



CONFERENCIA INTERNACIONAL
SOBRE
VIALIDAD INVERNAL

Del 27 al 30 de junio de 2017

Mendoza - Argentina

Piarc TC B2 activities

Didier Giloppé Chairman of Piarc TC B2 Winter Service committee

www.vialidadinvernal.org.ar

ORGANIZAN



Piarc TC B2 activities

Strategic plan and terms of reference
to organize the activity

22 committees and task force



World Road Association

Strategic Plan 2016-2019
Terms of reference for the Technical
Committees and Task Forces





The **Strategic Plan for 2016-2019** sets the organization structure of the Technical Committees according to five Strategic Themes:

- **Strategic Theme A - Management and Finance**
- **Strategic Theme B - Access and Mobility**
- **Strategic Theme C - Safety**
- **Strategic Theme D - Infrastructure**
- **Strategic Theme E - Climate Change, Environment and Disasters**

Technical Committees are tasked with producing reports on best practice and recommendations in their respective fields thereby assisting decision makers, road engineers and research engineers. They play an active role in the preparation of the World Road Congresses.

Technical Committees consist of distinguished engineers and experts appointed by member countries. They meet on average twice a year between Congresses allowing them to discuss and report on their work programme.

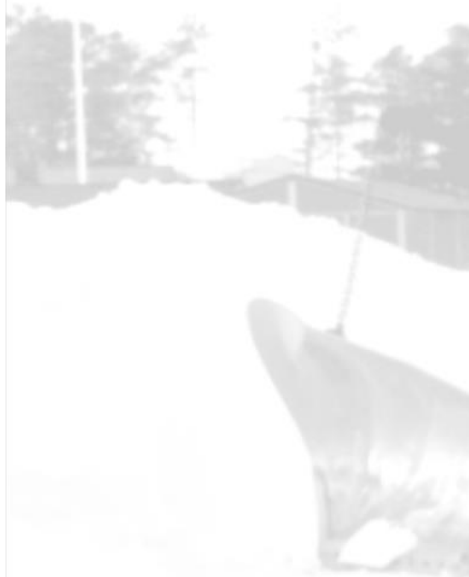


Activités du comité durant le nouveau cycle

Management and Finance	Access and Mobility	Safety	Infrastructure	Climate Change, Environment and Disasters
Technical Committees				
Terminology*				
	Road Network Operations/ITS* Winter Service*	National Road Safety Policies and Programs *	Road Tunnel Operations* Asset Management*	
Performance of Road Administrations	Sustainable Multimodality in Urban Areas	Design and Operations of safer Road Infrastructure	Pavements Bridges	Adaptation Strategies/Resiliency
Road Transport System Economics and Social Development	Freight		Rural Roads and Earthworks	Environment Considerations in Road Projects & Ops
Risk Management				Disaster Management
Task Forces				
Innovative Financing	Road Design & Infrastructure for Innovative Transport Solutions	Infrastructure Security		
Coordination between National and Sub-National Authorities				

*Indicates a multi-cycle Technical Committee.

Terms of référence



Issue B.2.1 Transportation management during winter events	
<i>Strategies</i>	<i>Outputs</i>
Identify and document best practices on winter service management and road user information systems that mitigate the effects of winter events on performance of the system and add to network resiliency.	<p>Case studies-based report on successful practices taking into account potential input from TC E.2.</p> <p>Training materials and presentations to support dissemination and implementation.</p> <p>Action plan for promoting these practices through implementation focus activities and events.</p>
Issue B.2.2 De-icing salt and brines treatments, interventions and best practices	
<i>Strategies</i>	<i>Outputs</i>
Investigate and document best practices associated with the use of technology in de-icing treatments, including mitigation the impacts on the environment.	Guidance report.
Issue B.2.3 Updates to the Snow and Ice Data Book	
<i>Strategies</i>	<i>Outputs</i>
To establish the Snow and Ice Data Book as a current resource for knowledge transfer globally.	<p>Updated version of the Data Book</p> <p>Inclusion of an interactive format to facilitate use by members.</p>
Issue B.2.4 Preparation of the 2018 Winter Road Congress	
<i>Strategies</i>	<i>Outputs</i>
Identify the priority themes and prepare the scientific program for the Congress taking into consideration the concerns and possible contributions from other Technical Committees.	<p>Definition of the technical programme incorporating session(s) on the various criteria of winter operations for decision makers and acceptable levels of service.</p> <p>Production of the proceedings.</p>

