

Nour-Eddin El Faouzi

Editor

REAL-TIME MONITORING,
SURVEILLANCE AND CONTROL
OF ROAD NETWORKS
UNDER ADVERSE
WEATHER CONDITIONS



Effects of weather on traffic and
pavement: State of art and best
practices

Just released

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COST (European Cooperation in the field of Scientific and Technical Research) is the oldest and widest European intergovernmental network for cooperation in research. Established by the Ministerial Conference in November 1971, COST is presently used by the scientific communities of 35 European countries to cooperate in common research projects supported by national funds.

Summary. This State of the Art report summarizes the work done within the COST Action TU0702 "Real-time monitoring, surveillance and control of road networks under adverse weather conditions". It gives an overview about the effects of inclement weather conditions on road traffic operations and road safety as well as the best practices which are available in various countries.

Several projects carried out in the last years on this topic (especially in Austria, Denmark, Finland, France, Germany, Greece, Poland and USA) are described.

This overview shows that a number of relevant projects are on-going and are widely spread among countries, although the research is fragmented and, in most cases, publication and distribution of most findings is at the national level only. Coordination at the European level has only recently emerged, through initiatives such as this COST Action. However, the importance of the coordination of research and development has been recognized and collaborative projects at European or even at international levels (mainly with Australia and Japan) are being set up.

The next step could logically be the integration of weather forecasting and traffic management capabilities together in an integrated framework that captures the effect of weather and weather-related strategies on traffic system performance.

Résumé. Cet ouvrage résume le travail effectué au sein de l'action COST TU0702 «Gestion temps réel et régulation des réseaux routiers lors de conditions météorologiques défavorables». Il dresse une synthèse sur les effets des conditions météorologiques défavorables sur la circulation et la sécurité routières, il rapporte les meilleures pratiques de différents pays (en particulier en Autriche, Danemark, Finlande, France, Allemagne, Grèce, Pologne et États-Unis).

Cet ouvrage recense également un certain nombre de projets centrés sur ce thème. Une des particularités de ce recensement est le caractère fragmenté de l'effort de recherche ; en effet dans la plupart des cas, les publications des résultats ne dépassent pas le niveau régional, au mieux le niveau national. La coordination européenne n'est apparue que récemment grâce à des initiatives telles que l'action COST TU0702.

La prochaine étape devrait logiquement être l'intégration des prévisions météorologiques dans les outils de gestion du trafic dans un cadre intégré qui prend en compte les effets de la météorologie et des stratégies associées sur les performances du système de la circulation.



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