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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-eighth session**

Geneva, 28 June-2 July 2021

Item 6 (c) of the provisional agenda

**Miscellaneous proposals for amendments to the Model Regulations  
on the Transport of Dangerous Goods: portable tanks****Inclusion of the new section 6.9.3 “Requirements for design,  
construction, inspection and testing of fibre reinforced plastic  
(FRP) valves, relief devices and manholes for portable tanks”****Submitted by the Russian Federation\*****General**

1. The Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals at its tenth session has been adopted amendments to the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/48/Add.1). The amendments include a new Chapter 6.9 “Requirements for the design, construction, inspection and testing of portable tanks with shells made of fibre reinforced plastics (FRP) materials” including the amendments necessary to Chapter 4.2 related to Chapter 6.9.
2. Keeping in mind that currently valves, relief devices and manholes made of metallic materials are installed on all types of portable tanks, the Russian Federation would like to inform the Sub-Committee about the fact that these devices have a shorter service life in comparison with the service life of the tank itself during long-haul transport and intensive trans-shipment of transported substances, especially corrosive substances.
3. The Russian Federation believes that using FRP materials in the construction of the mentioned service equipment leads to an increase of its service life and a reduction of repair and replacement costs.
4. The Russian Federation has acquired certain experience in using FRP materials for the fabrication of valves, relief devices and manholes as well as on their repair and inspection. The obtained experimental results demonstrate environmental effects such as chemicals, ultraviolet exposure, salt fog and fatigue on the mechanical properties of FRP materials for valves, relief devices and manholes of portable tanks. The results are presented in informal

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\* A/75/6 (Sect.20), para. 20.51

document INF.3 on “Environmental effects onto mechanical properties of FRP materials for valves, relief devices and manholes of portable tanks”.

5. In view of the above, the Russian Federation would like to initiate discussions on the development of the new section 6.9.3 “Requirements for design, construction, inspection and testing of fibre reinforced plastic (FRP) valves, relief devices and manholes for portable tanks”.

### **Requested actions**

6. The Russian Federation invites the Sub-Committee to:
- (a) Discuss the obtained experimental results at the forthcoming fifty-eighth plenary session;
  - (b) Invite experts to contribute to development of the new section 6.9.3 “Requirements for design, construction, inspection and testing of fibre reinforced plastic (FRP) valves, relief devices and manholes for portable tanks”;
  - (c) Entrust the development of the new section 6.9.3 to an informal working group.
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