DGP/19-WP/11 29/8/03 English only

DANGEROUS GOODS PANEL (DGP)

NINETEENTH MEETING

Montreal, 27 October to 7 November 2003

REPORT OF THE MEETING OF THE WORKING GROUP OF THE WHOLE

(FRANKFURT, 16 TO 20 SEPTEMBER 2002)

(Presented by the Secretary)

1. **INTRODUCTION**

The meeting of the Working Group of the Whole Dangerous Goods Panel was opened by Mr. H. Busacker, panel member nominated by Germany and Mr. H. Mai, Executive Director of Fraport AG on 16 September 2002. Mrs. J. Code was elected Chairwoman of the meeting and Mr. G. Leach was elected Vice-Chairman. The Secretary of the meeting was Dr. K. Rooney. Mrs. Code thanked Mr. Busacker and Mr. Mai for hosting the meeting on behalf of the working group

2. **ATTENDANCE**

2.1 The meeting was attended by the following panel members and advisers:

Member/Observer*	Adviser	State/International Organization
P. Steele	L. Willoughby	Australia
P. Guerreiro	C. Terry T. Vieira	Brazil
M. Hinoul	K. Vermeersch	Belgium

Member/Observer*	Adviser	State/International Organization
J. Code	G. Lawson D. Sylvestre	Canada
J. Le Tonqueze	B. Le Poulennec	France
H. Busacker	R. Auschra C. Black H. Brockhaus C. Fasten M. Philippi	Germany
	M. Apolloni A. Furia	Italy
	S. Maruo M. Oketani	Japan
	S. Oosterhoff D. Raadgers	Kingdom of the Netherlands
Y. Mikhin	D. Kurdchenko Y. Malyshev	Russian Federation
S-O Sanchez Serrano		Spain
G. Leach	M. Castle J.Hart R. Wells	United Kingdom
R. Richard	F. Black J. Goff J. McLaughlin	United States
	G. Kefalinos D. Warden	DGAC
J. Abouchaar	P. Balasubramanian T. Ezel N. McCulloch P. Oppenheimer	ΙΑΤΑ
W. Schuurman		IFALPA
K. Ngobese*		South Africa
L. Armen*		United Arab Emirates
	A. McCulloch	IECC

3. **REVIEW OF OUTSTANDING ITEMS FROM DGP/18**

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3.1 It was noted by the Chairwoman that a number of items remained outstanding after the last panel meeting. The Secretary explained that a new secure website for panel members and advisers would soon be available which would allow posting of sensitive information in a private, secure area whilst working papers would be placed on a public website to permit easy access for public consultation. Replies to the state letter regarding contact information from the appropriate authority had all been positive but it was noted that a large number of States who had DGP members had not replied. The Secretary asked for those members to ensure a response was sent from their State.

3.2 The Chairwoman noted that the following items required follow-up action by panel members:

- provision of incident data regarding failures of screw cap closures (DGP/18-WP/56, paragraph 2.10.7);
- provision of generic dangerous goods chapters of operations manuals containing information on dangerous goods (DGP/18-WP/56, paragraph 2.1.14);
- consultation with aerosol industry to determine what would be the effect a 95% limit on gas content (DGP/18-WP/56, paragraph 2.7.4.6); and
- provision of information on problems associated with the air transport of samples or instruments containing small quantities of radioactive material (DGP/18-WP/56, paragraph 2.15).

It was noted that the new secure website would be a suitable location for posting this information.

4. WORKING GROUP - LOADING OF ICAO CONSIGNMENTS

4.1 Loading of Cargo Aircraft Only (CAO) Consignments (DGP-WG02-WP/28)

The issue of accessibility in flight of certain cargo aircraft only consignments and the difficulty to comply with this requirement in certain aircraft had been discussed at DGP/18 (DGP/18-WP/56, paragraph 3.2). It had been agreed that a non-recurrent work item to address this issue would be added to the work programme. The aim of this working paper was to establish a small working group who would discuss the problem with aircraft manufacturers and operators and who would then make recommendations for amendments as necessary. Mr. Steele agreed to facilitate the working group discussions and terms of reference were agreed (see Appendix).

5. SECURITY

5.1 Guidance Material for Security Personnel (DGP-WG02-WP/34)

5.1.1 At DGP/18, material relating to dangerous goods in passenger baggage had been developed for incorporation into the ICAO Security Manual; it was agreed that cargo, courier and mail related aspects would need to be pursued in the future work of the panel.

5.1.2 A working group was established to develop suitable material. Mr.Leach agreed to facilitate the working group discussions. It was agreed that terms of reference would be developed by an informal working group at the next meeting which would then be presented to the meeting of the working group of the whole.

5.2 Development of Security-related Provisions in Annex 18 (DGP-WG02-WP/33)

5.2.1 The Secretary explained that all annexes, including Annex 18, were to be examined for the possible development or strengthening of security-related provisions. A working paper on security which will be discussed at the UNSCOE meeting in December was presented. It was noted that although ICAO had Annex 17 which contained cargo security provisions, other modes did not. In addition, it was noted that Annex 17 addressed general cargo movement but did not consider dangerous goods specifically. It was suggested that if the proposed text on security for dangerous goods was incorporated into the UN Model Regulations, it could then be adopted into the modal regulations.

5.2.2 The Secretary informed the meeting that the AVSEC section had reviewed the draft text of the UN working paper and had considered it to be complementary to Annex 17. She noted that further consideration would need to be given to the best location for incorporation of such text, if adopted, within ICAO documentation. This might necessitate the development of new security provisions in Annex 18 and the detailed requirements in the Instructions with cross references to Annex 17. Alternatively, some text might be incorporated into Annex 17 and the Security Manual with cross references to Annex 18 and the Instructions. One member suggested a joint working group with aviation security personnel would assist this discussion.

