



LABORATÓRIO NACIONAL
DE ENGENHARIA CIVIL

**TESTING
and METROLOGY**

UETRAF

Road Traffic Equipment
and Analysis Laboratory

TRANSPORTATION DEPARTMENT

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Scope

The Road Traffic Equipment and Analysis Laboratory (UETRAF) of LNEC-EM was established in 2010. The UETRAF is integrated in the Transportation Department/Planning, Traffic and Safety Unit of LNEC. Its activity is mainly focused on obtaining and managing information on surface transport systems, by providing support to the acquisition, validation and organization of road information integrated in databases and by carrying out traffic monitoring studies with applicability in several fields, such as mobility, road safety, economy and environment.



In addition to the mentioned field and laboratory studies, which are usually within the scope of LNEC's planned research and research contracted by external bodies, UETRAF also carries out activities in the following fields:

- Road accident investigation;
- Evaluation of the safety conditions of streets and roads;
- Planning safety related interventions on the road infrastructure and its environment.



Highlights

UETRAF has qualified human resources and several types of equipment for road traffic analysis (inductive, magnetic, radar and LIDAR sensors), image collection video equipment, as well as geographic referencing equipment, appropriate for carrying out tests in its scope of activity.



UETRAF has cooperated in projects, such as:

- Support program to EU Member-States in the collection of road safety key performance indicators related to speed and distraction while driving and compliance with traffic rules in pedestrian crossings (Projects BASELINE TRENDLINE)
- Road risk mapping and cost-effectiveness assessment of infrastructure corrective measures (Project MAPRISC).
- Roadside safety (Project SAFESIDE).
- Audit to motorway concessionaries' annual road safety reports.
- Lisbon's road accidents analysis.
- Identification of black spots on the National Highway Network.
- Technical manuals for road safety audits and road safety inspections.
- Dialogue platform between Africa and Europe on road safety (Project SAFERAFRICA).

Field of expertise

UETRAF's activity includes obtaining and managing information related to the road transport system operation, in what concerns to mobility, safety, economy and environment. This involves the acquisition and processing of information on roads, vehicles, traffic, among others. The activity of UETRAF comprises three major lines:

- Tests on highways to collect data about their layout, vehicles, traffic and other complementary data;
- Collection of relevant public information for transport analysis;
- Management of the information collected in supporting databases.