



### **Project SPID - System for Pavement Infrastructure Diagnosis**

- Advanced research within the scope of road infrastructure quality control
- Implementation and development of non-destructive methods
- Creation of the Non-destructive Research Development Centre

SPID - System for Pavement Infrastructure Diagnosis is a mobile laboratory equipped with state-of-the-art devices allowing us to use non-destructible methods to examine roads and bridges all over Europe. Causing no traffic interruptions, the research equipment is capable of evaluating the condition of bridges and roads, and controlling the quality of technologies and materials deployed for the building of transportation routes. This bears particular importance in countries featuring dense traffic and road networks.

Research is conducted by means of the following devices:

- TRAFFIC SPEED DEFLECTOMETER – equipment dedicated for pavement deflection measurements,
- HEAVY WEIGHT DEFLECTOMETER (HWD) – examines air-field surfaces, simulating loads comparable to those of a single Boeing 747 wheel,
- STEP-FREQUENCY RADAR SYSTEM – identifies structure of pavement construction,
- TYRE-PAVEMENT NOISE MEASUREMENT SYSTEM (CPX) – a device measuring the

degree of noise produced by rolling wheels of a vehicle,

- CORE DRILLING MACHINE – an appliance which collects samples for research and identification of surface layers,
- RADAR SYSEM FOR BRIDGE MEASUREMENTS – a device for detailed subsurface examination of bridges,
- RESEARCH AND ANALYSE SYSTEM FOR LOADED BRIDGE CONSTRUCTION EVALUATION – using micro-waves, it allow to perform remote measurements of translocations caused by dynamic loads,
- PAVEMENT DISTRESS EVALUATION SYSTEM – automatically registers surface conditions. The system includes: Profilograf and- Line Scan systems.

### **Project leader**

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Donation for innovation

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