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**Economic Commission for Europe****Inland Transport Committee****Working Party on the Transport of Dangerous Goods****Joint Meeting of the RID Committee of Experts and the  
Working Party on the Transport of Dangerous Goods**

Bern, 13–17 March 2017

Item 2 of the provisional agenda

**Tanks****Inclusion of provisions for flame arresters on breather  
devices****Transmitted by the Government of the Netherlands<sup>\*,\*\*</sup>***Summary*

|                            |   |
|----------------------------|---|
| <b>Executive summary:</b>  | This proposal reflects the outcome of the discussion on the inclusion of requirements for flame arresters in the Working Group on Tanks at the September 2016 session of the RID/ADR/ADN Joint Meeting. |
| <b>Action to be taken:</b> | Amend subsection 6.8.2.2.3.   |
| <b>Related documents:</b>  | ECE/TRANS/WP.15/AC.1/2016/20 and<br>ECE/TRANS/WP.15/AC.1/144/Add.1 paragraphs 3 to 5  |

**Introduction**

1. In the Working Group on Tanks at the September 2016 session of the RID/ADR/AND Joint Meeting it was decided that it was preferred to have requirements concerning flame arresters in the regulations themselves rather than making reference to a

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\* In accordance with the programme of work of the Inland Transport Committee for 2016-2017, (ECE/TRANS/2016/28/Add.1 (9.2)).

\*\* Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2017/18.

standard describing the applicability of sections of another standard on the subject of flame arresters. It was also decided to limit the applicability to so called “breather devices” used on gravity discharge tanks of 6.8.2.14 (a).

**Proposal**

2. Add a new last paragraph to 6.8.2.2.3 to read:

*Breather devices shall be fitted with flame arresters suitable for the vapour emitted by the substances carried (Maximum experimental safety gap – MESH), temperature range and application. They shall be approved based on the requirements and tests of EN ISO 16852:2010 for the situations given in the table below:*

| Application/Installation             | Testing requirements   |  |
|--------------------------------------|--|--|
| Direct communication with atmosphere | EN ISO 16852:2010, 7.3.2.1   |  |
| Communication to piping system       | EN ISO 16852:2010, 7.3.3.2 (applies to valve/flame arrester combinations when tested together) | EN ISO 16852:2010, 7.3.2.1 (applies to valve/flame arresters tested independently of the valves) |

3. Introduce a new transitional measure in 1.6.3.xx/1.6.4.xx to read (new wording in *italic script*):

*“1.6.3.xx/1.6.4.xx*

*Fixed tanks (tank-vehicles) and demountable tanks/Tank-containers constructed before 1 July 2019 in accordance with the requirements in force up to 31 December 2018 but which however do not comply with the requirements for flame arresters on breather devices applicable from 1 January 2019 may continued to be used.”*

**Justification**

4. At the request of the RID/ADR/ADN Joint Meeting CEN was charged with the drafting of a standard for the subject of flame arresters. Working Group 7 of CEN TC 296, working on standards for service equipment for petroleum products, carried out the work and is thanked for their efforts.

5. However, as the evolving standard only contained reference to applicable sections for testing and marking of equipment of a general ISO standard for flame arresters, the decision was made in the Working Group on Tanks of the RID/ADR/AND Joint Meeting not to reference the EN standard but include the reference to the applicable sections of the ISO standard in the regulation itself.

6. Although the wording could be used for flame arresters in general, also for vacuum valves, it was decided to limit the requirements to breather devices only.