5.2.3 A number of members welcomed the initiative which attempted to integrate security provisions into the safety regulations. It was noted that many of the suggested actions were already being practised by industry. However, it was suggested that problems might exist regarding registration of all carriers and provision of risk assessment plans. Additionally, it was queried if UN 2037, like aerosols, was excluded from the proposed Table 1.

5.2.4 The Secretary was asked to obtain AVSEC's confirmation of acceptance of the final UN paper and to report this at the December meeting.

6. **GENERAL REVIEW**

6.1. Draft Amendments to the Technical Instructions to Align to The UN Recommendations — Part 1 (DGP-WG02-WP/11)

Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 2 (DGP-WG02-WP/12)

Draft Amendments to the Technical Instructions to Align to the UN Recommendations

— Part 3 (DGP-WG02-WP/13)

Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 4 (DGP-WG02-WP/14)

Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 5 (DGP-WG02-WP/15)

Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 6 (DGP-WG02-WP/16)

6.1.1 The Secretary presented a series of papers containing draft amendments to the Technical Instructions based on draft UN Recommendations. It was agreed that references to Division 6.2 would be discussed separately (WP/12, WP/13, WP/14, WP/15, WP/19, WP/27, WP/39 and WP/52). A number of editorial amendments were suggested e.g. consistency in presentation of UN numbers, replacing the term "pressure receptacle" by "cylinder", use of an example more relevant to air transport in 4;4.1.1 etc. The Secretary clarified that all text had still to be agreed at the UN in December.

6.1.2 In WP/12, it was agreed that a new flowchart of organometallic substances should not be included in the Technical Instructions. It was also agreed that detailed material relating to environmentally hazardous substances should be reduced to a general definition, UN number references in 9.2.8 and relevant special provisions with a reference to the UN Model Regulations.

6.1.3 Since the UN Secretariat was still preparing the draft text for the December 2002 UNSCOE meeting, no list of dangerous goods was presented in WP/13. It was noted that approximately 80 new proper shipping names would be added to the list. It was also recognized that the work on the packing instructions may impact the list of dangerous goods.

6.1.4 In WP/14, it was noted that non-refillable cylinders including aerosols could be transported in shrink-wrapped trays or stretch-wrapped trays. It was agreed that this should not be permitted for air transport. It was also noted that editorial amendments were necessary for Packing Instruction 904 as reference to P001 and P002 were present.

7. **GENERAL - PART 1**

7.1 Dangerous Goods to Provide Medical Aid in Flight (DGP-WG02-WP/2)

7.1.1 The problem of transporting dangerous goods which were required for medical aid to a patient in flight on a flight before or after collection of the patient was explained. Although there was general agreement with the intent of the proposal, some members thought additional specifications, particularly those relating to information to the pilot-in-command and protection of oxygen cylinders, were necessary. The proposer said he would return to the next meeting with a revised proposal.

7.2 Content of Training Courses (DGP-WG02-WP/6)

7.2.1 An apparent anomaly with the training course requirements for security personnel was explained. Although security screening staff dealing with passengers and their baggage were required to have dangerous goods training, similar security staff dealing with screening cargo did not. Following clarification of the definition of 'screening' as contained in Annex 17, the proposal was agreed. A further proposal to remove an anomaly which suggested that cargo operators did not need to train their flight crews in aspects relating to passengers, was agreed as it was recognized flight crew needed to know what was permitted in crew baggage.

7.3 Radioactive Material in Air Mail (DGP-WG02-WP/9)

7.3.1 This paper was withdrawn.

7.4 Clarification of Training Category 9 - Acceptance Staff (DGP-WG02-WP/24)

7.4.1 It was suggested that clarification of the phrase "agencies acting on behalf of operators" was required since it could be interpreted as only including agencies carrying out acceptance functions of an operator. Although some members believed that category 6 personnel already covered all those acting on behalf of the operator, and thus included freight forwarders, others felt that these were two different categories of staff and that the proposed amendment would clarify category 9 personnel included all agencies accepting air freight. Noting that more than one freight forwarder might be involved with one consignment and that only the last would deal directly with the operator, the proposal was amended to replace the word "including" by "and". The proposal as amended was agreed.

7.5 Editorial: ICAO TI's 1;2.3.2 (b) - Dangerous Goods in Air Mail (DGP-WG02-WP/43)

7.5.1 The proposal with minor editorial amendments was agreed.

7.6 Clarification – Applicability of Category 6 Cargo Acceptance (DGP-WG02-WP/50)

7.6.1 Following the decision at DGP/18 to include a new category 9 for general cargo acceptance staff and an amendment to category 3 to make it specific for dangerous goods acceptance staff, it was suggested that a similar alignment was necessary for category 6 staff specializing in dangerous goods. Considerable discussion followed in which several members expressed differing opinions as to which category should apply to freight forwarder personnel processing documentation or handling the package. It was suggested that complete clarification of the categories of staff would be helpful. The proposer withdrew his paper and said he would present a revised paper at the next meeting.

8. CLASSIFICATION

8.1 Draft Amendments to the Technical Instructions to Align to The UN Recommendations— Parts 2, 3, 4 and 5 (DGP-WG02-WP/12, 13, 14 and 15) Transport of Infectious Substances (DGP-WG02-WP/39) 8.1.1 An explanation of the draft amendments for infectious substances was presented on the basis of WP/39 which had been prepared using the report of the UN working group submitted to the July 2002 meeting. Lengthy discussions had taken place over the last biennium and had included representatives from both States, industry and health organizations including WHO. It was explained that the major revision to Class 6.2 had resulted in a complete set of regulations for infectious substances in which both the form and the transmittability of the infection had been taken into account. It was anticipated that the UN would approve the amendments in December 2002. It was noted that WHO was preparing guidance material for potential users.

