

## THE RESULTS OF THE STATE SURVEILLANCE OF BUSES

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# **Objective**



State surveillance is carried out to verify the compliance of massproduced vehicles with the issued type approval documents. State surveillance involving destructive and non-destructive testing is carried out since 2017

number of objects	budget
3 tests	≈ <b>70 000</b> €
3 tests	≈ <b>70 000</b> €
14 tests	≈ <b>210 000</b> €
18 tests	<b>≈ 210 000 €</b>
	3 tests 3 tests 14 tests

### Verifiable bus requirements for 2019

- 1. Braking system efficiency;
- 2. Safety-belt anchorages;
- 3. Equipment of motor vehicles with restraint systems;
- 4. Strength of the seats and their anchorages;
- 5. Equipment with safety glazing;
- 6. Equipment with devices for indirect vision;
- 7. Equipment with lighting and light-signalling devices;
- 8. Superstructure strength;
- 9. General safety requirements for passenger transport vehicles;
- 10. Equipment with e-call device

E/ECE/TRANS/505 Rev.1/Add.65/Rev.1

22 February 2006

### AGREEMENT

CONCERNING THE ADOPTION OF UNIFORM TECHNICAL PRESCRIPTIONS FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED ON WHEELED VEHICLES AND THE CONDITIONS FOR RECIPROCAL RECOGNITION OF APPROVALS GRANTED ON THE BASIS OF THESE PRESCRIPTIONS \*/

(Revision 2, including the amendments which entered into force on 16 October 1995)

### Addendum 65 : Regulation No. 66

Incorporating all valid text up to: Supplement 1 to the original version of the Regulation - Date of entry into force: 3 September 1997 01 series of amendments - Date of entry into force: 9 November 2005

UNIFORM TECHNICAL PRESCRIPTIONS CONCERNING THE APPROVAL OF LARGE PASSENGER VEHICLES WITH REGARD TO THE STRENGTH OF THEIR



preement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor fiscle Equipment and Parts, done at Geneva on 20 March 1958.

## **Sanctions**



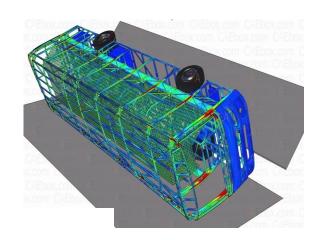
In case of uncover at the state surveillance, non-conformity of production to the prescribed requirements, the following sanctions can be applied to manufacturers:

- Administrative fine;
- The order on temporary suspension of product release into circulation;
- The order on product recall;
- Withdrawal of the type approval and forced product recall;
- Administrative body informs about dangerous products presence at the market by media

# Test methods stipulated in UN Regulation No. 66-02









Rollover test on representative body sections

Quasi-static calculations or computer simulations

Rollover test on a complete vehicle

### Test vehicle









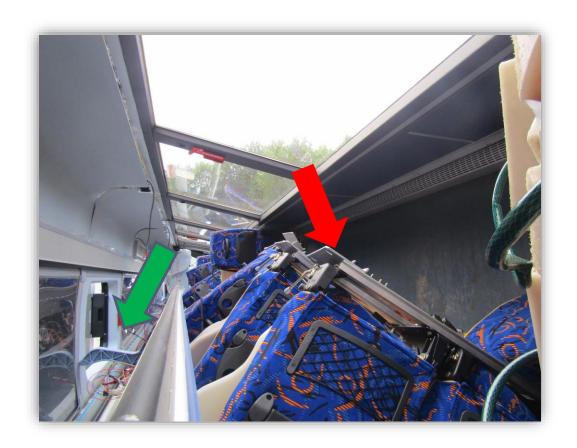


A rollover test on a complete vehicle was performed in accordance with the provisions of Annex 5 to UN Regulation No. 66-02.

The objective of the test is to assess the compliance of the vehicle in terms of ensuring the integrity of the residual space that shall be kept in the passenger compartment, crew and driver compartment(s) to ensure a greater likelihood of survival of passengers, driver and crew in the event of a vehicle rollover

# Identified damage





Intrusion of individual structural elements (luggage racks) into the residual space of the vehicle

Detachment of passenger seats was identified \*

\* Not a subject to evaluation as part of the compliance assessment pursuant to UN Regulation No. 66-02

# **Identified damage**





The emergency hatches were failed to open in accordance with the instructions marked on them \*

\* Not a subject to evaluation as part of the compliance assessment pursuant to UN Regulation No. 66-02

## **Conclusions**



1) Rollover test on representative body sections and/or Quasi-static calculations or computer simulations stipulated in UN Regulation No. 66-02 not all cases can be considered as equivalent to the rollover test method on a complete vehicle:

Rollover test on representative body sections



Quasi-static calculations or computer simulations



Rollover test on a complete vehicle

- 2) At the load resulting from an M3 category vehicle overturning, detachment of passenger seats is possible. However, existing provisions of UN Regulations (not only No. 66) do not provide for the assessment of seat strength in this type of overloading.
- 3) UN Regulation № 66 does not correspond with UN Regulation № 107 in terms of emergency exits

# Next steps



- 1. Investigate till the end of February 2020 what kind of measures would correspond to the conclusions made upon the results of bus safety tests.
- 2. During the mentioned period we will initiate in a due course development of amendments to the relevant UN Regulations in GRSG and GRSP Working groups. If our initiatives require the establish of informal working groups, we will be ready to lead such groups and provide our test results, as technical sponsor of the groups.



# Congratulate with the world day of quality!



Thank you for your attention!