



**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals****Sub-Committee of Experts on the Transport of Dangerous Goods****Forty-fourth session**

Geneva, 25 November – 4 December 2013

Item 2 (c) of the provisional agenda

Listing, classification and packing: miscellaneous**Special Provision 240****Transmitted by the International Air Transport Association (IATA)¹****Introduction**

1. At the 37th session of the Subcommittee there were changes agreed to the provisions of Special Provision 240 based on proposals in papers submitted by the expert from Germany (ST/SG/AC.10/C.3/2010/15) and by the US Fuel Cell Council (ST/SG/AC.10/C.3/2010/16).
2. Both of these papers were as a follow-up to discussions that took place at the 36th session of the Subcommittee where there were some proposals to limit what could be assigned to UN 3171 as Battery-powered vehicles or battery-powered equipment and what must be assigned to UN 3481 lithium ion batteries contained in equipment.
3. The changes to Special Provision 240 were incorporated into the 17th revised edition of the Model Regulations and subsequently became effective as Special Provision A21 in the 2013-2014 edition of the ICAO *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Technical Instructions).
4. The issue with the wording in Special Provision 240 (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 the provisions for battery-powered vehicles; these examples include e-bikes and wheelchairs.

¹ In accordance with the programme of work of the Sub-Committee for 2013-2014 approved by the Committee at its sixth session (refer to ST/SG/AC.10/C.3/84, para. 86 and ST/SG/AC.10/40, para. 14).

5. For lithium batteries, and by extension, to equipment assigned to UN 3091 or UN 3481, the provisions of paragraph 2.9.4, Special Provision 230 and packing instruction P903 all apply. For air transport the provisions of the Technical Instructions extend the requirements of the Model Regulations further by imposing a mass limit per package on the quantity of lithium batteries that may be consigned by air. None of these provisions apply to UN 3171.
6. 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.
7. 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.
8. As such it is proposed to revisit the wording of Special Provision 240 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.

Proposal

9. The Subcommittee is invited to amend the wording of Special Provision 240 as shown:

This entry only applies to vehicles powered by wet batteries, sodium batteries, lithium metal batteries or lithium ion batteries and equipment powered by wet batteries or sodium batteries which are transported with these batteries installed.

For the purpose of this special provision, vehicles are self-propelled apparatus designed to carry one or more persons or goods that have received approval from the appropriate national authority for road, waterway/maritime or aviation. Examples of such vehicles are electrically-powered cars, motorcycles, scooters, three- and four-wheeled vehicles or motorcycles, ~~battery assisted bicycles, wheelchairs, lawn tractors~~, boats and aircraft. Examples of equipment are lawnmowers, cleaning machines, e-bikes, battery-powered mobility aids or model boats and model aircraft.

Equipment powered by lithium metal batteries or lithium ion batteries must be consigned under the entries UN 3091 LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT or UN 3091 LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT or UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT, as appropriate.

Vehicles or equipment that also contain an internal combustion engine must be consigned under the entries UN 3166 ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN 3166 ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or UN 3166 VEHICLE, FLAMMABLE GAS POWERED or UN 3166 VEHICLE, FLAMMABLE LIQUID POWERED, as appropriate. Hybrid electric vehicles powered by both an internal combustion engine and wet batteries, sodium batteries, lithium metal batteries or lithium ion batteries, transported with the battery(ies) installed, must

be consigned under the entries UN 3166 VEHICLE, FLAMMABLE GAS POWERED or UN 3166 VEHICLE, FLAMMABLE LIQUID POWERED, as appropriate.

Vehicles or equipment powered by a fuel cell engine must be consigned under the entries UN 3166 VEHICLE, FUEL CELL, FLAMMABLE GAS POWERED or UN 3166 VEHICLE, FUEL CELL, FLAMMABLE LIQUID POWERED, or UN 3166 ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or UN 3166 ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED, as appropriate.