8.1.2 In WP/12, it was noted that for purposes of classification, risk groups would no longer be used. This was now replaced by classification into two categories, A and B, together with an indicative list of those infectious substances contained in Category A. Any infectious substance not meeting the criteria for Category A would fall into Category B, clinical or diagnostic specimens. It was noted that States and WHO will work toward the development of a more comprehensive list of Category A substances. One member expressed his concern that Category B infectious substances would no longer fall under the provisions of the Instructions while only the shipper would know the contents of UN 3373. This would imply no acceptance check, no labelling and no information to the pilot-in-command and emergency responders. However, it was pointed out that in the event of an accident, the risk of exposure to a healthy individual was considered low by medical experts who had participated in the discussion. It was also suggested that the provision requiring the use of good quality packagings together with a new mark would assist both in minimizing the likelihood of an accident and in informing people to stay away until it was treated.

8.1.3 In WP/13, clarification was sought regarding the phrase "Infectious substances packed and marked in accordance with Part I of Packing Instruction 650...." contained in special provision A139. It was confirmed that this referred to those diagnostic or clinical specimens assigned to the special provision. It was suggested an amendment be made to reduce the potential confusion. It was agreed to ask the UN to amend the proposed special provision A139 (UN YYY) by deleting the word 'infectious'. It was also agreed that further proposals to add requirements for incident reporting and training should be deferred until after the UN meeting in December.

8.1.4.1 In WP/14, it was explained that packing instruction 620 (the equivalent of ICAO 602) was for Category A infectious substances whilst packing instruction 650 was for clinical and diagnostic specimens. It was noted that PI 650 consisted of two parts - the first part was for the smaller, more typical specimens which would now be indicated by packagings bearing a new label (UN 3373 in a diamond pictogram) whilst the second part was for those specimens greater than 4kg or 4L. Packages containing these larger diagnostic specimens had additional requirements (e.g., PG II packaging standard, dangerous goods transport document, etc.) and must bear the infectious substance label. It was explained the second part had been developed on the basis that larger quantities of diagnostic specimens had the potential for more harm and thus the additional measures were introduced. It was noted that the present PI650 had incident reporting and air eligibility marking requirements which should be incorporated in the new packing instruction. It was agreed to await the decision of the UN meeting in December before making proposals for amendments to Packing Instruction 650.

8.1.4.2 A member pointed out that a paper would be presented to the UN meeting in December suggesting the deletion of the 6.2 label for Category B substances, together with further proposals regarding liquid nitrogen and dry ice. Another paper would be presented regarding training.

8.1.4.3 If the UN approved the deletion of the 6.2 label requirement, it was pointed out the difficulty operators would then face when presented with two packages of diagnostic specimens, both bearing the new UN 3373 label but one containing the larger quantity and thus requiring a transport document. There was apparently no way for the operator to differentiate between them although the two packages were required to meet two different parts of the same packing instruction.

8.1.4.4 With regards to training, it was noted that the potential user of this packing instruction could be a member of the public who needed to know how to properly send specimens. It was suggested that certified training would not be required but rather clear instructions would be sufficient. It was also suggested that training on the hazards posed by dry ice should be provided. The Secretary was asked to ensure that this issue was raised at the UN meeting in December.

8.1.4.5 A question was raised regarding the quantity limit of 4 kg of 4 L contained in the packing instruction. Concern was expressed that the addition of refrigerant may make the quantity in a package exceed these limits. It was agreed that the UN be asked to clarify that these were net quantity limits of the substance, which would consequently exclude the quantity of refrigerant.

8.1.4.6 It was noted that for specimens consigned according to Part 1, no other requirements applied. This could be interpreted as permitting diagnostic specimens in passenger cabins on board aircraft.

8.1.5 In WP/15, it was queried why the UN had deleted all advance arrangements. It was explained that shippers had no control over the flight the consignment was carried on and thus were not in a position to supply all the information requested. Additionally, it was noted that for security reasons, such information should be limited in its dissemination. The Secretary pointed out that advance arrangements between the shipper and operator contained in 7;1.2 still existed.

8.2 Division 6.2 - Infectious Substances (DGP-WG02-WP/27)

8.2.1 A potential problem with the addition of a new note 1 to 2;6.3.1.3.2 in which certain blood products were exempted was discussed. A number of members agreed that the wording of the note resulted in too broad an exclusion. It was noted that a paper would be submitted to the UN meeting in December to resolve the problem.

8.3 Overpacks Containing Diagnostic Specimens (DGP-WG02-WP/19)

8.3.1 The problem of what markings an overpack containing diagnostic specimens should bear was discussed. It was suggested that an operator could be subject to enforcement action for accepting such an overpack if it did not indicate it contained diagnostic specimens. One member suggested that a passenger could place such an overpack in his baggage as the packing instruction stated no other requirements were applicable. It was noted the problem would continue in 2005 when the new provisions for infectious substances would be introduced since it was a question of what marks should be transferred to the overpack. The logistics of disseminating such information was also queried. The proposal was

agreed by a small majority and the Secretary was asked to issue the amendment in a corrigendum. Following clarification that a safety case would have to be made to justify requesting such a corrigendum, it was agreed it was unnecessary.

8.4 **Definition - diagnostic specimens (DGP-WG02-WP/52)**

8.4.1 It was suggested that with the removal of the reference to risk groups in the definition for diagnostic specimens, only those substances previously allocated to risk group 4 would be declared as infectious substances and that those allocated to risk groups 2 and 3 would be consigned as diagnostic specimens. Although a number of members recognized a problem might exist until new provisions for infectious substances came into force in 2005, it was thought that the proposed wording might generate further confusion. The proposal was not agreed.

9. DANGEROUS GOODS LIST AND SPECIAL PROVISIONS

9.1 Ammunition, Smoke, UN 0015, UN 0016 and UN 0303 (DGP-WG02-WP/3)

9.1.1 A proposal to remove an inconsistency between the UN Recommendations and the Technical Instructions was agreed after it was explained that many new explosives classified as UN 0015, UN 0016 and UN 0303 did not necessarily possess corrosive properties and should therefore not be required to bear a corrosive subsidiary risk label. An editorial amendment to change 'shall' to 'must' was also agreed.

