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EUROPEAN ROAD ASSESSMENT PROGRAMME

# ROAD PROTECTION SCORE (RPS) METHOD AND PILOT RESULTS

## **Road Protection Score (RPS) method and pilot results**

Part of the EuroRAP programme is the development of a procedure for “drive through” inspection of routes – the Road Protection Score (RPS). This is being undertaken by TRL (the UK’s Transport Research Laboratory) in collaboration with the Swedish National Road Administration and others with international expertise. The RPS describes the protection from accidents that a road provides (elements of primary safety) and the protection from injury when collisions do occur (secondary safety).

Roads in Britain (England, Scotland and Wales), Germany, the Netherlands and Sweden have been compared.

The results show where safety gains can be obtained and, where this is not cost effective, how some improvement can be made by reducing traffic speed.

### **1 What accidents are common on roads outside built-up areas?**

About 80 per cent of death and serious injury accidents on European inter-urban roads can be explained by defining them as just four main types: “head to head” impacts; impacts at junctions; impacts with objects close to the road; and impacts with vulnerable road-users.

### **2 The Road Protection Score – another way to assess safety of roads**

Another part of the EuroRAP programme uses recent historical accident data to measure and map the safety of roads based on what has happened on them in the past. In popular terms, this is analogous with measuring “safety at sea” in terms of “the number of lives lost”, while the Road Protection Score can be interpreted as “the number of lifeboats each ship has”.

A drive-through inspection of 1200kms of British roads and 2250kms of mainland Europe roads has been carried out. A direct visual inspection of the road quality was used and the roads were assessed, using RPS to measure the extent to which roads offer protection from the main four accident types (elements of primary safety) and protection from injury when collisions do occur (secondary safety).

The British route included English, Scottish and Welsh roads. The European route included roads in Germany, the Netherlands and Sweden. There was also an inspection of the roads in Denmark that linked the route in Germany and Sweden, but no formal analysis has been undertaken of these roads.

The Road Protection Score differs from normal road safety audits in that its aim is to assess the general standard of a route rather than identify individual sites of concern.