

UN/CETDG/20/INF.26

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

(Twentieth session,
Geneva, 7 - 16 December 1998,
agenda item 2(b))

PACKING INSTRUCTIONS

Transmitted by the Expert from the United Kingdom

Report of an informal discussion group meeting held in the context of the RID Restructuring Working Group, London 23-27 November 1998.

In the development of proposals for a rationalised approach to multi-modal Packing Instructions for inclusion in the UN Model Regulations, the expert of the United Kingdom is concerned that views from all modes of transport should be fully considered.

Concerned that since the timetable of meetings in the various modal fora does not always enable full consideration of proposals submitted to the UN Committee of Experts, the representative of the UK suggested that an informal Working Group be held in the context of the November 1998 RID Restructuring Working Group meeting to discuss problems for RID/ADR remaining from proposals made in papers ST/SG/AC.10/1998/16 and Add.1-5.

The RID Restructuring Working Group agreed that an informal discussion group should meet and its report is attached to this Information Paper. It was agreed by the RID Restructuring Working Group that this report should be submitted to the UN Committee of Experts on a **purely informative basis**.

It is emphasised that the timetable of meetings has not enabled this document to receive formal endorsement from the RID/ADR Joint Meeting or the Restructuring Working Group and does not therefore necessarily represent the views of the contracting parties. It is intended to highlight certain inaccuracies and omissions from the current UN proposals which still need to be addressed and to indicate some areas of concern to RID/ADR contracting parties which remain.

RID RE-STRUCTURING WORKING GROUP MEETING - LONDON
23-27 NOVEMBER 1998

REPORT OF THE AD HOC DISCUSSION GROUP ON PACKING INSTRUCTIONS

1. *The group was attended by representatives of Austria, Germany and the United Kingdom. The discussion was led by Mr J M Hart (UK).*
2. *The Group's purpose was to review areas of difficulty for RID/ADR remaining in the proposals for Packing Instructions submitted by the UK/USA to the UN Committee of Experts meeting to be held in December 1998. (Papers ST/SG/AC.10/1998/16 and 16/Add.1-5.)*
3. *It was agreed that the discussion group would review firstly those issues where questions remained as highlighted in the report of the Frankfurt Working Group (ST/SG/AC.10/1998/16). These are addressed by paragraph order. Where reference to RID/ADR views are indicated this should be taken to mean the view of this discussion group.*

Para 4

RID/ADR should recommend restricting the use of removable head drums to PGI substances broadly meeting in principle the definition based on marginal 2301(E), marginal 3533(1) and marginal 3534(1). Possible text is appended to this report.

Para 7

P200 is a reminder and the Joint Meeting should address the replacement of this for both Class 2 and those other classes which provide for the use of gas cylinders.

Para 16

RID/ADR should have no problem with the use of 5H3, 5L3, 5M2 bags in P409.

Para 19

RID/ADR considers that there is no need to specify specific substances requiring a vent provided that UN Recommendation 4.1.1.8 includes a leakproofness test with vent in place and therefore showing the effectiveness of such a vent. Tests may have to be developed to show the effectiveness of venting devices. Reference to B5 may not be required if 4.1.1.8 is adopted.

Para 24

For RID/ADR, P801(a) does not require packages tested to PGIII performance, simply strong outer packaging.

Para 26

RID/ADR proposes that Packing Instruction P900 becomes P910 as this is a sea mode problem only.

Para 41

RID/ADR has deviated from the UN classification of 1790 but it is not clear why this has been done. The Joint Meeting should consider.

Para 49

To the knowledge of this discussion group there is no scientific basis for specifying 45°C as the cut-off value for substances which may become liquid in transport. The references to this could be moved to marginal 3500(12) as an illustrative note requiring the consideration of the effect of temperature changes on the physical state of the substance during transport.

Para 57

Agreed for UN1308, (Class 3 zirconium suspended in flammable liquids) it was agreed that this should not be permitted in IBCs, other than for items 3(b) and 31(c). IMO should be invited to review at DSC4 whether IBC01 might be acceptable for 3(b) and 31(c).

Para 62

This has been resolved by IMO, who will now accept 31HZ2 for PGIII substances with a subsidiary risk. The Joint Meeting could consider adopting similar provisions.

