DRIVER ACTIVITY TRACKING SOFTWARE SUPPORTING ANALOGUE AND DIGITAL TACHOGRAPHS

This article gives an overview of the main implementation steps identified during development of driver activity software system ● Software system supporting analogue and digital tachograph devices is presented

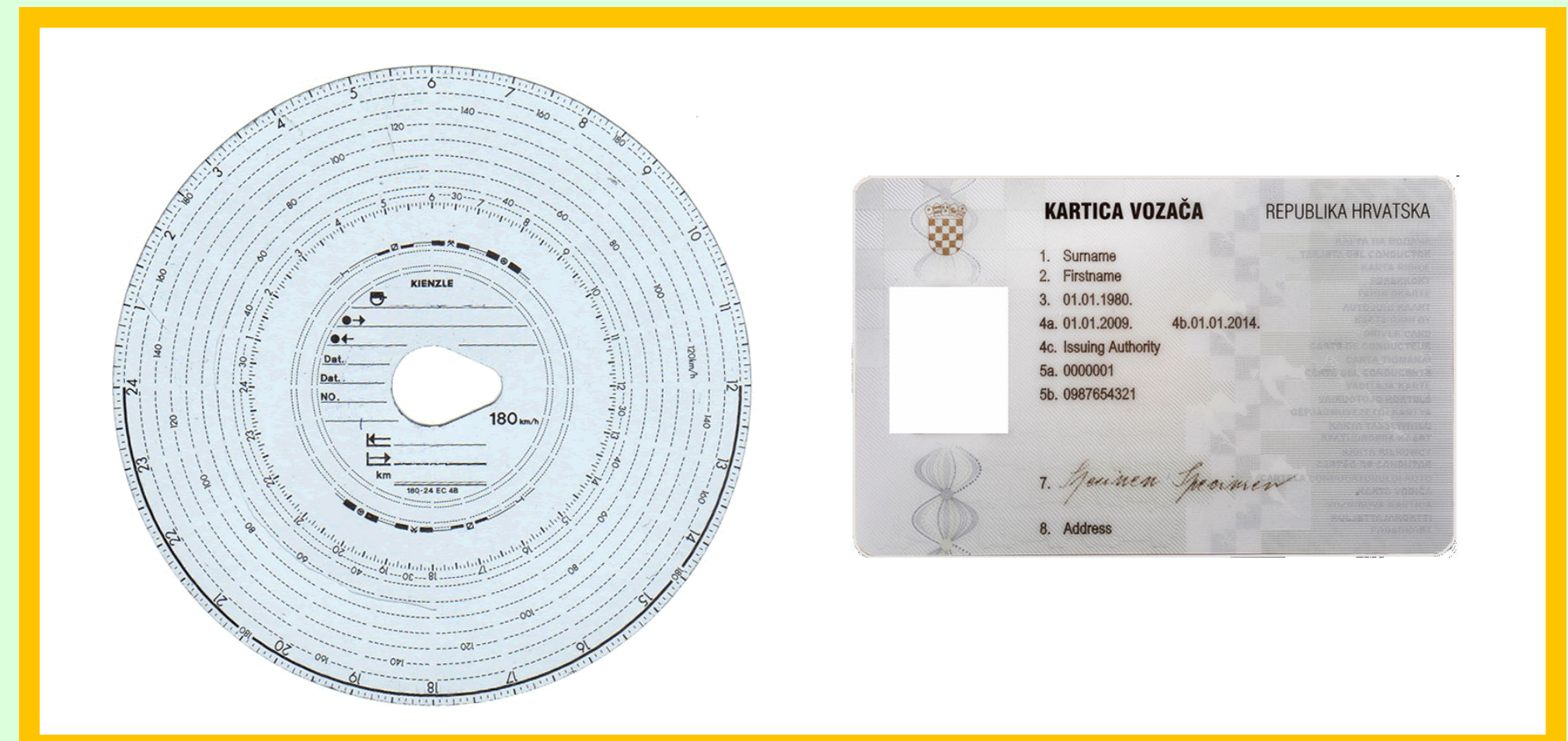## TACHOGRAPH ● Device used to record driver activities

