Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Bern, 9-13 September 2024

Item 5 (b) of the provisional agenda

Proposals for amendments to RID/ADR/ADN:

New proposals

Proposed amendments to RID/ADR 4.1.1.11 and 4.1.1.2 regarding empty, uncleaned packagings

Transmitted by the European Federation of Waste Management and Environmental Services (FEAD)\(^*\) \(^**\)

Summary

Executive summary: Proposed amendment of 4.1.1.11 and 4.1.1.2. to clarify the application of UN 3509 and the use of empty packagings with residues of different classes.

Decision to be taken: Amendment of 4.1.1.11 and 4.1.1.2. Additional amendment of 4.1.6.10 to align the wording.

Related documents: Informal document INF.11 transmitted by Ireland to the Working Party on the Transport of Dangerous Goods session held on 15-17 May 2023 and informal document INF.34 transmitted by FEAD to the Joint Meeting session held on 19-29 September 2023.

I. Background

1. Ireland transmitted informal document INF.11 on the carriage of empty, uncleaned packaging waste to the Working Party on the Transport of Dangerous Goods session held on 15-17 May 2023. In this document, Ireland informed the Working Party about a national

\(^*\) A/78/6 (Sect. 20), table 20.5.
\(^**\) Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2024/32.
exemption with respect to the carriage of specific empty, uncleaned (waste) single
packagings, composite packagings and composite IBCs.

2. This exemption was deemed necessary because in many circumstances the provisions
of UN 3509 PACKAGINGS, DISCARDED, EMPTY, UNCLEANED cannot be utilised
under the specific carriage conditions required under this entry. The purpose of the exemption
is to provide participants that generate empty, uncleaned packagings containing waste
residues of dangerous goods classes 3, 4.1, 6.1, 8 and 9 with certain exemptions from the
current RID/ADR provisions.

3. Ireland considered the option of making a request in relation to this issue for a national
derogation under Directive 2008/68/EC to the European Union (EU) Committee on the
Transport of Dangerous Goods. However, as this issue may also be experienced in other RID
Contracting States/Contracting Parties to the ADR, and potentially other modes of dangerous
goods carriage, it considered it preferable if a regulatory solution could be found that is
available to all. Therefore, the Irish delegation wanted to hear the opinions of other
dellegations in relation to the issue and to hear initial suggestions for a possible long-term
solution in the regulations.

4. The Working Party advised the representative of Ireland to submit her document to
the informal working group on the transport of hazardous waste of the Joint Meeting for
advice.

5. FEAD transmitted informal document INF.34 to the Joint Meeting in September 2023
with the intention to ask delegates, how they interpret the use of UN 3509 PACKAGINGS,
DISCARDED, EMPTY, UNCLEANED in the case of the carriage of drums or IBCs.

6. UN 3509 can be used either for small packagings (jerricans, boxes, small drums) or
for larger packagings (200 litres drums) or IBCs. In such case, either an outer packaging has
to be used or the UN 3509 packagings have to be transported in bulk (see Figure 1 in the
annex).

7. “EMPTY PACKAGING”, or “EMPTY IBC” (5.4.1.1.6.2.1) are used only if the
packaging or the IBC is not damaged and still covered by the certificate of approval (see
Figure 2 in the annex).

8. In the case of large drums (more than 200 litres) or IBCs, if they are not covered
anymore by the certificate of approval (adherent residues, corrosion, periodic control is
outdated for IBCs, …), the only possibility for carriage is the use of UN 3509. They shall be
transported, either in another packaging (packing instruction P003, IBC08 or LP02) or in
bulk (special provision for carriage in bulk VC1, VC2 and AP10). In the case we describe,
bulk transport would be the only alternative because the large drums or the IBCs are too big
to be packaged.

9. However, in some cases, they are still compatible with a carriage as a package (and
not in bulk), for example by putting the drums on a stretch-wrapped pallet, or because the
only default of the IBC is to exceed the inspection deadline. Handling and stowage are still
possible as a package because they are still in a good shape to be transported like that. In
those cases, loading or unloading in a bulk wagon/vehicle or container would generate more
difficulties and risks (see Figures 3 and 4 in the annex).

10. With informal document INF.34 FEAD wanted to ask the delegates if transporting
empty, uncleaned, discarded packagings as a package (and not only in bulk) could be
considered. Nevertheless, the document was finally withdrawn by FEAD before any
discussion took place at the Joint Meeting in order to have the discussion, first, within the

11. The IWG on the Transport of Hazardous Waste hold a meeting on 8 February 2024 in
which the need for clarification of the scope between the application of UN 3509 and the use
of empty packagings (as defined in RID/ADR) with residues of different classes was
discussed.

12. During the IWG meeting FEAD presented a slide that showed the need for
clarification of the scope, picturing it as a white area between the application of UN 3509
and the use of empty packagings with residues of different classes. The slide is shown in Figure 5 in the annex to this document.

13. A next slide showed the situation provided that the new clarification is incorporated in RID/ADR. The slide is also shown in Figure 6 in the annex to this document.

