BULLETIN N°2

Chambéry 2026 FRANCE

REGISTRATION IS OPEN

17th WORLD CONGRESS ON ROAD WINTER SERVICE, RESILIENCE AND DECARBONISATION

Ensuring road excellence in all seasons

CHAMBÉRY - SAVOIEXPO - FRANCE

MARCH 10-13, 2026 | ENGLISH

www.piarc-chambery2026.com

PIARC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE ET DE LA COHÉSION DES TERRITOIRES

GRAND CHAMBÉRY l'agglomération

Chambéry

TABLE OF **CONTENTS**

MORE INFORMATION AVAILABLE ON THE CONGRESS WEBSITE:
WWW.PIARC-CHAMBERY2026.COM

EDITORIAL

On behalf of PIARC, the World Road Association, I am pleased to invite you to take part in the 17th World Congress on Road Winter Service, Resilience and Decarbonisation, which will be held from 10 to 13 March 2026 at the Parc des Expositions Savoiexpo in Chambéry, France.

The aim of this 4-day congress is to bring together administrations, road operators, researchers, practitioners and academics interested in winter service, resilience and decarbonisation of road infrastructure. These are major issues, because we are all - as representatives of the road transport industry - faced with the challenges of climate change. Our congress is therefore intended for all the countries of the world, whatever their climatic conditions or level of economic development.

The World Congress on Road Winter Service, Resilience and Decarbonisation is an international event that builds on the work of the Technical Committees. It aims to encourage the sharing of international experience and best practice, and will include presentations by road experts, academics and practitioners from around the world, as well as PIARC's international partner associations. Organised every four years since 1969, this Congress in Chambéry will be the 17th edition.

Winter service, resilience and decarbonisation are major issues for our Committees, and our experts have already done a lot of work on these questions. Come and learn from their experience, and also share your own practices and recommendations. We can all learn from each other, as demonstrated by the success of our recent international call for papers, which attracted 432 abstracts from 65 countries. The Congress will therefore be a forum for forging new relationships, renewing old ones, disseminating knowledge, sharing best practice, and much more. And, as at every edition of our Congress, we will be hosting the famous international snowplough competition, which will be a great opportunity for conviviality.

On behalf of PIARC, I would like to sincerely thank the French Government and the Greater Chambéry Conurbation for their commitment in organising this congress, which will undoubtedly be a success.

I invite road experts, academics and students, managers and administrators from both the public and private sectors, from all countries whatever their climate, to join us for this World Congress.

I encourage you to put this event in your diary and look forward to seeing you in Chambéry in March 2026!

Emanuela Stocchi
President of PIARC

EDITORIAL

At a time when many regions, in France and on every continent, are seeing their road infrastructure weakened or even completely destroyed by natural disasters linked to climate change, the sharing of experiences and best practices is more essential than ever.

This is precisely the focus of the 17th World Congress on Road Winter Service, Resilience and Decarbonisation. As you will see in this second Bulletin, a very rich programme has been prepared for the congress - both in terms of technical sessions and site visits - as Savoie is a department which is regularly affected by natural hazards that have a significant impact on its road network.

Managing winter service, landslides, rockfalls, avalanches and torrential flooding are all part of the daily reality for road professionnals in the French Alps, who are working alongside us to share their expertise with you.

Like us, they are looking forward to welcoming you to Chambéry.

See you in March 2026!

The Co-Chairs of the Organizing Committee

Thierry Repentin
Mayor of Chambéry
President of Greater Chambéry

Sandrine Chinzi
Director of Road Mobility
Ministry of Regional Planning and Decentralization

WHO WILL ATTEND

- **Representatives from Ministries**
- **Road Directorate officials**
- **Road and road safety management authorities**
- **Highway concessionaires and operators**
- **Road and transport-related associations**
- **Road infrastructure construction companies (roads, bridges, tunnels, etc.)**
- **Manufacturers of specialised road equipment**
- **Manufacturers of construction equipment**
- **Developers of intelligent vehicle management solutions**
- **Developers of equipment and smart solutions for decarbonised mobility**
- **Engineering and project management consultancies**
- **Road and infrastructure engineers**
- **Associations and companies specialised in natural risk management**

CALL FOR ABSTRACTS
A RECORD-BREAKING RESPONSE

The Call for Abstracts for the 17th PIARC World Congress on Road Winter Service, Resilience and Decarbonisation ran from September 2024 to February 2025, and the response was unprecedented. A record-breaking 432 abstracts were submitted – the highest number ever received for a PIARC Winter Congress.

