Outcome of the Joint Meeting RID/ADR/ADN - Transport in tanks of UN 0133

Transmitted by the Secretariat

During its last session, the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods decided to transmit the conclusions of the Working Group on Tanks as regards document ECE/TRANS/WP.15/AC.1/2011/45 for decision.

The secretariat reproduces hereafter excerpts from the draft report of the last session of the Joint Meeting and the appropriate paragraphs of the Report of the Working Group on Tanks (informal document INF.54) submitted at that session.


Excerpt of the draft report
(ECE/TRANS/WP.15/AC.1/2011/CRP.3/Add.13)

5. Item 9: Transport in tanks of UN 0133 (Explosive, Blasting, Type B)

Document: ECE/TRANS/WP.15/AC.1/2011/45 (Proposal withdrawn by CEFIC but taken up on its behalf by Germany and Switzerland)

126. The Joint Meeting did not reach a decision on the conclusions of the working group, which were transmitted to WP.15 for decision.

Excerpt of the Report of the Working Group on Tanks (informal document INF.54)

Item 9: ECE/TRANS/WP.15/AC.1/2011/45 (CEFIC) Transport in tanks of UN 0331 (Explosive, Blasting, Type B) (Withdrawn by CEFIC, proposed by Germany and Switzerland)

33. Germany introduced the document and expressed the wish to transport UN 0331 in chapter 6.8 tanks, where they are currently only allowed in T1 portable tanks according to chapter 6.7. There was no objection in principle from the Working Group against this wish. The scope of the document was however reduced by the Working Group to only ADR tank-vehicles.
34. The Working Group was also informed that road transport is currently already allowed in Germany for over 5 years by means of a national derogation under the proposed provisions.

35. The Working Group then proceeded with a detailed analysis of the proposed provisions:

[For UN 0331 in Table A of Chapter 3.2:
Insert in column 12: S2.65AN(+)
Insert in column 13: TU 3, TU 12, TU 39, TU XX, TC YY, TA1]

Comments by the Working Group: Some members of the Working Group proposed inclusion of TE 10, TU19 and especially an equivalent of TA3 prohibiting the use of tank codes higher in the tank code hierarchy.

[Add a new (a) to 4.3.4.1.3 with the following text (re-numbering existing paragraphs (b) to (i)):
"(a) Class 1.5 UN 0331 Explosive, Blasting, Type B: code S2.65AN"]

Comments by the Working Group: The Working Group generally agreed with the proposed tank code. The test pressure level of 2.65 bar was considered a good compromise between the minimum wall thickness and impact resistance of the tank, while allowing the current use which requires a pressure of more then 1 bar during discharge. A dedicated tank seemed also for the Working Group the best option.

[In Section 4.3.5 add a new special provision TU XX as follows:
“TU XX: The maximum permissible net mass in 7.5.5.2.1 is not applicable if in addition to the verification of suitability in accordance with TU39, the suitability of the substance in cases "without mass limitation" has been determined by the competent authority.”]

Comments by the Working Group: The Working Group was informed that in Germany a risk evaluation showed that the effect of an incident with 16 tons of any explosives was comparable to the effect of an incident with 25 tons of UN 0331 for aluminium alloy tanks. In this philosophy the allowed net mass of product transported under the German derogation is higher then 16 tons since this reduces the number of transports on the road. Some members of the Working Group expressed their surprise at this information since it is a definite break from the currently used philosophy in the ADR regulations and the EU Directive 2008/68. Since this would only be applicable to ADR tank-vehicles the view of the WP.15 was deemed necessary.

[In Section 6.8.4 b) add a new a special provision TC YY as follows:
“TC YY: The shells shall be made of aluminium or aluminium alloy.”]

Comments by the Working Group: The Working Group agreed that aluminium alloy (minimum 5 mm wall thickness) was the only suitable material for construction of the shell for this specific substance. The use of aluminium would lead to wall thicknesses of 8 mm. The use of steel would lead to safety issues in the event of a fire, leading to much higher temperatures and pressures than would be the case for aluminium alloys and for 25 tons of this substance. For other substances under this UN entry, steel could be used with a mass limitation of 16 tons, in line with T1.

36. Further required consequential amendments to be added to the proposal are:
Amend the heading of 4.3.4 to read: “Special provisions applicable to Classes 1 and 3 to 9”
Amend the last sentence of 4.3.2.1.2 to read: “The explanations for reading the four parts of the code are given in 4.3.3.1.1 (when the substance to be carried belongs to Class 2) and in 4.3.4.1.1 (when the substance to be carried belongs to Classes 1 and 3 to 9).”

Amend footnote 1 to read: 1An exception is made for tanks intended for the carriage of substances of classes 1, 5.2 or 7 (see 4.3.4.1.3).

37. Several experts also expressed that they are not in a position to take a final decision on the proposal since they need both the referenced test data from BAM and time to evaluate the provided data with national explosives experts.

38. Ultimately the Working Group conceded that no final decision can be taken at this time but that the issue could be discussed at the next WP.15.