International Civil Aviation Organization

DGP/21-WP/59
21/9/07

WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-FIRST MEETING

Montréal, 5 to 16 November 2007

Agenda Item 5: Resolution, where possible, of the non-recurrent work items identified by the Air Navigation Commission or the panel
5.2: Reformatting of the packing instructions

PACKING INSTRUCTIONS

(Presented by the European Chemical Industry Council (CEFIC))

SUMMARY

This working paper provides comments on the reformatting of the packing instructions presented in DGP/21-WP/4.

Action by the DGP is in paragraph 2.

1. INTRODUCTION

1.1 The DGP Working Group of the Whole discussed the first DRAFT of the reformatted packing Instructions at their meeting in Memphis. The new proposal in document DGP/21-WP/4 was analyzed in detail by our members. A lot of progress was made and many of the concerns raised by the European Chemical Industry Council (CEFIC) at the previous meeting have been taken into consideration. We looked at the details of *all* UN-Numbers even if they are not part of our business.

1.2 The new proposal still contains many changes to the current provisions. We have attached an Excel-File (Appendix A) which shows all details of our analysis. It must be mentioned, that the analysis has been made by different people and hence the wording of the comments is not consistent, but should be understandable. We used the following abbreviations:

IP = Inner packagings
OP = Outer packagings
SP = Single packagings

1.3 This working paper contains a summary of these details. In order to indicate clearly which entry in the dangerous goods list we are talking about, we usually indicate the UN number and the packing group (e.g. UN 3134-II).

2. ACTION BY THE DGP

2.1 The DGP is invited to discuss the following reservations:

2.1.1 The following UN-Numbers were allowed for transport and are **now forbidden** according the new DRAFT:

in Limited Quantities:	UN 1222-II, 1865-II.
per Passenger Aircraft:	UN 1222-II, 1865-II, 1921-I, 3095-I, 3096-I, 3124-I, 3125-I, 3129-II, 3130-II, 3208-II, 3209-II, 3301-I, 3336-I (2 entries)
per Cargo Aircraft:	UN 1222-II, 1261-II, 1865-II, 3095-I, 3096-I, 3124-I, 3125-I, 3301-I, 3319

2.1.1.1 We are of the opinion that entries in the dangerous goods list cannot be forbidden without any justification. Annex II shows the forbidden entries of the dangerous goods list.

2.1.2 **Packing Instructions Y445 – Y448** are listed between PI 477 and PI 478 in the new PI's.. Instead they should be between Y443 and PI 450.

2.1.3 **Plywood Drums (Code 1D) almost disappeared from the PI's**. They have only been kept in the new PI's 371, 953, 961, and 964. In countless numbers of other packing instructions this pack type does no longer exist. It was permitted as outer packaging and, in combination with a liner, also as Single Packaging (old PI's 417, 420, 434, 511, 512, 518, 519, 607, 615, 619, 816, and 823). This pack type should be kept in the PI's.

2.1.4 **UN 1818 Silicon tetrachloride:** one member indicated that, considering that UN 1818 is a Chlorosilane, it should be treated as such and therefore be forbidden on Passenger Aircrafts.

2.1.5 **PI 494** indicates a quantity limit of 60 L per SP for UN 3399-III. But the permitted Single Packtypes are not mentioned in the PI.

2.1.6 **Fibreboard Drums (Code 1G)** are no longer permitted as SP's. They were listed in the old PI's 417, 418, 420, 434, 511, 512, 518, 519, 607, 615, 619, 816, 823 and 911. Together with a plastic liner they have proven to be a safe pack type. They should be kept as Single Packagings!

2.1.7 **New PI 959** — No packtypes have been listed at all!

2.1.8 **Jerricans** (Codes 3A.., 3B.., 3H...) have been deleted in the following new PI's: 550, 551, 553, 554, 555, 557, 561 and 679. They have proven to be a safe pack type. They should be kept in the Packing Instructions!

2.1.9 **UN 1868 – Decaborane and UN 1871 Titanium hydride**: All Single Packagings (Steel drums, Aluminium drums, Steel Jerricans, etc disappeared. At least some Single Packagings should still be available!

2.1.10 **UN 3316 Chemical kits / First aid kit – PI 963** – The following packtypes have been deleted: 4A, 4B and 4C1. They all should be kept for these products.

2.1.11 **PI 361** — we would like to keep Plastic inner packagings.

2.1.12 **UN 3314 — PI 960** states, that the outer packagings must be fitted with liners. Shouldn't they therefore be listed as "Single Packagings"? This would be in line with current provisions.

2.1.13 **UN 2071 – PI 961** lists outer packagings but no inners. Either IP's or Single Packagings should be listed.

2.1.14 **PI 351 and 361**: According the new provisions "IP Plastic" are forbidden, but allowed as Outer Packagings. This is a contradiction. We suggest to keep Plastic IP's.

2.1.15 **New PI 670 and 677**: the old PI 619 allowed different bags as Single Packagings. Industries use special filling installations for SP-bags. If they were no longer allowed, a significant amount of money would have to be invested. We propose to keep the currently allowed bags.

