

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

109<sup>th</sup> session

27 April 2021

Geneva, 3-7 May 2021

Item 6 of the provisional agenda

**Interpretation of ADR**

### **Clarification on ADR 5.3.2.2.1 - specifications for the orange-coloured plates**

**Transmitted by the Government of the United Kingdom**

#### *Summary*

<b>Executive summary:</b>	ADR 5.3.2.2.1 - specification for the orange-coloured plates - states that "The plate shall not become detached from its mount in the event of a 15 minutes' engulfment in fire." The United Kingdom would welcome an exchange of views and discussion on the interpretation of this provision.
<b>Action to be taken:</b>	An exchange of views and discussion on the interpretation of ADR 5.3.2.2.1.
<b>Related documents:</b>	None.

### **Background**

1. ADR 5.3.2.2.1 - specification for the orange-coloured plates - states that "The plate shall not become detached from its mount in the event of a 15 minutes' engulfment in fire."
2. Enforcement bodies in the United Kingdom have taken a view that magnetically attached plates do not satisfy this requirement. This view has raised the question of how to demonstrate that an orange-coloured plate can withstand a 15-minute engulfment in a fire. To our knowledge, there is no applicable standard or test which could uniformly demonstrate this. We note that there is no equivalent for fire resistance of placards, where the requirement is that the placards shall be 'weather-resistant' (see 5.3.1.1.1). In addition, the provisions relating to fire resistance do not apply to the alternative marking requirements for containers carrying dangerous solid substances in bulk and for tank-containers, MEGCs and portable tanks (see 4th paragraph of 5.3.2.2.1)
3. Magnetic plates are very popular within industry; particularly when using leased vehicles as they negate the need to drill into the vehicle and cause permanent damage. Metal tie wraps are also an option, but modern vehicles tend not to have convenient attachment points for such ties.
4. We also believe that some of the alternatives on the market would also not survive a 15-minute fire, often because they are simply PVC decals stuck onto a metal plate. Clearly the PVC decal would simply melt in a fire, and some suppliers even state in their small print that the plates do not comply with ADR fire rating requirements.

## Action to be taken

5. The United Kingdom would appreciate the views of delegates of the Working Party as, due to the above reasons, it can be difficult to enforce this provision.
  6. Specifically, we seek clarification, and invite discussion, from the Working Party on the following points:
    - (a) What was the original intention and expectation behind this requirement?
    - (b) What is the technical basis upon which the requirement is made to ensure consistent application by enforcement bodies?
    - (c) Which plates on the market can survive a 15-minute fire, and how is this tested? How can the purchaser of a plate be sure it is compliant?
    - (d) What would be defined as a 15-minute fire? Is it an intense petrol tanker fire, a small fire remote from the plates, etc.?
    - (e) What is the alternative to magnetic plates, where permanent attachment is not reasonably practicable (e.g. for leased vehicles)?
  7. Depending on the feedback received, the United Kingdom may also raise this issue at the RID/ADR/ADN Joint Meeting in September as equivalent text also exists in 5.3.2.2.1 of RID.
-