# منظمة الطيران المدني الدولي ورقة عمل

# فريق خبراء البضائع الخطرة الاجتماع الرابع والعشرون

مونتريال، ۲۰۱۳/۱۰/۲۸ إلى ۲۰۱۳/۱۱/۸

البند رقم ٢ من جدول الأعمال: إعداد توصيات بإجراء تعديلات على التعليمات الفنية للنقل الآمن للبضائع الخطرة بطريق الجو (الوثيقة (Doc 9284)) لإدراجها في طبعة ٥ ٢٠١ - ٢٠١٦..

### المصابيح التي تحتوى على مواد خطرة

(مقدمة من السيد تون ميلر)

#### الملخص

إن الإدخال المقترح لأحكام جديدة تتناول المصابيح التي تحتوي على مواد خطرة في 2.6 Part 1;2.6 من نسخة التعليمات الفنية ٢٠١٦-٢٠١٦ (انظر الورقة DGP/24-WP/3) يمكن أن يسبب إلتباس كما يحتمل أن يتناقض مع النص الوارد في التعليمات الفنية. وتقترح هذه الورقة تكييف النص الحالي والنص الجديد المتعلقان بنقل المصابيح التي تحتوي على بضائع خطرة لإزالة أي تناقض بينهما.

الإجراء المطلوب من فريق الخبراء المعني بالبضائع الخطرة: فريق الخبراء مدعو لتعديل الأحكام الجديدة المقترحة للمصابيح التي تحتوي على بضائع خطرة في 2.6 Part 1;2.6 وتعديل الحكم الخاص A69 من التعليمات الفنية على النحو المعروض في المرفق بهذه الورقة.

#### 1. **INTRODUCTION**

- 1.1 With the introduction of a new provisions for lamps containing dangerous goods in Part 1;2.6 (see DGP/24-WP/3) of the Technical Instructions, we find three different places in the Technical Instructions where the transport conditions of lamps (with the exception of lamps containing radioactive material which are addressed separately) are established:
  - a) Part 1; 2.6

#### [2.6 LAMPS CONTAINING DANGEROUS GOODS

The following lamps are not subject to these Instructions provided that they do not contain radioactive material and do not contain mercury in quantities above those specified in Special Provision A69:

 a) lamps that are collected directly from individuals and households when transported to a collection or recycling facility;

- b) lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package, provided that:
  - 1) the lamps are certified to a manufacturer's quality management system; and

Note.— The application of ISO 9001:2008 may be considered acceptable for this purpose.

- 2) each lamp is either individually packed in inner packagings, separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4;1.1 and capable of passing a 1.2 m drop test.
- used, damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when transported from a collection or recycling facility.

The lamps must be packed in strong outer packagings that are sufficient for preventing release of the contents under normal conditions of transport meeting the general provisions of 4;1.1 and that are capable of passing a drop test of not less than 1.2 m.

Note.— Lamps containing radioactive material are addressed in 2;7.2.2.2 b) and light bulbs containing Division 2.2 gases are addressed in 2;2.2.3 d).]

- b) Part 2; 2.2.3 d)
- "2.2.3 Gases of Division 2.2 are not subject to these Instructions when contained in the following:
  - a) foodstuffs, including carbonated beverages (except UN 1950);
  - b) balls intended for use in sports;
  - c) tyres which meet the provisions of Special Provision A59; or
  - d) light bulbs, provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package."
  - c) Special Provision A69
  - A69 The following are not subject to these Instructions when carried as cargo:
    - a) articles such as thermometers, switches and relays, each containing a total quantity of not more than 15 g of mercury, if they are installed as an integral part of a machine or apparatus and so fitted that shock or impact damage, leading to leakage of mercury, is unlikely to occur under normal conditions of transport.
    - b) lamps, each containing not more than 1 g of mercury and packaged so that there is not more than 30 g of mercury per package. Packages must be so designed and constructed such that when subjected to drop tests from a height of not less than 0.5 m the packages must still be fit for transport and there must be no damage to the contents.
    - c) articles, each containing not more than 100 mg of mercury, gallium or inert gas and packaged so that the quantity of mercury, gallium or inert gas per package is 1 g or less.

