

# XIII INTERNATIONAL WINTER ROAD CONGRESS

QUÉBEC, FEBRUARY 8 TO 11, 2010

BULLETIN 2
PROGRAM AND REGISTRATION



Québec \* \*



# BIENVENUE À QUÉBEC

Vancouver

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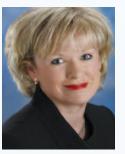






# **MESSAGES**

# **FROM DIGNITARIES**



MINISTER
OF TRANSPORT OF QUÉBEC

It is my great pleasure to invite you to the city of Québec for

the World Road Association's (PIARC's) XIII International Winter Road Congress, taking place February 8 to 11, 2010. This will be your opportunity to see for yourself the extensive winter service expertise Québec has developed over the years in dealing with its harsh winters.

Under the theme "Sustainable Winter Service for Road Users", the Congress will address, among other things, the growing concern among road authorities regarding sustainable development. Indeed, users are increasingly showing interest in means of transport that are efficient, safe and environmentally friendly, for the benefit of the community and future generations.

I wish you a pleasant stay in the city of Québec. I am convinced that, in addition to discovering the legendary hospitality of Québecers, the interactions you will have at this meeting will contribute significantly to improving winter service practices as well as to innovations in this regard.

We look forward to welcoming one and all!



PRESIDENT
OF THE WORLD ROAD ASSOCIATION (PIARC)

On behalf of the World Road Association (PIARC), I am very pleased to invite you to participate in the XIII International Winter Road Congress, taking place in the city of Québec February 8 to 11, 2010.

The first winter road congress took place in Berchtesgaden, Germany, in January 1969; this is the first time it is being organized

in the Americas. The theme of the Congress in the city of Québec, "Sustainable Winter Service for Road Users", is perfectly in tune with the strategic objectives adopted by the Association at the start of its second century of existence, namely the sustainability of our road systems, road service, user needs and responsibilities.

Global warming, as we all have seen, induces significant changes in winter conditions resulting in enormous economic as well as social impacts, especially on the sustainability of road infrastructures.

At the same time, we are in the throes of a serious economic crisis causing a tightening of the purse strings. The preservation of road systems is essential to economic recovery. Solutions to the repercussions of these climatic disorders will be addressed in the presentations and discussions at the Québec Congress.

On behalf of the World Road Association, I want to thank the governments of Québec and Canada, as well as the City of Québec and the ministère des Transports du Québec for hosting this Congress. I invite everyone directly concerned with winter service to come together in the city of Québec on February 8, 2010, so that together we may find sustainable solutions beneficial to winter road users.

I look forward to meeting with you in a first-class setting that will allow us to observe and assess the application of winter service best practices.

Welcome to the city of Québec!









FIRST DELEGATE
OF CANADA TO PIARC,
PRESIDENT OF THE CANADIAN
NATIONAL COMMITTEE AND
DIRECTOR, AUTOROUTE 30
AND QUEBEC PROJECTS

The World Road Association has chosen the City of Québec

to host its XIII International Winter Road Congress from February 8 to 11, 2010. This congress will bring together, under one roof, more than 1500 delegates, experts in winter road maintenance, and exhibitors from countries who experience winter weather. To make this invitation even more exciting, you will also be able to experience the renowned Québec Winter Carnival and the "Bonhomme Carnaval"

The congress will also pay tribute to Canadian winters with an International Snowplow Championship in the afternoon of February 10, 2010.

This international congress will allow Canadian experts in winter roads and road transportation to share their expertise with colleagues from other countries facing similar climate challenges. It will also provide an opportunity to discuss new technologies for sustainable winter roads in a national and international setting.

Finally, it gives me great pleasure to launch a special invitation to all experts in the field of winter roads to share their know-how.

Looking forward to seeing you there!



MAYOR OF THE CITY OF QUÉBEC

The city of Québec has tamed winter. But this season remains

unpredictable and still presents new challenges. In order to better meet these challenges, I invite you to take part in the XIII International Winter Road Congress in the city of Québec in February 2010.

The city of Québec provides the ideal setting for this Congress. Our winter lasts over 110 days, and nordicity is part of our way of life. We have built on the talents of the experts and winter enthusiasts who have helped us, over our 400 years of history, adapt and take full advantage of the cold season.

By sharing your experience and know-how, you will help participants and the communities who experience winter develop innovative approaches to deal with this harsh season. You will give this Congress the value that justifies its organization.

I invite you to visit our city between the two working sessions. Valued for its great beauty, the city of Québec will win you over with its European charm on North American soil. You will have the opportunity to experience the festivities surrounding the Québec Winter Carnival, one of the biggest in the world. The many social, cultural and sports activities will make your stay most enjoyable.

See you in 2010!



PRESIDENT
OF THE ORGANIZING
COMMITTEE OF THE
XIII INTERNATIONAL WINTER
ROAD CONGRESS AND
QUÉBEC'S DEPUTY MINISTER
OF TRANSPORT

As the World Road Association's (PIARC's) XIII International Winter

Road Congress approaches, on behalf of the Organizing Committee and myself, I invite you to join us for this event taking place in the city of Québec February 8 to 11, 2010. I am happy to announce that the preparations are going well and that we are looking forward to having you with us.

This meeting will undoubtedly be a great opportunity for winter service experts to examine the key issues facing road authorities as regards winter conditions. It is also a perfect opportunity for you to discuss innovative practices with colleagues, share your successes and draw inspiration from those of road authorities around the world. You will be able to see firsthand why, at the very heart of this difficult season in Québec, winter represents a major challenge for stakeholders in the area of winter service.

The Organizing Committee looks forward to welcoming you to the city of Québec on the occasion of this international event.

We hope to see you there!

PÉGIS I ARE

RÉGIS LABEAUME

DENYS **JEAN** 



# PRESENTATION OF THE CONGRESS

# THE CITY OF QUÉBEC, WORLD MEETING POINT FOR WINTER SERVICE IN FEBRUARY 2010!

The city of Québec, a destination known for adventure and discovery, juts out over the banks of the St. Lawrence River 250 kilometres east of Montréal. The only fortified city north of Mexico, it celebrated its 400 th anniversary in 2008, making it the oldest city in North America.

