Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

28 November 2022

Sub-Committee of Experts on the Transport of Dangerous Goods

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Comments on ST/SG/AC.10/C.3/2022/70 – Assignment of a new UN number to lithium battery powered vehicles

Transmitted by the expert from the United Kingdom

Introduction

- 1. The expert from the United Kingdom supports the intention of document ST/SG/AC.10/C.3/2022/70 from IATA and was grateful for the opportunity to take part in the discussions and contribute to the final draft. However, the expert from the United Kingdom believes that the proposal presented misses the opportunity for the Sub-Committee to make progress towards improving the provisions in relation to lithium batteries.
- 2. Members of the Sub-Committee may recall ICAO previously announced their concern of the lack of granularity in relation to the transport requirements for lithium batteries in the Model Regulations and were commissioning some work with the SAE to try and improve this aspect of the regulation. Separate analysis by the experts from the United Kingdom has found that lithium batteries are treated differently to all other dangerous goods in the Model Regulations. Firstly, there are only two UN numbers covering a variety of cells and batteries which would be the equivalent of having only two UN numbers for corrosives one for acids and one for alkalines. Secondly, only the lithium battery entries have multiple packing instructions and uniquely use special provisions where the same special provision applies different requirements to different UN numbers.
- 3. Mindful that this is the last meeting of the biennium the expert from the United Kingdom will restrict comments on ST/SG/AC.10/C.3/2022/70 to the identification (Proper Shipping Name) issues that the IATA paper creates. Long ago, the Model Regulations were changed so that the single-entry lithium batteries became two entries, lithium ion and lithium metal. The use of 'lithium battery' in the proposed proper Shipping Name is thus a regression, and the inclusion in light type of 'metal' or 'ion' which does not have to appear on transport documents removes the specific battery type distinction in transport. The normal way that the Model Regulations deal with type of situation is to add N.O.S. to the proper shipping name together with special provision 274. The United Kingdom presents below two alternative proposals.

Proposal 1

4. Add a new entry to the Dangerous Goods List in Chapter 3.2 as follows:

UN No.		Class or division	diam	UN packing group	Special provisions	Limited and		Packagings and IBCs		Portable tanks and bulk containers	
						exce quan	pted tities	Packing instruction	Special packing provisions	Instruc- tions	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
	VEHICLE, LITHIUM BATTERY POWERED N.O.S or VEHICLE, SODIUM ION BATTERY POWERED	9			274 384 388	0	Е0	P9xx			

The rest of the proposals presented in ST/SG/AC.10/C.3/2022/70 would be unchanged.

Justification

- 5. Users of the Model Regulations will be familiar with N.O.S entries and SP 274. However, there is the possibility that some transporters of sodium ion batteries might get confused with the use of SP 274 when the proper shipping name of 'Vehicle, Sodium ion battery powered' does not include 'N.O.S.'
- 6. However, this proposal still leaves three separate types of dangerous goods assigned to one UN number. This has two disadvantages in that users of the regulations will read (sometimes pages) of irrelevant information in relation to what they want to consign and secondly, it makes it difficult to tailor specific amendments to the relevant part of the entry. Proposal 2 below seeks to address these issues by listing the different types of battery powered vehicles as separate UN entries.

Proposal 2

Add the following new entries to the Dangerous Goods List in Chapter 3.2:

UN No.	Name and description	Class or division	diary	UN packing group	Special provisions	Limited and excepted quantities		Packagings and IBCs		Portable tanks and bulk containers	
								Packing instruction	Special packing provisions	Instruc- tions	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
	VEHICLE, LITHIUM- ION BATTERY POWERED	9			384 388	0	Е0	P9xx			
	VEHICLE, LITHIUM METAL BATTERY POWERED	9			384 388	0	Е0	P9xx			
	VEHICLE, SODIUM ION BATTERY POWERED	9			384 388 39x	0	Е0	P9xx			

Add a new Special Provision to Chapter 3.3 as follows:

- "SP39x This entry is not subject to other provisions of these Regulations other than the requirement for a transport document, when the batteries covered by this entry have a 0% state of charge and the battery is fitted with a short circuit device. The transport document shall state "Not Dangerous Goods, transported in accordance with Special Provision SP39x."
- 7. In keeping with intent to leave other matters until the next biennium, the other proposals presented in ST/SG/AC.10/C.3/2022/70 stand, except that as a consequence of Proposal 2 of this paper, where there were 2 entries proposed for the index, there will now be 3 and each will have a different UN number instead of the same. In the amended Special Provisions, all 3 new UN entries will have to be listed rather than the one with the list of names.

Justification

8. Proposal 2 splits the entry into the three different types of batteries that may be used in vehicles found in the Model Regulations and also includes a specific additional Special Provision for sodium ion powered vehicles. This would allow for any future specific transport arrangements for each battery type easier to address.