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Executive summary

Roads are of outmost importance for mobility of people and transport of goods throughout Europe. Experts believe that up to 50 % of the total maintenance budget is spent on winter maintenance in many European countries. It therefore has a high significance not only in keeping roads, cycle tracks and footways free from ice and snow but also in matters of pedestrian, cyclist and driver safety.

COST Action 353 "Winter service strategies for increased European road safety" started in April 2004 and ran for a four year period until April 2008. Participants from 22 European countries have been intensively working together from the very beginning to achieve the main objective of the Action – to develop a framework for the management of winter traffic for maximized road safety, and the secondary objective – to integrate new methods of winter maintenance management through the use of the latest technologies for data management, communication and vehicle positioning.

The Action is building on the achievements of the previous COST Action 344 "Improvements to snow and ice control on European Roads and Bridges" [2], which has been a useful platform for identifying the most important topics for short-and long-term winter maintenance research. Experts believe that up to 50% of the total maintenance budget is spent on winter maintenance in many European countries. It therefore has a high significance not only in keeping roads, cycle tracks and footways free from ice and snow but also in matters of pedestrian, cyclist and driver safety. Understandably, drivers, cyclists and pedestrians should also take responsibility for their behaviour in adverse weather conditions.

The Action has been carried out as an European collaboration because of its European dimension and the need for harmonisation. It targets safety, environment and economy issues and the necessary optimisation of these in delivering a quality winter service. For this, the close involvement of major road authorities and operators in various countries was required so that management modules could be developed on a European wide basis in order to compare service performance, safety records, and quality levels in similar climate domains. In this way, benefits in this area can be maximised.

The population of Europe is very unevenly distributed. That means also that the standard of roads and traffic density differ considerably. For instance, Germany, France, UK and Spain have the highest vehicle mileage while Belgium has the highest density of roads. It is important to bear this mind when studying different results.

Principles of assignment of the level of winter service can be

- climatic zones
- gradients divided in different classes
- traffic
- accidents