DGP-WG/13-WP/49 15/3/13 **Revised** 3/4/13

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

Montréal, 15 to 19 April 2013

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

## DANGEROUS GOODS IN AIR MAIL

(Presented by G A Leach)

#### REVISED

#### **SUMMARY**

This working paper proposes that ICAO and UPU explore the possibility of extending the list of dangerous goods permitted in air mail.

Action by the DGP-WG is in paragraph 2.

## 1. **INTRODUCTION**

- 1.1 After many years of the items being permitted in air mail being restricted to low hazard infectious substances/diagnostic specimens, dry ice and very low activity radioactive material, the Technical Instructions now provides for the sending of lithium batteries in equipment. This is a reflection of reality; millions of such items were being sent internationally via air mail and they would continue to do so, irrespective of whether provisions had been developed i.e. given the vast quantities involved prohibiting such items was never going to be realistic. In an ideal world dangerous goods would not be sent via air mail or in baggage or cargo, but providing controls (in the form of the Technical Instructions) ensures many items can be carried without posing any danger to an aircraft or its occupants whilst also reducing the risk of forbidden items being "driven underground".
- 1.2 The recent commitment of ICAO and UPU to work together is very welcome and collaboration between the two agencies has great potential for enhancing flight safety whilst at the same time ensuring the best service for consumers. It is suggested that the recent introduction of provisions for lithium batteries in equipment should be the first stage of a complete review of what items of dangerous goods may sent safely in air mail.
- 1.3 The UK Civil Aviation Authority and Royal Mail have worked extensively on exploring ways of controlling the introduction of dangerous goods into air mail using a proportionate, risk based

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approach. Part of this approach has been to determine what kind of forbidden dangerous goods were typically being sent. The results were approximately as follows:

- 2 -

- a) Perfume/after shave 30%
- b) Nail varnish/polish 36%
- c) Aerosols 14%
- d) Lithium batteries 12%
- e) Lighters 2%
- f) Others (e.g. whiskey) 7%
- The above figures are based on a sample of approximately 32,000 items and one can only wonder at the time and effort involved in the removal of 11,500 packets of nail varnish (in robust glass bottles rarely, if ever, exceeding 30mL) and subsequent disposal, reporting etc, not to mention the resources needed by Royal Mail and the CAA to handle complaints from irate senders who, understandably, cannot understand the logic behind such prohibitions, particularly when one can carry, in their baggage, not only the dangerous goods in question but in quantities 66 times greater than what is currently being removed from mail! The resources expended on dealing with such low hazard dangerous goods could be far better used on the detection of the really dangerous items which we have seen in the mail (e.g. fireworks, gallium, sulphuric acid, detonating cord, chemical oxygen generators to name but a few).
- 1.5 Apart from the disproportionate effort employed to deal with very low hazard dangerous goods it is suggested the current restrictions on dangerous goods in air mail are not credible in the modern world and undermine the status of the UPU Convention (and consequently Annex 18 and the Technical Instructions) in the eyes of the public. That said, it is important to state that any extension of the air mail provisions would need to be matched against what is currently permitted in air cargo. i.e. Designated Postal Operators should not enjoy greater relaxations than their counterparts in the express handling world.
- Based on the determination of the types of dangerous goods in UK mail, Royal Mail approached the Civil Aviation Authority for an exemption to allow for the carriage, in domestic air mail, of a small number of the most commonly carried, low hazard, dangerous goods. Following a risk assessment, which required the items to be permitted in passenger baggage or were not subject to the Technical Instructions when carried as cargo, and an evaluation of the controls introduced by Royal Mail (including those designed to ensure the items do not enter the international mail stream) the exemption was granted. The permitted dangerous goods are shown in the appendix along with maximum volumes per receptacle, maximum number of receptacles per outer package, packaging standards and marking requirements. Packages must also be marked with the name and address of the consignor (the address may be recorded as the building or house name/number and the postcode). It is suggested similar provisions should be considered for international air mail.

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

2.1 It is proposed that as part of the ongoing collaboration between ICAO and the UPU a task force is formed to review the items of dangerous goods permitted in air mail.

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# **APPENDIX**

# EXEMPT DANGEROUS GOODS IN UK MAIL

UN number	Proper Shipping Name	Intended product or use	Maximum inner receptacle size	Maximum number of receptacles per outer packaging	Packaging
ID8000	Consumer	Medicinal, dressing or	350 ml	2	Aerosols must be tightly packed in strong outer packaging
(UN1950*)	(Aerosols, flammable and non-flammable only)	grooming			and must be packed, secured or cushioned so as to prevent any damage to the aerosols. Valves must be protected by a cap or other suitable means to prevent inadvertent release of the contents during transport.
UN3065	Alcoholic Beverages (>24%<70%)	Alcoholic beverages sent for personal consumption	1 litre	2	Packed such that any inadvertent leakage of the alcoholic beverage is contained within the outer packaging. This may be achieved by the alcoholic beverage being contained in a leak-proof outer packaging or being placed in a leak-proof liner and then placed in an outer packaging.
ID8000 (UN1266*)	Consumer Commodity Perfumery Products	Perfumes and aftershaves	150ml	4	Perfumery products must be within retail packaging, placed in strong outer packaging. Inner packagings must be so packed, secured or cushioned in an outer packaging in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the outer packaging.

UN number	Proper Shipping Name	Intended product or use	Maximum inner receptacle size	Maximum number of receptacles per outer packaging	Packaging
ID8000 (UN1263*)	Consumer commodity  Paint and Paint related material	Nail varnish	30ml	4	Bottles of nail varnish must be placed in strong outer packaging and be so packed, secured or cushioned in an outer packaging in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the outer packaging.
UN2800	Batteries, wet, non-spillable	Batteries for consumer electronic devices	1.5kg	1	New, non-spillable batteries which comply with Special Provision 238 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations.  Batteries must be protected from short circuit (e.g. by the effective insulation of exposed terminals).
ID8000 (UN1851*) (UN3248*)	Consumer Commodity  Medicine, liquid, toxic, n.o.s  Medicine, liquid, flammable, toxic, n.o.s  Other liquid medicines which are flammable	Prescription and non- prescription medicines sent to an individual for personal use	50ml	8	Medicines sent from a registered pharmacy or medical professional. These must be packed in strong outer packaging and must be packed, secured or cushioned so as to prevent any damage to the medicines and contain any leakage within the outer packaging by way of either a leak-proof liner or absorbent material.

UN number	Proper Shipping Name	Intended product or use	Maximum inner receptacle size	Maximum number of receptacles per outer packaging	Packaging
ID8000 (UN3249*)	Consumer Commodity Medicine, solid, toxic, n.o.s.	Prescription and non- prescription medicines sent to an individual for personal use	50g	8	Sent from a registered pharmacy or medical professional packed in sift-proof outer packaging

<sup>\*</sup>To enable a single marking to be used these specific UN Numbers are each identified as ID8000 for the purpose of package marking/labelling Lithium batteries with equipment:

UN Number	UN3481	UN3091
Proper Shipping Name	<b>Lithium ion batteries packed with equipment</b> , which comply with Section II of Packing Instruction 966 of the ICAO Technical Instructions	<b>Lithium metal batteries packed with equipment</b> (including lithium alloy batteries), which comply with Section II of Packing Instruction 969 of the ICAO Technical Instructions