You are cordially invited to join us at the World Road Association's (PIARC's) XIII International Winter Road Congress taking place in the city of Québec February 8 to 11, 2010. Come experience winter service in a country where the people have learned to live in harmony with this demanding season!

This congress will be a bilingual event, where the official languages will be French and English. Simultaneous interpretation services will be provided for the technical sessions and the technical visits at the congress.

Although 80% of the people of Québec speak French, over 40% are bilingual (French/English), the highest rate in Canada.

Forced to live with winter, the people of Québec have learned to make the most of it. This icy season provides a number of joys and delights for Québecers. They have accordingly become, over the years, "experts in winter festivities", as demonstrated by the Québec Winter Carnival, the biggest winter carnival in the world. We hope to see you in the city of Québec in February 2010!

# ORGANIZING COMMITTEE AND TECHNICAL COMMITTEE B5

Preparing this major event requires the contribution of a number of key players.

Denys Jean, Québec's Deputy Minister of Transport, chairs an Organizing Committee composed of several branches of the ministère des Transports and the ministère des Relations internationales.

The Québec 2010 Office, the standing secretariat for this Committee and host of this Congress, relies on the help of collaborators from other organizations:

- American Association of State Highway and Transportation Officials (AASHTO)
- Association québécoise du transport et des routes (AQTR)
- Ministère des Relations internationales du Québec (MRI)
- Ministère du Développement économique, de l'Innovation et de l'Exportation (MDEIE)
- PIARC-Québec Committee
- Specialty Vehicles and Transportation Equipment Manufacturers' Association (AMETVS)
- Transports Canada
- Ville de Québec

The Scientific Committee for the Congress is chaired by Gudrun Öberg of the Swedish National Road and Transport Research Institute based in Sweden. It is composed of members of the World Road Association (PIARC) Technical Committee B5 - Winter Service. Its 45 members work in organizations managing road systems in 29 countries:

- Andorra
- Argentina
- Austria
- Belgium
- Canada
- Canada-Québec
- Chile
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary

- Iceland
- Iran
- Italy
- Japan
- Latvia
- Morocco
- Norway
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- United States

Technical Committee B5 is also working jointly with the PIARC General Secretariat and is responsible for all technical content of the Congress, from the choice of themes to the selection of papers.

To see the names of all of the members of this Committee, go to the "Welcome/Organizing Committees" section of the official Congress Web site at www.piarcquebec2010.org.



# **PROGRAM**

The program for this Congress will be rich in content and varied thanks to the numerous activities proposed. In fact, participants will have an opportunity to further their knowledge and meet ardent colleagues from all over the world during the technical sessions and during the international-calibre exhibition. They will also enjoy an afternoon in the field at the very first International Snowplow Championship, which will be held at the same time as equipment demonstrations and technical visits. Finally, on a friendly and festive note, they will be treated to the opening ceremony, the banquet, and the closing session of this 13<sup>th</sup> Edition of the Congress.

The following table presents an at-a-glance schedule of the main activities of the program:



MOND	)AY	9:00 a.m.	Registration		
FEBRU	EBRUARY 8	3:00 p.m. 4:30 p.m.	Opening ceremony (3:00 p.m. to 4:30 p.m.) Opening of the exhibition to Congress delegates (4:30 p.m. to 7:00 p.m.)		
	UESDAY EBRUARY 9	8:30 a.m. to 10:15 a.m.	Winter City Mayors' Session: Economic and Financial Governance of Winter Service		Exhibition (8:00 a.m. to 6:00 p.m.)
		10:45 a.m. to 12:30 p.m.	Ministers' Session: How to promote winter mobility adapted to the climate?		
		2:00 p.m. to 3:30 p.m.	5 parallel technical sessions	Poster sessions	Open house day
		4:00 p.m. to 5:30 p.m.	5 parallel technical sessions		
	VEDNESDAY EBRUARY 10	8:30 a.m. to 10:00 a.m.	5 parallel technical sessions	Poster sessions	Exhibition (8:00 a.m. to 1:00 p.m.)
		10:30 a.m. to noon	5 parallel technical sessions		
		2:00 p.m. to 5:00 p.m.	Equipment demonstrations	Technical visits	
			International Snowplow Championship		
		7:00 p.m. to 11:00 p.m.	Banquet - Show		
	IURSDAY BRUARY 11	8:30 a.m. to 10:00 a.m.	5 parallel technical sessions	Poster sessions	Exhibition (8:00 a.m. to noon)
		10:30 a.m. to noon	5 parallel technical sessions		
		noon to 3:00 p.m.	Closing session (meal included)		

# SPECIAL SESSIONS, CEREMONY AND BANQUET

Opening, dignitaries' sessions, banquet, closing: these special activities will set the tone for the Congress.

# Monday, February 8 A friendly and lively opening

At 3:00 p.m., the Mayor of the city of Québec, the Québec Minister of Transport and special guests will do us the honor of opening this XIII International World Road Congress.

At this opening ceremony, which all Congress delegates, exhibitors and accompanying persons are invited to attend, performances by Québec artists will bring the Congress's friendly winter decor to life.

The Congress program will then be presented to help you choose from among the many activities proposed.

At 4:30 p.m., the opening cocktail reception will be your opportunity to discover the exhibition associated with the Congress in a festive setting.

## Tuesday, February 9

# Governments and municipalities explain their policies

This Congress is a unique opportunity to bring together under one roof all players in the field of road management concerned with winter service issues.

Managers, researchers, entrepreneurs: your actions depend on the policies established by those who give orders at the various levels of government. That is why, on Tuesday morning, the Departments of Transport and major winter cities from around the world will be given the chance to speak.

The session for mayors of winter cities will be devoted to the theme of the economic and financial governance of winter service. The chosen theme represents a sizeable challenge for all nordic cities. Their search for balance between the quality of the services provided to users and the economic efficiency of operations is a constant endeavor. The issue is on the table. Mayors are invited to share their experience and examine adapted solutions together.

How to promote winter mobility adapted to the climate? Under this theme, you will have the privilege of learning how, from the viewpoint of sustainable development, governments intend to promote mobility that is adapted to weather conditions and accordingly different from mobility in other seasons. These discussions will focus on regulation, network accessibility, intermodality and public transit in winter.

