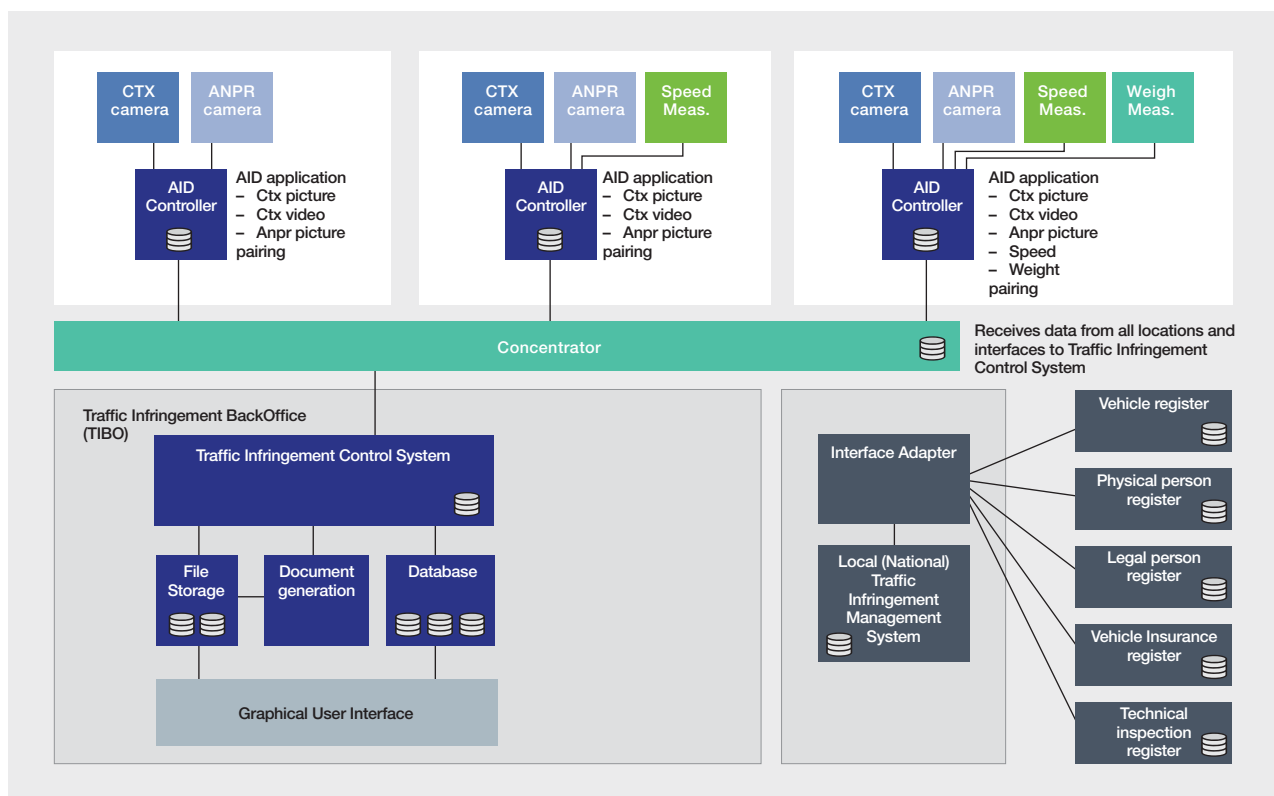# Platform
Automatic Incident Detection (AID)

SKYTOLL

The Automatic Incident Detection (AID) system is defined by a sophisticated structure consisting of different reliable technologies. Its purpose is to utilize state-of-the-art equipment to produce undisputable evidence for detected road incidents.

| CTX camera | ANPR camera |
| AID Controller | AID application
– Ctx picture
– Ctx video
– Anpr picture
pairing |

| CTX camera | ANPR camera | Speed Meas. |
| AID Controller | AID application
– Ctx picture
– Ctx video
– Anpr picture
pairing |

| CTX camera | ANPR camera | Speed Meas. | Weigh Meas. |
| AID Controller | AID application
– Ctx picture
– Ctx video
– Anpr picture
– Speed
– Weight
pairing |

Concentrator — Receives data from all locations and interfaces to Traffic Infringement Control System

Traffic Infringement BackOffice (TIBO)

Traffic Infringement Control System
- File Storage
- Document generation
- Database

Graphical User Interface

Interface Adapter

Local (National) Traffic Infringement Management System

- Vehicle register
- Physical person register
- Legal person register
- Vehicle Insurance register
- Technical inspection register

Judging by available data, the system is capable of vastly reducing the number of dangerous traffic law violations. The system also allows the drivers to be fined directly by producing and sending the accident documentation directly into their mailbox.

SCAN ME

More information:
qrfy.com/p/2023_aid

Main parts of the AID

- **ANPR cameras**

  Provide licence plates of offending vehicles. A processing unit is located inside the device, allowing for fast, real-time calculations.

- **Context camera**

  This system tracks predefined areas of the road to determine vehicle speed and placement on the road. This system is easily customizable and can be tailored to the road operator's needs. It contains two main modules:

  - **Video analysis module**

    Provides vehicle motion tracking analysis

  - **Context picture selection module**

    Provides pictures for the incident evidence

- **Speed measuring modules**

  Provide a reliable measurement of the speed of the offending vehicle. Our system can integrate different kinds of measuring technology:

  - **Doppler principle**

    Based radar – evaluates speed by measuring radio signal wavelength

  - **LIDAR**

    Measures vehicle distance and speed with laser impulses

  - **Inductive loops**

    Speed is measured based on passes between different loops

- **Dynamic weighing module**

  Provides vehicle weight measurement

All of these technologies were tried and tested in the field, and we have many years of hands-on experience with them. It is their combination that introduces a completely new system that provides almost full automation in incident detection that minimizes the need for human interaction.

The AID system communicates with a central database, which safely stores data collected by its components. Required incident documentation can be generated from the data at any time it is needed. By maintaining data in an online database, the incident data can be assigned to a particular vehicle by connecting to other online registries containing data of registered vehicles.

To ensure maximum validity of the video and picture material captured by the Automatic Incident Detection system, it contains data specifying the following parameters:

• Location and GPS coordinates of where the video or image was taken

• Precise timestamp of when the video or image was taken

• Serial number of the component that generated the material

Thanks to the modernization and maturity of our technology, the AID system can be completely deployed in the span of few months or even weeks. When implemented, it will provide a reliable way of logging road incidents thanks to consisting of multiple technologies that have proven their reliability over several years of operation.