

第10回国際冬期道路会議,第9回国際道路気象会議概要報告
石本 敬志 (開発土木研究所)

道路雪氷に関する両会議の概要は「雪氷」Vol.60 No.4を参照してください。
重複を避け、プログラムを転載します。道路会議のポスター発表分は制限枚数を
越えるので省略します。

X th PIARC International Winter Road Congress, 16-19 March in Lulea, Sweden

Wednesday March 18 09.00 – 13.00

Scientific Session (1A) "Winter Road Maintenance Policies : Strategy"

Tsefels, Koit and Varik, Hillar, Estonia, Effects of the Technology Improvements in Winter Maintenance of Estonian Roads

Lapsins, Andris and Kronlaks, Olafs, Latvia, Latvian Winter Road Maintenance

Dobosi, Tivadar, Timar, Andras and Toth, Sandot, Hungary, Performance of Winter Road Operation Duties on the National Road Network within a Corporate Operation Framework - a Comparison between the Hungarian and EU Practices

Jaquet, Jette and Prah, Knud Björn, Denmark, Road Standards for Winter Service

Postiglioni, Giannino, Italy, The Experience of Some *Compartimenti* in North Italy on the Subject of Winterservice

Fraser, Grahame and Drew, Joe, United Kingdom, Route Selection and Salt Management in Northern Ireland

Danielson, Uno, Sweden, A way to optimise winter maintenance

Roussel, Jean-Jaques, France, General Political Context of Winter Service in France

Paquier, Francois, France, Winter Service Level : Method of Calculation and Testing

Keranen, Paul F, USA, Maintenance Research - A Unique Approach to Innovation in Winter Maintenance

Miyamoto, Yasuyuki and Tadao, Mizukami, Japan, Outline of Winter Road Management Measures in Japan

Thursday March 19 09.00 – 12.00

Scientific Session (1B) "Winter Road Maintenance Policies : Organization"

Gutiérrez-Bolívar, Oscar and Vilanova, Vicente, Spain, Overview of Winter Maintenance. Organization and Strategies in Spain

Popkov, Gennadiy, Russia, Moscow Region Road Maintenance Strategy Development Project

Dahl, Torgrim, Norway, Flexible Working Hours During Winter

Pletan, Rod, USA, Managing Winter Maintenance Through the Eyes of the Customer

Brusk, Per, Eriksson, Håkan and Nordlander Jan-Olof, Sweden, Greater Efficiency by Making Road Maintenance Competitive in Sweden

Carstensen, Allan, Denmark, The Danish Experience of Tendering Winter Services

Perchanok, Max S, Canada, Friction Based Quality Assurance Measures for Snow Clearing Operations

Bröchner, Jan and Johansson, Alf, Sweden, Winter Road Maintenance - a Swedish Typical Case

Wednesday March 18 09.00 – 13.00

Scientific Session (2) "Ice and Snow Control Methods"

Pigeon, Michel, France, Training Staff for Winter Service. The Salles Training Centre

Smithson, Leland D, USA, A Partnering Model For Public-Private Partnerships A Concept Maintenance Vehicle

Chollar, Brian H and Nassif, Salim F, USA, Federal Highway Administration Involvement In Anti-Icing and Other Snow and Ice Technologies

Deschênes, Daniel, Canada, Technological Innovations Supporting Winter Maintenance in Québec

Ihs, Anita, Sweden, Test and evaluation of alternative deicing methods and materials in Sweden

Moritz, Karl, Germany, Effectivity and Economy of De-icing Agent Spraying Systems/
Presented by Mr K-H Johnen/

Ardemagni, Claudio, Christillin, Marcello and Trombella, Gianfranco, Italy,
The Buthier Viaduct, A different approach to road network maintenance in winter.