# Wednesday, February 10 A banquet and music to liven up the evening

An unforgettable moment of relaxation will begin at 7:00 p.m.: a banquet with Québec flair will end with a musical show by the Painchaud Family, artists/musicians of infectious good cheer.

## Thursday, February 11 Summary and conclusions

Our hosts will come to greet you at noon. Then, the Chair of the Technical Committee B5 will present the conclusions that can be drawn from these three days of exchanges.

The meal, which will be served during the session, will punctuate the various contributions. An illustrated presentation of future World Road Association congresses will bring this XIII International Winter Road Congress to a close.





# TECHNICAL SESSIONS

The Call for Papers was very successful, with more than 200 abstracts submitted to the 2010 official Congress official Web site. PIARC Technical Committee B5 - Winter Service is now responsible for preparing the technical sessions for the Congress. Based on the selection criteria that it has established, the Committee evaluated the abstracts and notified the authors of its decisions and comments.

Therefore, the analysis and selection of papers phase has now been completed on schedule, and it is now possible to present an overview of the distribution of the abstracts, and therefore, the main areas of interest.

An initial review of the accepted abstracts clearly indicates that the authors have a particular interest in "Winter Service Planning, Management and Implementation", "Winter Service Information Systems", "Snow and Ice Control Techniques and Technologies", and "Winter Service and Sustainable Transportation". Each of these topics attracted approximately forty abstracts.

Approximately twenty abstracts were selected for the topic of "Safety and Mobility in Winter: Social, Environmental and Economic Aspects". The topic entitled "Winter Service and Climate Change Impacts" attracted the attention of ten authors. Even though it is a relatively new subject on which work is just beginning, the conference may feature two full sessions on this new challenge.

Technical Committee B5 is convinced that all communications will be of excellent quality.

## **REMINDER TO AUTHORS**

Authors whose abstracts were accepted must now prepare and submit their completed papers by July 31, 2009, as stated in the instructions that appear on the Congress Web site (www.piarcquebec2010.org).

#### COMPLETE TECHNICAL PROGRAM: ON THE WEB SITE IN NOVEMBER 2009

So far, the members of Technical Committee B5 have accepted nearly 180 abstracts. The division between technical sessions and poster sessions will be decided after the final versions of the papers are received. This selection will allow for the technical sessions to be organized over the three half-days provided for during the technical section of the Congress program. The poster sessions, which are also of great interest, will be added to the program.

#### **TOPICS**

The speakers who will be addressing the first topic, "Winter Service Planning, Management and Implementation", will be sharing their experience and thoughts concerning:

- Level of service: How to include road users needs and rules?
- Strategic planning and organization (rules, standard, evaluation)
- Relationships between all parties (managers, operators, road users...)
- Contracting types versus in-house implementation
- Cost-benefit: achieving the optimum balance?
- Staff training
- Instructing/Informing the road users
- Risk and contingency planning
- Quality and performance management

The second topic, "Safety and Mobility in Winter: Social, Environmental and Economic Aspects", should give a sense of the various approaches to:

- Road users' needs and responsibilities
  - > responsibility and education of road users
  - risk and mobility for pedestrians, cyclists,& people with reduced mobility
  - > nature of the information for road users and dissemination methods
- Network safety and mobility
  - > safety and capacity compliant road infrastructure in winter
  - > weather-based measures for proactive traffic management
  - > safer winter road operations
- Innovative technologies (along the infrastructure and in vehicle) mitigating safety and mobility problems in winter: ITS solutions, cooperative systems
- Human-Machine Interface (HMI)

The third topic, "Winter Service Information Systems", will look at the innovative aspects of new technologies that are currently being developed, including:

- Information tools to the manager/operator; tools for the interface between meteorology and road management
  - > surface condition detection: friction, road surface temperature, short term forecasts
  - > traffic management and emergency management
  - > on line/real time information of road users
- Data management/data processing
  - > new developments, new application for an improved winter road management, e.g. Maintenance Decision Support Systems

The fourth topic, which is more traditional, will examine the current situation involving "Snow and Ice Control Techniques and Technologies" in terms of:

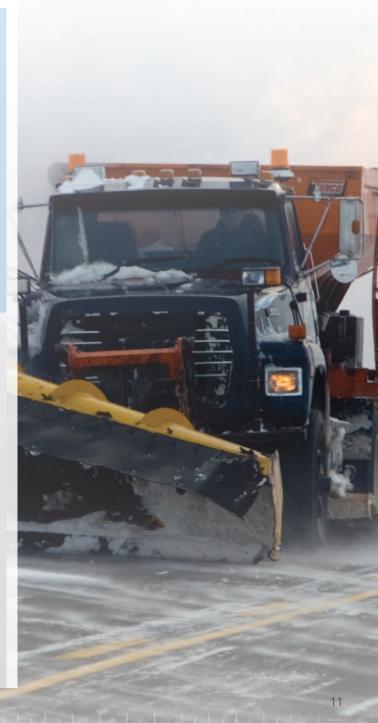
- Standardization efforts (all areas of Winter Service)
- Machinery and equipment
  - > plow blades and spreaders
  - > winter service vehicle markings and lighting
  - > optimized spreader controls
  - > maintenance of winter service machinery
- Infrastructure
  - > fixed auto-spray systems
  - > surface treatments implementation of different techniques according to different types of pavements – innovative pavement materials
  - > self-maintaining structures (bridges and sidewalks)
- Specific applications, strategies and tactics
  - > winter service for urban and rural areas
  - > winter service operations for pedestrians, cyclists and aging population
- Innovative application techniques
- Implementation of artificial and natural snow fences

The fifth topic, "Winter Service and Sustainable Transportation", has become a major concern for highway network managers, and will be examined from the following perspectives:

- What is sustainability?
  - > holistic impacts studies
  - > life cycle Impacts
  - > social, economy, safety: the right balance
  - > concrete examples
- Sustainable strategies
  - > adapted policies
  - > adapted equipments and materials
  - > road salt: storage, spreading
  - > environmentally friendly materials and techniques
  - > strategies between environmental aspect and safety
- Economic aspects: mobility

Finally, the sixth topic, which is entitled "Winter Service and Climate Change Impacts", reflects one of the major concerns of this century and looks at the following issues:

- Situation analysis for Winter Service: which method, which data?
- Generating relevant scenarios dedicated to winter maintenance
  - > short term
  - > long term
- New strategies
  - > on the transportation system
  - > on winter maintenance approaches
- Focus on specific items
  - > reduction in permafrost/ground frost
  - > new challenges in using ice roads
  - > greater avalanche risk
  - > how to manage Winter Service during rapid and significant weather fluctuations



# TECHNICAL VISITS

Every Congress delegate can sign up for one of seven technical visits planned for Wednesday afternoon.

