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**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-seventh session**

Geneva, 22 – 26 June 2015

Item 6 (c) of the provisional agenda

**Miscellaneous proposals for amendments to the Model Regulations  
on the Transport of Dangerous Goods: marking and labelling****Appropriate hazard communication – Elevated Temperature  
Substances and Environmentally Hazardous Substances****Transmitted by the expert from the United Kingdom<sup>1</sup>****Introduction**

1. At the forty-sixth session, the Sub-Committee adopted new marking and labelling provisions to better communicate the hazards associated with the transport of lithium batteries which originated from the United Kingdom's 2014/89. The official report reported the following outcome to the discussions of the proposals contained in ST/SG/AC.10/C.3/2014/89:

“47. The United Kingdom document contained three proposals for specific marks and labels for the various substances and articles of class 9. Although there was support for proposal 1 concerning lithium batteries, the discussion in plenary showed that several experts would prefer to discuss proposal 2 in the next biennium or were even reluctant to discuss proposal 3 in a near future. The proposals were referred to a lunchtime working group which developed new provisions for marking and labelling lithium batteries (informal document INF.73) which were adopted (see annex).

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15).

48. As opinions remained divided on proposals 2 and 3, it was agreed to postpone their discussion to the next biennium.”

2. As there was some support for continuing to examine the benefits of improved hazard communication for Elevated Temperature Substances and Environmentally Hazardous Substances (Proposal 2 of 2014/89) in this current biennium, the United Kingdom therefore presents a follow-up proposal to 2014/89 which proposes new marking and labelling provisions for these Class 9 substances based upon the principle adopted for Class 9 lithium batteries at the last session.

3. There are substances other than UN 3257 and UN 3258 which may fall into another class/division which are carried at elevated temperatures. For these dangerous goods it would not be correct to use the Class 9 Elevated Temperature placard but to continue to use the separate applicable class/division label with the elevated temperature substance mark. This is a principle which would need to be accepted by the Sub-Committee.

4. The United Kingdom received some inter-sessional comments from some delegations in relation to the previous proposal 2 in document 2014/89. These comments have been taken into account in producing this follow-up proposal. One comment received was that it would be beneficial to consider how the new class 9 labels would be applied to packages or cargo transport units which contained different class 9 substances/articles. For example, what would happen if you had UN 3077 (proposed label 9C) together within the same package as UN 3480 (label 9A) and UN 3268 (label 9). What combinations of class 9 labels or placards would be necessary or would it be sufficient just to use the “ordinary” class 9 label/placard?

5. To answer this question the United Kingdom looked towards the existing requirements for mixed packing which is contained in 5.1.4 which states that:

“5.1.4 When two or more dangerous goods are packed within the same outer packaging, the package shall be labelled and marked as required for each substance.”

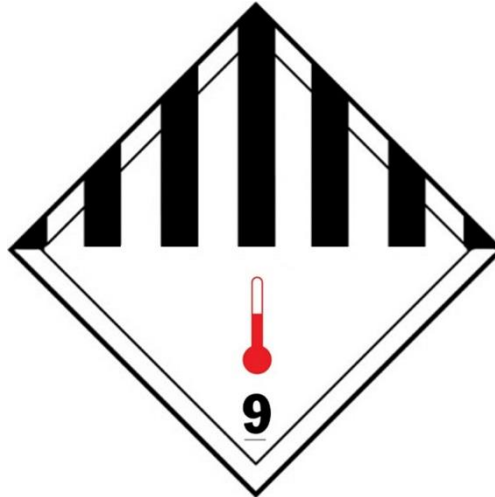
6. The question is whether the three types of class 9 are considered to be the same dangerous goods or not. Under the existing provisions in the example above, the package would require the class 9A label, the class 9 label and the environmentally hazardous substance mark. The United Kingdom believes that if the proposals below are adopted, it would be necessary to label the package with label numbers 9, 9A and 9C. Therefore three labels/marks would still be required to represent the different hazards presented by the class 9 dangerous goods. The benefit of the new labels is that the specific hazards attributable to the class 9 substances are highlighted whereas prior to the adoption of label No. 9A for lithium batteries, only the generic class 9 label would be used. The United Kingdom suggests that no additional text is necessary to reflect the proposed new labels as 5.1.4 already makes the requirement clear. However we would like to hear other delegations opinions on this matter.

7. It was also suggested that the proposed new labels should have names allocated to them in line with how the class 7E fissile material label is presented. This has been incorporated into the proposals below but will also require a consequential amendment to the label no. 9A adopted at the last session.