Andersen, Öyvind, Norway, Equipment for Removal of Snow and Slush

Perchanok, Max S, Canada, An Approach to Cost Analysis and Priorization of Snow Drift Treatments on Public Highways

Vassilyev, Alexander, Russia, Permissible Thickness of Snow Layer on Roads and New Snow Fence Constructions

Naaim, Mohamed and Cligniez, Vincent, France, Avalanche Study and Modeling :
Application to Road Protection

Brod, Hans-Georg, Germany, Assessing the Risks of Using De-icing Salts on Groundwater/
Presented by Mr Otmar Speth/

Schlup, Ulrich and Schatzmann, Jurg, Switzerland, Solar Energy for Ice Control

Hiroshi, Tanno, Nobuhiro, Tezuka and Nobuo, Kobayashi, Japan, Development of Highway Snow Melting Technology Using Natural Energy

Thursday March 19 09.00 – 12.00

Scientific Session (3) "Special Winter Road Problems in Urban Areas"

Krokeborg, Jon, Norway, Studded Tyres and Public Health "The Road Grip Project"

Takagi, Hideki and Tsutae, Akinori, Japan, Winter Skidding Accidents on Road Surfaces Covered with Snow and Ice under Studded-Tire Regulation

Durth, Walter, Bernhard, Markus and Stöckert, Ralph, Germany, Intensified Snow Removal

Svedova, Dagmar, Slovakia, Winter Maintenance on Urban Roads

Laurinavicius, Alfredas and Cygas, Donatas, Lithuania, Winter Maintenance Problems on the Streets of Lithuanian Cities

Mattsson, Jouni, Finland, Estimating the Winter Maintenance of a Street on the Basis of Street Properties

Öberg, Gudrun, Sweden, Single Accidents Among Pedestrians and Cyclists in Sweden

Mikkelsen, Leif and Prahl, Knud Björn, Denmark, Use of Brine to Combat Icy Bicycle Lane Surfaces

Tuesday March 17 14.00 – 17.00

Scientific Session (4) "Maintenance Information and other Support Systems for Winter Road Management"

Nakatsuji, Takashi, Fujiwara, Takashi, Hagiwara, Toru and Onodera, Yuki, Japan, Direct and Indirect Methods for Predicting Slipperiness of Road Surfaces in Winter Using a Neural Network Model

Fleege, Edward J and Wambold, James C, USA, Variable Slip Friction Measurement Techniques for Snow and Ice Operations

Nordström, Olle, Sweden, Development and Validation of BV14, a New Twin Track Fixed Slip Friction Tester for Winter Road Maintenance Monitoring in Sweden.

Leviäkangas Pekka, Finland, Improving Winter Road Management Under Euro-regional Project "Viking"

Burtwell, Marilyn, United Kingdom, Assessment of Road Surface Freezing Point Sensors for the UK

Pani, Bruno and Totaro, Stefano, Italy and Troitsky, Arkady and Khaikine, Michail, Russia, A Radiometric System for Road Surface Condition Monitoring

Maletka, Grzegors, Dzienis, Tadeusz, Pałys, Marek, Antosz, Marek and Supernak, Szymon, Poland, Integrated System of Meteorological Roads Protection in Poland Based on Intelligent Road Weather Stations

Ledent, Thierry, Belgium, "Meteo Routes" : The Walloon Project of Meteorological Data Control for a Better Service to the Users.

Knudsen, Freddy, Denmark, The Danish Winter Management System

Tuesday March 17 14.00 – 17.00

Scientific Session (5) "Interaction between People, Roads and Vehicles"

Invited representative for the users : Hallsten, Lars. Swedish Road Haulage Association. The heavy commercial vehicle operator's view of winter road maintenance.

Wallman, Carl-Gustaf, Sweden, Driver Behaviour on Winter Roads : A Driving Simulator Study

Suzuki, Shun-ichi, Asano, Toshikazu and Taketani, Eiichi, Japan, Expressway Traffic Operation in the Winter Season

Leiren, Kjersti, Norway, Road User Information Service in Norway

Desmarchais, Pierre, Canada, Assessment of the Effect of Accumulated Snow or Ice on the Retaining Capacity of Parapets under Actual Operating Conditions

Cabanes, Ariel, France, Winter Serviceability

Nordström, Olle and Gustavsson, Lars-Erik, Sweden, Experience of Functional Testing of Winter Tyres for Passenger Cars and Heavy Vehicles by Means of the VTI Indoor Flat Bed Test Facility and a Mobile Tyre Test Vehicle.