Analogue tachograph
- older vehicles, in Croatia – registered before 2009.
- rounded/circular paper form – **tachochart**
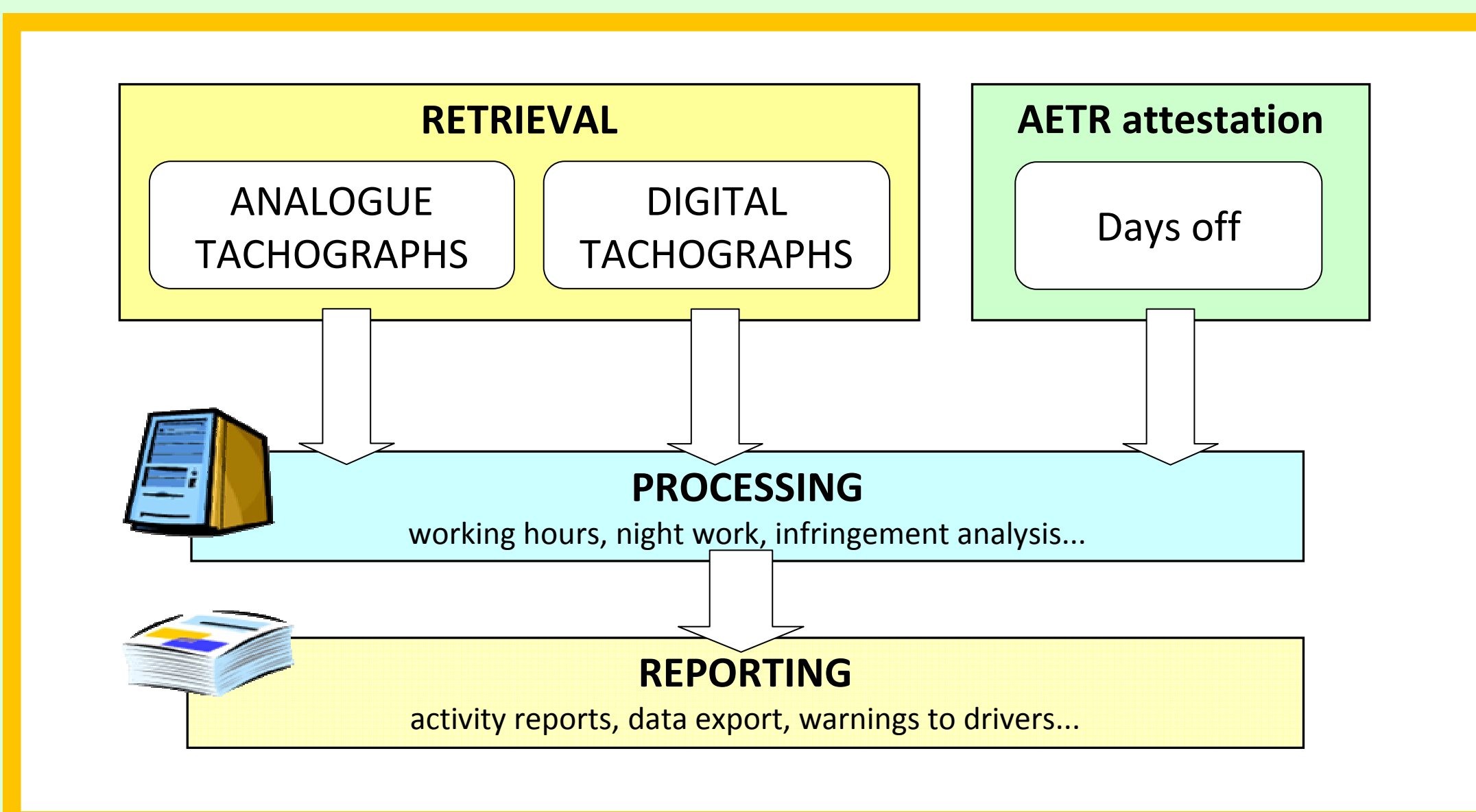- manual driver and vehicle data insertion

Digital tachograph
- new vehicles
- digital recording – **driver card** + vehicle unit

