

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

109th session

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Geneva, 3-7 May 2021

Item 5 (a) of the provisional agenda:

**Proposals for amendments to annexes A and B of ADR:
construction and approval of vehicles**

Engine fire suppression systems and tyre fire protection systems to reduce the likelihood of a BLEVE

Transmitted by International Organization of Motor Vehicle Manufacturers (OICA)

OICA inputs to the BLEVE Working Group proposals (INF.7) of modifications of the ADR:

1. On the BLEVE Working Group:
 - (a) Because the design of vehicle used for the transport of dangerous goods can be/is impacted by the proposed modifications of the ADR by the BLEVE Working Group, OICA would like to join the BLEVE Working Group discussions.
2. On the introduction of the FL vehicles in chapter 9.7.9.:
 - (a) OICA is neutral regarding the introduction of the FL vehicles in chapter 9.7.9.
3. On the engine fire suppression systems:
 - (a) OICA's position on the proposal Option-A is neutral.
 - (b) With regards to the Option-B, could the BLEVE Working Group clarify the terminology "can be found" in the proposed text? Are the UN Regulation No.107 and the RISE examples only? What are the installations and/or test procedures and/or other criteria to follow?

Please consider that the UN regulation No 107 is applicable to buses, not trucks.
 - (c) OICA, at this stage, does not support the Option-C.

Does the BLEVE Working Group require modifications to the chapter 9.2?

Is the scope the engine's fire or/and other components/systems' fires such as combustion heater for example?

Please consider that the Option-C refers to the UN R107 applicable to buses and not trucks.
4. On the tyre fire protection:
 - (a) At this stage, OICA could only accept the Option-A, if the design restrictive provisions are removed for FL vehicles. OICA cannot support the other options due to, among others, the following reasons:
 - i. The vehicles comply to the spray suppression systems requirements as per the Commission Regulation (EU) No 109/2011 and national requirements.

ii) The installation of metallic spray suppression systems and additional metal parts on the vehicle, such as, for example, brackets needed to support these systems, would generate durability issues due to the consequential weight increase.

iii) The additional weight would then have a negative impact on the vehicle/combination payload since we are on the limits of the maximum authorized regulated masses on the axles, for the vehicles and the combinations.

iv) The vehicle manufacturers see a higher risk of tyres' fire if the tyres are 'enveloped' in metal and/or thermal shields mainly because of the potential reduction of air coolant. For example, it could generate much higher brake temperatures and so increase the risk of wheels/tyres' fires.

v) In addition, mudguards might incorporate other safety equipment like radars, lighting devices and others. It would then be needed to reconsider how to mount this extra equipment and how to secure each different functions' compatibilities.

5. On the proposed transitional provisions:

a) Taking into consideration the need for clarifications of the proposed amendments to chapter 9.7.9. as well as the lead time to design and introduce the solutions, OICA recommend the transitional provisions to be moved earliest to ADR 2027 edition.
