

Economic Commission for Europe**Inland Transport Committee**

23 January 2018

Working Party on the Transport of Dangerous Goods**Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)****Thirty-second session**

Geneva, 22-26 January 2018

Item 5 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:
other proposals**

Dry aerosol forming fire extinguishing agent**Transmitted by the Governments of Belgium, the Netherlands and Switzerland****Introduction**

During the discussion on document ECE/TRANS/WP.15/AC.2/2018/21 several delegations and the recommended ADN classification societies provided suggestions to improve the text of the original proposal. Furthermore it was requested to provide as well the amendments regarding tank vessels in 9.3.X.40. You can find the final proposed amendments in the Annex.

Annex

9.1.0.40.2.1 Add a new subparagraph (e) and (f) to read as follows:

- “ (e) (Reserved);
- (f) K_2CO_3 . ”

9.1.0.40.2.2 f) Amend to read as follows:

“(f) Protected spaces shall ~~be provided with a means of extracting the extinguishing agent.~~ **have a facility for extracting the extinguishing agent and the combustion gases. Such facilities shall be capable of being operated from positions outside the protected rooms and which must not be made inaccessible by a fire within such spaces. If there are permanently installed extractors, it shall not be possible for these to be switched on while the fire is being extinguished. If extraction devices are installed, it shall not be possible to start them up during extinguishing.**”

9.1.0.40.2.14 Replace to read as follows:

“**9.1.0.40.2.14 (Reserved)**”

9.1.0.40.2.15 Add a new subsection to read as follows:

“**9.1.0.40.2.15 Fire-fighting systems using K_2CO_3 as the extinguishing agent**

In addition to the requirements laid down in 9.1.0.40.2.1 to 9.1.0.40.2.3, 9.1.0.40.2.5, 9.1.0.40.2.6, and 9.1.0.40.2.9, fire-fighting systems using K_2CO_3 as the extinguishing agent shall comply with the following provisions:

- (a) **The fire-fighting system shall have a type-approval pursuant to Directive 2014/90/EU¹ or to MSC/Circ. 1270²;**
- (b) **Each room shall be provided with its own firefighting system;**
- (c) **The extinguishing agent must be stored in specially provided unpressurised tanks in the room to be protected. These tanks shall be fitted in such a way that the extinguishing agent is dispensed evenly in the room. In particular the extinguishing agent shall also work underneath the deck plates;**
- (d) **Each tank is separately connected with the triggering device;**
- (e) **The quantity of dry aerosol-forming extinguishing agent relative to the room to be protected shall be at least 120 g per m³ of the net volume of this room. This net volume is calculated according to Directive 2014/90/EU³ or to MSC/Circ. 1270⁴. It shall be possible to supply the extinguishing agent within 120 seconds.**

9.1.0.40.2.16 Move current 9.1.0.40.2.14 to a new 9.1.0.40.2.16 to read as before:

“**9.1.0.40.2.16 Fixed fire-extinguishing system for physical protection**”

¹ Official Journal of the European Union, L 257 of 28 August 2014, p.146

² International Maritime Organization Circular MSC/Circ. 1270/Corr.1 — Revised Guidelines for the approval of fixed aerosol fire-extinguishing systems equivalent to fixed gas extinguishing systems, as referred to in SOLAS 1974, for machinery spaces — adopted on 29 August 2008.

³ Official Journal of the European Union, L 257 of 28 August 2014, p.146

⁴ International Maritime Organization Circular MSC/Circ. 1270/Corr.1 — Revised Guidelines for the approval of fixed aerosol fire-extinguishing systems equivalent to fixed gas extinguishing systems, as referred to in SOLAS 1974, for machinery spaces — adopted on 29 August 2008.

9.3.X.40.2.1 *Add a new subparagraph (e) and (f) to read as follows:*

- “ (e) (Reserved);
 (f) K_2CO_3 . ”

9.3.X.40.2.2 f) *Amend to read as follows:*

“(f) Protected spaces shall be provided with a means of extracting the extinguishing agent. ~~Such facilities shall be capable of being operated from positions outside the protected rooms and which must not be made inaccessible by a fire within such spaces. If there are permanently installed extractors, it shall not be possible for these to be switched on while the fire is being extinguished. If extraction devices are installed, it shall not be possible to start them up during extinguishing.~~ **Such facilities shall be capable of being operated from positions outside the protected rooms and which must not be made inaccessible by a fire within such spaces. If there are permanently installed extractors, it shall not be possible for these to be switched on while the fire is being extinguished.**”

9.3.X.40.2.14 *Replace to read as follows:*

“9.3.X.40.2.14 (Reserved)”

9.3.X.40.2.15 *Add a new subsection to read as follows:*

“9.3.X.40.2.15 **Fire-fighting systems using K_2CO_3 as the extinguishing agent**

In addition to the requirements laid down in 9.3.X.40.2.1 to 9.3.X.40.2.3, 9.3.X.40.2.5, 9.3.X.40.2.6, and 9.3.X.40.2.9, fire-fighting systems using K_2CO_3 as the extinguishing agent shall comply with the following provisions:

- (a) **The fire-fighting system shall have a type-approval pursuant to Directive 2014/90/EU⁵ or to MSC/Circ. 1270⁶;**
- (b) **Each room shall be provided with its own firefighting system;**
- (c) **The extinguishing agent must be stored in specially provided unpressurised tanks in the room to be protected. These tanks shall be fitted in such a way that the extinguishing agent is dispensed evenly in the room. In particular the extinguishing agent shall also work underneath the deck plates;**
- (d) **Each tank is separately connected with the triggering device;**
- (e) **The quantity of dry aerosol-forming extinguishing agent relative to the room to be protected shall be at least 120 g per m³ of the net volume of this room. This net volume is calculated according to Directive 2014/90/EU⁷ or to MSC/Circ. 1270⁸. It shall be possible to supply the extinguishing agent within 120 seconds.**

9.3.X.40.2.16 *Move current 9.3.X.40.2.14 to a new 9.3.X.40.2.16 to read as before:*

“9.3.X.40.2.16 **Fixed fire-extinguishing system for physical protection**”

⁵ Official Journal of the European Union, L 257 of 28 August 2014, p.146

⁶ International Maritime Organization Circular MSC/Circ. 1270/Corr.1 — Revised Guidelines for the approval of fixed aerosol fire-extinguishing systems equivalent to fixed gas extinguishing systems, as referred to in SOLAS 1974, for machinery spaces — adopted on 29 August 2008.

⁷ Official Journal of the European Union, L 257 of 28 August 2014, p.146

⁸ International Maritime Organization Circular MSC/Circ. 1270/Corr.1 — Revised Guidelines for the approval of fixed aerosol fire-extinguishing systems equivalent to fixed gas extinguishing systems, as referred to in SOLAS 1974, for machinery spaces — adopted on 29 August 2008.