We are of the opinion that the definition of the MWP (Maximum working pressure) is not clearly defined in the standard and the interpretation of the MWP is not unambiguous.

According to the ADR in 1.2.1 for “Maximum working pressure” has to be taken into account. In the last paragraph “For tanks equipped with safety valves (with or without bursting disc), the maximum working pressure (gauge pressure) shall however be equal to the prescribed opening pressure of such safety valves.” In Finland the safety valves has normally been used for these tanks.

In 6.8.3.2.9 there is “Tanks intended for the carriage of compressed or liquefied gases, may be fitted with spring-loaded safety valves. These valves shall be capable of opening automatically under a pressure between 0.9 and 1.0 times the test pressure of the tank to which they are fitted.”

This will mean that the highest value has to be taken into account. The maximum working pressure is equal to the test pressure. That means that the pressure for calculations in the columns in the standard is almost the same, but the allowable stresses in these cases differ a lot from each other. That would mean that the wall thickness of the wall increases 20 % when using the branch D (Operating conditions).

Finally we would like to remind that in the equivalent standard prEN 12 493 for LPG which has already been approved to the ADR and RID there is not branch D for calculation of tanks.

Proposal: Delete the branch D for the class 2 in the standard.