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

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PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Comments on ST/SG/AC.10/C.3/2006/101 and ST/SG/AC.10/C.3/2006/81 DROP TEST TARGET

Transmitted by the expert from Germany

Reference is made to the decision of the Twenty-ninth session of the Sub-Committee of Experts on the Transport of Dangerous Goods to amend 6.1.5.3.4, 6.3.2.5 (a), 6.5.6.9.3 and 6.6.5.3.4.3 with respect to a better specification of targets used to perform drop tests and the open points in square brackets (seeST/SG/AC.10/C.3/58 paragraph 32 and ST/SG/AC.10/C.3/58/Add.1 paragraph 6.1.5.3.4).

The expert from Germany strongly supports the intention of the amendment which is seen as a step towards the comparability and credibility of performance test results from around the world.

It is supported to insert such detailed specification in the Model Regulations itself, or, as an alternative in future, in the Manual of Tests and Criteria, rather then to refer to ISO 2248.

The data put in square brackets and the fact that ISO 2248, which served as a basis for the amendment, is under review at present, give reason to reconsider the terms and figures of the envisaged amendment in general.

With respect to the mass relationship of 50, German test houses have indicated that there may be a large number of IBC and Large Packaging design types which could be invalidated. This would be the case because the mass relationship had been agreed with the German competent authority as to be 1:15, but not less then 20 tons, at least, for IBCs and Large Packagings. The mass relationship for IBCs and Large Packagings is questioned therefore.

Guidance should be given to the modal regulators, at least, how to deal with design type approvals based on drop tests using non-complying targets.

The envisaged detailed target specification should be both, suitable for the design and construction of new sites, as well practical for inspection purposes. The chosen values (flatness and stiffness) do

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not cope with this requirement. The envisaged maximum deviation from the surface flatness of the target has only a very limited influence on test results. If any, the roughness of the surface may have some effect on some packaging types. The stiffness figure is neither usable for the design of new targets nor easy to be measured for existing targets.

As a consequence, the following amendments are suggested:

"6.1.5.3.4 *Target*

The target shall be a non-resilient, horizontal and flat surface, massive enough to be immovable and rigid enough to be non-deformable under test conditions, and shall:

- <u>be a reinforced concrete block</u> with a <u>total</u> mass of at least [50] times that of the heaviest package to be tested,
- <u>have a maximum length of 5 times of its thickness and</u> be sufficiently large to ensure that the test package falls entirely upon the surface,
- be covered with an imbedded steel plate, whose thickness prevents the concrete to become damaged by the tests and whose surface is kept free from local defects, capable of influencing the test results."

NOTE: This test requirement applies to design types for packagings manufactured after 31 December 201X.