To take part in one of these visits, you must indicate your choices in order of priority on the registration form or on the online form at <a href="https://www.piarcquebec2010.org">www.piarcquebec2010.org</a>. Spaces are limited according to the facility and will be granted in the order registrations are received.

Each visit includes one stop at the Snowplow Championship before or after the facility visit, as the case may be. Each Congress delegate will thus be able to attend part of this unusual international competition.

## MINISTÈRE DES TRANSPORTS QUÉBEC SERVICE CENTRE

The agglomeration of the city of Québec is one of the largest urban centres in the province of Québec. The Service Centre is responsible for maintaining approximately 800 kilometres of road out of a total of close to 1,700 kilometres for the region's entire highway system. Several sectors are located on broken terrain and some receive an annual snowfall of more than 5 metres. This situation requires the use of special winter maintenance methods.

The visit will give delegates the opportunity to speak with operating staff, who will explain their management approaches using maps. The application of road weather, road closure criteria and procedures, user assistance and emergency responses in the event of a storm will be explained on this occasion.

The principles for the harmonization of maintenance contracts between adjacent territories and the distribution of operations between the ministère des Transports and the private sector will also be addressed.

Lastly, visitors will have the opportunity to learn about snow removal and de-icing procedures as well as to see the vehicles and equipment used for these maintenance operations.



#### CENTRE INTÉGRÉ DE GESTION DE LA CIRCULATION DE QUÉBEC

The Centre intégré de gestion de la circulation de Québec [Québec integrated traffic management centre] is a key facility for monitoring the road system in an area comprising more than 15,000 kilometres of road under the ministère des Transports's responsibility, including the urban agglomeration of the city of Québec. It serves as a 24 hours a day year-round gateway to the Ministère for requests for action and information, including for emergency response events. It serves a clientele composed of employees, road users and various partners such as police forces, emergency services, municipalities and transportation organizations.

Through its team and telecommunications, traffic control and road monitoring activities, the Centre strives to increase the safety of road users and improve traffic flow by providing better knowledge of the network's state and use, as well as through priority actions.

In its newly built cutting-edge offices, visitors will learn more about the Centre in general, the system used to monitor road conditions in winter, the telecommunications control software and the traffic control tools (network of cameras and changeable message signs) as well as about weather watch and road monitoring operations.



# COORDINATION OF SNOW REMOVAL AND EMERGENCY RESPONSES IN THE CITY OF QUÉBEC

With over 300 cm of snow on average every year and an average temperature in January of -13°C, the city of Québec is, without question, a winter city. Helping its half-million inhabitants get through four months of winter with uninterrupted access to various services in a dense agglomeration is an ongoing challenge.

Responsible for managing parking, removing and transporting snow, and adapting snow removal routes based on public safety needs, the City of Québec has a policy regarding snow removal operations and the management of emergency responses.

The visit will take place in two stages. First, participants will visit a facility from which the snow removal operations for a district of the city are planned and overseen. They will also be able to examine the equipment used.

Second, participants will visit the police force's Mission Operation Centre (MOC), where the actions of emergency services are coordinated during major weather events.



#### THE CITY OF QUÉBEC SNOW-MELTING FACILITY

In order to protect the environment, Québec adopted regulations governing the management of waste snow. Indeed, snow removed and transported for disposal must be deposited on an authorized disposal site, thereby forbidding its dumping in waterways like the St. Lawrence.

The removal and transportation of the more than 300 cm of snow that falls every year within the City of Québec's land area have forced the latter to manage and store a very large quantity of snow at its various snow dumps. To reduce these volumes in an environmentally friendly manner, the City of Québec designed, in 1998, a machine to melt the snow collected on roads. This machine uses solar power and geothermics to heat and store the water needed to melt the snow. Close to 60,000 m³ of snow is processed every year by the melter.

Participants will watch a video presenting the snow melter as well as view the equipment and observe the latter's operation.



#### MANAGEMENT OF LÉVIS WASTE SNOW DISPOSAL FACILITIES

The City of Lévis operates five waste snow disposal facilities within its territory. The biggest has a capacity of 1,500,000 m<sup>3</sup>. In times of active operation, the site sees an average of 50 incoming trucks per hour, with peaks of 115 trucks.

The City of Lévis conducts various types of follow-ups on snow transported to disposal sites to ensure the safety of the storage sites, control volumes and monitor environmental impacts.

As regards the environmental aspect in particular, the layout of these sites makes it possible to manage various contaminants having an impact on water quality. Monitoring activities that include the sampling of ground and surface waters are carried out on an ongoing basis to make sure the facilities adequately fulfill their role.

The five sites are supervised by a single person, thanks to the implementation of a computer-based management system. The benefits thus ensured include improved control over operations and costs as well as better overall efficiency. This technology was developed by the City of Lévis in collaboration with the software provider.

Congress delegates will be welcomed for a visit to the waste snow disposal facility at the des Moissons site, followed by a demonstration.



#### QUÉBEC-LÉVIS FERRY CROSSING

The Société des traversiers du Québec provides reliable, safe and effective ferry services to Québec's population and to visitors. Ferry services are an integral part of the Québec road system and quickly and economically connect the communities to one another.

This organization operates eight ferry services on the St. Lawrence, including one providing a cross-river link between the north and south shores of the river to the people of the cities of Lévis and Québec travelling on foot, bicycle and by car. This intermodal link reduces the traffic flow in the city of Québec's downtown area. This cross-river service must accordingly be maintained despite the weather and marine conditions resulting from Québec winters.

During this visit, Congress delegates will hear about the company's management policy as well as the policy for the safe handling of users in winter as in summer, including the issues associated with the diversity of user needs, depending on whether they are travelling by foot or by car. On the same occasion, themes associated with regulation and environmental considerations in relation to shore-to-shore navigation will also be integrated in the visit.