Reflecting the Congress three core themes, submissions included 157 abstracts on winter service, 154 on resilience, and 99 on decarbonisation, with an additional 22 abstracts bridging multiple themes. Submissions came from 65 countries, another new record, including contributions from 28 countries without snow or ice on their roads, demonstrating the global relevance of the Congress.

Authors have now been notified of the results, and their full papers are expected by August 31. In support of excellence and innovation, several member countries – France, Japan, Canada, Switzerland, and the United Kingdom – have also launched National Competitions based on Congress articles to recognise and promote outstanding contributions.

TECHNICAL PROGRAMME

TUESDAY 10 MARCH 2026

PROVISIONAL PROGRAMME

	Plenary room	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Poster sessions	Exhibition hall	Technical Visits
8:00 9:00	REGISTRATION AND ACCREDITATION									
9:00 10:15	WELCOME COFFEE									
10:15 11:30	**Opening Session**									
11:30 12:00	Opening of the Exhibition - Authorities visit of the Exhibition									
12:00 13:00	LUNCH								Exhibition	
13:00 14:20	**Ministers / Authorities Session**									
14:30 16:00	**SDSW** Strategic Aspects of Winter Service	**W01** Driver assistant systems for winter service	**D01** Driving Decarboni-sation with Road Invest-ments	**R01** Bridge resilience for aging infra-structure	**D02** Pavements carbon footprint Part 1	**F01** Transalpine Cooperation	**WK01** PIARC Framework to Climate Change Adaptation			
16:00 16:30	COFFEE BREAK									
16:30 18:00	**W02** Overview of winter service worldwide	**W03** Decarbonisa-tion in winter maintenance	**W04** Management of Human Resources	**SDSR** Resilience of the road network	**D03** Pavements carbon footprint Part 1	**F02** Circular and sustainable road infra-structure	**WK2**			
18:00 19:30	WELCOME COCKTAIL IN THE EXHIBITION AREA									

Plenary Sessions · W=Winter Service Session · R=Resilience Session · D=Decarbonisation · F=Foresight Session
SP=Special Project Session · WK=Workshop · Posters Sessions · Exhibition · Technical Visits

TECHNICAL PROGRAMME

WEDNESDAY 11 MARCH 2026

PROVISIONAL PROGRAMME

	Plenary room	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Poster sessions	Exhibition hall	Technical Visits
8:45 9:20	**Keynote Session 1**									**Technical Visits A**
9:20 9:30								**Poster Session 1** W01-W04 R01 D01-D03	**Exhibition**	
9:30 11:00	**W05** Automatic spreading and plowing systems	**W06** Environmental aspects of winter maintenance	**R02** Resilience of road freight traffic	**R03** Improving road safety resilience Part 1	**SDSD** Decarbonisation of the road sector	**SP1** Artificial Intelligence in the road sector	**WK03** Beyond Boundaries: Multi-dimensional Disaster Resilience			
11:00 11:30	**COFFEE BREAK**									
11:30 13:00	**W07** Development of spreading technologies	**W08** Effects of climatic change	**W09** Forecasts for winter service	**R04** Improving road safety resilience Part 2	**D04** Electric Road Systems	**F03** Adapting inland transport to climate change	**WK04** Impact of overweight vehicles on pavements and bridges			
13:00 14:00	**LUNCH**									
14:00 15:30	**W10** Management of extreme weather situations	**W11** Implementation of RWIS in winter maintenance	**SP2** Motorcyclists road safety	**R05** proving resilience planning	**D05** Decarbonisation of construction & maintenance Part 1	**F04** SIRWEC Conference Part 1	**WK05** Transport System Resilience	**Poster Session 2** W05-W09 R02-04 D04		**Technical Visits B**
15:30 16:00	**COFFEE BREAK**									
16:00 17:30	**W12** Effects of spreading agents	**W13** Maintenance Decision Support Systems	**W14** New guidelines for winter maintenance	**R06** Organizational resilience: what & how?	**D06** Decarbonisation of construction & maintenance Part 2	**F05** SIRWEC Conference Part 2	**WK06** Innovation in the road sector			
17:30 17:45										

