



**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****Fifty-first session**

Geneva, 3-7 July 2017

Item 2 (f) of the provisional agenda

Explosives and related matters:**application of security provisions to explosives N.O.S****Application of security provisions to explosives****Transmitted by the expert from the United Kingdom*****Introduction**

1. At the forty-fifth session 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 Working Group on Explosives and concluded that it 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 hence do not attract the security provisions of Chapter 1.4 of the Model Regulations) whilst the threat they pose remains unchanged.

2. At the forty-eighth session, 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 (48th session)). Following comments received from the Sub-Committee further proposals were made at the fiftieth session by representatives of Italy and the United Kingdom (informal documents INF.33 and INF.44 (50th session) in an attempt to resolve the specific and general issues previously raised.

* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, paragraph 98 and ST/SG/AC.10/44, paragraph 14).

Whilst a successful conclusion was found to the specific problem identified by Italy, the Sub-Committee felt the broader issue raised by United Kingdom requires further consideration.

3. The objective remains that explosives which have the potential for misuse in a terrorist event and which may, as a result, produce serious consequences such as mass casualties, mass destruction or mass socio-economic disruption are kept secure during transport. The problem with explosives is that relatively small quantities have the potential, in the wrong hands, to cause these serious consequences; the Boston bomb after all fitted into a standard rucksack. The threat from explosives cannot be derived directly from how they have been classified; an attacker is not bothered whether a detonator has been classified 1.1 or 1.4 in transport, they just want a detonator.

4. The recommendation from the Working Group on Explosives that explosives of Hazard Division 1.6 be included on the HCDG list is the subject of a separate proposal (see ST/SG/AC.10/C.3/2017/20).

Discussion

5. The Working Group on Explosives concluded that further development work was required before generic changes could be made to the HCDG list. Several experts felt that security provisions should be criteria based and not dependant on UN number but recognised that this would require careful study (see informal document INF.59, paragraph 9 (50th session)).

6. In considering the above comments, it is difficult to see what criteria can be applied other than that given in 1.4.3.1.1. of the UN Model Regulations, i.e. (explosives)..... that have the potential for misuse in a terrorist event which may, as a result, produce serious consequences such as mass casualties, mass destruction or mass socio economic disruption. Developing a new system based on new security definitions would mean specific assessment of each article and establishing additional labelling requirements to distinguish between those that require security plans and those that don't. This is considered to be disproportionate for what is required and revisions to the current HCDG as currently formatted is capable of resolving the discrepancies identified.

7. A significant number of explosive substances and articles have this potential for mis-use but because of the way they are packaged are overlooked in the current list of HCDG and hence do not attract the security provisions they warrant. Examples are Charges Explosive, Commercial without detonator, UN 0444 and 0445, Components Explosive Train, N.O.S UN 0383 and 0384. In addition there is the problem highlighted by the Italian expert whereby an article is reclassified into an N.O.S entry simply because there is no suitable name in the Dangerous Goods List with the appropriate Hazard Division designation.

8. There are a number of pitfalls in using the United Nations scheme for assigning hazards associated with explosives during transport for other regulatory purposes, security being one example. Because of the generic description for some entries in Chapter 3.1, the true nature and application of an article can be obscured. Articles Pyrotechnic covers a range of pyrotechnics that have uses across many industry sectors - theatrical, aerospace and offshore for instance – and differ widely in terms of their effects and construction. However, for the reasons identified in paragraph 5 above, developing an alternative is considered to be disproportionate and revisions to the HCDGs list can be made which minimises the effects of using generic entries.

9. The argument has been made that the List in Table 1.4.1. is only indicative, and there is nothing prohibiting national authorities from requiring the security provisions to explosives not on the list. Whilst this may be the case in theory, in practice those involved in the movement of dangerous goods advise that they use the list as a definitive guide to when additional security provisions are to be applied. In the interests of consistency and facilitating the movement of explosives, the list should be as comprehensive as possible.

10. It also needs to be recognised that there are explosives that society generally accepts which are not of particular terrorist threat and as a result can be made freely available to members of the public without particular control - fireworks, marine flares, theatrical pyrotechnics for example. It therefore seems sensible to specifically exclude these types of explosives from the requirement for additional security provisions. The additional advantage of using an exclusive list, as proposed to trying to develop an inclusive list, is that a positive decision has to be made when new explosives entries are made to the Dangerous Goods List as to whether or not the security requirements are to apply.

11. In addition it is noted that explosives of Compatibility Group C are included on the indicative for those in Hazard Division 1.3. There are a number of entries in this Division that should be considered as candidates for inclusion on the HCDG list, namely Compatibility groups F, H, J, K and L.

12. 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.

Proposal

13. In light of the above arguments, the following amendments are proposed:

Amend Table 1.4.1 in the Model Regulations to read (deleted text ~~struck out~~, changes in *italics* and underlined):

Class 1, Division 1.3 *except* compatibility group CG explosives

~~Class 1, Division 1.4 UN Nos. 0104, 0237, 0255, 0267, 0289, 0361, 0365 and 0500.~~

Class 1, 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; 0431; 0432; 0446; 0454; 0493; 0503; 0505; 0506; 0507; 0509; 0510*

Class 1, Division 1.5 explosives

Class 1, Division 1.6 explosives¹

¹ Subject to separate proposals, see ST/SG/AC.10/C.3/2017/20