# QUÉBEC CITY AIRPORT: MAINTENANCE OF AIRCRAFT MOVEMENT AREAS

The Québec City Jean-Lesage International Airport proposes a visit in a setting where the winter maintenance operations differ as much due to the criteria used to analyze the condition of aircraft circulation areas (brake index, width cleared, remaining width, percentage of ice, powder, hard snow, wet snow, height of snowdrifts, etc.) as the special features of the snow removal equipment (high-speed runway sweepers, 5,000 ton/hour snowblowers operating at more than 40 km/h). The runway surface friction coefficient (CRFI), obtained using an electronic decelerometer, is the main tool used to analyze and inform pilots of runway conditions.

Subject to major time constraints, ever-stricter standards and ceaseless evolution in the field of aeronautics, passenger safety remains a priority. Québec City's airport also significantly improves its performance on an ongoing basis to reduce runway downtimes: three to five hours per season.

The technical visit at the airport will allow visitors to discover the equipment used to determine runway conditions and make them usable, as well as help them understand working methods and decision-making processes.



# ECO-RESPONSIBLE CONGRESS

In keeping with the theme of sustainable development that was selected for the conferences during this Congress, the Organizing Committee is taking concrete steps to help reduce the ecological footprint related to planning and organizing an international congress.

The exhibition organizer is investing in an eco-responsible event, with a goal of zero waste. In order to achieve this, an eco-advisor will be involved in the planning and operation of various event activities. This means that special attention will be paid to the management of residual materials with a view to reducing consumption at the source, encouraging re-use, recovering all recyclable products and composting organic materials (food waste).



The "turnkey" exhibition booths will be designed in an eco-responsible manner. Exhibitors who prefer to create/produce their own booths will be encouraged to follow the advice that they will find in the Exhibitor's Guide pertaining to eco-responsibility.

The Québec City Convention Centre has been committed to its sustainable development policy, energy-efficient management, an effective residual materials management system, sound water management, and a variety of environmental protection measures for many years. For example, the food services that are provided during the Congress will be eco-responsible in terms of the containers used, the collection of compostable materials and the donation of leftover food to charitable organizations.

In addition, the Québec 2010 Office uses paper consisting of 100% post-consumer fiber in all of its publications. In order to reduce the quantity of paper used, some of the information concerning the Congress is being published exclusively on the official Congress Web site, and we invite those who plan to participate in the Congress to register through this site (without using the paper form) starting in June 2009.

You can demonstrate eco-responsibility by simply using the services that are available to you during the Congress!

# Press Room Conferences Conferences

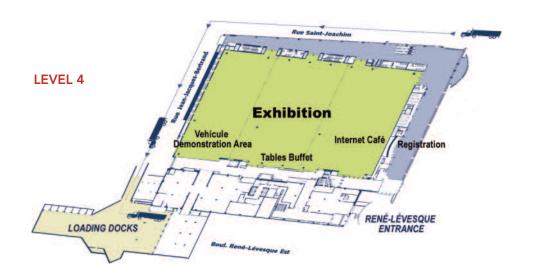
# **EXHIBITION**

The Québec 2010 international exhibition will begin on February 8 at 4:30 p.m., immediately following the opening ceremony launching the XIII International Winter Road Congress. As this exhibition provides a unique opportunity to present their latest accomplishments and innovations in winter service, several businesses and World Road Association (PIARC) member countries have already reserved space for their pavilion in the exhibition area.

Aside from the exhibitors themselves, Congress delegates will be the main visitors to the exhibition. Exhibitors will accordingly benefit from significant visibility with the multiple clienteles walking up and down the Québec City Convention Centre: contractors, government officials, clients, heads of corporations, researchers, consultants, and business people. The Open House on February 9, 2010 is expected to welcome even more visitors and maximize the prospects for this meeting, and is sure to be a highlight of the exhibition.

As of May 1, 2009, more than one-third of the available area had been reserved. To benefit from a prime space on the exhibition floor or in the vehicle demonstration area, we invite you to reserve now by consulting the "Exhibition" section of the official Congress official Web site: www.piarcquebec2010.org.





# INTERNATIONAL SNOWPLOW CHAMPIONSHIP AND EQUIPMENT DEMONSTRATIONS

# INTERNATIONAL SNOWPLOW CHAMPIONSHIP

The very first International Snowplow Championship, taking place alongside the International Winter Road Congress, will most certainly be a memorable part of this 13th edition. Indeed, this exceptional competition gives rise to much interest from the national committees and associations who will be in the city of Québec in 2010.

The Snowplow Championship is a skill competition focusing on the precision and safety demonstrated by snowplow operators, who will be required to perform a number of tricky maneuvers on a circuit approximately 250 metres long.

Participants will be evaluated according to a scoring system determined by a jury and based on performance and speed. Scheduled challenges: mechanical inspections, driving around traffic cones and parked cars, use of the various snow removal equipment on the snowplow, driving forward and in reverse and parking.

A maximum of four participants per PIARC member country can take part in the competition. Each country that wishes to participate may select drivers from the government and from the private sector. The participation fee has been set at \$200 per participant.

It should be noted that the competition will be taking place using equipment belonging to the ministère des Transports du Québec. Although certain driving differences could cause added difficulties for foreign drivers, the vehicles used in the championship will not be modified technically or mechanically in any way.

The rules for the Snowplow Championship will be available soon and posted on the Québec 2010 Web site. It is possible to see promotional videos in the "Events" section of the Québec 2010 Web site. For more information regarding the competition or to register, please contact the Québec 2010 Office directly by writing to quebec2010@mtq.gouv.qc.ca.



#### **EQUIPMENT DEMONSTRATIONS**

Equipment demonstrations will be taking place on the same site as the International Snowplow Championship, approximately 10 minutes from the Québec City Convention Centre. Return transportation by bus to the demonstration site will be provided for those who are interested in attending on Wednesday.

The equipment demonstrations will consist of an outdoor presentation of snow removal vehicles. Exhibitors registered for demonstrations will have the opportunity to demonstrate the capacities of their snowblowers, snowplows and other equipment within a real winter setting.

In order to be eligible to take part in the equipment demonstrations, your company or organization must be registered for the official exhibition of the Québec 2010 Congress. In fact, you can reserve your space in the exhibition area immediately by visiting the Québec 2010 Web site, at www.piarcquebec2010.org.