Plenary Sessions · W=Winter Service Session · R=Resilience Session · D=Decarbonisation · F=Foresight Session · SP=Special Project Session · WK=Workshop · Posters Sessions · Exhibition · Technical Visits

TECHNICAL PROGRAMME

THURSDAY 12 MARCH 2026

PROVISIONAL PROGRAMME

	Plenary room	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Poster sessions	Exhibition hall	Technical Visits
8:45 9:20	**Keynote Session 2**									**Technical Visits C**
9:20 9:30								**Poster Session 3** W10-W14 &W20-W24 R05-R06 & R10-R12 D05-D06 & D09-D10	**Exhibition**	
9:30 11:00	**W15** New developments of spreading agents	**W16** Strategic use of spreading agents	**R07** Resilience and sustainable operation of tunnels	**R08** Asset Management for Road Resilience Part 1	**D07** Innovative ITS for decarboni-sation and resiliency	**F06** Winter Service for airports	**WK07** Natural hazards risk for mountain road infra-structure			
11:00 11:30	**COFFEE BREAK**									
11:30 13:00	**W17** New developments for snow removal	**W18** Winter Maintenance Management Systems	**W19** Winter Service on urban Roads	**R09** Asset Management for Road Resilience Part 2	**D08** Roads for decarbon-ized urban & peri-urban mobility	**SP3** Rapid Impact Assessment	**WK08** Decarbonisa-tion progress on road con-struction & maintenance			
13:00 14:00	**LUNCH**									
14:00 17:30	**5th World Snowplough Championship**									**Technical Visits D** (not related to winter service)
19:00 21:00	**GALA DINNER**									

Plenary Sessions · W=Winter Service Session · R=Resilience Session · D=Decarbonisation · F=Foresight Session · SP=Special Project Session · WK=Workshop · Posters Sessions · Exhibition · Technical Visits

TECHNICAL PROGRAMME

FRIDAY 13 MARCH 2026

PROVISIONAL PROGRAMME

	Plenary room	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Poster sessions	Exhibition hall	Technical Visits
8:45 9:20	**Keynote Session 3**									**Technical Visits E**
9:20 9:30								**Poster Session 4** W15-19 R07-09 D07-08	**Exhibition**	
9:30 11:00	**W20** Quality Management of winter service	**W21** Winter Service for pedestrians	**R10** Rural Roads Resilience	**R11** Extreme Weather: Coping Mechanisms	**D09** Evolution of roads statistics	**SP4** Management of worksites	**WK09** Winter Service to access ski resorts and Olympic Games			
11:00 11:30	**COFFEE BREAK**									
11:30 13:00	**W22** Use of AI for winter maintenance	**W23** Communica-tion & Data Use for winter service	**W24** Winter service for bicycles	**R12** Extreme Weather: Cooperative Solutions	**D10** Earthworks facing climate change	**F07**	**WK10** Research on future of road infrastructure INFRA 2050			
13:00 13:15										
13:15 14:00	**Closing Session**	**LUNCH BOX**								

Plenary Sessions · W=Winter Service Session · R=Resilience Session · D=Decarbonisation · F=Foresight Session · SP=Special Project Session · WK=Workshop · Posters Sessions · Exhibition · Technical Visits

CONGRESS **PROGRAMME** AND **THEMES**

The Congress will include 86 sessions over the three and a half days, plus an exhibition, technical visits, social events and the 5th World Snowplough Championship:

