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**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-second session**

Geneva, 27 November-6 December 2017

Item 3 of the provisional agenda

**Listing, classification and packing****Multiple marking of packagings, including IBCs and large  
packagings, indicating conformity with more than one  
successfully tested design type****Transmitted by the European Chemical Industry Council (CEFIC)  
and the Dangerous Goods Advisory Council (DGAC)\*****Introduction**

1. At the forty-seventh session of the Sub-Committee, the document ST/SG/AC.10/C.3/2015/24 submitted by DGAC addressed the lack of guidance on permissible packagings for the transport of substances which are filled as liquids and solidify during or before transport and vice-versa. During the discussion in plenary, some delegations endorsed the principle of addressing this issue, whereas others did not support amendments of the regulations and recommended the current approach according to which their competent authorities approve certain packagings for multiple use. In the case of solidifying liquids, a packaging which is simultaneously provided with design type approvals for the carriage of both liquid and solid dangerous goods, should be permissible and accepted without any restrictions.

2. Following the recommendations resulting from the discussion in the Sub-Committee, consignors are trending towards the use of packagings with more than one approval, which simultaneously fulfil design criteria and performance test provisions of different design types. Based on the safety performance related to each of the approved design types, such packagings provide flexible and pragmatic solutions in case of

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\* 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)

ambiguous packing provisions required in certain applications, e.g. comparable to the issue of solidifying liquids.

3. However, current experience with the use of multi-approved packagings, although properly marked according to the corresponding design type approvals, reveals diverging views on the permissibility for transport in general:

- Rejection and uncertainty of carriers and enforcement bodies about the permissibility of dual-marked packagings, e.g. when using packagings with approvals for liquid and solid dangerous goods, for example a steel drum marked for dual use simultaneously with both UN-strings (e.g. 1A1/X2.0/400/... and 1A1/X420/S/...) displayed on the same drum.
- Discussion about preventing heavy duty metal IBCs (11A) to be dual-approved as a metal box (4A), although fulfilling each of the design criteria and corresponding performance test provisions. This is problematic, as related applications are widely used by the waste management industry and firefighting brigades for flexibility of carriage of solids in bulk, or alternatively of articles and inner packagings as well. This is a safety issue, in particular to avoid additional risks of emptying single packagings into the IBC to reach compliance for bulk carriage.
- Well-established use of multiple coded cardboard boxes, where the marks indicate the specific performance parameters for the different packing groups, or testing of different inner packages and chemicals. This is an application in wide use and beneficial to packing operations, which could also serve as currently accepted best practice.

4. For the sake of legal certainty and to support flexibility in the use of packagings, including IBCs and large packagings, which individually provide compliance to various design types of different kind and category, multiple approvals should be permissible to certify conformance to each and every related design type. It should also be explicitly allowed in the regulations to apply the specific marks to the packagings individually or in multiple combination to indicate compliance to each of the corresponding design types.

## Proposal

5. Supplement 4.1.1 by a new sub-paragraph under 4.1.1.3 including a note to read as follows (new text underlined):

“4.1.1.3.1 Packagings, including IBCs and large packagings, which conform to successfully tested design types shall bear marks compliant with the related provisions of Part 6. For packagings, including IBCs and large packagings, having more than one approval, the specific marks may be applied individually or in multiple combination to indicate those design criteria and performance test provisions that have been met.”

**NOTE:** Receptacles constructed according to the provisions of Part 6 related to packagings, IBCs and large packagings may fulfill the criteria of various design types of any kind and category. Where required, multiple approvals shall certify simultaneously conformance of the receptacles to each successfully tested design type.

## **Justification**

6. Without any compromise on safety, the use of multiple-approved packagings is in full compliance with the packing provisions of each of the corresponding design types and the specific transport conditions required by the allocated substances, which in certain cases may not be covered by a single approval on its own.

7. The display of multiple packaging certifications simultaneously on the same packaging provides the full set of information to the user about all safety-relevant performance parameters, which is of crucial importance to ensure safety and compliance within the packing process.

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