

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

20 November 2013

### **Sub-Committee of Experts on the Transport of Dangerous Goods**

#### **Forty-fourth session**

Geneva, 25 November – 4 December 2013

Item 5 (b) of the provisional agenda

#### **Miscellaneous proposals for amendment to the Model Regulations on the Transport of Dangerous Goods: articles containing small quantities of dangerous goods**

## **Articles containing small quantities of dangerous goods**

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

1. At the forty-third session, the United Kingdom presented ST/SG/AC.10/C.3/2013/20 which proposed that the Sub-Committee consider whether a more generic approach to addressing articles containing small quantities of dangerous goods could be developed. The intention is that using a generic approach would make it easier for consignors to determine a suitable entry against which to assign their items or “articles”; would better communicate any hazardous properties of the substances contained; would limit the inappropriate use of UN 3363; and would avoid the necessity for proliferation of new entries in the Dangerous Goods List.

2. The discussion of this paper subsequently prompted the United Kingdom to produce INF.60 from the last session which provided an outline for discussions at a lunchtime working group held on 26<sup>th</sup> June 2013. The United Kingdom indicated that it would produce a further paper on this issue at the 44<sup>th</sup> Session which took comments made at the lunchtime working group into consideration and also any written comments provided by others in the Sub-Committee. At the time of writing the United Kingdom has only received written comments from one other delegation.

### **Discussion**

3. Having considered the issue further it is clear that more work is needed before any firm proposal can be put forward for adoption or otherwise. Indeed alternative approaches to addressing the problems identified in paper 2013/20 are possible and the United Kingdom has identified other options that may be more attractive to the Sub-Committee. These options are described in more detail below. The UK would thus welcome direction from the Sub-Committee in deciding upon the approach to resolving the issue of articles containing small quantities of dangerous goods.

## Options for consideration

### Option 1

4. The United Kingdom has proposed one approach in ST/SG/AC.10/C.3/2013/20 and we would wish to keep this paper on the table for the time being.

### Option 2

5. An alternative may be to clarify the scope of UN3363 by amending Special Provision 301 [and P907] to include 'articles' and then dividing it into four sub-categories depending on the amount of dangerous goods contained within the article/machinery/apparatus. The sub-categories could be as follows:

**Category 1 – Where the Limited Quantity amount is zero in Column 7a) of the Dangerous Goods List;**

The assumption is that dangerous goods which have zero allocated in the dangerous goods list are too dangerous to be transported under the less stringent provisions of the limited quantity regime. In this case, the consignor would be directed to seek competent authority approval for the transport of the article/machinery/apparatus concerned.

**Category 2 – Where the Limited Quantity amount is  $\leq$  5l/5kg in column 7a) of the Dangerous Goods List;**

This is the current extent of SP301. It dictates that UN3363 can only be used for dangerous goods in machinery or apparatus which are authorized to be transported in limited quantities and in quantities which do not exceed the limited quantity threshold for the substance in question. The UK would suggest that no change is made to this.

**Category 3 – Where the article/machinery/apparatus contains dangerous goods in excess of the Limited Quantity amount in Column 7a) of the Dangerous Goods List up to a limit of X;**

The suggestion here is that to transport as UN3363 there would be an additional requirement to add the Class labels appropriate to the substance(s) contained within the article/machinery/apparatus and that additional text is also required on the transport document to identify the dangerous goods contained[(for example, UN3363, DANGEROUS GOODS IN MACHINERY/APPARATUS/ARTICLES, 9, (6.1), (3))]. This suggestion is put forward as it was clear from previous discussions in the working group that communication and identification of the hazards was a key concern for many delegations. The Sub-committee would need to decide upon the upper quantity limit to allow for transport under these conditions. A further condition for use of this entry would be the application of Packing Instruction P907 as now.

**Category 4 – Where the article/machinery/apparatus contains dangerous goods in excess of X;**

For the transport of article/machinery/apparatus containing dangerous goods in excess of the upper amount X in category 3, it is suggested that the conditions of Category 3 are met plus the application of a new Packing Instruction which is more stringent in nature than P907 [which could be along the lines of P908?]. Again, the

Sub-Committee would need to determine what the requirements of that Packing instruction would be.

### Option 3

6. This approach does not attempt to define articles or equipment but looks at the underlying purpose behind the transport operation. Firstly the intention is not to distribute or deliver dangerous goods and secondly the proportion of dangerous goods to the overall mass is much smaller than packaged dangerous goods. So a simple approach would be to look at the amount of dangerous goods as a proportion of the mass of the item that contains it and set percentage limits for the dangerous goods content with a stepped approach to control. This might look like the example below. To put it into perspective the exempt lines have a maximum of 50g for the top weight articles but the table is, at present, purely arbitrary. However the principal could neatly be applied to a UN number by having multiple lines with the weight limits in light text and the percentage written into the various columns with a short Special Provision by way of explanation/application.

7. Except for classes 1, 7 and other articles and equipment identified by name in the Dangerous Goods List, dangerous goods fully contained or sealed in equipment or articles of any other description where the dangerous goods are integral to the operation or function of the equipment or article, may be exempted or transported under the following conditions:

Mass of article/equipment	% mass of dangerous goods	Provisions applied
up to 5kg	Up to 1%	Exempt
Up to 5kg	> 1% to 5%	Limited quantities
Up to 5kg	>5% to 10%	See packing instruction xxx
> 5 to 25kg	0.2%	Exempt
> 5 to 25kg	>0.2% to 1%	Limited quantities
> 5 to 25kg	> 1% to 10%	See packing instruction xxx
Above 25kg	Up to 10%	See packing instruction xxx
Above 100kg	Up to 10%	See packing instruction yyy

8. Articles and equipment must meet appropriate manufacturing and testing standards.

9. Articles and equipment with more than 10% dangerous goods by mass shall be referred to the competent authority.

10. Note the dangerous goods may be consumed by the article or equipment during the course of its operation and the article or equipment may be fitted with leak tight closures to allow refilling.

### Option 4

11. Since, in the opinion of the UK, there is considerable misunderstanding and misuse of the existing entries for UN3363 – DANGEROUS GOODS IN MACHINERY/APPARATUS, UN 3166 ENGINE, INTERNAL COMBUSTION/VEHICLES and the application of Special Provision 363, the use or definition of terms such as machinery, equipment, apparatus, means of containment etc. could be re-visited to clarify what is meant and to identify whether a gap is then left that might be addressed by just one other new entry in the Dangerous Goods List.

### **Option 5**

12. It may be however that the Sub-Committee decides that a general approach cannot be agreed upon. A further option thus could be to do nothing at present and continue to have an ad-hoc approach to the assignment of articles containing small quantities of dangerous goods, perhaps with some general guidance on assignment to existing entries or the need to propose new entries set out in the Guiding Principles document.

### **Conclusion**

13. In order to make progress on this issue the UK would like the Sub-Committee to consider further the original approach proposed in ST/SG/AC.10/C.3/2013/20 and the alternative approaches now identified and come to a decision on the preferred way forward. Once the approach has been agreed upon the UK would be prepared to draft specific proposals for adoption based on the identified approach.

---