



## 危险物品专家组 (DGP)

### 第二十四次会议

2013年10月28日至11月8日，蒙特利尔

议程项目5.1: 审查关于运输锂电池的规定

#### “车辆”与“设备”及特殊规定A21的适用

(由D. Brennan提交)

#### 摘要

本工作文件提议对特殊规定A21的措词进行一处修改，在被视为“车辆”的物品中删除对电动自行车和轮椅等的提及。

**危险品专家组的行动:** 请危险品专家组按本工作文件附录所示修改特殊规定A21。

## 1. INTRODUCTION

1.1 Special Provision A21, which applies to UN 3171, **Battery-powered equipment** and **Battery-powered vehicle** was revised in the 2013-2014 Edition of the Technical Instructions based on revisions to Special Provision 240 in the UN Model Regulations.

1.2 The basis for the changes to the wording of SP 240 in the UN Model Regulations was to make some differentiation between equipment and vehicles and the assignment to UN 3171 where the equipment is powered by lithium batteries.

1.3 The original proposal to the UN Subcommittee simply proposed to separate vehicles, which would be assigned to UN 3171, even when lithium battery powered and equipment, which when powered by lithium batteries would be assigned to UN 3091 or UN 3481, as applicable.

1.4 Based on an INF paper raising concerns at the proposals in the original paper and the subsequent discussions there was a lunch-time working group that met to develop a compromise position. The end result being the wording in Special Provision A21.

1.5 The issue with the wording in Special Provision A21 is in the examples that are given on what may be considered as a “vehicle” and therefore assigned to UN 3171 and consequently prepared in accordance with Packing Instruction 952; these examples include e-bikes and wheelchairs.

1.6 Based on recent experience and questions being raised by airlines and ground handling agents it is believed that it is inappropriate for such items to be considered as “vehicles” for the purposes of the Technical Instructions.

1.7 While there have been some changes to Packing Instruction 952 to bring in specific reference to Part 2;9.3, Packing Instruction 952 does not contain the net mass limits or the packing requirements that are provided for in Packing Instructions 967 and 970 for lithium batteries contained in equipment. For vehicles such as cars and motor bikes, and if applicable vessels and aircraft, this is probably quite reasonable as there is an expectation that these vehicles, when licenced or approved for use will have undergone some form of crash or certification testing and the lithium battery will be afforded a degree of protection by being installed in the vehicle.

1.8 The same, however cannot be said for items such as e-bikes, wheelchairs, battery powered skateboards and surfboards where the degree of protection for the lithium battery may be non-existent, or at best limited and there is no, or minimal regulatory approval process.

1.9 As such it is proposed to amend Special Provision A21 to limit vehicles containing lithium batteries to those that have received regulatory approval from the appropriate national authority for road, waterway/maritime and aviation. It is also proposed to delete reference to battery-assisted bicycles, wheelchairs and lawn tractors as examples of vehicles and to move them to being examples of equipment.

1.10 The proposal in this paper has also been submitted to the 44<sup>th</sup> meeting of the UN Subcommittee that meets in late November of this year proposing an equivalent change to Special Provision 240 in the 18<sup>th</sup> revised edition of the UN Model Regulations. However, as any change for the 19<sup>th</sup> revised edition UN Model Regulations won't become effective until 1 January 2017, the panel is requested to consider this proposal for implementation in advance of the UN.

## 2. ACTION BY THE DGP

2.1 The DGP is invited to revise Special Provision A21 as shown in the appendix to this working paper.

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## 附录

### 对技术细则第3部分的拟议修订

## 第3部分

### 危险物品表，特殊规定和限制数量与例外数量

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### 第3章

#### 特殊规定

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表3-2 特殊规定

本细则 UN

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≠ A21 本条目仅适用于以湿电池、钠电池、锂金属电池或锂离子电池为动力的车辆和以湿电池或钠电池为动力的设备，并且运输时这些电池安装在这些车辆和设备上。

对于本特殊规定而言，车辆系指设计用于运载一人或多人或用于运载物品 并经负责道路、水路/海事或航空的国家有关当局批准的自推进式装置，例如：电动汽车、摩托车、轻骑、三轮和四轮车辆或摩托车、电池自行车、轮椅、草坪拖拉机、船只和航空器。设备的例子包括割草机、清洁机器、电动自行车、以电池为动力的代步工具或模型船和模型飞机。

由锂金属电池或锂离子电池驱动的设备必须酌情划入UN 3091 **Lithium metal batteries contained in equipment**（装在设备中的锂金属电池）或UN 3091 **Lithium metal batteries packed with equipment**（与设备包装在一起的锂金属电池）或UN 3481 **Lithium ion batteries contained in equipment**（装在设备中的锂离子电池）或UN 3481 **Lithium ion batteries packed with equipment**（与设备包装在一起的锂离子电池）予以托运。

车辆或设备如果也装有内燃机，必须酌情划入如下条目：UN 3166 **Engines, internal combustion, flammable gas powered**（易燃气体发动的内燃发动机）或UN 3166 **Engines, internal combustion, flammable liquid powered**（易燃液体发动的内燃发动机）或UN 3166 **Vehicle, flammable gas powered**（易燃气体为动力的车辆）或UN 3166 **Vehicle, flammable liquid powered**（易燃液体为动力的车辆）。由内燃机和湿电池、钠电池、锂金属电池或锂离子电池共同驱动的混合动力电动车辆，在安装电池运输的情况下，必须酌情划入如下条目：UN 3166 **Vehicle, flammable gas powered**（易燃气体为动力的车辆）或UN 3166 **Vehicle, flammable liquid powered**（易燃液体为动力的车辆）予以托运。

以燃料电池发动机发动的车辆或设备，必须酌情划归为如下条目：UN 3166 **Vehicle, fuel cell, flammable gas powered**（易燃气体为动力的燃料电池车辆）或UN 3166 **Vehicle, fuel cell, flammable liquid powered**（易燃液体为动力的燃料电池车辆）或UN 3166 **Engine, fuel cell, flammable gas powered**（易燃气体为动力的燃料电池发动机）或UN 3166 **Engine, fuel cell, flammable liquid powered**（易燃液体为动力的燃料电池发动机）予以托运。

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