- 6 plenary sessions will bring together all delegates at least once each day for a shared and engaging experience.
- 24 Technical Sessions will be dedicated to Winter Service. Twelve Technical Sessions will address Resilience, and 10 Technical Sessions will present Decarbonisation topic.
- 8 Foresight Sessions will be organised with partner organisations, who will bring their unique insights to the Congress and make it the world meeting point for Winter Service, Resilience and Decarbonisation on road infrastructure and transport.
- 4 Special Projects Sessions will address urgent and emerging topics identified by PIARC member countries.
- 10 Workshops will offer delegates a more hands-on approach to some practical topics.

The Poster Sessions, designed as a high-level event, will allow delegates to engage directly with all accepted authors.

PLENARY SESSIONS

The Opening Session and the Ministers & Authorities Session will serve as the first day's plenary sessions, featuring insights from high-level political representatives and showcasing elements of French Alps culture.

Each day will begin with a plenary Keynote Session that will set the tone for the day's discussions.

KEYNOTE SESSIONS

In the three Keynote sessions, prestigious regional and international speakers will share their strategic views with the Congress audience.

They will put the themes of winter service, resilience, and decarbonisation in a global context, with the aim to establish connections between modes and industries and to enrich the discussions and analysis on roads.

The Closing Session will wrap up the Congress with a presentation of the main conclusions, awards for the best sessions, and an invitation to future Congresses.

STRATEGIC DIRECTION SESSIONS

Three Strategic Direction Sessions, each of them dedicated to Winter Service, Resilience and Decarbonisation, will offer future oriented views on the strategic aspects of these three thematics of the Congress. PIARC Strategic Coordinators will moderate the Sessions with inputs from Technical Committees and member countries

TECHNICAL SESSIONS

INSIGHTS FROM PIARC TECHNICAL COMMITTEES AND AUTHORS OF THE CALL FOR ABSTRACTS

The Technical Sessions of the Congress will be built both on the insights or PIARC Technical Committees with presentations of their work, and on the insights from the Call for Papers with authors from all over the world presenting on the 23 topics of the Call.

THEME **WINTER SERVICE**

TOPIC 1

Management of Human Resources in Winter Service

Technical Session W04 *- Management of Human Resources in Winter Service*

Winter Service needs Human Resources. The topic deals with how to manage to have enough, motivated and good staff. That means good educated and well-trained persons. The same applies for contractors. It is very important to attract people for the job, especially young people and women to increase the number of operators and their knowledge.

Including:

- Measures for attracting people for the job
- Education and Re-Education
- Training in the job
- Access to knowledge
- Staff Motivation
- Contracting in Winter Service
- Staff Safety
- Organization of on-call-service
- Promote gender equity and diversity

TOPIC 2

The impact of climate change and extreme weather on Winter Service (WS) as well as WS environmental aspects and decarbonisation

Technical Session W03 *- Decarbonisation in winter maintenance*
Technical Session W06 *- Environmental aspects of winter maintenance*
Technical Session W08 *- Effects of climatic change on winter Maintenance*
Technical Session W10 *- Management of extreme weather situations*

Nature and the environment can have a big influence on WS. So, it is essential to be prepared for extreme situations. There is also a task to reduce the negative impact of WS on the environment, especially through decarbonisation.

Including:

- Decarbonisation in Winter Service
- Environmental aspects of Winter Service
- Influence of Winter Service on the infrastructure
- Measures to reduce the influence on the environment and the infrastructure
- Climate change and its effects on Winter Service and its organization
- Management of extreme weather situations

TOPIC 3

Road Weather Information and Forecast for Winter Service

GTechnical Session W09 *- Forecasts for winter service*
Technical Session W11 *- Implementation of RWIS in winter maintenance*
Technical Session W13 *- Maintenance Decision Support Systems*

Good and efficient Winter Service needs a good weather information and good forecasts, their professional analysis and implementation in the practical Winter Management. The topic deals with the knowledge, the technique and the methods of Road Weather Information Systems..

