



The *Geopositioning group of the Monitoring, Assessment and Computational Science (MACS)* Department at IFSTTAR have been involved in the GNSS research for more than 20 years.

From 1990 to 2004, the team has developed a national and international level research activity in the field of site robotics for road construction and maintenance, together with a deep expertise on high-precision GPS systems and in particular in full-scale assessment of this type of systems.

Since 2004, the group has switched to research in Intelligent Transport Systems and has developed a new expertise in the field of quality of service of GNSS-based positioning systems for road vehicles.

For instance, the team has developed innovative algorithms for lane-level positioning systems in the frame of the FP7 CVIS Integrated Project (<http://www.gsa.europa.eu/go/news/satellite-navigation-key-to-interactive-road-transport-applications>) and has published a lot of papers in this field.

Very recently, the team has supported with its expertise the people of the Ministry in charge of Transport in the bidding procedure to select a concessionaire for the French Road Tolling system that will be based on GNSS technology.

The team possesses a test vehicle dedicated to positioning systems assessment, equipped with a high-grade reference “trajectometer” capable to provide the “ground truth” in any kind of environment.

#### Applied research in GNSS for road transport