TC B2 activities

- Publication of reports
- Publication of the snow and ice data book
- Organisation of the international winter Road Congress
- Organisation of workshops
- Organisation of conferences or seminars
- Terminology work

Piarc TC B2 activities

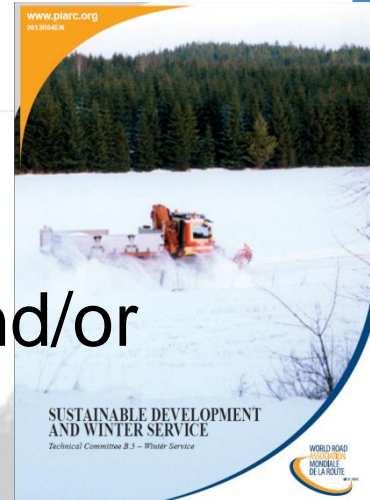
Publication of reports :

(To upload for free on the Piarc website)

Crisis management of unusually severe and/or sustained snow event

Sustainability and Climate Change Considerations in Winter Operations

Advanced technology for data collection and information to users and operators



Piarc TC B2 activities

Snow and ice data book

Snow and Ice Data Book is available at the PIARC web site.

<http://www.piarc.org/>

Free of charge for downloading

(French, Spanish, English versions)

- Each report contains 4 main themes
- Demographics and roads
- Climate
- Winter road management
- On-going research and studies



WORLD ROAD ASSOCIATION MONDIALE DE LA ROUTE

EXCHANGE KNOWLEDGE AND TECHNIQUES ON ROADS AND ROAD TRANSPORTATION

SEARCH Keyword OK MY ACCOUNT

KNOWLEDGE BASE VIRTUAL LIBRARY TERMINOLOGY LINKS EVENTS

Home - Virtual Library - Directory of publications - Snow and Ice Databook 2014

Publication sheet

Snow and Ice Databook 2014

English Version:
Snow and Ice Databook 2014

Download for free
22925_SIDB_EH_Winter_Service_World-Road-Association.pdf (31.8MB)

French version:
Base de données sur la neige et le verglas 2014

Download for free
22924_SIDB_ES_Viabilidad_Invernal-Asociacion-Mundial-Carretera.pdf (29.6MB)

Spanish version:
Base de datos de la vialidad invernal 2014

Download for free
22924_SIDB_ES_Viabilidad_Invernal-Asociacion-Mundial-Carretera.pdf (29.6MB)

Date 2015
Author(s) Comité technique 2.4 - Viabilité hivernale Technical Committee 2.4 - Winter Service
Domain(s) Winter service
PIARC Ref. Snow and Ice Databook - SIDB 2014EN
ISBN 978-2-84060-355-9
Pages 223

This fourth edition of the Snow and Ice Databook was produced to accompany the 14th International Winter Road Congress held in Andorra. It compiles in a homogeneous and consistent format descriptions of practices for managing winter road conditions from nearly 30 countries. The four country-specific headings consist of: description based on geography, demographics and road network characteristics; potential climatological and meteorological phenomena; road management methods; and recent developments and current research addressing winter service conditions.

Winter conditions are always difficult to forecast. Climate change has influenced winter weather variations and each year brings its share of surprises. Winter service has become a difficult activity to plan for and schedule, especially in these times of continuously increasing demands and despite ever-tighter budget constraints. Experience from elsewhere is thus most instructive.

The Snow and Ice Databook is perfectly suited to handle such pressure. The objective here is to upload contributions benefiting both user safety, across all travel modes (automobile, walking, bicycle, public transit trips), and economic imperatives often relying on just-in-time management and dependent on the road network. The ultimate challenge is to accommodate environmental concerns and, more broadly, implement sustainable development approaches.



