If you want to be a film star – go to Barcelona now!

Video-filming of road traffic is about to begin at three different intersections in Barcelona. The InDeV project will use the video data on the movement of road users to identify possible conflicts and thus learn about the causational factors that can lead to road accidents.

Colleagues from ETRA Barcelona (http://www.etra.es/en/) have finished their job of installing the electrical appliances that provide the essential conditions to put up cameras for filming the road traffic at the intersections. The Connection Systems team (https://www.connectionsystems.nl/index.php/en/) finished the mounting and adjustments of the cameras on May 4. Cameras are now operative and will be running 24 hours a day for three weeks.

InDeV will work with 3 cameras per intersection, 2 of them classical RGB cameras and 1 thermal camera. The cameras records the traffic movements focusing on turning to the right side in intersections where motor traffic and bicycle lanes run in parallel. Approaching to a pedestrian crossing after turning to the right side will also be observed. These are two of the situations in which pedestrians and cyclists accidents are usually involved.

The purpose of the recordings is to provide sufficient samples to detect the circumstances in which these accidents occur. The results will be used to analyze what are the most frequent concurrent factors and to design corrective measures to avoid this accident. The behavior of the driver, the distances and points of conflict in the turn, the influence of the signaling or the location of the pedestrian crossings, among other factors, will be observed.

The analysis of the recordings will be made through RUBA, an image processing software that allows to define zones in the field of vision and the detection and identification of the presence of different types of user.

The result of the analysis will lead to the design of tools for the researcher and planners to detect risk situations and prevent them at the planning stage, but also after accidents for the application of corrective measures. These tools will be translated into a user manual for groups related to road safety.

The observation works now starting in Barcelona will be analyzed simultaneously with observations in two other European cities participating in the project: Warsaw (Poland) and Hasselt (Belgium).