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.

 S_1 is the area for standing passengers. In the case of vehicles of classes III or B, $S_1 = 0$.

SP, declared by the manufacturer, shall not exceed the value S_1/S_{Sp} , where S_{Sp} 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/m^2 .

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 <u>exterior</u> racks are aimed by the text.