

**ROAD TO OTHERWISE CALMER DRIVING (RACA)
UNDERSTANDING USER BEHAVIOUR
DESIGN FOR ROADS**

O. MOISAN & G. DUPRE & O. BISSON & F. ROSEY & E. VIOLETTE
CETE Normandie Centre, DITM, France

<mailto:{olivier.moisan, guy.dupre, olivier.bisson, florence.rosey, eric.violette}@developpement-durable.gouv.fr>

ABSTRACT

The "Roads otherwise to induce calm driving" concept is a proactive approach to fight against road casualties and to give priority n°1 to road users' safety. This concept consists on working on the road itself and its environment to encourage drivers to naturally observe the speed limits.

This paper describes the different stages of the process: act on the road and its environment to induce calm driving, build a technical approach to design the roads in a different way, raise awareness among the road safety professionals who can interact in the process and integrate this process in a sustainable development strategy.

It details the technical approach by considering that the road and its environment inevitably and mechanically influence drivers' behaviours and speeds. We have to better understand these mechanisms to see if it is possible to build roads that would naturally induce calm driving. It is necessary to work towards improving safety on our roads in a sustainable way. The safety gains are achieved largely through the strengthening of controls and enforcements. The user behaviours are positively changing, but this improvement may be fragile. It must be supported by road improvements likely to produce long-lasting effects, without any constraint due to sanctions.

The proposed approach is based on the following considerations: knowledge of driver behaviours and acceptability of the rules, relevance of road types and appropriate use of design guidelines, approaches through landscaping and readability and finally, evaluation and capitalisation of experimental results.

First reports will provide real-world remedial measures summarised in experiment sheets that will describe the evaluation process before and after the works and translate the results obtained in the form of user-friendly tools and methods.