9.2 Cryogenic Liquids (DGP-WG02-WP/7)

9.2.1 A proposal to include the cryogenic label in column 5 against all refrigerated liquids was withdrawn after it was explained that the UN decided to apply such handling labels for open cryogenic cylinders only. There was some discussion as to whether the label was to signify the possibility of spillage from an open cryogenic cylinder or to indicate that visible vapour did not mean a fire was present. It was noted that further discussion by specialized experts of cryogenic liquids would take place.

9.3 UN 1266, Perfumery Products with Flammable Solvents (DGP-WG02-WP/20)

9.3.1 A proposal to revert to previous, higher quantity limits for perfumery products was presented. It was noted that the limit had changed from 15L to 5L in the 2001-2002 edition of the Instructions but the basis for the change was not apparent. It was suggested that the higher quantity limit had been introduced in 1984 based on experience and the safety record of the perfumery industry.

9.3.2 A number of members suggested that these products should not be treated any differently from other Class 3, Packing group II substances and that a rationalized approach to quantity limits should be followed. It was suggested the change had been made during the reformatting of the Instructions to align with the UN Model Regulations. It was noted that the formal process should be followed for any amendment and that justification for such amendments should always be presented. The proposer withdrew the paper.

9.4 Wording of Special Provision A1 (DGP-WG02-WP/23)

9.4.1 A proposal to align the text of special provision A1 with that contained in special provisions A2 and A109 was agreed. There was some support by members that text explaining the purpose of State variation be developed for Part 1 of the Instructions.

9.5 **Definition of Transport Unit (DGP-WG02-WP/25)**

9.5.1 The proposal was agreed.

9.6 UN 2037, Receptacles, Small, Containing Gas (DGP-WG02-WP/30)

9.6.1 It was explained by the Secretary that the proposal to the UN had not been discussed at the July 2002 meeting and it was unclear whether it would be presented at the December 2002 meeting. One member noted that this was potentially a serious issue for ICAO since a differentiation is made between gas receptacles and aerosols. On the basis there is no release device, gas receptacles are permitted in larger quantities and safety is ensured in so far as there is no means for a gas to escape unless the receptacle is punctured. It was noted that this issue may already have been discussed at ADR/RID meetings. Based on this discussion, the paper was withdrawn.

9.7 Special Provision A112 (DGP-WG02-WP/35)

9.7.1 A proposal to permit class 9 materials in consumer commodities was withdrawn after it was pointed out that the proposed expansion to special provision A112 would allow not only items such as first aid kits but also dry ice, magnetized material and certain airbags. The proposer said he would present a revised proposal for the next meeting.

9.8 Special Provision A78 (DGP-WG02-WP/36)

9.8.1 It was explained that during the restructuring of the Technical Instructions, text permitting the transport of pyrophoric radioactive material had been inadvertently omitted and that this had resulted in tritium being prohibited from air transport. It was agreed that such material in solid form should be permitted in Type B packages, noting that such packages had to successfully pass a fire test. It was further agreed that this amendment should be disseminated as soon as possible by means of a corrigendum.

9.9 Quantity Limitation of UN 2990, UN 3072 Life-saving Appliances (DGP-WG02-WP/47)

9.9.1 The proposal was agreed on clarification 905 would remain in columns 9 and 11 and "No limit" would be entered in columns 10 and 12.

9.10 Dangerous Goods List, Wetted Explosives (DGP-WG02-WP/48)

9.10.1 Several inconsistencies relating to wetted, desensitised explosives arising from the UN Model Regulations were explained together with proposed solutions. Some members agreed that the

issues identified needed to be reviewed by technical experts and suggested the UN be asked to revisit the whole issue. The proposer asked that comments be sent as soon as possible to allow him to submit a late paper to the UN.

9.11 Consumer Commodities (DGP-WG02-WP/49)

9.11.1 It was agreed that the Secretary should ask the UN to assign a UN number for consumer commodities on the basis that having an ID number caused many problems on a multi-modal level.

10. PACKING INSTRUCTIONS

10.1 **Report of the Packing Instruction Working Group (DGP-WG02-WP/45)**

10.1.1 Following the decision taken at DGP/18 that a review of the packing instructions should be undertaken with the aim of simplification, two informal working group meetings were held and a report summarizing the work was presented.

10.1.2 The working group on packing instructions agreed that the current ICAO packing instructions could be significantly simplified and aligned with the UN packing instructions. The basis of the work was (1) an appropriate level of safety should be maintained whilst a rationalized approach was addressed and (2) there should be ease of customer use. With regard to (1), a conservative approach was adopted and changes were only made to inner quantity limits so as to align with similar substances when differences could not be justified. No changes were made to the maximum net quantity permitted in the Dangerous Goods List. In addition, authorized packagings were aligned with those in the UN Model Regulations if there were no safety implications. With regard to (2), analysis of the packing instructions showed frequent duplication of information which could easily be simplified. It was estimated that consolidation of the packing instructions would provide approximately 40% reduction in the number of packing instructions.

10.1.3 The working group had analysed the packing instructions for Classes 3, 4, 5 and 9 and would undertake the remaining classes 6.1 and 8 for the next working group. It was noted the work had been more complex than had been anticipated. It was the intention of the working group to review every UN number with its associated packing instruction very carefully and to list any differences between what was presently in the Instructions and what was proposed. It was noted that Classes 1, 2, 6.2 and 7 would not need to be considered as the relevant packing instructions either were already aligned to the UN or would be by 2005 at the latest.

10.1.4.1 The issue of particular packaging requirements (PPRs) was then addressed. It was explained that these were of two types - one group which related to packaging issues only and which were carried forward in the exercise, and the second group which related to compatibility. This latter group raised questions which need to be addressed if a successful simplification of the packing instructions is to be achieved.

