

### Kapsch TrafficCom

## ***Kapsch Sicura Section Speed Enforcement.***

One third of all fatal accidents is related to unadjusted and excessive speed. The higher the speed, the higher the risk of an accident. Section Speed Enforcement monitors the average speed on road sections and is much more effective to increase road safety and to smooth traffic flow compared to radar boxes.

### *Benefits/Highlights.*

- > significant reduction of accident probability and less fatal accidents
- > defusing dangerous road sections
- > less abrupt breaking by drivers
- > increased drivers' acceptance
- > increased traffic flow and reduced traffic noise
- > less air pollution and particulate emissions (PM10)
- > reduction of fuel consumption

### *System design and technical functionality.*

Section Speed Enforcement is triggered once a vehicle enters and once it leaves the section at a measured track. Both time stamps are correlated to the distance to determine, if speed limits are violated.

In this case enforcement records will be generated automatically and could be verified manually, if required. Finally data is processed and tickets are issued.

## Technical Features/Details:

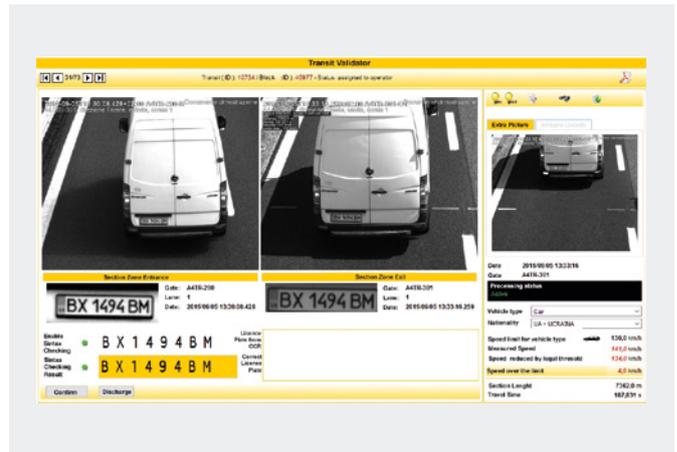
- > timestamp for measurement and evidence
- > average speed calculation (for short and long distances)
- > video based vehicle classification to monitor different speed limits for different vehicles
- > overview picture, if required for evidence
- > optional driver recognition
- > no additional sensor needed
- > data encryption ensures privacy
- > trigger by variable message signs
- > traffic surveillance functionality

## Section Speed Enforcement Viewer.

The incidents will be archived and encrypted on a server. The Section Speed Enforcement Viewer decrypts and shows all information and images.

### Infringement file details:

- > entrance and exit image
- > location ID of the SSE site
- > number plate
- > average speed
- > legal speed limit
- > speed violation
- > distance measured
- > time elapsed
- > arrival time
- > departure time



## Case study and references.

**The Netherlands, A13 motorway:** after section speed control was introduced in 2002, only 0.5% of the vehicles were detected speeding. Collisions were reduced by 47% as well as casualties even though the numbers were too small to allow valid conclusions.

**Austria, Vienna, A22 “Kaisermühlen” tunnel:** after the implementation of “Section Control” injury accidents were reduced by a third and the number of deaths and serious injuries were almost halved compared to the three years prior. No deaths were registered the following two years of operation.

**Italy, Soave, A4 Motorway:** the system was implemented on one of the motorway sections with the higher traffic volume in Italy (< 50.000 vehicles per day). The system can classify vehicles according to the speed limits in each vehicle class and thus to enforce trucks only. Thanks to this in-depth results, the system was approved by the Italian Ministry of Transport with Decree no. 1549. There are currently on-going several installation projects on some Italian extra-urban roads.