The words "not restricted" and the special provision number A69 must be provided on the air waybill when an air waybill is issued.

#### 1.2 Several observations can be made:

a) It is felt that the provisions in Part 1;2.6 a) are not applicable to air transport but are mainly a concern for the surface mode. Also, the transport of used, damaged and defective lamps from a collection or recycling facility (Part 1;2.6 c)) does not seem to fit with the philosophy of the Technical Instructions. Therefore, it seems inappropriate to incorporate the new proposed paragraphs in the 2015-2016 Edition of the Technical Instructions.

b) Current Special Provision A69 b) imposes a drop test for lamps containing mercury of 0.5 m. The UN Model Regulations do not have this specific requirement for lamps containing mercury. However, with the introduction of new Part 1;2.6, all packages containing lamps must be capable of withstanding a 1.2 m drop test. Moreover, in accordance with Special Provision A69 b), each lamp containing mercury may not contain more than 1 g of mercury and must be packaged so that there is not more than 30 g of mercury per package. These criteria are exactly the same as the new criteria specified in Part 1;2.6.

Therefor is it is proposed to delete paragraph b) of Special Provision A69.

c) Special Provision A69 c) speaks about "articles" in general. These may include lamps, in which case some confusion may occur. For example, in accordance with this special provision a light bulb containing an inert gas such as Neon is limited to 100 mg while in accordance with Part 2;2.2.3 d) these are not subject to the Instructions. Therefore, it is felt that lamps should be excluded from Special Provision A69 c). The same approach should be taken for paragraph a) of Special Provision A69. In addition, a note could be added to Special Provision A69 referring to the provisions for lamps in Part 1;2.6

#### **APPENDIX**

#### PROPOSED AMENDMENT TO PART 1 OF THE TECHNICAL INSTRUCTIONS

#### Part 1

#### **GENERAL**

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#### 2.6 LAMPS CONTAINING DANGEROUS GOODS [CARRIED AS CARGO]

The following lamps are not subject to these Instructions provided that they do not contain radioactive material and do not contain radioactive material contain mercury in quantities above those specified in Special Provision A69:

- a) lamps that are collected directly from individuals and households when transported to a collection or recycling facility;
- b)—lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package, provided that:
  - 1) the lamps are certified to a manufacturer's quality management system; and
    - Note.— The application of ISO 9001:2008 may be considered acceptable for this purpose.
  - 2) each lamp is either individually packed in inner packagings, separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4;1.1 and capable of passing a 1.2 m drop test.
- c) used, damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when transported from a collection or recycling facility.

The lamps must be packed in strong outer packagings that are sufficient for preventing release of the contents under normal conditions of transport meeting the general provisions of 4;1.1 and that are capable of passing a drop test of not less than 1,2 m.

Note.— Lamps containing radioactive material are addressed in 2;7.2.2.2 b) and light bulbs containing Division 2.2 gases are addressed in 2;2.2.3 d).]

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#### Part 3

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

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#### **Chapter 3**

#### SPECIAL PROVISIONS

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#### Table 3-2. Special provisions

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A69

The following are not subject to these Instructions when carried as cargo:

- a) articles other than lamps, such as thermometers, switches and relays, each containing a total quantity of not more than 15 g of mercury, if they are installed as an integral part of a machine or apparatus and so fitted that shock or impact damage, leading to leakage of mercury, is unlikely to occur under normal conditions of transport.
- b) articles other than lamps, each containing not more than 100 mg of mercury, gallium or inert gas and packaged so that the quantity of mercury, gallium or inert gas per package is 1 g or less.

The words "not restricted" and the special provision number A69 must be provided on the air waybill when an air waybill is issued.

Note.— For lamps containing dangerous goods, see Part 1;2.6.

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