



**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****Thirty-ninth session**

Geneva, 20–24 June 2011

Item 5 (a) of the provisional agenda

**Miscellaneous proposals of amendments to the Model Regulations
on the Transport of Dangerous Goods: packagings****Prevention of dangerous electrostatic discharge****Submitted by the expert from Germany¹****Introduction**

1. During the last session of the Sub-Committee the expert from Germany presented document ST/SC/AC.10/C.3/2010/68 on the prevention of electrostatic discharge. Several delegates expressed differing views on the question if dangerous goods regulations should contain provisions on the prevention of electrostatic discharge, and if so, how detailed such provisions should be. Therefore no decision was taken at the thirty-eight session.

2. According to 4.1.2.1 of the additional general provisions for the use of IBCs it is required that *when IBCs are used for the transport of liquids with a flash point of 60 °C (closed-cup) or lower, or for powders liable to dust explosion, measures shall be taken to prevent a dangerous electrostatic discharge.*

3. Although single packagings for liquids and solids can reach with maximum 450 litres nearly half the capacity of a standard IBC (1000 litres) and the effect of the explosion of vapour or dust does not depend on the amount of transported liquid or solid (powder) but on the amount and concentration of free vapour or dust, there is no regulation for preventing dangerous electrostatic discharge by using packagings according to 6.1.

¹ In accordance with the programme of work of the Sub-Committee for 2011–2012 approved by the Committee at its fifth session (refer to ST/SG/AC.10/C.3/76, para. 76 and ST/SG/AC.10/38, para. 16).

4. Because dangerous electrostatic discharge may be a problem not only for IBCs, but also for single packagings, it is proposed to apply the requirement of 4.1.2.1 for IBCs to all packagings for dangerous goods.

5. During the last meeting, some experts expressed their view that the prevention of electrostatic is not a question of safe transport of dangerous goods, as it causes mainly problems while handling, loading and unloading. If the Sub-Committee follows that approach, the deletion of the existing 4.1.2.1 would be a logical consequence. But the expert of Germany is of the opinion that 4.1.2.1 should remain, because handling, loading and unloading operations do belong to the transport operation, too. On the other hand a more detailed description of the required measures is not necessary. The requirement connects dangerous goods legislation with adjacent fields of law, as for example provisions on industrial safety and labour protection. Such provisions deal with the handling of substances liable to vapour or dust explosions and they are national provisions.

Proposal

6. Insert a new 4.1.1.15 to read as follows:

“4.1.1.15 When packagings, including IBCs are used for the transport of liquids with a flash point of 60 °C (closed-cup) or lower, or for powders liable to dust explosion, measures shall be taken to prevent a dangerous electrostatic discharge.”

7. Renumber the following paragraphs as follow:

- 4.1.1.16 For plastics drums
- 4.1.1.17 Explosives, self-reactive substances and organic peroxides
- 4.1.1.18 Use of salvage packagings
 - 4.1.1.18.1 Damaged, defective
 - 4.1.1.18.2 Appropriate measures
 - 4.1.1.18.3 Appropriate measures

8. Delete 4.1.2.1

9. Renumber the following paragraphs as follow:

- 4.1.2.1 Every metal, rigid
- 4.1.2.2 IBCs of type
- 4.1.2.3 Except for routine

10. Revise 4.1.8.2 as follow:

"4.1.8.2 The definitions in 1.2.1 and the general packing provisions of 4.1.1.1 to 4.1.1.15, except 4.1.1.10 to 4.1.1.12, apply to infectious substances packages. However, liquids shall only be filled into packagings which have an appropriate resistance to the internal pressure that may develop under normal.

11. Revise the introduction to Packing Instruction P621 and IBC 620 to read as follow:

P621	PACKING INSTRUCTION	P621
This instruction applies to UN No. 3291		
The following packagings are authorized provided that the general provisions of 4.1.1, except 4.1.1.16, and 4.1.3 are met:		
....		

IBC620	PACKING INSTRUCTION	IBC 620
This instruction applies to UN No. 3291		
The following IBCs are authorized, provided that the general provisions of 4.1.1 , except 4.1.1.1-16, 4.1.2 and 4.1.3 are met:		
....		