10.1.4.2 The majority of the compatibility PPRs have existed from the first edition of the Instructions in 1984. It was noted that since that time, many new types of plastic material including special coatings and new methods of coating metal had been developed which removed compatibility problems. Accordingly, many of the PPRs relating to compatibility have been proposed for deletion. Also, where a packing instruction restricted the use of a particular packaging type based on compatibility, it was suggested this should be removed.

10.1.5 A detailed presentation of the annexes to the working paper was then given. It was noted that Annex 5, a correlation between the current and the proposed packing instructions, was not up to date and thus was not examined. It was explained that no renumbering of the packing instructions had taken place; this would only be done on completion of the exercise but it was suggested that if the packing instruction was exactly the same as the equivalent UN packing instruction, the number should be the same. It was further suggested that if a PI was cargo aircraft only, this should be indicated. For limited quantities, it was noted that a clear indication was required which was probably best achieved by using a Y prefixed packing instruction number. It was considered the presentation for limited quantities, eg in PI 312, was confusing and needed to be presented in a clearer way. Finally, it was suggested to display as much information as possible in a tabular format

10.1.6 Annex 1; Class 3

10.1.6.1 311

The text "...may be shipped as UN 3064 only if packed" should be examined. The last sentence should form the first paragraph.

10.1.6.2 312

The text "...provided they will not interact dangerously" in the limited quantities section should be examined.

For special provision A66, a gross quantity limit of 30 kg G was suggested but it was noted the base material was a flammable liquid and should be in litres.

10.1.6.3 3X1

This new instruction represented a consolidation of six packing instructions and presented the quantity limits for both passenger and cargo only aircraft for the three packing groups.

It was noted that the compatibility requirement specified in 4;1.1.3 was already covered by the general reference to Part 4, Chapter 1.

The tabular layout for inners in combination packagings was viewed positively and it was suggested it would be helpful if a similar style could be created for single packagings.

It was suggested that for open head drums if used for single packagings only, the text of the additional requirement 1 should start "For single packagings, open head drums...."

The removal of the PPR referring to halogenated hydrocarbons was explained

10.1.6.4 3X2

It was noted that the physical characteristics of specific dangerous goods needed to be reviewed to ensure that they were treated appropriately.

Quantity limits were increased on the basis of a rationalized approach and on the belief that metal packagings offered greater protection. This was done on a limited basis and only when justified. Deletion of PPR 8 should refer to UN 2983

10.1.6.5 3X3

This instruction was developed for very high hazard class 3 liquids; no changes were made to quantity limits although there could be an additional consolidation with 3X2

10.1.6.6 3X4

This instruction was developed for the remaining limited quantity packing instructions. Superscripts 1 and 2 should be deleted. Insertion of PG I and a dash to indicate forbidden was suggested.

10.1.7 Annex 1; Class 4

10.1.7.1 4X1

Additional requirement 3 - the UN reference 2.1.3.5 should be revised to the appropriate Technical Instructions reference.

Additional requirement 4 - it was queried if this implied a packing instruction for liquids was more suitable for such a dispersion; it was agreed to consider this further.

A reduction in the quantity limitation for cargo aircraft for UN 1336, 1344 and 1357 was developed on the basis of the rationalized approach.

10.1.7.2 4X2

A very large number of substances are included - members were asked to review the PPRs, especially PPEA, PPEB, PPEC and PPXXX as no rational had been found for the quantity limits. It was suggested they might later be aligned.

It was noted PPDA was missing and needed to be added.

10.1.7.3 4X5

An inconsistency for the quantity limits for plastic bags and bottles was noted. Caution was advised regarding reducing quantities until industry could be consulted.

10.1.7.4 4X7

Comments were requested regarding the proposed addition of plastic inners for passenger aircraft.

10.1.7.5 4X8

The addition of cushioning material for glass inners was queried.

It was queried why ICAO allowed pure substances to be packed in ordinary single packagings whereas the UN required either combination packagings or cylinders.

10.1.7.64X15An increase for UN 2805 quantity limit to 5kg was based on the rationalized approach.

10.1.7.7 4X16

No changes to quantities were proposed. One member suggested consolidation of 4X16 with 4X15 and this was agreed.

It was agreed that UN 3319 was forbidden for both passenger and cargo only aircraft.

10.1.8 Annex 1; Class 5

10.1.8.1 5X1 Note 1 will be revised to follow standard text.

10.1.8.2 5X2 The origin of PPXX was queried.

10.1.8.35X3It was queried whether open -head single packagings should be allowed.

It was noted that the information in the row for metal IP.3, cargo aircraft was in the incorrect sequence (2.5L, 5L, 5L).

10.1.9 Annex 1; Class 9

10.1.9.1906UN requires packaging for certain UN numbers; this will be done for the next meeting.

10.1.9.2 911It was suggested it would be helpful if the single packagings were presented in a tabular format.

10.1.9.3 9X1 A consolidation of the three packing instructions for lithium batteries was welcomed. It was suggested some text might be duplicated and could perhaps be better presented in a general section at the start of the instruction.

10.1.9.4 9X2 It was suggested it would be helpful if the single packagings were presented in a tabular format.

10.1.10 Annex 2 PPR 2 - it was noted that the revised wording would, for packing group III substances, lead to the situation where absorbent material would be required but 4;1.1.10.1 would imply it was not required.

10.1.11 Annex 3 As changes are made, the working group intend to update this list.

10.1.12 Annex 4 - DGL

A draft of how the DGL might appear was discussed. It was pointed out this layout was very similar to that in the UN Model regulations and other modal regulations. Several suggestions were made regarding how the limited quantity packing instruction information could be conveyed. It was noted that examples of

entries with more than one packing group should be given. The usefulness of having the PPRs listed in the DGL was explained - it would be helpful as a cross check against the packing instruction information and it was noted each PPR would not necessarily apply to all substances in the packing instruction.