Including:

- Forecasts for Winter Service
- Road Weather Information Systems
- Implementation of RWIS in Winter Maintenance
- Maintenance Decision Support Systems

TOPIC 4

Implementation of new technologies and methods in winter operation

Technical Session W01 *- Driver assistant systems for winter service*
Technical Session W05 *- Automatic spreading and plowing systems*
Technical Session W07 *- Development of spreading technologies*
Technical Session W12 *- Effects of spreading agents on traffic and environment*
Technical Session W15 *- New developments of spreading agents*
Technical Session W17 *- New developments for snow removal*
Technical Session W22 *- Use of AI for winter maintenance*

There are many new and changing tasks and requirements for winter service, its management and staff. New or further developed technology and methods can meet these requirements and can help to solve the issues.

Including for example:

- Driver Assistance Systems
- Automatic Spreading and Plowing Systems
- Spreading Technologies and Spreading Agents
- Snow or Ice Removal Systems

All fields and tasks of winter service can be included here.

TOPIC 5

Winter Maintenance Management

Technical Session W14 *- New guidelines for winter maintenance*
Technical Session W16 *- Strategic use of spreading agents in winter maintenance strategies*
Technical Session W18 *- Winter Maintenance Management Systems*
Technical Session W20 *- Quality Management of winter service*

The time and intensity of winter service operations cannot be planned for long periods of time. However, the organization must be ready at all times to make fast and efficient operations. This topic deals with all measures to organize and prepare winter maintenance operations

Including:

- Winter Service Guidelines
- Operation Planning, Route Planning
- Strategies for Use of spreading agents, Regulations for the spreading densities
- Connection between Winter Service and traffic safety and economy
- Control operations management
- Winter Maintenance Equipment Management, Fleet Management
- Quality Management
- Public Relations and communication in Winter Maintenance

TOPIC 6

Communication and use of Data from cars and roads for Winter Service

Technical Session W23 *- Communication and Data Use for winter service*

With modern cars having more connectivity power and sensors, how can we use the information received to help make better winter maintenance decisions? How can this data be combined with data of roads, of service operations and of RWIS? In addition, how can we use the connection to send live updates to cars which are travelling on the roads?

Including:

- Ways and systems of communication between cars and infrastructure for winter service
- Analyzing and using data for winter maintenance
- Distribution of data for road users
- Data Exchange with other partners (e.g., Public Transport)
- Data Quality Management

TOPIC 7

Winter Service in Urban Areas

Technical Session W19 *- Winter Service on urban Roads*
Technical Session W21 *- Winter Service for pedestrians*

Winter Service in urban areas has special tasks and requirements. On the main roads we have very high traffic volumes with many junctions. For pedestrians there special winter service operations must be conducted, and public transport has high priority. Plants and trees in the cities must be specially protected. Large amounts of snow must be transported away.

Including:

- Guidelines for Winter Service in urban areas
- Plans for priority areas for Winter Service (e.g., hospitals, schools ...)
- Expectation of the citizens
- Use of spreading agents in urban areas
- Winter Service for pedestrians
- Requirements of people with disabilities in winter
- Requirements of public transport for winter maintenance
- Protection of the environment in urban areas
- Snow removal and snow transport in urban areas
- Special Urban Road User Information Systems

TOPIC 8

Winter Service on bicycle infrastructure

Technical Session W24 *- Winter service for bicycles*

Winter cycling is becoming more and more popular, hence winter service on bicycle infrastructure must keep up with that demand. While most bikeways are within cities, there are also some interurban bikeways connecting towns.

Including:

- Guidelines for Winter Service on bicycle infrastructure
- Equipment used for Winter Service on bicycle infrastructure
- Winter Maintenance on bicycle paths

THEME **RESILIENCE**

TOPIC 9

Improved Planning for Resilience of Road Networks and Road Organisations

Technical Session R05 *- From vulnerability knowledge to the implementation of adaptation measures: best approaches and methods*
Technical Session R06 *- Organizing & organizational resilience: examples of best practices*

The growing challenges and risks from natural hazards demand improvements to resilience management of road networks as well as resilience of the organisations which own and manage the networks. In general, road networks and organisational systems have developed some resilience to natural hazards as part of business-as-usual development and maintenance initiatives. However, the accelerated demand of hazard management due to climate change impacts requires improved planning methodologies to maintain network resilience. The emerging expectations around sustainable development, climate impact adaption, carbon emission reduction, environmental impact management, nature positive solution and so on also need to be considered in the process.