14. The IWG acknowledged the challenges and different interpretations of the provisions and agreed that a new note under 4.1.1.11 could be a good way forward to clarify the issue. The wording should ensure that the scope is clear, meaning that it is only applicable for waste management activities and not to go back to the filler/supplier, and that the exemption will only apply in specific circumstances, e.g. for not damaged, closed packaging, or for expired IBC, for example.

15. It is herewith clarified that packagings, including IBCs, which after proper discharging still contain residues that cannot be removed without major effort, are still considered “empty” for the purpose of the amendments proposed to 4.1.1.11.

II. Proposal

16. Proposed amendments to 4.1.1.11 are in bold and underlined or stricken-through. Notably, clarifications to note 1 and new notes 2 and 3 are proposed as follows:

"4.1.1.11 Empty packagings, including IBCs and large packagings, that have contained a dangerous substance are subject to the same requirements as those for a filled packaging, unless adequate measures have been taken to nullify any hazard.

NOTE 1: When such packagings are carried for disposal, recycling or recovery of their material, they may **also alternatively** be carried under UN 3509 in bulk or by using an outer packaging provided the conditions of special provision 663 of Chapter 3.3 are met.

NOTE 2: Empty, uncleaned packagings, including IBCs, which can have residues which remain in the packaging after proper discharging and cannot be removed without major effort, may be carried for disposal, recycling or recovery of their material by derogation from 4.1.1.11, under the conditions listed below, provided that they remain firmly closed using the original closure devices or other equivalent securing devices, so that they remain secure and leakproof under normal conditions of carriage:

- **exceeding the permitted period of use according to 4.1.1.15 for plastics packagings,**
- **after the date of expiry of the last periodic test or inspection, by derogation of 4.1.2.2 for IBC, or**
- **without taking into account the packaging and IBC documentation required by 4.1.1.1, 4.1.1.3, 6.1.1.5, 6.1.5.8.2, 6.5.1.1.4 and 6.5.6.14.2.**

Such derogation shall only be applied for empty packagings having contained dangerous goods of classes 3, 4.1, 5.1, 6.1, 8 or 9. In addition, such packagings shall not have contained:

- **Substances assigned to packing group I or that have "0" assigned in Column (7a) of Table A of Chapter 3.2;**
- **Substances classified as desensitized explosive substances of Class 3 or Class 4.1;**
- **Substances classified as self-reactive substances of Class 4.1;**
- **Radioactive material; or**
- **Asbestos (UN Nos. 2212 and 2590), polychlorinated biphenyls (UN Nos. 2315 and 3432) and polyhalogenated biphenyls, halogenated monomethylidiphenylnmethanes or polyhalogenated terphenyls (UN Nos. 3151 and 3152).**

NOTE 3: Empty, uncleaned packagings, including IBCs, which can have residues which remain in the packaging after proper discharging and cannot be removed without major effort, and which are carried for assessment for possible reconditioning, repair, remanufacturing or reuse, may be carried under the conditions of note 2 as far as the
receiving outlet. If the packaging is inspected and then deemed suitable for reconditioning, repair, remanufacturing or reuse, all relevant provisions of the RID/ADR will apply.”

17. In addition, FEAD proposes to align 4.1.1.2 with the proposed amendments of 4.1.1.11 exposed above. Amendments proposed to 4.1.1.2 are in bold and underlined, as follows:

“4.1.2.2 Every metal, rigid plastics and composite IBC, shall be inspected and tested, as relevant, in accordance with 6.5.4.4 or 6.5.4.5:

• before it is put into service;
• thereafter at intervals not exceeding two and a half and five years, as appropriate;
• after the repair or remanufacture, before it is re-used for carriage.

An IBC shall not be filled and offered for carriage after the date of expiry of the last periodic test or inspection. However, an IBC filled prior to the date of expiry of the last periodic test or inspection may be carried for a period not to exceed three months beyond the date of expiry of the last periodic test or inspection. In addition, an IBC may be carried after the date of expiry of the last periodic test or inspection:

(a) after emptying but before cleaning, for purposes of performing the required test or inspection prior to refilling, for purposes of disposal, recycling or recovery of its material; and

(b) unless otherwise approved by the competent authority, for a period not to exceed six months beyond the date of expiry of the last periodic test or inspection in order to allow the return of dangerous goods or residues for proper disposal or recycling.

NOTE: For the particulars in the transport document, see 5.4.1.1.11.”

18. In addition, FEAD proposes to align 4.1.6.10 with the wording of the proposed amendments of 4.1.1.11 and 4.1.1.2 exposed above. Amendments proposed to 4.1.6.10 are in bold and underlined or stricken-through, as follows:

“4.1.6.10 Refillable pressure receptacles, other than closed cryogenic receptacles, shall be periodically inspected according to the provisions of 6.2.1.6, or 6.2.3.5.1 for non-UN receptacles, and packing instruction P200, P205, P206 or P208 as applicable. Pressure relief valves for closed cryogenic receptacles shall be subject to periodic inspections and tests according to the provisions of 6.2.1.6.3 and packing instruction P203. Pressure receptacles shall not be filled after they become due for periodic inspection but may be carried after the expiry of the time-limit for purposes of performing inspection, or disposal, recycling or recovery of its material, including the intermediate carriage operations.”

