SAFETY SITUATION OF VULNERABLE ROAD USERS IN POLAND

Traffic safety situation of vulnerable road users in Poland is one of the worst in the EU. In 2015, 915 pedestrians were killed (31% of all traffic fatalities) and 8040 injured (20% of all traffic injuries). Cyclist victims included 300 killed (10% of all traffic fatalities) and 4116 injured (10% of all traffic injuries). In the years 2009-13 among all victims of road accidents, 27% of pedestrians and 37% of cyclists were killed or injured at intersections in built-up areas. Although road safety in Poland is improving, the number of pedestrian and cyclist accidents at intersections is not decreasing as fast as in the other areas.

RESULTS OF ANALYSES CONDUCTED WITHIN PROJECT INDEV

One of the aims of the project was to identify situations and circumstances critical for VRU safety. To this end, pedestrian and cyclist accidents in InDev partner countries were examined. Of particular interest is accident database in Warsaw where police records are enhanced with additional information like exact accident location and movements of accident participants.

The dataset examined (ZDM) includes police records of 1379 accidents from the years 2009-2013, in which 115 pedestrians were killed and 1349 injured. During the same period, there were also 281 accidents with cyclists in which 10 cyclists were killed and 269 injured.

One group of factors examined relates to physical environment (road type and width, exact location of the accident, lighting conditions), traffic control (signal presence) and vehicle characteristics (vehicle type, type of manoeuvre before the accident). Another group of factors relates to road user characteristics (age, gender) and behaviour contributing to the accident (red running).

LOGISTIC REGRESSION

Analysis conducted using logistic regression shows that the most important factors affecting injury severity are: type of intersection control (signalised or not) and the type of vehicle involved in the accident. The highest probability of fatal or serious injury occurs for pedestrians or cyclists hit by trams, buses or trucks. The impact of the type of vehicle manoeuvre is not statistically significant.

ROAD USER BEHAVIOUR

Road user behaviour plays an important part: in 27% of accidents examined pedestrians were crossing on red while in 9% of cases vehicles were crossing on red. Reasons of committing violations of traffic rules could be not pedestrian-friendly traffic signal settings. This could mean long waiting times for pedestrian at signalised crossing. It is hoped that more data on pedestrian crossing behaviour will be collected during filming which will be carried out within project InDev.