

## **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**

24 November 2016

### **Fiftieth session**

Geneva, 28 November-6 December 2016

Item 2 (b) of the provisional agenda

**Recommendations made by the Sub-Committee  
on its forty-seventh, forty-eighth and forty-ninth sessions  
and pending issues: explosives and related matters**

## **Application of security provisions to explosives**

### **Transmitted by the expert from the United Kingdom**

### **Introduction**

1. At the forty-fifth meeting of the Sub-Committee the expert from Italy raised an issue with the classification of articles under UN No. 0349, Articles, Explosive, N.O.S 1.4S (ST/AG/AC./C3/2014/22). The issue was discussed by the Explosive Working Group and concluded that the issue extended beyond just articles in UN 0349 and encouraged Italy to develop a more comprehensive proposal for future consideration. (See informal document INF.61, 45th session). The issue concerned explosives that, as a consequence of being repackaged and reclassified, cease to be considered as high consequence dangerous goods (HCDGs) and therefore do not attract the security provisions of Chapter 1.4 of the Model Regulations.

2. At the forty-eighth meeting of the Sub-Committee the United Kingdom proposed changes to Special Provision 178 and the indicative table of high consequence dangerous goods aimed at ensuring explosives which should attract the additional security requirements of Chapter 1.4 are effectively identified. (See ST/SG/AC.10/C.3/2015/47 as amended by the informal document INF.17 (48<sup>th</sup> session)). There was wide support for the proposal that Articles, Explosive, Extremely Insensitive, 0486 (1.6N) should be added to the High Consequence Dangerous Goods list but there was no agreement on any of the three options put forward for N.O.S entries.

3. The United Kingdom expressed a preference for the option whereby the competent authority was charged with making a decision on whether the explosive should be considered as HCDGs when assigning it to an N.O.S entry. This proposal stimulated a discussion on what was intended to be covered by the definition in 1.4.3 of the Model Regulations and a potential disconnect with the items listed in the indicative list in Table 1.4.1. The Working Group on Explosives also noted that some entries on the indicative list were only relevant when carried in bulk, whereas for explosives it was irrespective of quantity (para 13, informal document INF.53 (48<sup>th</sup> session)).

4. The Working Group on Explosives requested guidance from the Sub-Committee on what was intended to be covered under the definition of HCDGs and whether the security provisions should only be applied to goods that have the potential to cause mass casualties and/or destruction as consigned for transport. Two options for clarifying the provisions were put forward for the consideration of the sub-committee; the first that HCDGs applied only to goods that have the potential to cause mass casualties and/or destruction as consigned and the second

was a broader interpretation to include those goods that have the potential for wider terrorist use.

5. In their response, the Sub-Committee expressed a preference for neither option put forward but rather an intermediate solution that retained the current system of 'identifying in the Model Regulations those dangerous goods which are deemed to be HCDGs, but would also associate a quantity factor in the case of explosives of Division 1.4.' (Item I.3 ST/SG/AC.10/C.3/96). The United Kingdom agreed to revisit this and submit a new proposal for the next session.

## Discussion

6. Consideration has been given to whether the wording of HCDGs in 1.4.3.1.1 could be revised or amended to achieve the intermediate solution desired by the Sub-Committee. The original proposal put forward by the UK was designed to resolve a specific issue but the direction provided by the sub-committee is of a more fundamental nature than was intended at the outset. The sub-committee was largely content with the current indicative list and simply asked that a quantity factor be considered for Division 1.4.

7. The items currently listed under the heading of Division 1.4 in the indicative list are often key elements (as they constitute either initiators or essential components in an explosive train) in any terrorist event where causing serious casualties and destruction is the objective. Suggesting that the security provisions should only be applied where these are being consigned in 'bulk' would be a seriously retrograde step. Even at low quantities, the items currently listed have the potential for widespread misuse and mayhem; 5Kg of UN 0255 could be used to initiate several thousand terrorist events. Applying a quantity factor to those items currently listed should therefore be excluded to avoid a lowering of standards.

