

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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Item 6 (b) of the provisional agenda

Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods:

Packagings, including the use of recycled plastics material

Use of the REC-marking on packagings and intermediate bulk containers (IBCs) made from recycled plastics material

Transmitted by the expert from Belgium

I. Introduction

1. The initial provisions for the use of recycled plastics material (RPM) for the production of packagings and IBCs for transport of Dangerous Goods were initially introduced in the tenth revised edition of the United Nations *Recommendations on the Transport of Dangerous Goods* in 1997 (see ST/SG/AC.10/23/Add.1). These provisions included a definition of recycled plastics material and a requirement to mark packagings produced from RPM with REC.
2. In 2005, standard ISO 16103, which was developed to assist competent authorities in approving packagings made from recycled plastics material, was approved by ISO. Subsequently a note referring to this standard was introduced in the *Model Regulations* (see document ST/SG/AC.10/C.3/2005/37).
3. During the recent biennia, due to technological progress and changing societal needs, a number of amendments have been made to the provisions for the use of RPM for the manufacture of packagings and IBCs.
4. These amendments were:
 - An amendment to 6.5.5.3.2 so that RPM can be used for the production of rigid plastics IBCs.
 - An amendment to 6.5.5.4.6 so that RPM can be used for the production of composite IBCs with a plastics inner receptacle.
 - The introduction of a new 6.5.2.1.2 that requires IBCs produced from recycled plastics material to be marked “REC” in line with what is required for packagings in 6.1.3.6.
 - Amendments to the definition of recycled plastics material in 1.2.1. Those resulted in allowing also plastic material from other than industrial sources to be used, while still requiring that the source material as well as the produced packagings meet the necessary requirements to guarantee safety during transport of these packagings.
 - An amendment to the note referring to ISO 16103 specifying that this standard is not obligatory to comply with for the production of packagings or IBCs.
5. In line with what was decided for rigid and composite IBCs, proposal 3 of document ST/SG/AC.10/C.3/2024/47¹ on the use of RPM for flexible IBCs (fIBC), proposes to amend 6.5.2.1.2 to require the REC-marking also for fIBCs made from RPM.

¹ [ST-SG-AC10-C3-2024-47E.pdf \(unece.org\)](https://www.unece.org/ST/SG/AC10-C3-2024-47E.pdf).

6. However, during the preceding discussions on document ST/SG/AC.10/C.3/2024/47, doubt was expressed about the practical use of the REC-marking by several of the contacted experts.

7. Until recently it was common practice that packagings made from RPM may only be reused a limited number of times for the production of new packagings because of expected degradation and lower quality of the source material. The current version of standard ISO 16103:2005 also forbids the use of packagings marked with REC from being further recycled (clause 5.3.7).

8. The above amendments, especially those to the definition of RPM, have resulted in provisions that allow RPM from less well-controlled sources, like post-consumer material, that might harbor a lower quality and homogeneity compared to RPM from packagings and IBCs that have been previously used for transport of dangerous goods. Hence it seems contradictory to on the one hand open up the system for less well-controlled RPM while on the other hand still requiring the REC-marking.

9. In the ongoing revision of standard ISO 16103 a different approach is being followed where much more emphasis is put on the quality of the source material in addition to the performance-based test requirements that must always be followed for packagings and IBCs.

10. It is understandable from a historical point of view that marking and a restricted reuse of plastic packagings were introduced to ensure the quality and the safety of the recycled packagings. Nevertheless, it is noteworthy that for packagings and IBCs that might be produced from other materials like steel or fiberboard, there is no requirement to mark them even though these materials are frequently recycled.

11. In summary, Belgium believes that the obligatory application of the REC-mark has no clear purpose anymore and questions the current relevance of this mark in the view of recent technological progress, the recent amendments to the *Model Regulations* and the ongoing revision of standard ISO 16103.

12. Therefore Belgium proposes to delete the current paragraphs requiring the application of the REC-mark and renumbering the following paragraphs accordingly.

II. Proposal

13. Delete 6.1.3.6 and 6.5.2.1.2 from the *Model Regulations*.

14. Renumber the current 6.1.3.7 to 6.1.3.6, the current 6.1.3.8 to 6.1.3.7 and the current 6.1.3.9 to 6.1.3.8.

15. Renumber the current 6.5.2.1.3 to 6.5.2.1.2 and the current 6.5.2.1.4 to 6.5.2.1.3.

16. If the proposals from previous paragraph above are accepted, there is no reason to accept proposal 3 from document ST/SG/AC.10/C.3/2024/47.

III. Sustainable development goals

17. This proposal is linked to Sustainable Development Goal 12 “*Ensure sustainable consumption and production patterns*” and more specifically its target 12.5 “*By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse*”.
