PROJECT


Systeme für die automatische Verkehrsuüberwachung (Monitoring) mit digitaler Bildverarbeitung

Funding: National (Switzerland)
Duration: Dec 2001 - Dec 2007
Status: Complete with results

Background & policy context:
Digital image processing enables the continuity of the traffic survey and the quick and efficient handling of the security services in case of an event. The necessary basics for the traffic survey with video image processing are to be specified.

Objectives:
The objective of the project is to specify methods and demands for the digital image processing for a permanent and reliable traffic survey.

Methodology:
Specify criteria methods and requirements for digital image processing for the continuous, reliable traffic monitoring.

Parent Programmes:
ARAMIS - ARAMIS information system

Institute type: Public institution
Institute name: Swiss Government: State Secretariat for Education and Research
Funding type: Public (national/regional/local)

Partners:
Switzerland
Swiss Federal Roads Office
B+S Ingenieure AG Engineering im Bau- und Planungs-
B+S Ingenieure AG Engineering im Bau- und
Organisation: Planungs-
Address: Muristrasse 60
Zipcode: 3006
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Contact country: Switzerland

Key Results:
It is expected that there will be widespread use of IAS on the roads in the future, for safety reasons and as a result of technological progress in image assessment.

As a result of this development, and indeed the present situation, the definition of general requirements for these systems in the form of a standard is urgently needed. This research work and the draft standard form the basis for the implementation of an appropriate standard. Based on the outcome of the research it was recommended the following additional work:
1. The draft standard should be developed to form a definitive standard, as planned.

2. Bodies operating traffic facilities should state that the new standard is obligatory for the design, project development, bidding, delivery, installation and operation of IAS.

3. Detailed verification procedures for compliance with the quality requirements set out in the standard and relating to the tender award process, inspection of work and acceptance should be defined.

4. Manufacturers of IAS should be given the option of having their products certified in a specified process independently of any project. This certification process must be prepared in detail and with care.

5. The various stages of traffic-jams that can be detected with IAS and other data capture systems and which can be defined via a range of key traffic figures should be standardised. This standardisation should follow the traffic quality levels A to F, as shown in SN 640 018, table 6, and should be independent of the data capture system.

Related Projects:

Research organisation: Swiss Federal Roads Office; Research Roads-Bridges-Tunnels
Project number VSS2006/903
Project title Qualitätsanforderungen an die digitale Video-Bildverarbeitung zur automatischen Verkehrsstandsüberwachung im Strassenverkehr

Documents:
21174_1169_Inhalt.pdf (Final report)

STRIA Roadmaps: Network and traffic management systems
Transport mode: Road transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Digitalisation
Geo-spatial type: Other