PROCESSING REAL-TIME TRAFFIC DATA AND EVENTS USING TRAFICON DETECTION SYSTEM ON ORADEA CITY STREETS

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Oradea City Council had constituted a large team of engineers and authorities represented pearsons, in order to setup and implementation a reliable monitoring system for traffic data, as result of a Co-Operation Programme between Flanders and Central and Eastern Europe (Call 2007). This team had as main objective to study the opportunity to solve the problem of congested traffic on Oradea main streets by an easy to use system who's specific application algorithms has to provide the following types of traffic information: traffic data for statistical processing; incident related data; presence data using the Traficon essentially concept TrafiCam which combines a CMOS sensor and video detection technology in one.

Real time traffic data are composed by events which are characterized by date, time, camera, zone and event type. In the event stack, it is further indicated if an image or image sequence is available for the event. In a typical Traficon installation, a detection unit consists of a number of VIP (Video Image Processor) boards integrated into a standard 19" rack together with 1 communication board, a video camera is installed at a certain height for monitoring the traffic, its video signal is used as input for the detection unit.

During set-up of a VIP, *detection lines/zones* are superposed on to the appropriate position in the video image as a vehicle crosses these detection lines/zones thus activating them, the vehicle is being detected, so the application specific algorithms provide different types of traffic information traffic data for statistical processing, incident related data, presence data. The *communication board* handles the compression of images and transmission of data, alarms or images and the Traficon PC Software (WATTS, Traficon TMS) monitors the video detection system in the traffic control center. The combination of both *numerical data* and *visual image control* sets video detection apart from all other detection systems. The immediate *visual feedback* received from video detection systems ensures its proper functioning: On a monitor, the operator at the traffic control center can check whether the detector is working correctly or not. The combination data and images is an enormous advantage in the field of automatic incident detection (AID). Automatically generated alarms warn the operators as soon as an incident takes place and a maximum of information is given: type; severity; location; relevant traffic data

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[***] **www.traficon.com**