Kajiya, Yasuhiko, Ishimoto, Keishi and Matsuzawa, Masaru, Japan, ITS Technology for Winter Road Management - ITS/Win Research Program of the Hokkaido Development Bureau-

STANDING INTERNATIONAL ROAD WEATHER COMMISSION

9th SIRWEC conference Luleå 15 -17 March 1998 at Nordkalotten hotel

Monday 16th MarchJ. Sand Kirk: *Danish Winter Index*Masuda Yoshitaro: *Development of a Mobile Winter Road Surface Information Collection System*Henrik Voldborg: *New experiments in the field of Thermal mapping and forecasting Road Surface Condition*Torbjörn Gustavsson: *A critical review of thermal mapping techniques*Erik Liljas: *Research - Nowcasting in Europe*Gerald Spreitzhofer & R. Steinacker: *Experiences in applying the wels-road weather system over Austria*Hirofumi Uchiyama, Koichi Yoshida & Chuichi Shimomura: *Freezing Forecast System*J. Heierli: *Site-specific Road Condition Forecast for Maintenance Services*Wolfgang E. Raatz, Wilfred Jacobs & Konrad Balzer: *Verification Studies on Detailed Area Forecasts of Road Weather*J. Thornes: *Verification of road Weather Forecasts*Kimmo Toivonen & Jouko Kantonen: *New Development Phases of the Finnish Road Weather Information System*Peter Davies, Dean Deeter & Clare Bland: *Weather Information for Surface Transportation: Providing Integrated Services Across the North American Continent*Lars Frimodig, Knuth Heijkenskjöld & Dan Eriksson: *VIIS/RWIS Road Weather Information System*Paul A. Pisano & Gary G. Nelson: *Integrated Weather Information Systems: White paper Findings*Mark Wikelius, P.E., Judy Rockvam & Clare E. Bland: *Aurora - A Multi-national RWIS Program*Toru Hagiwara: *Effects of Luminance and Color on Drivers Visibility during Snowstorm in the Daytime*
Shaburov Sergei, Maevsky Alexander & Mikhailov Alexander: *Winter weather conditions and compacted snow on carriageways in East Siberia*Pekka Leviäkangas & Yrjö Pilli-Shivola: *Customer-Oriented Services and Functions of Road Weather and Traffic Information Centres*Keishi Ishimoto, Yasuhiko Kajiya, Shunichi Kawakami & Masao Takeuchi: *Effect of Snow Break Trees on Improving Visibility*J. Norrman & M. Eriksson: *Relations between Road Weather, Road Maintenance and traffic Accidents*Tuesday 17th MarchWilfred Jacobs & Wolfgang E. Raatz: *Climatology of Road-Surface Temperatures for Different Road Site Characteristics*Marie Eriksson: *Geographical Information Systems (GIS) as a tool for planning new road stretches - Modelling and analysis of local climatological variations*Maria Karlsson: *Weathers influence on the spatial differences in temperature, horizontal and vertical, to the road surface*Masaru Matsuzawa, Yasuhiko Kajiya, Keishi Ishimoto, Toshiaki Kobayashi & Yasuhiro Kaneda: *The Relation between Winter Road Surface and Weather Conditions and Road Maintenance*Ulrika Postgård: *Temperature patterns during partly cloudy/calm and windy situations*PJ McLean & NLH Wood: *The reaction times of road surface temperatures*Markus J. Turunen: *Experiences in development and testing the ROSA road weather station*Toshimitsu Muramatsu & June Wada: *A study of service levels and sensors which scan cross-sections of snow on the road and provide information of the road surface characteristics*Andreas Kuehnle: *Video-based classification of winter road condition*Lars Sahlin: *RWIS development in Sweden*Paul W. Ruppert & Ulrich Schlup: *Project Erlkönig - Fog Detection along Motorways*Etienne Bornand: *Physical bases of freezing point measurement using active and passive probes*