Informal meeting on Code of Practice for Packing of Cargo Transport Units

at the request of the United Nations Economic Commission for Europe Working Party on Intermodal Transport and Logistics

Geneva and virtual, 29-30 September 2021 (second meeting)

Item 4 of the provisional agenda

Updates to the CTU Code

Answers on acceleration coefficients and blocking capacity of dunnage bags

Submitted by the Russian Federation

1. Russian Federation would share background information – test results or calculation methodologies – on how the values of suggested acceleration coefficients to be considered for securing cargo in containers transported by railway of 1.0 to 1.19 tf/t in longitudinal direction and 0.33 to 0.5 tf/t in the transverse direction have been obtained.

When calculating the fastening of goods in wagons and containers for transportation on the railways of the Russian Federation, specific longitudinal inertial forces are used in the longitudinal direction up to 1.2 tf/t; in transverse direction up to 0.5 tf/t.

The current methodology, regulated by regulatory documents, was developed on the basis of practical results of scientific research, which evaluated the dynamics of the interaction of wagons in freight trains during movement and shunting operations at stations, including on sorting slides, and also monitored the number of disbandment of wagons from sorting slides in the route and collision speeds of wagons.

2. Russian Federation would share its expertise with regard to determination of the blocking capacity of the dunnage bags other than based on bursting pressure.

As an alternative to using operating pressure values to calculate the permissible load on the dunnage bags (the current procedure), it is proposed to provide the possibility of using maximum working loads when filling specific gaps specified by the manufacturer in the technical characteristics of the fastening based on the results of tests performed.