8. An option would be to refer to the compatibility group of items in the same way as that for Division 1.3. Given the broad range of items needed to be included it is considered easier to exclude specific groups rather than list those that are included. Fireworks and pyrotechnic articles in Division 1.4 are generally considered not to present a significant threat of misuse. Intuitively Compatibility Group S should be considered low risk and should also be excluded. However, it is worth noting that should this be adopted, the original issue identified by the Italian expert would not be resolved.

9. The use of N.O.S entries should be relatively infrequent as they are only to be used where an appropriate entry in the Dangerous Goods list doesn't exist. Including all explosive N.O.S entries as HCDGs should not therefore impose an excessive burden on consignees. Applying the quantity factor to these entries is likely to further reduce the number of consignments captured by this change.

10. It is also worth noting the work being undertaken in reviewing and revising the provisions in Chapter 2.1 of GHS relating to the classification of explosives. The latest draft for a revised Chapter 2.1 (see informal document INF.11 (50<sup>th</sup> session)) proposes that all explosives which are safe to transport fall into one Category (Category 2) and that this category be further sub-divided into sub-categories 2A and 2B, where the latter would include those explosives considered to be less hazardous and warranting less severe labelling requirements. The criteria for inclusion in Category 2B have not yet been made explicit, but the provisional list proposed consists primarily of those explosives which are generally available to members of the public and considered to be low consequence articles. Reference to the articles so identified could provide an alternative approach to identifying which explosives should be considered high consequence. However, this approach would not lend itself to including a weight criteria requested by the Sub-Committee.

## Proposals

### Proposal 1

11. This proposal is made with a view to meeting the direction by the Sub-Committee whilst also achieving the objectives of the original proposals put forward by the experts from Italy and the UK.

12. It is proposed that a quantity factor be included for Division 1.4 explosives in line with the direction provided by the sub-committee but only to those goods not currently listed in Table 1.4.1. It is proposed that the limit be set at 5kg, in line with the weight limit prescribed for specific explosives to be carried in Limited Quantities. It is further proposed that this be applied to all Explosives NOS in Division 1.4. It is also proposed that Compatibility Groups G and S in Division 1.4 be excluded from the indicative list; and that Hazard Division 1.6 be included in the list of High Consequence Dangerous Goods.

13. The changes proposed are therefore:

Amend Table 1.4.1 in the Model Regulations to read (changes in *italics* and underlined):

Class1, Division 1.3 compatibility group C explosives

Class1, Division 1.4 UN Nos. 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455, 0456 and 0500

Class1, Division 1.4 explosives, NOS, in consignments greater than 5Kg

Class1, Division 1.4 explosives, other than those in compatibility group G or S, in consignments greater than 5Kg

Class1, Division 1.5 explosives

Class1, Division 1.6 explosives

### Proposal 2

14. An alternative would be to make the HCDG list consistent with the list of explosives considered less hazardous in the proposed Table 2.1.2 in the draft revised Chapter 2.1 of GHS.

15. The argument for inclusion of Hazard Division 1.6 is unaffected.

16. The consequential changes are therefore:

Amend Table 1.4.1 in the Model Regulations to read (changes in *italics* and underlined):

Class1, Division 1.3 compatibility group C explosives

*Class1, Division 1.4 except UN Nos. 0012; 0014; 0044; 0055; 0066; 0070; 0105; 0131; 0173; 0174; 0191; 0197; 0276; 0278; 0306; 0312; 0317; 0323; 0325; 0336; 0337; 0338; 0339; 0345; 0368; 0373; 0379; 0403; 0404; 0405; 0425; 0446; 0454; 0503; 0505; 0506; 0507; [0509;] 0510*

Class1, Division 1.5 explosives

Class1, Division 1.6 explosives