10.1.13 Many members congratulated the members of the working group for the huge amount of excellent work which had been done and they recognized a large degree of simplification had been achieved. One member noted that a number of principles had still to be addressed such as the new combination of packing groups in one instruction versus the present differing instructions; the desirability of maintaining different passenger and cargo aircraft only instructions for the transport document (although it was accepted that this did not hold true for all cases); the consolidation of passenger and cargo aircraft only information in one packing instruction, user friendliness, etc. He noted he would set up working groups to examine some of these issues.

10.1.14 It was noted that when one referred to user friendliness, one had to ask who was the primary user and it was suggested this was the shipper. The draft packing instructions had been shown to shippers in one State and general satisfaction had been expressed. It was noted that the packing instruction number was only a check number on the transport document and that air was the only mode to require it.

10.1.15 Regarding the issue of compatibility, it was noted that the onus was on shippers to use packagings which were compatible with their product. It was suggested the presence of information on individual inner packagings could give the shipper a false sense of security since an instruction might indicate that a plastic inner, for example, was permitted but it might not be, dependent on the grade and type of plastic. It was further noted that only the air mode provided such information and that the other modal regulations did not feel it necessary to do so. Some members felt it was important to provide as much information as possible to the user in the packing instructions themselves and not depend on the user going to the general requirements. However, it was pointed out that if the PPRs were to be retained in the packing instructions, the result would be cumbersome and would not necessarily apply to all entries. It was also pointed out the overall simplification would then be minimal.

10.1.16 In order to proceed with the exercise, members were requested to review the material presented and to send their comments to Mr. Richard and Mr. Castle by 1 November 2002. In particular, specific questions were frequently raised by the working group and included at the end of individual packing instructions in Annex 1; comments on these items were requested. Some members suggested that this was too short a period for detailed consideration and that more time was required. Another member suggested that the completed paper should be available in sufficient time before the next meeting in order to allow consultation. It was agreed that preliminary comments should be sent by 1 November with additional comments to be sent as soon as possible thereafter.

10.2 Phosphoric Acid, UN 1805 (DGP-WG02-WP/21)

10.2.1 A proposal to amend packing instructions 825, Y825 and 826 by adding UN 1805 together with inner quantity limits was agreed. In addition, it was agreed to permit single packagings and particular packing requirement 5 and that this would be issued in a corrigendum.

10.3 UN 2030 - Hydrazine, Aqueous Solution (DGP-WG02-WP/26)

10.3.1 A proposal to amend packing instruction 809 by adding UN 2030 together with inner quantity limits and particular packing requirements was agreed. It was further agreed this would be issued in a corrigendum.

10.4 UN 1873, Perchloric Acid - Packing Instruction 501 (DGP-WG02-WP/41)

10.4.1 A proposal to permit certain plastic inner packagings for perchloric acid was discussed. It was noted that due to an apparent omission by the UN, shippers were not allowed the possibility of using plastic inners even though fluoropolymer plastics have been shown to be non-reactive. It was agreed that the Secretary should raise the issue at the UN on the basis this was a multimodal problem.

11. SHIPPER'S RESPONSIBILITIES

11.1 Sequence of the Dangerous Goods Description (DGP-WG02-WP/22)

11.1.1 Information was provided on the decision by the IATA Dangerous Goods Board to permit only one sequence of information from 2005 and their intention to ask the UN at the December 2002 meeting to remove the compromise dual system with a single sequence. A number of members agreed that a single sequence should be fully supported but caution was expressed if the air mode was to adopt this unilaterally, bearing in mind the lengthy discussions which had taken place over the last biennium until a compromise had been reached. At that time, it was stated that in the interest of facilitation of international transport, it was essential that all national and international regulations should authorize the optional use of each of the two sequences.

11.1.2 Noting that from 1 January 2003, modes had to accept the two sequences. It was suggested that IATA should ask the UN for one sequence; if approved, this would give a longer transitional period which had important implications now that the UN Recommendations formed Model Regulations which are adopted by many states for their national legislation.

11.2 Class 9 Hazard Warning Label (DGP-WG02-WP/4)

11.2.1 A proposal to align the miscellaneous dangerous goods label in the Instructions with that in the UN Model Regulations was discussed. It was explained the UN label appeared to be incorrect but that IMO and ADR were aligned with it. It was also pointed out there was a difference in the flammable solid label. It was suggested that a possible solution would be to develop text which would allow for slight differences. The paper was withdrawn and the proposer said a new paper will be submitted for the next meeting.

11.3 Marking of Packages Containing Gas Cylinders (DGP-WG02-WP/18)

11.3.1 The problem of how to handle cylinders packed in strong outer packagings was described. The revised packing instruction 200 does not clarify if these outer packagings should be treated as overpacks (for handling purposes) or as protective packagings (to protect a valve). It was proposed if the packagings were to be considered as an overpack, then prescribed markings would need to indicated. It was suggested that new UN text referring to overpack marking might be helpful. A new proposal will be submitted at a future meeting.

11.4 Signature on Dangerous Goods Transport Document (DGP-WG02-WP/29)

11.4.1 The proposer withdrew his paper and asked for it to be resubmitted for the next meeting.

11.5 Affixing Labels to Small Packaging (DGP-WG02-WP/38)

11.5.1 A proposal to permit labels to be attached by tags to small packages was discussed. Although there was some sympathy in the case of a small package having to bear multiple labels, a number of members believed a minimum size was needed in order to prevent labels being attached to inappropriately small packages. One member queried what impact the proposal would have on the display of the "package orientation" labels. Another member queried what was meant by "other suitable means", another queried if the proposal conflicted with 4;1.1.14. The proposer noted he would reconsider the issue for a later date.

11.6 Special Marking Requirements for Radioactive Material Packaging - International Vehicle Registration Code, Part 5:2.4.5 (b) (iii) (DGP-WG02-WP/42)

11.6.1 The problem of displaying the marks prescribed by the Vehicle Registration Code together with those required by the Instructions on a minimum dimension package was described. It was suggested that the intent of the IAEA was to follow that of the UN when referring to the code. The Secretary was asked to raise the issue at the UN December meeting.