Para 75

In Packing Instruction P601 indent 3. c(i). RID/ADR does not see a need to address substances “toxic by inhalation”.

The discussion group considers that for presentational clarity, where a substance may be in a solid or liquid state they should be shown in separate rows in the assignment of substances list.

4. *The discussion group then reviewed RID/ADR requirements not addressed in the UN Packing Instructions papers as follows:*

Palletised bags

RID/ADR does not permit transport of bags and flexible IBCs other than as palletised loads. For local distribution palletised loads may not be necessary. This needs to be addressed by RID/ADR. Amendment of 3500(1) to include reference to “penetration” may offer a solution. This text may need to be offered to the UN Committee of Experts for consideration.

Full loads

Again, for reasons of local distribution, the requirement for full loads in RID/ADR may not be necessary in all cases.

Both these issues relate to handling requirements and should be addressed in RID/ADR other than in packaging provisions, and perhaps by incorporating the provisions of the new UN Recommendation 4.1.1.1.

Light gauge metal packagings

Light gauge metal packagings could only appear in P001 or P002. RID/ADR will need to add appropriate provisions in these Packing Instructions to incorporate such packagings.

Mixed packing

Marginal 2311(6) specifies certain dangerous reactions of mixed packagings which are not permitted, whereas marginal 2002(6) seems to recognise mixed packaging of substances which have such dangerous reactions. This needs to be addressed by the Joint Meeting.

Plastics drums for Liquids of PGI

RID/ADR limits liquids of PGI in plastics drums to 60 litres. The UN proposal would remove this restriction.

Leaktightness and Hermetic Sealing

Clarification of these terms is required.

5. *The discussion group moved on to review the assignment of substances to Packing Instructions for both packages and IBCs as set out in paper ST/SG/AC.10/1998/16/Add.2.*

The following issues were identified:

UN3533

Item No.6(a) does not appear in the index to ADR and appears to have no packing or marking requirement in RID/ADR. It would appear necessary to understand the term “conform” to include the requirement “tested” in Packing Instruction P202. This may also be necessary for Packing Instruction P003.

UN1194

RID/ADR does not require specific provisions beyond P001. Competent authority approval (P099) should not be necessary.

UN1921 and UN2481

These substances do not seem appropriate for P001. A packing instruction similar to P601 or P602 for Class 3 may be necessary.

UN2486

RID/ADR sees no reason not to permit this in IBC02.

UN3065

IBC special packing provision B10 is noted in 16/Add.2 but does not appear in 16/Add.5.

UN1851, UN3248 and UN3249

The UN Recommendations currently limit receptacles using these UN numbers to 5 litres and 5 kilograms. RID/ADR should consider aligning with SP221.

UN1327

Note that this will not be used in RID/ADR. An equivalent of marginal 2900(3) will be needed for Class 4.1.

UN3319

This is shown in the index to ADR as 13(b). It is in fact 17(b). An editorial correction is required.

UN1357 and UN0220

RID/ADR considers these substances should also be assigned to P405 with a new SPP permitting up to 11.5 kg to be packaged.

UN0154, UN0155, UN0209, UN0214, UN0215 and UN0234

These substances need to be included in proposals for Packing Instructions when water wetted with not less than 10% water as Class 4.1 and assigned to P405 with a new SPP to identify them.

UN1320, UN1321 and UN1348

Marginal 2404 does not permit metal packagings and thus Packing Instruction P405(3) would not be appropriate. It also permits no diminishing of the water content, whereas 3500(7) allows a reduction which may be more appropriate. The Joint Meeting should review the need for these provisions.

UN3097 PGII and PGIII

RID/ADR should permit transport with competent authority approval (P099).

The discussion group noted that many substances in Class 4.2 PGI attract Packing Instruction P403A which would limit metal packagings to 150kg, where RID/ADR has no such limit at present.

UN2304 and UN2448

The Joint Meeting should note that these substances would now be permitted in IBCs.

UN1381

Packing Instruction P404 will require testing to PGII performance whereas RID/ADR requires testing to PGI performance levels. Packing Instruction P404 should be reviewed.

UN2441

This substance seems to have been omitted from Packing Instructions in P403A.

UN3255

The RID/ADR index identifies this as item 10(a) but it does not appear as such in the Class 4.2 provisions.

UN1431

This is permitted in IBCs in RID/ADR. IBC04A should be assigned.