In order to encourage the highest number of attendees for the technical visits, the Snowplow Championship and the equipment demonstrations, Congress plenary sessions and the exhibition will be suspended during the afternoon of February 10, 2010. All conference participants and exhibitors will have an opportunity to attend demonstrations of equipment in action just a few metres from the track and the machinery.





# ACCOMPANYING PERSONS' PROGRAM

The accompanying persons' program was specially designed to allow everyone to spend four unforgettable days in the city of Québec. Discover our beautiful city in winter!

# Monday, February 8 Opening ceremony

You will be invited to take part in the Congress opening ceremony at 3:00 p.m. The content of this ceremony will of course be professional, but the festive ambiance as well as the surprise performances will surely make it an unforgettable event.

From 4:30 p.m. to 7:00 p.m., a cocktail will be offered at the official opening of the Congress exhibition, which will also allow you to tour the pavilions of the various countries.

# Tuesday, February 9 City tour and Ice Hotel

A bus will pick you up at 9:00 a.m. at the Québec City Convention Centre for a day filled with amazing sights!

In the morning, a guided tour of the city will help you discover the strategic points and tourist attractions of Québec, a 400-year-old fortified city whose historic district has been proclaimed a World Heritage Treasure by UNESCO.

The morning will end in the heart of Place Royale, where lunch will be served in a house over 350 years old.

After this gourmet break, you will be taken to the Ice Hotel. The guided tour will bring you to this real hotel comprising a lobby, rooms and an art gallery, all made of snow and ice. A drink in a glass made of ice will be served at the bar of this fantastic hotel. For a photo overview: www.icehotel-canada.com.

Return to the Québec City Convention Centre around 4:00 p.m.

## Wednesday, February 10 Montmorency Falls, Île d'Orléans, Snowplow Championship and banquet

After a good night's sleep, you will leave at 9:00 a.m. on a thrilling adventure.

The day will start with a tour of Montmorency Falls, which, at 83 m, are 30 m higher than Niagara Falls. You will also have the opportunity to visit Montmorency Manor, a house built in 1780 and former residence of the Duke of Kent, father of Queen Victoria.

The bus will then bring you to Île d'Orléans, where the culture and history of its first inhabitants will be presented. A stop at a certified organic farm will give you a chance to taste ciders, mustards and other regional specialties.

After this small taste, you will eat a traditional meal at a "sugar shack" to the folk tunes of a live musician. A guided tour of the museum will help you understand how maple products are made.

At 2:00 p.m., you will be back at the Québec City Convention Centre. At that time, you may choose to have the afternoon free or take the shuttle to attend the finals of the first International Snowplow Championship, where competitors from various countries will have to prove their skills on a particularly complex course.

At 7:00 p.m., you will take part in the gala evening. A relaxing yet festive moment featuring a generous meal followed by a lively music show (see details on page 9).

# Thursday, February 11 Closing session

To help you catch your breath following the highly festive events of Wednesday evening, Thursday morning is a half-day of free activities.

At noon, you will be expected for the Congress closing ceremony, at which a farewell lunch will be served.

Are you already familiar with the city of Québec, or would you prefer to discover it on your own? Instead of registering for the accompanying persons' program, you can buy your ticket for the banquet on Wednesday evening for \$150 CDN.

The price of \$350 CDN includes all activities on the accompanying persons' program: transportation, visits, admission to sites and meals.







## And then?

Intended as an initiation to the winter joys of the city of Québec and its must-see sites, this program is an invitation to stay with us a little longer. Do not hesitate to consult www.bonjourquebec.com or the Congress Web site at www.piarcquebec2010.org for ideas on how to round out your stay. Know that, once here, hotel concierges can also give you useful information to help you organize and customize your visit.

Finally, don't forget the Carnaval de Québec, which is the largest public winter festival in the world! Dozens of activities will take place within the city between January 29 and February 14, 2010. Join in the celebration, and come and meet its famous ambassador, the funloving, flamboyant Bonhomme Carnaval!

# PLANNING YOUR STAY IN THE CITY OF QUEBEC

# REQUIREMENTS FOR ENTERING CANADA (PASSPORTS AND VISAS)

Visitors must hold a valid passport; a visa may be required in some cases. For more information about visas, please consult the Citizenship and Immigration Canada Web site at www.cic.gc.ca. You may also consult the nearest Canadian embassy, the consulate, a customs broker or your travel agent.

#### **LETTER OF INVITATION**

The Québec 2010 Office will deliver an official letter of invitation to individuals who must receive one in order to participate in the Congress. This procedure was developed to facilitate obtaining a visitor's visa or permission to attend the Congress, not for covering registration fees and other expenses. The letter of invitation in no way commits Congress organizers to providing financial or other support. To obtain a letter of invitation, please consult the Congress Web site at www.piarcquebec2010.org.

## **CURRENCY**

The legal currency is the Canadian dollar, which is divided into 100 cents. Bills are available in denominations of 5, 10, 20, 50 and 100 dollars. Coins are available in denominations of 1, 5, 10 and 25 cents, plus 1 and 2 dollars. Canadian and U.S. currencies are not at parity. U.S. currency is accepted at most places with varying exchange rates.

Consult http://qc.finance.yahoo.com/currency for exchange rates.

To avoid any inconvenience, we recommend that visitors obtain Canadian currency at the official exchange rate at a financial institution or travel agency when they arrive.

#### **UNITS OF MEASURE**

Canada uses the metric system.

#### **TAXES**

The federal goods and services tax (GST) of 5% and the Québec sales tax (QST) of 7.5% are added to all purchases. For more information, visit the Web sites of the Canada Revenue Agency at www.cra-arc.gc.ca and Ministère du Revenu du Québec at www.revenu.gouv.qc.ca.

#### **TIPPING**

In Canada, tips are not included on restaurant bills, but are left to the customer's discretion. A tip of 15% of the total cost before taxes is recommended. We suggest you do the same for taxis. Porters expect \$1 CDN per bag.

#### **SAFETY**

Québec City is a welcoming and safe North American city. Québecers have built a stable, peaceful society through their open, tolerant culture, with 400 years of incorporating influences from France and England, and now Europe, the Americas, Asia and Africa. As in all cities, caution should still be used in order to avoid falling victim to petty crime.