Driver activities
- *driving, rest, availability, other work*

SOFTWARE SYSTEM MODEL ● IMPLEMENTATION ISSUES

Analogue tachograph
- automated retrieval of driver activities from scanned tachocharts
  - "two-day" tachocharts (overnight drive)
  - scanned image rotation angle detection
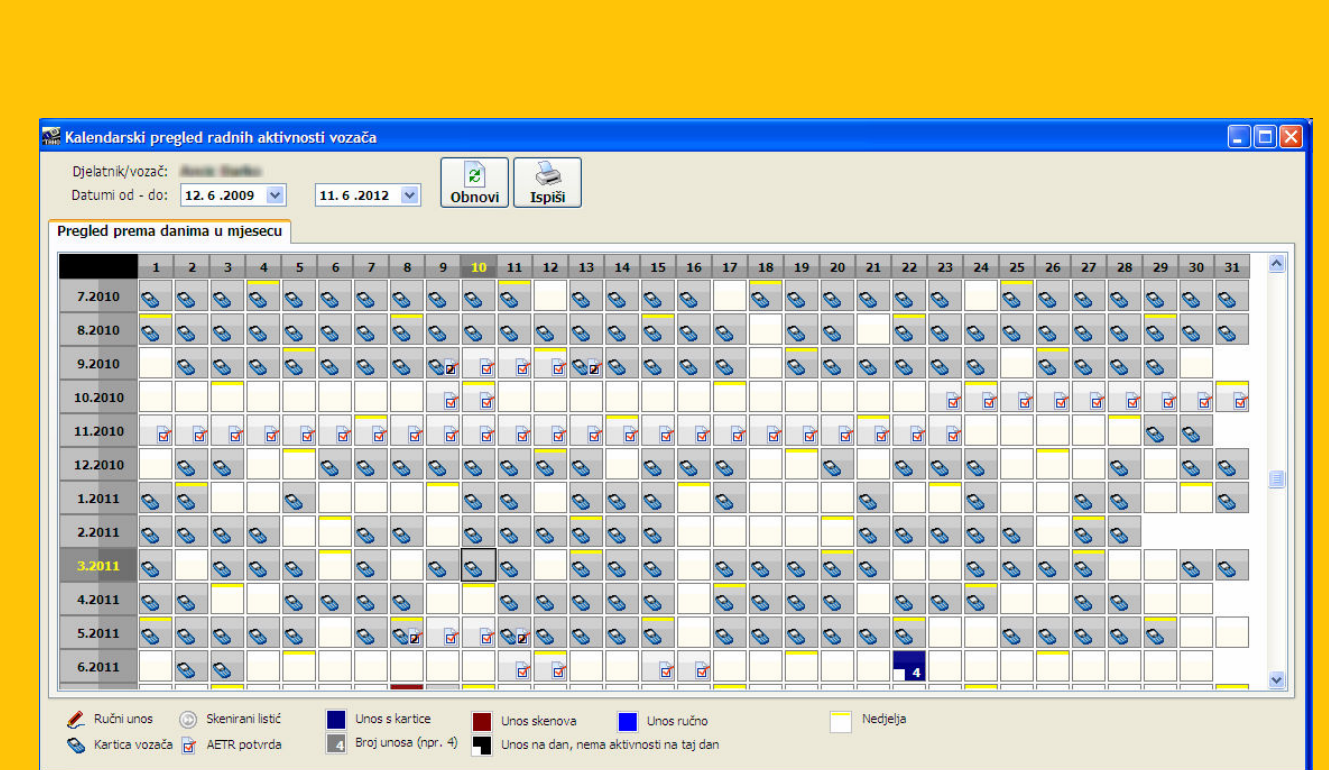- multi-tachochart support
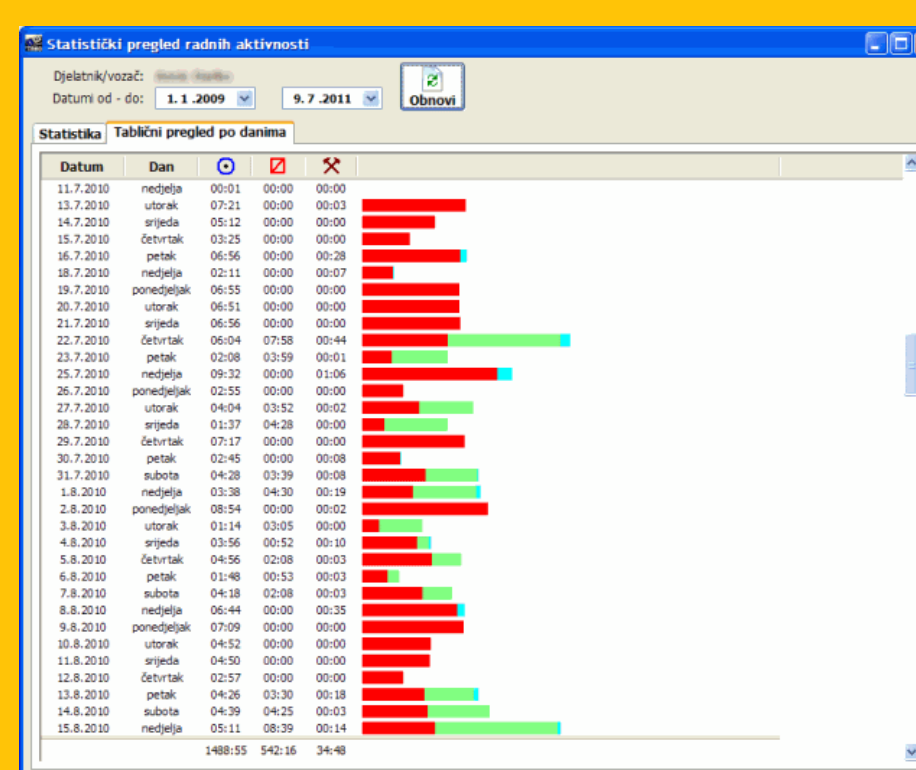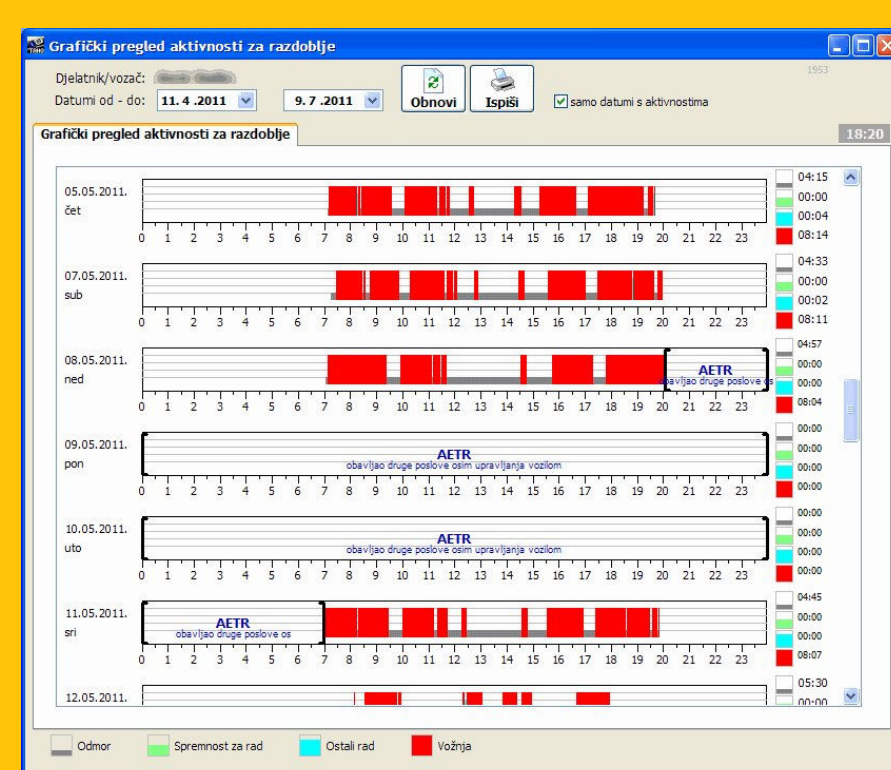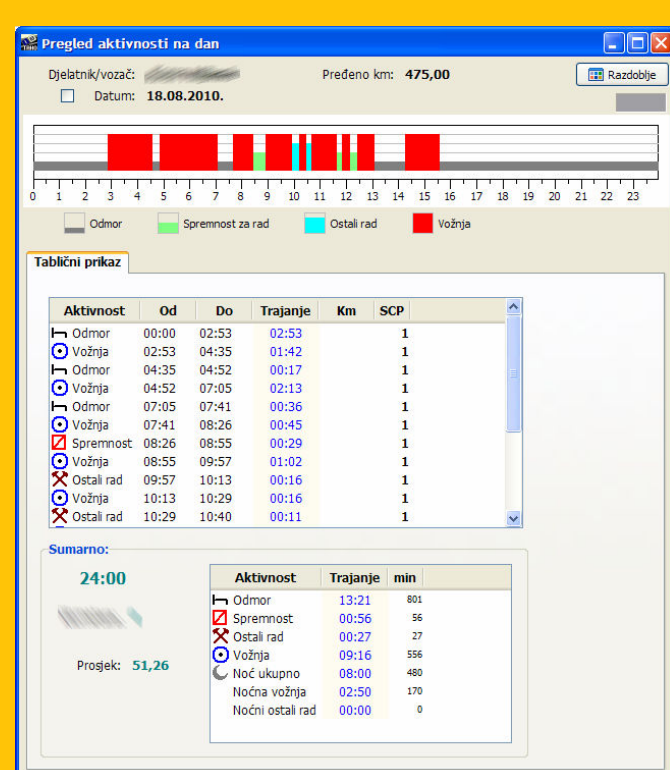
Digital tachograph
- data acquisition using standard smartcard reader
- driver card data analysis and storage

Data processing
- analysis, infringement detection

Data analysis, visualization

Driver Activity Overview ● Analysis ● Reporting
Intranet ● Reliable database "in-house"

CONCLUSION

Software developed from scratch
- tailored for Croatian customers
- third-party service companies release available

Support for all driver activity related objects
- analogue + digital tacho, vehicle unit data
- AETR attestation forms

FUTURE WORK

Data acquisition
- analogue tacho - advanced scanned image analysis
  - extraction of distance and speed data? (forensics)
- driver card – security aspects – digital signature check

New features
- web support – delivery + data acquisition?

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