As part of a simplified and wholistic approach of hazard planning, the climate change related hazards can be addressed along with other natural hazards such as earthquakes, volcano eruption, tsunamis, land movement etc. Accordingly, improvement actions need to be designed for targeted resilience outcomes in a changing context and with a middle/long-term perspective.

These two sessions will present technical studies, best practices, lessons learned, review reports on methodologies, or programmes and approaches. The aim of these sessions is to improve network resilience planning frameworks for addressing all hazards including climate change, and / or exploring organisational resilience opportunities to achieve network resilience.

TOPIC 10

Management and Resilience Building for Disasters

Technical Session R11 *- Engineering Resilience: Coping Mechanisms for Extreme Weather*
Technical Session R12 *- Social Resilience: Cooperative Solutions to Extreme Weather*

Extreme weather events like higher temperatures, heavy rainfall, snowfall, droughts, and forest fires are increasingly severe and frequent globally, posing significant challenges for road management. In supply chains, efficient logistics infrastructure, primarily roads, are crucial for uninterrupted product delivery. Roads are essential for disaster response, enabling access for rescue operations and emergency supplies. To maintain connectivity amidst disasters, road administrators must enhance resilience in road infrastructures and implement agile management systems capable of swift disaster response.

The two sessions will address the following topics:

- Coping with extreme weather: world-wide case studies to identify improvement strategies for responding to and coping with extreme weather disasters and building resilience into road networks.
- Social resilience within communities and public authorities: experiences on social resilience in road administrations, focusing on collaboration among road managers, users, communities, and authorities, especially on the preparedness through education, training, and community involvement in response activities.
- Infrastructure resilience for supporting supply chain: best practices related to the preparedness, mitigation, response, and recovery measures for securing resilience of road networks to support supply chain continuity, such as the practices in the areas of training, technologies, tools, and management strategies/actions.

TOPIC 11

Rural Roads Resilience in a Changing Climate

Technical Session R10 *- Rural Roads Resilience in a Changing Climate*

Rural roads in PIARC member countries have different definitions, construction methods and functions.

In most low- and middle-income countries, rural roads are vital to economic development, as they facilitate both the movement of people between communities and the transport of agricultural goods to urban markets. Considering these essential functions, it is alarming to note that climate change is significantly affecting the sustainability of rural roads, preventing them from effectively fulfilling their roles. The session will present an overview of its existing rural roads, the construction techniques and procedures used, and the impact of climate change on the sustainability of these rural roads and the solutions being considered.

The session will address the following topics:

- Rural road´s construction and maintenance techniques:
  - Gravelling using locally available materials
  - Sealing of low volume roads
  - Routine, Periodic Maintenance
  - Emergency Maintenance

- Analysis of the impact of climate change on the sustainability of rural roads:
  - Erosions and slope protection measures
  - Rural road Safety Concerns Due to Climate Change-Induced Weather Events
  - Strengthening road resilience
  - Rural roads design upgrade to meet standards of national paved roads
  - Nature-based solutions to enhance road durability and environmental sustainability

TOPIC 12

Resilience of road freight traffic facing adverse situations: foresight, modelling, response and lessons learnt

Technical Session R02 *- Resilience of road freight traffic facing adverse situations*

Natural disasters, including weather events but also major disruptive events such as bridge collapse or strikes, demonstrations, or geo-political conflicts, can cause disruptions to the multimodal freight network and industry supply chains. These disruptions impact communities, businesses and the overall economy. When large-scale events disrupt freight systems, supply chains can fail, and populations are at risk of losing access to basic necessities and critical supplies needed to support recovery. Emergency response and recovery activities are dependent on the expeditious movement of utility service vehicles and trucks carrying emergency supplies, medicine, food, fuel, and infrastructure repair materials to the affected area. Freight system resilience, the ability of the system to resist and rebound from disruptions, is essential to ensure the reliability of economically important supply chains and, the timely distribution of critical resources and services. Multimodal freight transportation system resilience depends on the collaboration between public sector infrastructure owners and operators and privately-owned modes, carriers and shippers.