11.7 Editorial: ICAO TI's Figure 5-25 - Radioactive Material, Class 7, Placard for Large Freight Containers (DGP-WG02-WP/44)

11.7.1 The proposal was agreed and it was decided not to issue a corrigendum.

12. **OPERATOR'S RESPONSIBILITIES**

12.1 Radioactive Material in Exclusive Use (DGP-WG02-WP/10)

12.1.1 The proposal was agreed together with a corresponding editorial amendment to 7;2.9.3.3.a)

12.2 Acceptance of Goods Not Subject to the Provisions of the Technical Instructions (DGP-WG02-WP/1)

12.2.1 A proposal to add a note to 7;1.1clarifying that operators did not need to verify compliance if an item were non-dangerous by virtue of a special provision was discussed. It was clarified that although reference was made to A45, the proposed amendment was applicable to all special provisions. Some members suggested that numerous notes would be needed in order to cover all possible instances of items being classified as non-dangerous. Others suggested that although there was no requirement for an operator to verify what is excepted, shippers could be encouraged to inform the operator by the addition of a phrase such as 'Not restricted' on the package and/or on the documentation. The paper was withdrawn.

12.3 Storage of Ammunition on Board Aircraft That Have Access to the Baggage Compartment in Flight (DGP-WG02-WP/51)

12.3.1 The issue of whether to require an operator to load ammunition in such a way as not to be readily available where the baggage compartment is accessible during flight was discussed. Although there was some sympathy with the concept, a number of members suggested it was possibly more of a security rather than a dangerous goods issue. One member queried the feasibility of identifying the presence of ammunition in passenger baggage. The Secretary was asked to seek advice from AVSEC on the issue.

13. **EMERGENCY RESPONSE**

13.1 Emergency Response Guidance (DGP-WG02-WP/31)

13.1.1 It was noted that procedures in the *Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods* did not include guidance on how to handle powder spillages. One member offered to supply information on general precautions to be taken. The proposer said he would present a proposal to the next meeting.

13.2 Aircraft Emergency Responsible Drill - Infectious Substances, Affecting Humans, UN 2814 and Infectious Substances, Affecting Animals, UN 2900 (DGP-WG02-WP/40)

13.2.1 For UN 2814 and UN 2900, it was suggested that drill code 6L was unsuitable because it did not convey adequately the unique health danger posed by these substances nor did it provide the correct response information for crew members. It was explained that when the drill codes were developed, 'L' was used both to convey low or no other risk as well as providing a check that another risk had not been missed. Some members agreed to consult with experts to review the issue. The paper was withdrawn.

13.3 Information by Pilot-in-command in Case of In-flight Emergency (DGP-WG02-WP/32)

13.3.1 Potential misinterpretation of the phrase "as soon as time permits" particularly during translation were discussed. It was agreed the intent had not changed - the obligation was still for the pilot-in-command to notify air traffic services only if the situation permitted. It was noted it would be preferable to amend the problematic text rather than adding a note. However, it was pointed out this text had just been incorporated into Annex 18 and was thus not suitable for an immediate amendment.

13.3.2 The Secretary was asked to research the origin of the amended text. The proposer stated that with this information he would present a new proposal for the next meeting.

14. **PROVISIONS FOR PASSENGERS AND CREW**

14.1 Dry Shippers (DGP-WG02-WP/8)

14.1.1 An incident involving a dry shipper was described and it was suggested operators should be notified when they are carried by passengers. One member queried whether this was seeking to regulate a non-regulated item or whether the dry shipper had leaked in which case it was a non-compliant package and therefore should be regulated. Another member noted that if transported as cargo, these dry shippers would be classified as non-dangerous. The proposer stated he believed the operator should be given an opportunity to know he has these items. He withdrew his paper and said he would consider the comments expressed.

14.2 Carriage of Sporting Ammunition by Passengers (DGP-WG02-WP/46)

14.2.1 A proposal to permit ammunition in Division 1.4S for other than sporting purposes was discussed. It was noted the amendment consisted of deletion of the phrase "for sporting purposes" and the addition of two UN numbers which implied cartridges permitted on passenger aircraft i.e. excluding ammunition with explosive or incendiary projectiles. It was suggested that "boxed" should be replaced by "packaged" as this permitted other possible packagings. It was also noted that the phrase "for that person's own use" had been inadvertently omitted and should be kept. A number of members agreed that this proposal would solve a frequently faced problem situation, noting that sky marshalls needed approval if they were to carry ammunition for other than sporting purposes. Others felt the idea of "sporting purposes" acted as a limitation of these unregulated dangerous goods. The proposal, as amended, was agreed.

15. MISCELLANEOUS

15.1 Responsibilities of Carriers in Identifying Undeclared Cargo-constructive Knowledge (DGP-WG02-WP/37)

15.1.1 Further to the discussion at DGP/18 on operator responsibilities in identifying undeclared dangerous goods (see DGP/18-WP/56, section 2.14), members were informed of the results of a meeting held to discuss "What constitutes constructive knowledge of the presence of dangerous goods with respect to civil penalty liability action". The conditions under which a civil penalty could be assessed against a person who "knowingly" violated the law was presented; this would include both those circumstances where the person had actual knowledge of the facts leading to the violation as well as when a reasonable person exercising reasonable care would have that knowledge.

15.1.2 Information was provided on work done to develop guidelines for establishing the responsibilities of operators in identifying undeclared or non-compliant dangerous goods consignments. Members were asked to comment on the responsibilities of the shipper and operator, training to recognize a "suspicious package" and the use of checklists where the information would be sufficient for a person to have constructive knowledge.

