



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
MEETING OF THE WORKING GROUP OF THE WHOLE**

**Montréal, 15 to 19 October 2012**

**Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284)* for incorporation in the 2015-2016 Edition**

**2.3: Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities**

**2.4: Part 4 — Packing Instructions**

**CERTAIN 1.4S ARTICLES IN LIMITED QUANTITIES**

(Presented by Dangerous Goods Advisory Council)

**SUMMARY**

This paper proposes to assign certain 1.4S articles as Limited Quantities.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 Based on amendments adopted in the 17<sup>th</sup> revised edition of the UN Model Regulations (UNMR), DGP-WG/11 provisionally approved amendments to the Technical Instructions permitting selected entries used for consumer ammunition and power tools in Division 1.4S (UN 0012, 0014 and 0055) to be transported as limited quantities of dangerous goods. It was recognized that a new Y packing instruction was needed for this purpose (see paragraph 3.2.9.2 a), DGP-WG/11-WP71). In DGP/23-WP/36, DGAC provided a draft packing instruction for consideration by the DGP.

1.2 At DGP/23 the panel determined not to adopt these proposals as explained in the report (DGP/23-WP/102, paragraph 2.5.3). The panel noted that these goods retain the requirement for package testing within the UN Model Regulations, and questioned the benefit of the proposal, as the sole exception offered in the Technical Instructions for limited quantities would not be utilized. DGAC acknowledged this, but felt that practical issues of harmonization would arise without use of the Y mark. An example was given for one State where exceptions given to limited quantities shipped by air might not be available to packages using the surface mark. To paraphrase the report, although the panel saw no safety concern, some members felt very strongly that the general philosophy applied to limited quantities should not be changed based on the requirements in one State. This would cause confusion in training

programmes and could delay acceptance checks. As no other further supporting logic could be given at the time, the proposal was rejected.

1.3 Ammunition manufacturers have accordingly proceeded with implementation of surface markings for limited quantities of these goods consistent with the UN Model Regulations 17th Edition. For the air mode, manufacturers world wide applied the Panel's determination that surface marks for limited quantities would be allowed and ignored for air transport, per Part 5;2.4.13, and that the Y mark would not be allowed. About 15 million packages per year are in the process of revision to the surface mark, many of which are subsequently shipped by air.

1.4 However, after DGP/23, implementation difficulties became apparent for enforcement and carrier personnel, as exemplified by the Swiss proposal at the UNSCETDG 41st Session in ST/SG/AC.10/C.3/2012/7 and the response from the Sporting Arms & Ammunition Manufacturers' Institute (SAAMI) in UN/SCETDG/41/INF.15. The Swiss noted that, in practice, surface enforcement authorities may not allow the surface limited quantities mark to appear on a package that has a hazard label applied, but in that case they would allow the limited quantities Y mark. Similarly, shippers of 1.4S limited quantities have also encountered a prevailing policy of major air carriers who use the surface limited quantities mark as an indicator of misdeclared goods by air and reject the shipment. Therefore shippers are currently placed in the unharmonized position of not being able to simultaneously comply with the Technical Instructions, surface enforcement personnel and air carrier policies.

1.5 Since this information was not available at DGP/23, DGAC wishes to bring it to the attention of the Panel. The original reasoning for rejecting the proposal was not driven by safety, but upheld simplicity as a worthy goal in the absence of strong reasons to support the proposal. Now significant practical difficulties have come to light which are barring manufacturers and shippers from proceeding without the Y mark. From a practical standpoint, the benefits of designation as air limited quantities extend beyond the package testing exception, and are very important for surface transport.

1.6 We reiterate that there is no physical difference for these solid articles between packagings which are or are not limited quantities, other than the need to confine package options to combination packagings with 5 kg inners in a Y packing instruction. A 25 kg maximum for limited quantities is proposed based on (1) the NEQ being 5-10% of the mass; (2) the fact that packages are still subject to package testing; and (3) the applicability of the 6(d) test by ICAO adoption of the new special provision from the UNMR.

1.7 In summary, industry accepted and began to implement the decision of the panel at DGP/23, but is now faced with the practical concerns of air carriers and surface enforcement personnel with this implementation. Manufacturers are caught between conflicting regulations and policies. The Y mark was originally conceived to aid in surface transport of air compliant packages, and its importance extends beyond the exception from package testing requirements to surface transport clarification. We believe that this proposal offers a good and optimal harmonization without reducing safety. The UNSCETDG is awaiting the panel's action on this proposal, and will take appropriate action in their next biennium to further enhance their alignment with ICAO.

1.8 This proposal combines the proposals of the last biennium, i.e. DGP-WG/11 as amended by DGP/23-WP/36 and the DGP/23-WP/36 Flimsy.

2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to consider the proposal which is shown in the appendix to this working paper.