Theme 1

- Demographics and roads
 - Population
 - Geographic location
 - Economy
 - Road network and traffic



Network in Germany (Motorways red)

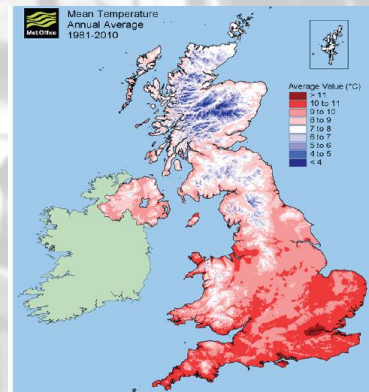
Area	356,700 km ²	
Latitude	47°16' to 55°03'N	
Population	82.0 million	
Length of road 2002-12-31	Federal trunk roads	Federal motorways (Autobahnen; 4- and 6- lane divided highways) 12,800 km
		Federal highways 40,600 km
		State highways 86,600 km
	Other federal-aid roads	County roads 91,500 km
		Community / urban roads 413,000 km
	Total	644,500 km
Capital	Berlin	
Latitude	52°30'N	
Inhabitants	3.5 million	



Theme 2

Climate

- Statistics on temperature and precipitation
- Winter indexes



	Max Temp [deg C]	Min Temp [deg C]	Days of Frost [days]	Rainfall [mm]
England	13.5	5.9	49.1	855
N. Ireland	12.4	5.4	42.8	1136
Scotland	10.7	4.2	67.4	1570
Wales	12.6	5.7	49.3	1460

Winter maintenance class	Is	I	Ib
Normal	0.30	0.28	0.25
Friction requirement	road surface below -6 °C 0.25	road surface below -4 °C 0.25	spot sanding 0.25 line treatment 0.22
Cycle time	2 h	2 h	salt 3 h sand 4 h

Theme 3

- Winter road management
- Standards and rules
 - Level of service
 - Equipments
 - Materials
 - Laborers

Level 1



Level 2



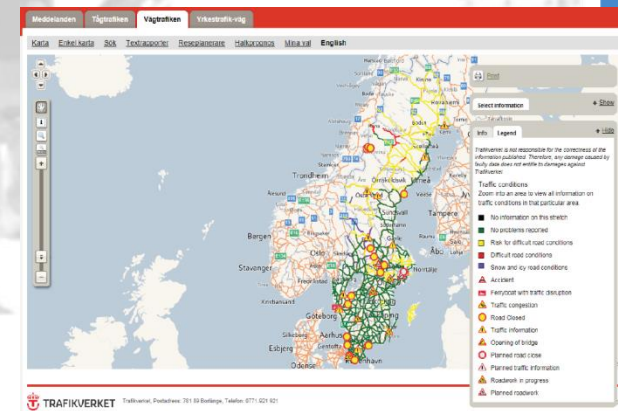
Level 3





Theme 3 (cont'd)

- Winter road management
- Organization and operation of winter maintenance
- Assessment of snow and ice control measures
- Traffic safety and information