UN2006

In Packing Instruction P002 this substance should attract SPP8.

UN1389 and UN1422

RID/ADR permits these substances in metal IBCs and they should be authorised in IBC01 with Special Packing Provision B1.

UN1409

RID/ADR does not permit this substance in IBCs and thus SPP B1 should be deleted.

UN3132, UN3133 and UN3135

These substances are currently not permitted for transport in RID/ADR and would thus attract P099. This should be reviewed by the Joint Meeting.

UN3132, UN3135 and UN2011

RID/ADR would now need to permit these substances in IBCs. They should not attract SPP18 which is relevant only to UN1854. The Joint Meeting would need to review this.

UN3131

RID/ADR permits a wider range of packagings and therefore P402 is not appropriate. This needs to be reviewed by the Joint Meeting.

UN3130 and UN3129

RID/ADR does not permit these substances in IBCs.

UN2072 PGI and PGII

RID/ADR does not permit this substance in transport.

UN1745, UN1746 and UN2495

RID/ADR will need to introduce a new packing instruction for these substances based on marginal 2504.

UN2015

P501 does not fully conform to marginal 2503.

UN3098 and UN3099

RID/ADR permits wider use of IBCs than IBC01 which permits only metal IBCs.

UN3100, UN3121 and UN3137

RID/ADR does not permit these substances in transport whereas they are assigned P099.

UN1613 and UN1614

The discussion group noted that RID/ADR has a Class 3 subsidiary risk for these substances which UN does not. The Joint Meeting should consider this.

UN1614

RID/ADR has additional requirements to Packing Instruction P200 which will need to be addressed in a Special Packing Provision.

UN3315

RID/ADR references ICAO TI Packing Instruction 623. P099 would continue to permit competent authorities to use this ICAO Packing Instruction.

UN2570

The IBC Packing Instruction for this substance in liquid form should show 'none'.

UN1185, UN1259, UN1994, UN2480 and UN3294

RID/ADR differs slightly from Packing Instruction P601 but should be acceptable to RID/ADR.

UN1595

RID/ADR item 27(a) is less restrictive than Packing Instruction P602.

UN1700, UN2016 and UN2017

Marginal 2607 is similar to Packing Instruction P600 but with a maximum net mass limit of 75kg.

UN3000, UN3002 UN3004 and UN3008

These UN numbers no longer appear in the UN or RID/ADR Dangerous Goods Lists.

UN3279

This substance has a subsidiary risk in Class 3 so ought not to be shown as a possible solid substance assigned to P002.

UN2076

It should be clarified that IBC special provision B3 applies only to IBC02.

UN2814, UN2900 and UN3291

In ADR/RID these Class 6.2 substances do not align with Packing Instructions in current UN text. The Joint Meeting will need to consider whether to adopt this UN text.

UN3123 and UN3125

These substances in item 44(c) do not appear in the UN list since the precedence tables indicate that they should be assigned to Class 4.3. RID follows this but ADR does not.

UN3094, UN3095 and UN3096 in PGI

Assignment to P099 would be more restrictive than RID/ADR.

UN1790 and UN2031

Special Packing Provision 29 should be deleted as these substances in PGI are assigned to Packing Instruction P802 which does not permit single plastics packagings.

UN3028

RID/ADR has slightly different text but its provisions are covered in Packing Instruction P801. P801 may need to be revised if Large Packaging Packing Instructions for batteries are adopted.

UN2212

The need for reference to Special Packing Provision 12a is unclear.

UN2590

Special Packing Provision 12a should read XC.

5. The RID Restructuring Working Group is invited to note these comments and consider whether they should be made available to the UN Committee of Experts as an aid to discussions of the Packing Instruction proposals at its meeting to be held in December 1998.

ANNEX

Substances allocated to Packing Group 1 with a viscosity of more than 200mm²/s are permitted in removable head packagings provided that;

(a) In the solvent separation test (see Part III sub section 32.5.1 of the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria) the height of the separated layer of solvent is less than [3%] of the total height; and

(b) The flowtime in the viscosity test (see Part III, sub section 32.4.3, of the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria) with a jet diameter of 6mm is equal to or greater than:

(i) 60 seconds;or

(ii) 40 seconds if the viscous substance contains not more than 60% of Class 3 substances.