#### **VOLTAGE**

In Canada, electricity is 110 volts, as in the rest of North America. Appliances from other countries outside North America require a power adaptor and a plug adaptor.

#### **INSURANCE**

The fees for the Congress do not include any provisions for the insurance of participants against personal injury, sickness, theft or property damage. This also applies to any event held during the Congress period. Participants and accompanying persons are advised to arrange for any insurance they consider necessary. Neither the Organizing Committee nor the agencies or partners involved in the organization of the Congress assume any responsibility for loss, injury or damage to persons or belongings, whatever the cause may be.

Access to health care is costly for non-residents and we therefore recommend that participants arrange their own travel insurance (health and accident coverage). We also recommend that you arrange insurance for lost luggage and other incidents.

#### **CLIMATE**

Québec's climate is humid continental. February is the middle of the Québec winter. Temperatures vary between -6° and -20° Celsius during the day.

#### HOW TO LIVE IN HARMONY WITH WINTER

Winter in Québec is great! To get the full experience of this harsh season, we strongly recommend that you dress warmly. The best way to ensure comfort is to dress in layers and remove them according to ambient temperature. It is preferable to avoid cotton and silk garments, which do not wick moisture away from skin.

It is also important to protect your extremities by wearing a hat and warm gloves. To avoid any unpleasantness, cover your hands before you go out (thus trapping the heat). Also, choose a good pair of boots. For warmth and stability, look for the following features:

- Good insulation and waterproof construction
- Thick, anti-skid soles
- Low, wide heels
- Not too heavy

Generally speaking, it is preferable to wear proper footwear to walk outside and bring a lighter pair of shoes to wear indoors.

With these few tips, you will be properly equipped to fully appreciate the beauty of Québec's winters!

# TRANSPORTATION AND ACCOMMODATION

#### **TRANSPORT**

It is easy to get to the city of Québec from everywhere in the world. The major airlines service the city of Québec, sometimes via Montréal or Toronto.

North American travelers can consider coming by train, bus or car.

## By plane

The city of Québec is located one and a half hours from New York, Boston and Toronto, and only 40 minutes from Montréal. The Jean-Lesage International Airport is located 16 kilometres from downtown. For information on the various means of transportation available to travelers, please consult the section "Passenger Services" on the airport's Web site: www.aeroportdequebec.com.

Star Alliance™ has been appointed the official airline network for the XIII International Winter Road Congress. In order to obtain Star Alliance™ Convention Plus discounts, please call the reservation office of a participating Star Alliance Member Airline at 1 800 361-7585 and quote the Convention Code AC01S10 or go to "Visiting Québec/Transportation" on the official Congress Web site: www.piarcquebec2010.org.

Registered participants and their accompanying person travelling to the event automatically receive a discount of up to 20%, depending on the rate and class reserved.



The participating carriers are:

- ANA
- Air Canada
- Air China
- Asiana Airlines
- Austrian Airlines
- LOT Polish Airlines
- Lufthansa

- Scandinavian Airlines
- Spanair
- SWISS International Air Lines
- TAP Portugal
- THAI
- Turkish Airlines
- United

Discounts are offered for business class and economy class rates, excluding Web site rates, rates for seniors and young people, group rates and the around-theworld rate.

Please note that, for travel from Japan and New Zealand, the special rates or discounts from Austrian Airlines and United are offered by participating carriers in their own network.

When arranging your travel plans, please present confirmation of your registration or proof of participating in the Congress.

#### By train

Via Rail provides a few trips a day between Montréal and the city of Québec. There is also daily service between Toronto and Ottawa. www.viarail.com

#### By bus

If you prefer to travel by bus from Montréal to the city of Québec, you can take the shuttle from Montréal-Trudeau airport to downtown Montréal, where Orléans Express has hourly departures from Montréal to the city of Québec. The bus ride takes about two and a half hours. Orléans Express also offers connections to other carriers. www.orleansexpress.com

## By car

Renting a car is another option for getting to the city of Québec. Two major highways connect the city of Québec and Montréal. If you wish to rent a car, you can do so either at the airport or in downtown Montréal or the city of Québec. In Québec, speed limits are displayed in kilometres/hour (100 km/h is equivalent to about 62 mph). Gas is sold by the litre (3 litres is equivalent to one U.S. gallon). Please consult the Québec City and Montréal airport Web sites for more information.

www.aeroportdequebec.com www.admtl.com

## **ACCOMMODATION**

The city of Québec offers many different hotel options. However, in light of February's often challenging weather conditions, and considering the amount of tourists who will be in town for the Winter Carnival, the Organizing Committee has reserved blocks of rooms in three hotels due to their closeness, comfort and the special terms they are offering Congress participants.

To make a reservation online, go to the "Accommodation" section of the official Congress Web site: www.piarcquebec2010.org.

Suggested Hotels *Interior passageway giving access to the Convention Centre	Rate negotiated for single or double occupancy \$CDN	Reservation Code
Hilton Québec* 1 800 447-2411 (toll free from Canada and the U.S.) 1 418 647-6500 (direct)	Regular: 149 Executive: 199 / 219	VIAA10
Hôtel Château Laurier Québec 1 800 463-4453 (toll free from Canada and the U.S.) 1 418 522-8108 (direct)	Regular: 124	281449
Delta Québec* 1 888 884-7777 (toll free from Canada and the U.S.) 1 418 647-1717 (direct)	Delta: 119 Premier: 139 Signature: 169	GGBOO

The applicable taxes will be added: • Accommodation tax: 3% • Federal sales tax: 5% • Provincial sales tax: 7.5%

The special rates will be offered until January 5, 2010. Room availability is not guaranteed; it is first come, first served. So, don't delay! Please contact the hotel of your choice directly for reservations and payments. To download the reservation form, please consult the Web site Congress at <a href="www.piarcquebec2010.org">www.piarcquebec2010.org</a>. Remember to indicate that you are participating in the XIII International Winter Road Congress to obtain the room rate discount.

# **PARTNERS**

The Organizing Committee for the 2010 Congress would like to thank all of its partners for their financial contribution, which stand as a testimony to their commitment to the objectives of the XIII International Winter Road Congress: the advancement of knowledge and the enhancement of winter service methods.