2.1.16 Paragraph 1.3 a) of the proposal indicates, that the **IP codes for inner packagings** have been removed from the packing instructions. But in our opinion, one effect has been overseen. The current TI indicates e.g.: Inner Metal (IP.3, IP.3A). The new provisions only indicate "Metal". How should a shipper know, whether he has to use "Metal other than aluminium" IP.3 (as per 6;3.2.3.1) or "Aluminium IP.3A (as per 6;3.2.3.2)? The conclusion could be drawn, that Metal AND Aluminium can be used.

2.1.16.1 A similar problem exists for Glass and Glass Ampoules, for Glass, earthenware and wax and last but not least the bags. We therefore suggest, questioning the idea of removing the IP codes. In fact we propose to keep the IP codes. They are quite helpful for shippers. Misunderstandings and unnecessary errors can be avoided.

2.1.16.2 (One member suggested, revising the IP specifications/requirements as well. But as this is not part of this P.I.-Reformatting we might come back to this topic at a later stage. The detailed comments in this respect can be sent to the DGP-WG.)

2.1.17 **UN 1571 – PI 456** offers only one IP. An alternative (e.g. Plastic as in the current TI) would be preferable for industry.

2.1.18 **New PI 473 and 475**: they now require PG II performance standards for these PG III-products. This should be corrected.

2.1.19 **UN 2590 – PI 961**: we propose to keep Steel Drums 1A2 as Single Packaging.

2.1.20 **UN 2803:** we propose to keep Steel Jerricans 3A2.

2.1.21 **UN 2029 –** PI 854: all Single Packagings have been removed. This should be corrected.

2.1.22 **Reduced Quantities** – For a big number of entries in the DG-List the allowed quantities per Inner or per Outer have, partly drastically, been reduced. A change of such thresholds is easily done in a document, but the consequences for affected companies are significant. We propose that these changes are only made based on a found justification.

2.1.23 Paper Bags as Single Packagings have been removed from a number of PI's. We propose to keep the following bags: 5L3, 5H3, 5H4, 5M1 and 5M2 **for UN 3077 in PI 968**. This is a very common packtype for these products. The same argument as in 2.1.15 is valid.

2.1.24 **Layout of PI 967 and 968**: The layout for the Combination Packagings should be improved by drawing lines.

2.1.25 **PI 370** indicates that Metal Packagings must be corrosion resistant…. for substances with a class 8 sub risk. Though this PI is assigned to UN 3269 only which has no such sub risk. Therefore this requirement can be deleted.

2.1.26 **PI 968** indicates that the Boxes listed under "Singe Packagings" must be fitted with a suitable liner. We just would like to raise the question, whether it would be sufficient to assign the asterisk to 4C2, 4D, 4F and 4G only.

2.1.27 For **UN 1888 Chloroform** the special PI 680 was created. We propose to delete PI 680 and assign PI 655 for Passenger Aircrafts and PI 663 for Cargo Aircraft. These Packing Instructions are used for other Class 6.1 PG III entries. Or have we overseen a major difference between them?

2.1.28 A new text concerning closures in 4; 1.1.4 has been proposed under paragraph 1.3 d) of the proposal. Our members raised a number of questions in this context**:**

2.1.28.1 Is this applicable on all packages or only inner packages?

2.1.28.2 Is this applicable on packages for liquids or both liquids and solids?

2.1.28.3 Will the existing requirements on the use of absorbing material remain or will they be changed/ deleted?

2.1.28.4 Is the list of secondary closures limited to the indicated ones or are they just examples?

CEFIC would appreciate receiving clarification on these questions from the ICAO Working Group.

2.1.29 In order to help industry with the envisaged workload, we kindly ask the Secretary to make the final **Dangerous Goods List publicly available** by means of an Excel-file.

2.1.30 We informed the DGP at the Memphis meeting, that we need a **transitional period** of two years for training, changes of databases etc. We suggest that the new packing instructions be announced in the 2009-2010 edition of the Technical Instructions to make everyone involved aware of the coming changes. The new provisions would have to be applied at the latest on 1 January 2011.

2.1.30.1 Many companies produce "on stock". This means, at the date of production they do not know yet whether the product will be shipped in one week or three months. We would therefore strongly suggest offering the possibility to apply the new packing instructions already on 1 January 2010. For such

shipments a remark could be made in the Shippers Declaration (e.g. “Packed in accordance with the ICAO Technical Instructions 2011-2012”).

2.1.31 The question is raised whether it is necessary to indicate the packing groups in the new packing instructions. The packing instructions are assigned to a specific UN Number and packing group and can be found in the dangerous goods list. Therefore this seems to be superfluous.

3. APPENDICES

3.1 The following appendices are provided:

a) Appendix A: This analysis is based on the “supplementing document” and reflects all the changes made. We have inserted the following columns:

1) comments to LQ

2) comments to PAX

3) comments to CAO

4) overall comments

5) WP Paragraph (indicates the paragraph numbers within this document)

The analysis has been made by several member companies. The wording is sometimes very straight forward.

b) Annex II: Lists the dangerous goods list-entries which were allowed for transport and which are forbidden now.

— — — — — — — —

APPENDIX A

ANALYSIS OF CEFIC

Click here to access file

APPENDIX B

DANGEROUS GOODS LIST ENTRIES WHICH WERE ALLOWED FOR TRANSPORT AND WHICH ARE NOW FORBIDDEN

Click here to access file