This session will address examples of such disruptions from actual case study (lessons learnt) and from foresight study. The session will highlight how to build resilience into the multimodal transportation infrastructure planning, design, management, and operations to mitigate the impact of major disruptive events and maintain or restore services during and after major disruptive events.

Among topics to be considered are data and analysis to facilitate identification of threats and risk factors that disrupt multimodal freight transportation system operations, metrics to measure the resilience of the freight transportation system, investment to build resilience in the freight transportation system, response planning to support remediation of infrastructure damage, effective restoration of services, strategies to improve freight transportation network resilience, strategies to mitigate supply chain disruptions, best practices in freight transportation and supply chain resilience, and the role of road authorities.

TOPIC 13

Improving Road Safety Resilience through the Safe System Practices

Technical Session R03 *- Improving Road Safety Resilience Part 1*
Technical Session R04 *- Improving Road Safety Resilience Part 2*

Road Safety continues to be a leading cause of death and serious injuries worldwide. Road crashes also create significant impacts to transport leading to non recurrent congestion and loss of efficiency, making for a less resilient system for all road users. Road safety policies that reduce crashes also are investments that provide for a more resilience system by removing unexpected blockages and secondary crashes. Safety for all road users is a necessary component of a resilient transport system as not all have access to equal means of transportation as can be shown in the vulnerable road user statistics for low and middle income countries.

The session will address following topics:

- Providing resilient transport options by ensuring road safety of Vulnerable Road Users
- Increasing resiliency in transport through proactive approach to road safety improvements
- Speed management to provide for a more resilient and safe transport system
- Diagnosing Road Safety Problems and Opportunities

TOPIC 14

Asset Management Measures for reducing risks and improving the resilience of road networks

Technical Session R08 *- Asset Management for Road Resilience Part 1*
Technical Session R09 *- Asset Management for Road Resilience Part 2*

This session will contribute to building the body of knowledge on how to manage transportation infrastructures assets with the goal to increase the resilience of road networks to climate change and other stressors.

It is important to expand current approaches in asset management decision-making to incorporate risk- and resilience-based approaches, in the face of various threats to transportation infrastructure. Proven approaches can help road asset managers best focus risk and resilience aspects to enhance road preservation and renewal decisions.

The session will present best practices and approaches of Asset Management to improve the resilience of the road infrastructures.

Experiences from low, middle and high income countries will also be presented.

TOPIC 15

How can the resilience of aging bridges be improved in the context of climate change?

Technical Session R01 *- How can the resilience of aging bridges be improved in the context of climate change?*

The resilience of bridges relates to ability of infrastructure to resist, absorb, accommodate and recover from the effects of an event or hazard in a timely and efficient manner, including preservation or restoration of its essential service and function. Resilience has become more prominent over the decades, with bridges more frequently and more severely impacted by climate related events, such as flooding, tidal surges, storms, and fires. At the same time, bridges are aging and experiencing increases in traffic load and intensity. In addition, the majority of existing bridges were not designed to accommodate these changes and they are continuing to age and deteriorate with time.

Structural redundancy is an important feature to understand and incorporate when considering resilience and the continuity of service that is expected by the communities and economies that use highway bridges. As a result, this session will discuss bridge resilience in the face of climate change, aging, and increasing traffic demands, with a particular focus on structural redundancy and robustness.

The session will address the following topics:

- Emergency response examples, including bridge recovery after the occurrence of sudden events or hazards.
- Mitigation to accommodate effects due to sudden events or hazards for road bridges.
- Measures and considerations for increasing resilience.
- Effects of resilience, redundancy, and robustness on bridge design and maintenance.