There are still numerous partnership opportunities and various types of agreements available. Choose from among platinum (\$60 000 and more), gold (\$30 000), and silver (\$10 000) partnership and friends of the congress (\$5000) to provide your organization with the best possible visibility before and during the 2010 Québec Congress. Visit the "Partners" section of the official Congress Web site for more information.

# **PLATINUM**



# **GOLD**



# **SILVER**











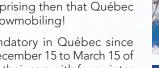
# FRIENDS OF THE CONGRESS

**BPR** 

# **DID YOU KNOW...**

- The city of Québec is the second city in the world of 500,000 inhabitants or more with the greatest snowfall after Sapporo in Japan (500 cm or close to 197 in. on average per year)?
- In the winter of 2007–2008, the city of Québec saw a record snowfall of close to 550 cm (over 217 in.)?
- In six months, temperature variations can reach 60°C (140°F) in the city of Québec?
- It was in Québec that a universal method of communicating with road users was invented, with the creation of the first pictograms? Designed in 1923 by the ministère de la Voirie (now the ministère des Transports), they led to the signage now in effect around the world.
- Québec ranks 18<sup>th</sup> in the world in terms of land area with close to 1.7 million square kilometres (more than 656,000 square miles)? Japan would fit five times within its land area; France, three times and the United Kingdom, more than six times.
- For more than four months a year in the southern portion of Québec (where most of its road system is located), the ground freezes to a depth varying between 1.2 and 3.0 m (3.9 to 9.8 ft.), depending on the region?
- In the city of Québec, long before the construction of the Québec and Pierre-Laporte bridges, an ice bridge connected the north and south shores of the St. Lawrence River? During the winter, of course!
- The Québec Bridge is the cantilever bridge with the longest clear span in the world, with 549 m (1,801 ft.) between its main piers and its 576 metre-long (1,890 ft.) centre span? Even 92 years after it was opened to traffic, this bridge still represents a considerable feat of engineering.

- There are more than 33,500 kilometres (close to 21,500 miles) of snowmobile trails in Québec and close to 800,000 enthusiasts? Not surprising then that Québec is considered a Mecca for snowmobiling!
- Winter tires have been mandatory in Québec since December 15, 2008? From December 15 to March 15 of each year, drivers must equip their cars with four winter tires to drive on roads in the winter.











# -<u></u><u></u> -S-I-R-W-E-C-<u></u> -

# STANDING INTERNATIONAL ROAD WEATHER COMMISSION (SIRWEC)

Please join us for the XV International Road Weather Conference, which will be held in Québec City just prior to the World Road Association's XIII International Winter Road Congress.

#### OBJECTIVES OF THE CONFERENCE

The Standing International Road Weather Commission (SIRWEC) is a forum for the exchange of information on state-of-the-art technology between road engineers, climatologists and meteorologists. The objective of the biennial meetings is to promote improvements in snow and ice control operations, with a focus on specialized road weather forecasting and climatological measuring techniques, as well as improvements in the organization of winter maintenance

SIRWEC is celebrating its 25<sup>th</sup> anniversary this year!

For more information: www.sirwec.org/

# **REGISTRATION**

To facilitate your registration, we suggest that you register online in the "Registration" section at www.piarcquebec2010.org. The registration tool is highly secure. A paper version of the form is also available in this newsletter.

#### **REGISTRATION FEES**

All amounts are in Canadian dollars. Consult the following Web site for exchange rates: http://qc.finance.yahoo.com/currency.

Registration as a delegate for the entire Congress includes:

- The participant's kit (containing the Congress delegate guide and the exhibition guide)
- Participation in the opening ceremony as well as in the banquet on Wednesday evening
- Participation in plenary sessions: dignitaries' sessions and closing session on Thursday (with meal included on Thursday)
- Access to all lectures and poster sessions
- Access to all exhibition areas.
- One technical visit on Wednesday afternoon
- Free access to shuttles to travel to the equipment demonstration and Snowplow Championship site on Wednesday afternoon
- Free Internet access at the Internet café
- Free access to breakfasts from 8:00 a.m. to 8:30 a.m.
- Free access to coffee breaks at 10:00 a.m. and 3:00 p.m.
- Paid access to open restaurants in the exhibition area on Tuesday and Wednesday
- Congress proceedings

Registration as a delegate for one day includes access to all activities taking place on that day only, not including the banquet on Wednesday evening.

	On or before November 13, 2009 \$ CDN	After November 13, 2009 \$ CDN
Congress delegate for the entire Congress  • PIARC member  • Non-member	950 1 100	1 250 1 400
Congress delegate for one day	400	400
Accompanying person (see detailed description of the program on page 20)	350	350
Banquet on Wednesday evening (additional ticket)	150	150

#### **TERMS OF PAYMENT**

The fees must be paid in full at the time of registration for the Congress. The payment must be made in Canadian dollars, using the following methods:

- Cheque, money order or bank draft in Canadian dollars, drawn from a Canadian bank and made out to Agora Communication.
- Credit card (Visa and MasterCard). Credit card transactions will appear as Web Meeting Solution on your next statement.
- Electronic wire transfer: to obtain the bank information for the Congress, please contact the secretariat by calling 1 418 658-6755 or via email at adminguebec2010@agoracom.qc.ca.

#### **REGISTRATION CONFIRMATION**

Whether registering online, by mail or by fax, a registration confirmation will be sent to you upon receipt, indicating your registration status. If you do not receive this registration confirmation, please write to adminquebec2010@agoracom.qc.ca. A file number will be provided to you. This number should be kept and used for any and all communications regarding your registration.

#### **CANCELLATION POLICY**

Cancellations must be made in writing and sent to the Congress secretariat by fax to 1 418 658-8850 or via email to adminguebec2010@agoracom.qc.ca.

Participants who cancel on or before January 8, 2010, will receive a refund minus an administration fee of \$100 CDN. Please note that refunds will be issued after the Congress.

No refund will be issued for cancellations received after January 8, 2010.

If, for any reason, the Congress should be cancelled, neither the Québec 2010 Office nor PIARC will be responsible for any transportation, hotel or other fees incurred in relation to the registration.

**REGISTER NOW!** www.piarcquebec2010.org

