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## Resumé

The author's aspiration was to certify the possibility of exploiting the driving simulator and to acquire values, which could be useful for an expert analysis of the progress of a road accident. The treatise was conduct as a component of granted assignment "The standardization and harmonization of the expert witness' procedure by analysing road accidents", which assigned The Institute of the Forensic Engineering (GAČR 103/00/1748).

There was made an adaptation in the programme of driver's simulator AT-97 VRT, which pretended unexpected situations in the road traffic. 56 test persons were used for 431 drives, in each of the drives were created 5 sudden situations, 2155 measurements were made. During every measurement was kept eye on these quantities:

- the time of the driver's reaction on given impuls,
- · the process of pedal movement,
- the process and the direction of the steering wheel's motion.

620 measurements with sober drivers were decisive for the verification of the comparibility of results, which were obtained from the simulation. The resulting reaction times were compared with previous treatises, which were published abroad. The comparation (Fig. 28) showed out very good harmony of values established on the driver's simulator with the values descovered at a test road with vehicles. The result is, that in case of simulator's adaptation, the simulator is hihgly suitable for certifying the behavior of drivers in a concrete situation.

The reaction of drunk drivers were established as a secondary result of the treatise. It is not possible to find it out neither in the real road traffic nor on a test road.