III. Justification

19. Industry that generates waste uncleaned packagings with residues of dangerous goods may have sourced the raw materials in packagings from suppliers across the globe. In many cases these raw materials are not sourced directly from the manufacturers and there are many agents / distributors in the supply chain. There are thus difficulties sourcing the packaging documentation (associated test report and instructions on use).

20. According to 4.1.1.11, empty IBCs are subject to the same requirements as those for filled packagings. This includes 4.1.2.2, which allows the transport of uncleaned empty IBCs after the date of expiry of the last periodic test or inspection, but only for the purposes of performing the required test or inspection. It also allows the return of dangerous goods or residues in the IBC for proper disposal or recycling.

21. Therefore, empty, uncleaned packagings cannot be carried for purposes of disposal, recycling or recovery of its material, without updating the inspection or testing. However,
such easiness is permitted elsewhere in RID/ADR for refillable pressure receptacles, without any deadline, for example in 4.1.6.10.

22. This proposal will serve to assist stakeholders in Contracting States/Contracting Parties in remaining in compliance with 4.1.1.11 for the limited situations described, which include, for example, the absence of the documentation requirements of 4.1.1.1, 4.1.1.3, 6.1.1.5, 6.1.5.8.2, 6.5.1.1.4 and 6.5.6.14.2, in particular packaging documentation (associated test report and instructions on use), or exceeding the permitted period of use according to 4.1.1.15.

23. The proposal clarifies the current situation, where there are different interpretations of when to use UN 3509 and when to use the provision for empty packagings (as defined in RID/ADR).

24. The proposal does not increase the current risk level. Waste is highly controlled, and all other RID/ADR provisions apply and are complied with.
Annex

**Figure 1**

UN 3509 PACKAGINGS, DISCARDED, EMPTY, UNCLEANED (WITH RESIDUES OF 3, 6.1, 8, 9).

This kind of damaged packagings as to be considered as a whole:

- either these damaged packagings (with their original labels) has to be "repackaged" (P003).
- The class 9 label and UN 3509 marking is on the "outer" packaging.

- either they can be transported in bulk. The class 9 label is on the container with orange plate (880509).

**Figure 2**

EMPTY PACKAGINGS, WITH RESIDUES OF 3, 6.1, 8.

These empty packagings are transported as a package (not in bulk) with no "outer" packagings.

The original labelling is still on the packaging.
Figure 3

The wrong interpretation of UN 3509:
- These empty drums are either transported in another packaging (with the class 9 label), either they are transported in bulk (and the class 9 label is on the container).
- The class 9 label and UN 3509 marking can’t be on the empty packaging directly (or only if it is used as an “outer packaging” with damaged packagings inside, UN 3509 is then assigned to these damaged packagings as a whole).

These empty packagings are not compliant with 4.1.1.11: they do not fulfill the same requirements as those for a filled packaging.

They could be transported as “Empty packaging” with a new note under 4.1.1.11?

Figure 4

The wrong interpretation of UN 3509:

These empty packagings are compliant with 4.1.1.11 and should have been transported under “Empty packaging, 8.1”

UN 3509 is often misunderstood.
Figure 6

UN 3850 PACKAGINGS, DISCARDED, EMPTY, UNCLEANED (WITH RESIDUES OF 3, 6.1, 8, 9).

Assignment to UN 3569, PACKAGINGS, DISCARDED, EMPTY, UNCLEANED and compliance with the requirements (SP 563)

Is it possible to transport UN 3569 in another packaging (P903)?

YES

Transport in packages (possibility of using 1.1.3.6 assumption in unlimited quantities)

NO

Is it possible to transport UN 3569 in bulk?

YES

Transport in bulk (VC1/VC2)

NO

Residues of classes 2, 4.1 (except self- initiating), 5.1, 5.1.1 and 6. No substances with FIG. for transport category II not acceptable and PCB/PCT (see 1.1.3.6)

YES

The packaging can fulfill the same requirements as a filled packaging? (procedure - closures - capable of passing performance tests) (4.1.1.51)

NO

Carried for disposal, recycling or recovery of material?

YES

Subject to full ADR with other UN number

NO

NO. but conditions under new nota are met

Not subject to ADR (1.1.3.5)

No UN number needed Assignment to EMPTY PACKAGING, EMPTY IBC or EMPTY LARGE PACKAGING

YES

Measures have been taken to nullify the hazard? Used, uncleaned packaging having contained classes 2, 3, 4.1, 5.1, 6.1, 8 and 99 (see 1.1.3.5)

NO

Used, uncleaned packagings having contained dangerous goods classified in transport category II

YES

Subject to full ADR (possibility of using 1.1.3.6 assumption in unlimited quantities)