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APPENDIX

PROPOSED AMENDMENT TO THE TECHNICAL INSTRUCTIONS

Part 3

**DANGEROUS GOODS LIST,  
SPECIAL PROVISIONS AND  
LIMITED AND EXCEPTED QUANTITIES**

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Chapter 2

**ARRANGEMENT OF THE  
DANGEROUS GOODS LIST (TABLE 3-1)**

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Table 3-1. Dangerous Goods List

Name	UN No.	Class or division	Subsidiary risk	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger aircraft		Cargo aircraft	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
...												
Cartridges for weapons, inert projectile †	0012	1.4S		Explosive 1.4		<u>AXX</u>		E0	130 <u>Y130</u>	25 kg <u>25 kg</u>	130	100 kg
Cartridges, small arms †	0012	1.4S		Explosive 1.4		<u>AXX</u>		E0	130 <u>Y130</u>	25 kg <u>25 kg</u>	130	100 kg
Cartridges for weapons, blank †	0014	1.4S		Explosive 1.4		<u>AXX</u>		E0	130 <u>Y130</u>	25 kg <u>25 kg</u>	130	100 kg
Cartridges, small arms, blank †	0014	1.4S		Explosive 1.4		<u>AXX</u>		E0	130 <u>Y130</u>	25 kg <u>25 kg</u>	130	100 kg
Cartridges for tools, blank †	0014	1.4S		Explosive 1.4		<u>AXX</u>		E0	130 <u>Y130</u>	25 kg <u>25 kg</u>	130	100 kg
Cases, cartridge, empty, with primer †	0014	1.4S		Explosive 1.4		<u>AXX</u>		E0	136 <u>Y130</u>	25 kg <u>25 kg</u>	136	100 kg
Cases, cartridge, empty, with primer †	0055	1.4S		Explosive 1.4		<u>AXX</u>		E0	136 <u>Y130</u>	25 kg <u>25 kg</u>	136	100 kg

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## Part 3

# DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND LIMITED AND EXCEPTED QUANTITIES

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## Chapter 3

### SPECIAL PROVISIONS

*Parts of this Chapter are affected by State Variations AU 1, AU 2, CA 7, HR 3, IR 3, JM 1, KP 2, NL 1, US 11, ZA 1; see Table A-1*

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Table 3-2. Special provisions

TIs UN

AXX (364) This article may only be transported under the provisions of 3:4 if, as presented for transport, the package is capable of passing the test in accordance with Test Series 6(d) of Part I of the UN Manual of Tests and Criteria as determined by the appropriate national authority.

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## Chapter 4

# DANGEROUS GOODS IN LIMITED QUANTITIES

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### 4.1 APPLICABILITY

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4.1.2 Only dangerous goods which are permitted on passenger aircraft and which meet the criteria of the following classes, divisions and packing groups (if appropriate) may be carried under these provisions for dangerous goods in limited quantities:

Class 1 Only UN 0012, UN 0014 and UN 0055

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### 4.2 PACKING AND PACKAGINGS

4.2.1 The general packing requirements of 4:1.1 applicable to passenger aircraft must be met except that the requirements of 4:1.1.2, 4:1.1.9 c), 4:1.1.9 e), 4:1.1.16, 4:1.1.18 and 4:1.1.20 do not apply. Articles of Division 1.4, Compatibility Group S must fully comply with Part 4.

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## Part 4

## PACKING INSTRUCTIONS

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## Chapter 3

## CLASS 1 — EXPLOSIVES

*Parts of this Chapter are affected by State Variation BE 2, DK 2, HR 5;  
see Table A-1*

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## 3.4 PACKING INSTRUCTIONS

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<u>Packing Instruction Y130</u>		
<u>Limited quantities for UN 0012, 0014 and 0055 only</u>		
<u>COMBINATION PACKAGINGS</u>		
<u>Inner packagings</u>	<u>Intermediate packagings</u>	<u>Outer packagings</u>
<u>Bags</u> <input type="checkbox"/> <u>plastics</u> <input type="checkbox"/> <u>textile</u>  <u>Boxes</u> <input type="checkbox"/> <u>fibreboard</u> <input type="checkbox"/> <u>metal</u> <input type="checkbox"/> <u>plastic</u> <input type="checkbox"/> <u>wood</u>  <u>Receptacles</u> <input type="checkbox"/> <u>Fibreboard</u> <input type="checkbox"/> <u>metal</u> <input type="checkbox"/> <u>plastics</u> <input type="checkbox"/> <u>wood</u>	<u>Not necessary</u>	<u>Boxes</u> <input type="checkbox"/> <u>aluminium (4B)</u> <input type="checkbox"/> <u>fibreboard (4G)</u> <input type="checkbox"/> <u>natural wood, ordinary (4C1)</u> <input type="checkbox"/> <u>natural wood, with sift proof walls (4C2)</u> <input type="checkbox"/> <u>plywood (4D)</u> <input type="checkbox"/> <u>reconstituted wood (4F)</u> <input type="checkbox"/> <u>solid plastics (4H2)</u> <input type="checkbox"/> <u>steel (4A)</u>
<b><u>PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS:</u></b>		
<u>— Inner packagings are limited to 5 kg gross mass each</u>		

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