**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, 23–27 March 2015

Item 2 of the provisional agenda

**Tanks**

**Wall thickness of tanks with a capacity of less than 5,000 litres made of austenitic-ferritic stainless steel**

Transmitted by the Government of France¹,²

**Summary**

**Executive summary:** The purpose of this proposal is to introduce requirements for the minimum wall thickness of tanks with a capacity of less than 5,000 litres made of austenitic-ferritic stainless steel.

**Action to be taken:** Amend the second table in 6.8.2.1.21 of ADR.

**Related documents:** ECE/TRANS/WP.15/AC.1/2011/17.

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¹ In accordance with the programme of work of the Inland Transport Committee for 2014–2015 (ECE/TRANS/240, para. 100, ECE/TRANS/2014/23, cluster 9, para. 9.2).

² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2015/8.
Introduction

1. During its March 2011 session, the Joint Meeting adopted an amendment to 6.8.2.1.19 of RID/ADR, introducing requirements for the minimum wall thickness of tanks made of austenitic-ferritic stainless steels.

2. The table in 6.8.2.1.21 of ADR that applies to fixed or demountable tanks with a capacity of less than 5,000 litres was not considered.

3. Over the course of the review of standard EN 13094 on the design and construction of metallic tanks with a working pressure not exceeding 0.5 bar, the experts considered it desirable to set out specific requirements for the wall thickness of those tanks of less than 5,000 litres capacity made of austenitic-ferritic stainless steels.

4. We therefore propose introducing requirements for the minimum wall thickness of those tanks, as follows.

Proposal

5. Have the second table of 6.8.2.1.21 of ADR replaced by the following:

<table>
<thead>
<tr>
<th>Maximum radius of curvature of shell (m)</th>
<th>≤ 2</th>
<th>2–3</th>
<th>2–3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity of shell or shell compartment (m³)</td>
<td>5.0</td>
<td>≤ 3.5</td>
<td>&gt; 3.5 but ≤ 5.0</td>
</tr>
<tr>
<td>Minimum thickness of shells</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austenitic stainless steels</td>
<td>2.5 mm</td>
<td>2.5 mm</td>
<td>3 mm</td>
</tr>
<tr>
<td>Austenitic-ferritic stainless steels</td>
<td>3 mm</td>
<td>3 mm</td>
<td>3.5 mm</td>
</tr>
<tr>
<td>Other steels</td>
<td>3 mm</td>
<td>3 mm</td>
<td>4 mm</td>
</tr>
<tr>
<td>Aluminium alloys</td>
<td>4 mm</td>
<td>4 mm</td>
<td>5 mm</td>
</tr>
<tr>
<td>Pure aluminium at 99.80%</td>
<td>6 mm</td>
<td>6 mm</td>
<td>8 mm</td>
</tr>
</tbody>
</table>