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**Committee of Experts on the Transport of Dangerous Goods  
and on the Globally Harmonized System of Classification  
and Labelling of Chemicals****Sub-Committee of Experts on the Transport of Dangerous Goods****Fifty-first session**

Geneva, 3-7 July 2016

Item 5 (b) of the provisional agenda

**Transport of gases: miscellaneous****Update of ISO standards in Class 2****Transmitted by the International Organisation for Standardisation  
(ISO)\*****Introduction**

1. These proposals concerns four standards of which, three are already referenced in the Model Regulations and are updated with two amendments and one revision. The fourth is a new standard for the construction of composite cylinders.

The titles of the standards are:

ISO 11114-1:2012 + Amd 1:2017 Gas cylinders – Compatibility of cylinder and valve materials with gas contents – Part 1: Metallic materials;

ISO 10297:2014 + Amd 1:2017 Gas cylinders – Cylinder valves – Specification and type testing;

ISO 24431:2106 Gas cylinders – Seamless, welded and composite cylinders for compressed and liquefied gases (excluding acetylene) – Inspection at time of filling;

ISO 11119-4:2016 Gas cylinders – Refillable composite gas cylinders – Design, construction and testing – Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 l with load-sharing welded metallic liners.

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\* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, paragraph 98 and ST/SG/AC.10/44, paragraph 14).

The usual arrangements have been made with the Secretariat to circulate PDF copies of these documents to the experts.

## Proposal 1

2. Replace “ISO 11114-1:2012” by “ISO 11114-1:2012 + Amd 1:2017” in the following places: 3.3.1 SP 379 (d) (i), 4.1.6.1.2, 6.2.2.2 and 6.7.5.2.4 (a).

## Justification for proposal 1

3. The principal content of this amendment gives more explicit instructions on the permissible concentrations of gases containing halogens in aluminium cylinders. Requirements for butylene, hydrogen cyanide, hydrogen sulphide and nitric oxide are also amended.

## Proposal 2

4. In the second sentence of the penultimate paragraph of 4.1.6.1.2 replace “... requirements of annex A of ISO 10297:2006 or annex A of ISO 10297:2014 shall be met.” by “... requirements of annex A of ISO 10297:2006, annex A of ISO 10297:2014 or annex A of ISO 10297 + Amd 1:2017 shall be met.”.

5. In 6.2.2.3, in the first table for ISO 10297:2014 in the column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2022”.

6. After the row for ISO 10297:2014 insert the following new row.

ISO 10297:2014 + Amd 1:2017	Gas cylinders – Cylinder valves – Specification and type testing;	Until further notice
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## Justification for proposal 2

7. This essential purpose of this amendment was to modify the standard to include valves for tubes and pressure drums. It also corrects some mistakes in the 2014 version.

## Proposal 3

8. In 4.1.4.1 P200 (4) replace the reference on the last line to ‘ISO 24431:2006 Gas cylinders – Cylinders for compressed and liquefied gases (excluding acetylene) – Inspection at time of filling’ by ‘ISO 24431:2106 Gas cylinders – Seamless, welded and composite cylinders for compressed and liquefied gases (excluding acetylene) – Inspection at time of filling’.

## Justification for proposal 3

9. This edition has been restructured and its scope has been extended to include provisions for the inspection before, during and after filling of composite cylinders (Types 2 to 5 inclusive).

## Proposal 4

10. In 6.2.2.1.1 add a the following new row to the end of the table (after ISO 11119-3:2013):

ISO 11119-4:2016	Gas cylinders – Refillable composite gas cylinders – Design, construction and testing – Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 l with load-sharing welded metallic liners	Until further notice
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## Justification for proposal 4

11. The first three parts of the ISO 11119 series cover various designs of composite cylinders with a seamless liner. This fourth part defines the requirements for design, construction and testing of composite cylinders with a welded metallic liner.

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