

Intelligent Traffic Information System for Łódź, Poland

In October 2011 a comprehensive traffic information system was put into operation in the metropolitan area of Łódź, Poland. The traffic monitoring system, designed by CAT GmbH, was installed in cooperation with the Polish company TRAX Elektronik. At 25 measuring sites traffic data is collected continuously and afterwards transferred to a central server via mobile network. All measuring sites are equipped with a system for automatic number plate recognition (ANPR). The system captures the license plate numbers of passing vehicles and matches them with traffic data generated by induction loops or overhead mounted radar sensors. Thus it is possible to determine the journey time at different routes within the investigation area. In addition, the system delivers information about the traffic volume as well as the vehicles' speed at each site. For statistical purposes the video system automatically recognizes and reads ADR plates.



Eight measuring sites are equipped with so-called High-Speed Weigh-in-Motion (HSWIM) systems. Each system consists of road-embedded weighing sensors and data processing electronics. With this technology a fully automatic weighing of heavy goods vehicle in free-flow traffic is possible. In this context CAT's WIM-VIVER principle is applied, which automatically identifies overloaded vehicles by the use of weighing sensors and in combination with a video-based system for vehicle registration. The system therefore operates as a preselection site in order to selectively sort out potentially overloaded trucks. This is necessary to face problems such as damaged road surfaces, road accidents or distortion of competition.