15.1.3 A number of members believed the main emphasis should be on training and the development of guidance material for operators. It was noted it is not in the interest of operators to have undeclared dangerous goods on board their aircraft but that the use of checklists was not an acceptable method for determining when enforcement action should start. Rather, it was the creation of an environment conducive to the reporting of undeclared dangerous goods which would assist inspectors in determining non-compliance and thus help safety. It was noted there was no merit in prosecuting an operator whereas there was in prosecuting a shipper who knowingly declared cargo as being non-dangerous. Confidential reporting without penalty was one means of obtaining this information.

A number of members indicated that the operator has a certain level of responsibility to 15.1.4 inspect for indications of undeclared or non-compliant dangerous goods and that under certain circumstances operator violations have been assessed for failing to meet their responsibilities for detecting undeclared cargo or for failing to reject cargo that was not in compliance with the requirements of the Instructions. The discussions revealed that competent authorities address this issue in a number of different ways. On this basis, some members believed that the option should rest with the enforcement authorities and that it is difficult, except by addressing the issue on a case by case manner, to determine whether the operator should have inquired further or taken other measures to prevent acceptance of undeclared or non-compliant dangerous goods. Some felt that the decision for enforcement action is an accumulative decision based on all of the circumstances of each occurrence. Others indicated that "constructive knowledge" indicators could not be subject to an absolute checklist but that guidance on how to better define the operators responsibilities for detecting undeclared cargo and for rejecting noncompliant cargo would be useful. Several members agreed to provide additional information relative to how "constructive knowledge" issues were being addressed in their countries. It was requested that any available information from any of the attending states on this subject be forwarded to the presenter.

15.2 Transport of Dangerous Goods on Passenger Aircraft Without Class B Or C Main Deck Cargo Compartments (DGP-WG02-WP/5)

15.2.1 The decision by the DGP at the last panel meeting to permit certain categories of dangerous goods to be carried in a main deck cargo compartment not meeting class B or C was reviewed. It was explained that this decision had inadvertently permitted a number of unsuitable substances for carriage. It was suggested the issue needed to be revisited and a new proposal will be made at a future meeting. Conversely, UN 1072 Oxygen compressed (Division 2.2, subsidiary risk Division 5.1) had historically been considered to be an exception as it was commonly carried and did not represent a great risk. However, under the new wording in the Supplement, this would no longer be permitted. Following a query if information about such unsuitable substances could be disseminated by means of some form of circular, it was pointed out that operators would not necessarily possess the necessary information to make a judgement on suitability. It was then agreed that a list of exclusions could be forwarded to the Secretary and following approval by the members via correspondence, a corrigendum would be issued to the Supplement.

15.3 **EXEMPTIONS FOR TYPE C QUANTITIES OF RADIOACTIVE MATERIAL**

15.3.1 Information was provided to the meeting about a recent IAEA Review Panel meeting at which it was said that a number of aviation authorities had issued exemptions for radioactive material (fissile material and special form Cobalt ₆₀ in Type C quantities in Type B packages). Information was requested from ICAO as to the extent of the ICAO exemption process and its effectiveness in ensuring matters

such as communication of hazard information in the event of an accident. It was pointed out that the amendment to Annex 11 (proposed by DGP/17) now contained a reference to dangerous goods carried as cargo; it was queried how much information this would convey to emergency responders in the event of an accident involving radioactive material of high activity. In the view of the IAEA, Type C packages should be used for such material. However, it was recognized that other modes of transport might not be available or not be so secure, an issue of increasing importance.

15.3.2 Members were requested to find out if exemptions had been or were likely to be granted and under what conditions, especially with regard to emergency response information. It was queried whether exemptions were granted under 1;1.2 in which case an equivalent level of safety should be provided or under multilateral approval. Any information on the exemption process should be sent to Mr. Warden (david.warden@amersham.com) to enable him on behalf of the ICAO DGP to reply to the IAEA within their 120 day comment period.

15.4 Working group on gases

15.4.1 Information was provided on the work done in the last biennium by the UN Working Group on Gases. It was noted specification details for refrigerated liquefied gas cylinders have now been developed. It was agreed that further work should be done by an informal working group to update the text of Part 6; Chapter 5 on open cryogenic receptacles and to consider pressure relief device settings. It was suggested this work should be coordinated with the UN and it was noted the work of the working group could be conducted by correspondence.

15.5 Passenger awareness

15.5.1 It was suggested that members take into consideration additional criteria for the exceptions for passengers and crew in Part 8. The first consideration suggested was the possibility of dangerous goods being misused as weapons. The second consideration related to the length and detail of the exceptions which resulted in the average passenger being unable to understand them. For outreach and education purposes, it was suggested a user friendly list of exceptions applicable to many passengers would be more easily understood and perhaps applied than a list of specialized items applicable only to a few.

15.6 Next meeting

15.6.1 An invitation was extended to the DGP by the observer from the United Arab Emirates to hold the next meeting of the working group of the whole in Dubai from 31 March to 4 April 2003. Noting that some members had insufficient time to discuss working papers prior to this meeting, it was agreed that the deadline for submission of papers for WG03 would be 31 January 2003. It was, however, recognized that working papers related to reformatting of the packing instructions would be subject to a later deadline of 14 February 2003. The Secretary, noting that all working papers would be placed on the website as soon as processed, requested members to copy all participants when submitting papers to her as this would allow a longer period for discussion prior to the meeting.

DGP/19-WP/11

DGP-WG/02-WP/53 Appendix

APPENDIX

THERMS OF REFERENCE FOR THE WORKING GROUP TO REVIEW THE PRINCIPLES GOVERNING THE TRANSPORT OF DANGEROUS GOODS ON CARGO ONLY AIRCRAFT

- 1. The working group will review the principles governing the transport of Dangerous Goods on cargo only aircraft and if appropriate, develop subsequent amendments to the relevant provisions of the Technical Instructions.
- 2. The working group will communicate prior to WG/03 in Dubai and again prior to DGP/19.
- 3. The working group will present progress reports on its activities to the WG/03 and to DGP/19.

-END-