Task N3: Winter maintenance standards
TD Network management

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Task N3: Starting point

• Legal obligations and operational standards that define the works to be performed differ throughout Europe.

• It would be useful for NRAs to be able to compare their levels of services and identify common problems.

• Recognition of common problems can lead to joint research to improve the situation.

• Participating countries: Slovenia (leader), Italy, Latvia, Lithuania, Spain and Denmark.
Task N3: About the project

- **Time schedule:**
  - First draft report ready for presentation to the CEDR EB in summer 2014.
  - Finalization of the report in autumn 2014.
  - Final conference planned after completion of activities (end of 2014; may be organized in Slovenia).

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Task N3: Expected results

- **Added value from task group N3** will be in its practical recommendations to CEDR members about which issues of winter maintenance are the most troublesome for the majority of countries. Interested members can then invest certain funds in research projects that will find solutions to these matters and thus enable more efficient winter service in the CEDR member states.
Task N3: Topics that were discussed

- Improved technologies for snow removal
- Exchange of information among different operators of winter services (also across borders)
- Cleaning of roadides in springtime (garbage and litter removal, desalination of soil on roadsides)
- Ban the use of harmful chemical substances for providing drivability on roads (i.e. ban on CaCl₂ – calcium chloride)
- Improved systems, sensors and weather stations for monitoring road conditions, improved systems for weather prediction and forecasting
- Less sprinkling with saline and consequently lower level of service
- Problems with salting due to changeable weather conditions (unnecessary salting in more stable weather conditions)

Task N3: Working strategy

First phase:
Collect information from CEDR member states and compile a summary of winter maintenance standards, procedures and methods.

Second phase:
Gather information from CEDR member states about their most urgent problems regarding winter service i.e. from environmental or other relevant aspect.

Third phase:
Define certain common issues (problems) for all NRAs and advice to CEDR member states in which research projects they should invest to provide solutions for these problems.
Task N3: Recognised common research issues

- **Maintenance Decisions Support System (MDSS)** – a cost/benefit analysis would need to be done for such a system and to solve the problem of "information overflow" into the system; research on implementation of such systems in winter service
- **Calibration mechanisms of machinery** – to develop and standardize as a CEDR standard a methodology for calibration of machinery for winter maintenance
- **Salt and gritting material consumption** – research in optimizing the consumption of gritting materials
- **Scenarios of road maintenance** – research needs to be done to determine various scenarios on the road and maintenance measures that would be used as an utility guide in decision making process
- **New gritting materials** – research on new gritting materials that could be used instead of salt which is environmentally dangerous and otherwise questionable

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Task N3: Conclusion

THANK YOU FOR YOUR ATTENTION

QUESTIONS?

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