## **Proposal**

8. In the Dangerous Goods List in Chapter 3.2, add Special Provision XXX against the following UN numbers in column (6): 3257, 3258

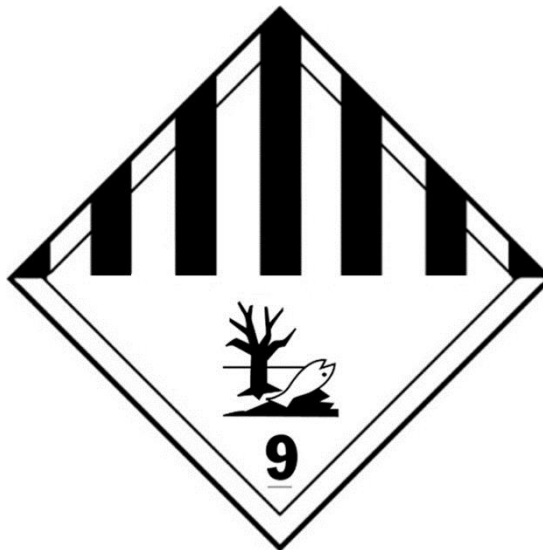
9. At 3.3.1, add a new Special Provision XXX, to read:  
“Cargo transport units shall display the placard (No. 9B), see 5.2.2.2.2, in accordance with the provisions of Chapter 5.3. The class label (Model No.9) together with the elevated temperature substance mark in accordance with 5.3.2.2 may continue to be used until 31 December [2021].”
10. At 5.2.2.2.2, under CLASS 9, after the label No. 9A for lithium batteries, add the following (new text underlined):



(No.9B)

Class 9 elevated temperature substances  
Symbol (seven vertical stripes in upper half; black;  
thermometer in lower half; red);  
Background: white;  
Figure “9” underlined in bottom corner’

11. In the Dangerous Goods List in Chapter 3.2, add Special Provision YYY against the following UN numbers in column (6): 3077, 3082
12. At 3.3.1, add a new Special Provision YYY, to read:  
“The label and placard to be used is No. 9C, see 5.2.2.2.2. The class label (Model No.9) together with the environmentally hazardous substance mark in accordance with 5.2.1.6 or 5.3.2.3 may continue to be used until 31 December [2021].”
13. At 5.2.2.2.2, under CLASS 9, after label No. 9B for elevated temperature substances, add the following (new text underlined):



(No.9C)

Class 9 environmentally hazardous substances

Symbol (seven vertical black stripes in upper half, fish and tree in lower half):  
black; Background: white;  
Figure “9” underlined in bottom corner’

## Consequential amendments

14. Amend the text in 5.2.2.2.1.3 to read as follows (new text underlined):

“5.2.2.2.1.3 With the exception of labels for divisions 1.4, 1.5 and 1.6 of Class 1, the upper half of the label shall contain the pictorial symbol and the lower half shall contain the class or division number 1, 2, 3, 4, 5.1, 5.2, 6, 7, 8 or 9 as appropriate. The label may include such text as the UN number, or words describing the hazard class (e.g. “flammable”) or for label Nos. 9A, 9B and 9C the symbol in accordance with 5.2.2.2.1.5 provided that the text does not obscure or detract from the other required label elements.”
15. Amend the final sentence of 5.2.2.2.1.5 to read as follows (new text underlined):

“5.2.2.2.1.5 For label Nos. 9A, 9B and 9C no text other than the class mark shall be included in the bottom part of the label”.
16. At the end of the transitional period [2021], 5.2.1.6 and 5.3.2.3 would no longer be required and should therefore be deleted. The same is not true for 5.3.2.2 as the elevated temperature substance mark would still be required for those substances transported at elevated temperature which are not Class 9.
17. Additionally, at the end of the transitional period the first sentence of 5.3.1.2.1 will need to be amended as follows:

“5.3.1.2.1 Except as provided in 5.3.1.2.2 for the Class 7 placard, ~~and in 5.3.2.3.2 for the environmentally hazardous substance mark,~~ a placard shall be configured as shown in Figure 5.3.0.

## Justification

18. The four class 9 entries UN3257, UN3258, UN3077 and UN3082 already require additional hazard communication to that of the class 9 label. For UN3257 and UN3258 an additional mark is required for cargo transport unit carrying such substances according to 5.3.2.2. For UN3077 and UN3082 an additional mark is required for packages in accordance with 5.2.1.6, or for cargo transport units the mark is required to be in accordance with 5.3.2.3.

19. The Sub-Committee has already accepted the principle that the Class 9 label can be adapted to illustrate the hazards posed by specific Class 9 dangerous goods by adopting the label 9A to illustrate the hazards posed by Class 9 and lithium batteries on one label.

20. It would seem a logical extension of this principle that the Class 9 dangerous goods that require additional hazard communication already could benefit from only requiring one label/placard instead of two separate ones to communicate their hazards.

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