 g of lithium or lithium alloy per battery. Lithium cells or batteries containing more lithium or lithium alloy than the quantities indicated were not accepted for carriage in accordance with the United Nations Recommendations.

This was why the following Note 2 was included in item number 5° of marginal (2)901 in the RID/ADR before restructuring:

“2. Each cell shall not contain more than 12 g of lithium or lithium alloy. The quantity of lithium or lithium alloy contained in each battery shall not be more than 500 g.

With the approval of the competent authority of the country of origin, the quantity of lithium or lithium alloy in each cell may be raised to 60 g and a package may contain up to 2,500 g of lithium or lithium alloy; the competent authority shall determine the conditions of carriage as well as the type and duration of the test. If the country of origin is not a contracting State of COTIF/party to ADR, the approval shall be recognized by the competent authority of the first contracting State of COTIF/party to ADR reached by the consignment.”

In the second revised edition of the United Nations Manual of Tests and Criteria, no limitation was established on the quantity of lithium or lithium alloy per cell or battery.

The restructuring of RID/ADR is based on the tenth edition of United Nations Recommendations.

As part of the restructuring, the first two sentences of Note 2 in item number 5° of marginal (2)901 of RID/ADR (see above) were included in special provision 230, the rest in special provision 636.

With the eleventh edition of the United Nations Recommendations and the introduction of the third revised edition of the United Nations Manual of Tests and Criteria, special provision 230 was amended by removing the limitations on quantities, while in the United Nations Manual of Tests and Criteria a differentiation was made between large and small cells and between large and small batteries, which exactly correspond to the above limits. Small cells are therefore cells which do not contain more than 12 g of lithium and small batteries are batteries which do not contain more than 500 g of lithium.

Special provision 230 now stipulates that only lithium cells and batteries which have been proved to meet the requirements of the third revised edition of the Manual of Tests and Criteria and have been assigned to UN Nos. 2019 or 3091 of Class 9 on the basis of the test results, may be carried. This means that the limitation on the quantity of lithium or lithium alloy per cell or battery has been removed.

In the context of the harmonization, special provision 230 was also amended accordingly in RID/ADR. It was not, however, realized that the non-amendment of special provision 636 (a) meant that the competent authority must always give approval for the carriage of lithium cells: (see above text, Note 2 to item number 5° of marginal (2)901).

This applies at least to lithium cells and batteries which are not referred to in special provision 188. This provision exempts lithium cells and batteries which do not exceed a certain maximum quantity of lithium per cell or battery.

However, since section 38.3 of the Manual does not establish any maximum quantity of lithium per cell or battery, but only differentiates between large and small cells or batteries, it is possible to carry lithium cells and batteries without restrictions on the quantity of lithium and without the approval of the competent authority in accordance with the United Nations Recommendations.

This is, in fact, a mistake which has gone unnoticed to date because of the fact that Note 2 to item number 5° of marginal (2)901 of RID/ADR was divided into two different special provisions during the restructuring.

Proposal

In view of the fact that as from 1 January 2003, as explained earlier, the approval of the competent authority will always be necessary when lithium cells or batteries are to be carried, the Government of Germany proposes the following solution to this problem:

It will be necessary to delete (a) in special provision 636 and renumber (b) to (d) accordingly as (a) to (c).

As this is clearly a mistake which resulted from the simultaneous restructuring and the harmonization with the United Nations Recommendations, the correction should be made in RID/ADR as soon as possible, for example by means of a corrigendum.

Justification

- Safety: In view of the fact that the carriage of lithium cells containing more than 12 g of lithium or of lithium batteries containing more than 500 g of lithium since the introduction of the third revised edition of the Manual of Tests and Criteria and the related incorporation of tests for these cells and batteries has been recognized as a standard by the United Nations experts, transport in European traffic should not also pose problems of technical safety, particularly as the transport of these large cells or batteries has always been possible to date with the approval of the competent authority.
- Feasibility: No problem, since to date lithium cells and batteries have already been tested in accordance with the third revised edition of the Manual of Tests and Criteria and subsequently carried as articles of Class 9, UN Nos. 3090 and 3091.
- Enforceability: The carriage of these batteries is an industrial necessity and is also a daily practice.