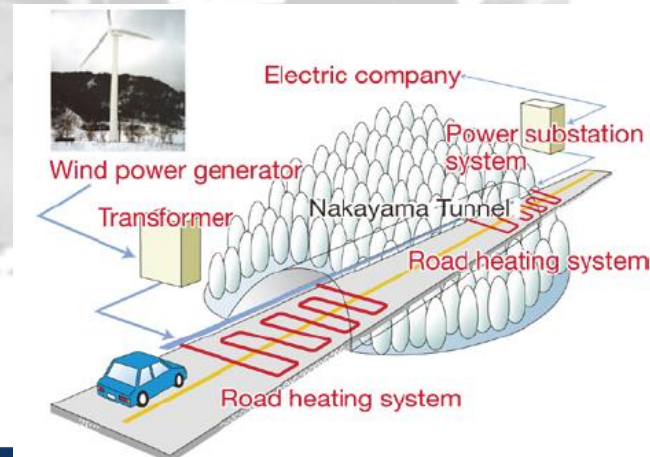


Theme 4

- On-going research and studies to improve winter management

New technology

New management and organization approaches



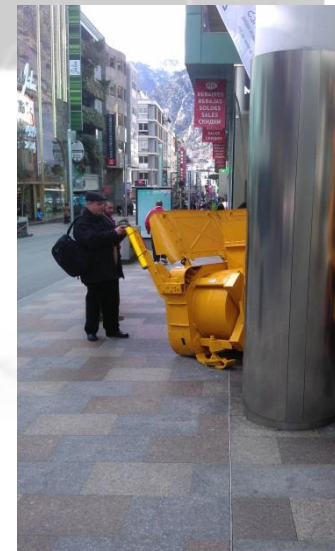
Píarc TC B2 activities Andorra congress

In the conference center.....

Congress members	905
Drivers	25
Guest	24
Exhibitors	534
Exhibition visitors	2910
Vips	120
Journalist	48



.....and in the street





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Piarc TC B2 activities snowplough competition



A total of 25 drivers take part on the 2nd International Snow Plough Drivers Championship



650 attendees

Piarc TC B2 activities

nieve compacta

stisnjen sneg

SLOVENIA

nieve compactada

圧雪

Japan

neige tassée

þjappaður snjór

Island



a. Term search

To search for a term in several languages:

1. click on "Term search" (see previous page);
2. type the term or expression;
3. select the (source) language for the request;
4. select the target language(s);
5. send your request: **SEARCH**.

