# **Proposal for AMEVSC working group**

#### **Definition of Vehicle Type**

Annex 21

Renumber paragraph 1. without amendment as:

- "1. GENERAL
- 1.1. This Annex defines ...... of this Regulation."

## Insert new paragraph 1.2. to read:

- "1.2. In meeting the requirements of this Annex a vehicle type shall consist of vehicles which do not differ in at least the following essential respects;
- 1.2.1. the character of the vehicle tractor for semi-trailer, truck, bus, semi-trailer, full trailer, centre-axle trailer;
- 1.2.2. the axle configuration;
- 1.2.2.1. 4x2, 6x2, 6x4 in the case of power-driven vehicles;
- 1.2.2.2. the number of axles in the case of trailers:
- 1.2.3. the front axle steering ratio in the case of power-driven vehicles when the vehicle stability function does not include it as a end-of-line programmable feature or as a self-learning feature;
- 1.2.4. additional steered axles in the case of power-driven, and steered axles in the case of trailers;
- 1.2.5. lift axles;"

#### Annex 21 appendix 2

Paragraph 2.3. proposed amendment:

The simulator shall be deemed to be validated for a range of wheel base lengths and centre of gravity heights for a vehicle type(s) when its output is comparable to the practical test results produced by the same a given vehicle type(s) during the selected manoeuvre(s) from those defined with paragraph 2.1.3. or 2.2.3. of Annex 21, as appropriate.

The comparison shall include at least three practical tests each in the laden and unladen condition to show that different conditions of load can be adapted to and to confirm the extreme parameters to be simulated; i.e.

- ⇒ vehicle with shortest wheelbase and highest centre of gravity;
- $\Rightarrow$  vehicle with longest wheelbase and highest centre of gravity; and,
- ⇒ vehicle with a wheelbase which is approximately midway between the longest and shortest wheelbases with the highest centre of gravity.

In the case of the steady state circular test the under-steer gradient shall be the means of making the comparison.

In the case of a dynamic manoeuvre, the relationship of activation and sequence of the vehicle stability function in the simulation and in the practical vehicle test shall be the means of making the comparison.

## Annex 21 Appendix 3

## Amend paragraph 2.1. to read:

2.1. Character of vehicle type: (e.g. truck, tractor for semi-trailer, bus, semi-trailer, centre-axle trailer, full trailer)