Proposal for amendments to Regulation No. 107 (M₂ and M₃ vehicles)

I. Proposal

Annex 11,
Paragraph 3.2.3.2.1., amend to read:

"3.2.3.2.1. The vehicle in running order is loaded with: a mass corresponding to the number P of seated passengers, of mass Q; a mass corresponding to the number SP of standing passengers, of mass Q uniformly distributed over the surface available for standing passengers S₁; where appropriate, a mass WP uniformly distributed over each wheelchair space; a mass equal to B (kg) uniformly distributed in the baggage compartments; a mass equal to BX (kg) uniformly distributed over the surface area of the roof equipped for the carriage of baggage, where:

P is the number of seating places.

S₁ is the area for standing passengers. In the case of vehicles of classes III or B, S₁ = 0.

SP, declared by the manufacturer, shall not exceed the value S₁/SSp, where SSp is the conventional space provided for one standing passenger specified in the table below.

WP (kg), is the number of wheelchair spaces multiplied by 250 kg representing the mass of a wheelchair and user.

B (kg), declared by the manufacturer, shall have a numeric value not less than 100 x V. This shall include baggage compartments or racks that may be attached to the outside of the vehicle.

V is the total volume of baggage compartments in m³ including baggage compartments, exterior racks and ski-box. When approving a vehicle of Class I or A, the volume of baggage compartments accessible only from the outside of the vehicle shall be disregarded.

BX, declared by the manufacturer, shall have a numeric value not less than 75 kg/m².

Double deck vehicles shall not be equipped for the carriage of baggage on the roof and therefore BX for double-deck vehicles shall be zero."

II. Justification

Annex 11 is based on EU Directive 97/27 EC on the type-approval of vehicles with regard to their masses and dimensions. This Directive was replaced by Regulation (EU) 1230/2012. The purpose of this text is to align Annex 11 of UN Regulation No. 107 with Regulation (EU) 1230/2012.

This document is a proposal from OICA to remove the ambiguity introduced by the attempt for alignment on the EU Regulation 1230/2012. In the calculation of the total mass, the weight of the passengers indeed includes some hand luggage that is assumed to be placed in the racks. But GRSG/2014/22 counts the rack luggage mass separately, i.e. in addition to the passengers’ mass. This leads to double-count the hand luggage hence reduces the vehicle maximum permitted load capacity. The problem possibly originates a language
misunderstanding as “rack” in the EU-regulation 1230/2012 means a system that is attached to the outside of the vehicle, similar to a ski box.

The OICA proposal aims at clarifying that only the exterior racks are aimed by the text.