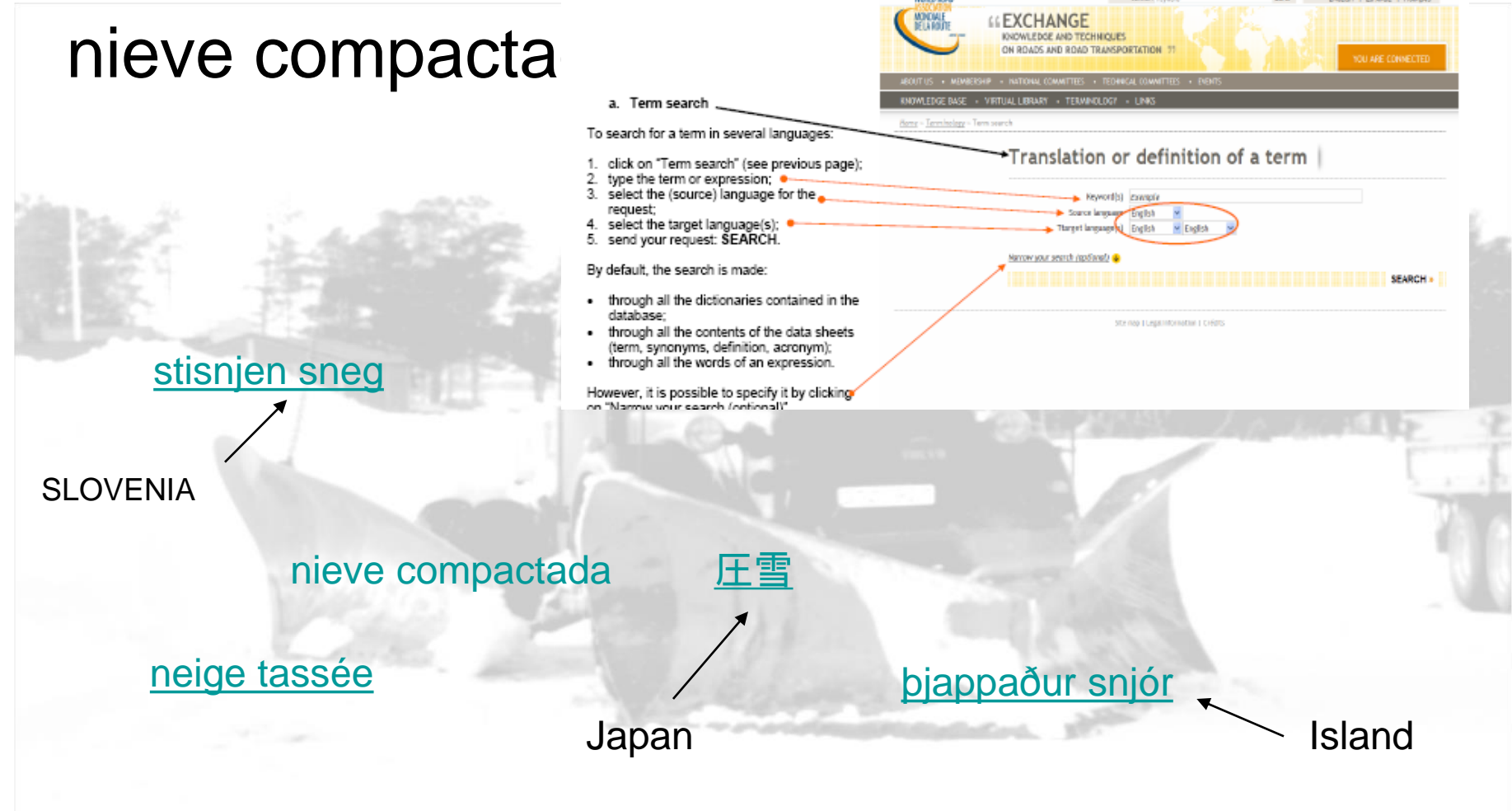
Translation or definition of a term

Keyword(s)
 Source language:
 Target language(s):

By default, the search is made:

- through all the dictionaries contained in the database;
- through all the contents of the data sheets (term, synonyms, definition, acronym);
- through all the words of an expression.

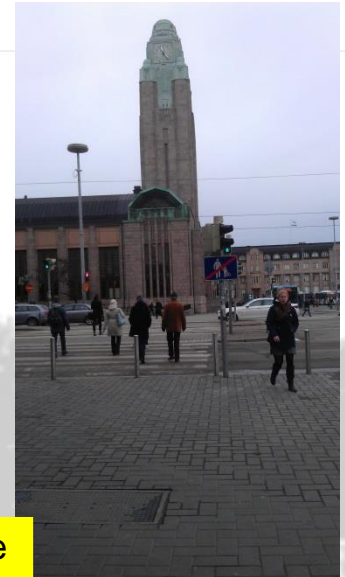
However, it is possible to specify it by clicking on "Narrow your search (optional)".



Piarc TC B2 activities

Workshop Helsinki

“Mobile road surface condition measurements in winter”



The main questions in the workshop:

How to measure
friction, road
temperature etc.
mobile?

How to determine the
correct use of anti-
icing chemicals?

How to test potential
meter, censer and
maintenance
technologies?

What are the strengths
and weaknesses of new
mobile meters?

How to disseminate
the road condition
information
gathered?

How to exchange the
information and
experiences of new
systems and solutions?

Piarc TC B2 activities

Winter service seminar Santiago Chile
“Winter operation at high altitude and extreme zones”





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World road congress in Korea





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International Winter Road Congresses

A congress every four years

1969 – 1st Congress in Berchtesgaden, Germany

Tromsø 1990

Seefeld 1994

Luleå 1998

Sapporo 2002

Turin-Sestrières 2006

Québec 2010

Andorra 2014

Gdansk 2018



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Partnerships and links with other organizations

CEDR (Congress of European Directors of Roads)

BRA (Baltic Road Association) Association of the Baltic Roads

SIRWEC (Standing International Road Weather Commission)

AASHTO (American Association of State Highway and Transportation Officials),

TRB (Transportation Research Board)

TRA (Transport Research Arena)

Cen TC 337 European Committee of Standardization

Etc...



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International Winter Road Congress Andorra 2014.....

Gdansk 20 23 february 2018



Poland
2018
AIPCR-PIARC

XVth International
Winter Road Congress
20-23 February 2018



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Thank you for your attention !

