PROJECT

ROSITA

Roadsite Testing Assessment

Funding: European (4th RTD Framework Programme)
Duration: Jan 1999 - Sep 2000
Status: Complete with results

Background & policy context:

In recent years the negative impact on traffic safety of driving under the influence of drugs has been widely recognised. As driving a car is understood to be a complex task where the driver continuously has to deal with lots of information and will have to react to it, the influence of illicit drugs and medicines on driving performance is critically investigated.

Hence, a need for development of more reliable, easy-to-handle and cost effective roadside test equipment is articulated throughout Europe. These technical and operational aspects are accompanied by the requirement to harmonise and specify legal preconditions for drug testing of suspected drivers.

Objectives:

The aim of the ROSITA project was to identify the requirements for roadside testing equipment, and to make a comparative assessment of existing equipment and prototypes.

The main objectives of ROSITA were:

- to determine the drugs and medicines that are suspected to have detrimental impact to road user performance;
- to survey the state-of-the-art roadside testing equipment for urine, sweat and saliva, and to gather information about other tests that can be used to evaluate the impairment of roadside drivers;
- to investigate into the operational, user and legal requirements for roadside testing equipment that do exist across Member States of the European Community;
- to assess the usability, practicability, sensitivity, accuracy and costs of available roadside test devices; and
- to recommend advanced future roadside testing equipment for Europe.

Parent Programmes:

FP4-TRANSPORT - Specific research, technological development and demonstration programme in the field of transport, 1994-1998

Institute type: Public institution

Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)

Funding type: Public (EU)

Partners:

NA

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Key Results:

ROSITA has:

- reviewed epidemiological, pharmaco-epidemiological and experimental studies about the influence of illicit drugs and medicinal drugs on driving performance;
- documented in a market study nineteen original drug testing devices, of which sixteen are designed for the screening of urine samples, three are originally developed for saliva and one can also be applied to sweat; all but one are manufactured in the U.S. and represent a total of more than 30 brand names on the international market;
- used 26 completed questionnaires from 19 different European countries to assess the current situation of legislation, restrictions on the application of roadside alcohol and drug tests, operational and user requirements, and the planned introduction of new test devices and training schemes for police staff; and
- evaluated on-site test devices for urine, oral fluid (saliva) and/or sweat in 8 countries based on testing of 2968 drivers (92 % male), highlighting the following findings:
  - police officers liked having the tools to detect drug abusing drivers,
  - police did not encounter major objections to collecting specimens,
  - on-site testing gave police confidence, saved time and proved cost efficient,
  - most of the urine devices worked well and generally served as good predictors of blood concentrations,
  - oral fluid and sweat were found to be promising specimens and in some cases are more suitable than urine but more research and development will be needed, and
  - more accurate, sensitive and easier to use devices are foreseen for the near future.

Policy implications

The ROSITA study has clearly confirmed a need for large scale drug test testing of car drivers in order to promote traffic safety throughout Europe. Therefore, it is important to further validate existing devices which are applicable to the detection of the abuse of drugs in street traffic. These include urine tests but also oral fluid and sweat test devices. More effort has to be made on the investigation of the correlation between impairment and pharmacokinetics of illegal drugs in easily accessible body fluids, such as sweat and oral fluids. This will help to develop more reliable devices for roadside testing.

Furthermore, it is essential for most countries to train police staff in the detection of drivers under the influence of illegal drugs, and more specific regulations are required in most countries of the European Union.

Then, industry will be more willing to invest into new and more reliable testing equipment. Due to the fact that road safety is of broad public interest, legal and funding activities are foreseen to be adequately coordinated.

Related Projects:

None

Documents:
- rositarep.pdf (Final report)

STRIA Roadmaps: Cooperative, connected and automated transport
Transport mode: Road transport
Transport policies: Safety/Security