TOPIC 16

How to apply innovative ITS technologies delivering decarbonised and climate resilient network operations

Technical Session D07 *- Innovative ITS for decarbonisation and resiliency*

All governments are developing Net Zero strategies and action plans to decarbonise our transport and infrastructure. Stakeholders from both government and industries are all rethinking the transport network and systems to support the decarbonisation and sustainability. There are enormous opportunities to reduce transport sector emissions by promoting better network operations planning, shifting to more sustainable or low emission ways of moving goods and people, and increased use of innovative ITS (intelligent transport systems) technologies such as digital communication, big data models, optimised network management, congestion mitigation, incident management and traffic controls, etc.

At the same time, climate resilience of our road network operations is also critical as the impacts of climate change and extreme weather conditions continue to worsen (e.g. floods, heat, storming, fire etc.). ITS technologies and toolkits are often used to provide agile, effective and economic forecasts, prevention, interventions and warnings.

The session will present innovative research, best practice and impact assessment papers addressing:

- Adopting emerging ITS and digitisation technologies to detect, track, measure, manage and improve the network decarbonisation.
- Development and applications of ITS related tools for climate resilient transport operations.

TOPIC 17

Earthworks & Earth Structures faced with climate changes

Technical Session D10 *- Earthworks & Earth Structures faced with climate changes*

Earth structures are the most sensitive to climate change, which poses real challenges in terms of stability for existing structures, but also for the design of new structures. Because of the materials they are made of, earth structures are particularly sensitive to variations in rainfall, drought or other meteorological factors, which can accelerate deterioration, ageing and instability. Current standards therefore need to be completely revised. The earthworks industry needs to adapt to these changes and reduce its impact on the climate, with new management practices for earthworks, new methods such as resilience, and the need to decarbonise works.

The session will present approaches from diverse stakeholders in the earthworks sector (contractors, project owners, managers, design offices) describing examples, references, case studies and best practice in these three themes:

- Earthworks asset management (maintenance, planning, monitoring, small repair, etc.),
- Resilience and
- Decarbonisation of works.

TOPIC 18

Strategic Road Investments: Contributions and Impacts on National Decarbonisation Plan

Technical Session D01 *- Driving Decarbonisation: The Role of Strategic Road Investments*

This session explores how strategic investments in road infrastructure can actively support national decarbonisation plans and broader climate goals. Through a series of international case the session highlights diverse strategies integrating sustainability, innovation, and socioeconomic impact into road projects. Discussions will also address policy frameworks like congestion pricing models and the classification of national decarbonisation plans in the transport sector.

By examining barriers, enabling factors, and best practices across different contexts, the session provides insights into how road infrastructure planning can become a catalyst for reducing greenhouse gas emissions, promoting sustainable mobility, and achieving resilient, low-carbon urban development.

TOPIC 19

Road solutions for the decarbonisation in Urban and Periurban areas

Technical Session D08 *- Road solutions for the decarbonisation in Urban and Periurban areas*

This topic addresses planning in uncertain times when different kind of crisis is triggering significant changes in cities. An immediate crisis can cause further long-term changes and increase the impact of other major trends, such as climate change. Managing such fundamental change processes is a key challenge for road administrators and urban mobility practitioners to integrate into their plans for urban and metropolitan areas.

The session will present following topics among others:

- Better cooperation between transport modes in urban and peri -urban areas, promote multimodality to make mobility system flexible, resourceful, inclusive and with zero or low emissions.
- Urban Vehicle Access Regulations (UVARs) for reducing greenhouse gases from the road sector and responding to increased resilience and sustainability request of city and metropolitan areas
- New road solutions and new guidelines of improving secure and safe mobility for all vulnerable road users (including new mobilities) for the decarbonisation of cities

TOPIC 20

Electric Road Systems: The Next Step for Electric Vehicle Charging?

Technical Session D04 *– Electric Road Systems: The Next Step for Electric Vehicle Charging?*

Reducing carbon pollution from the road transport sector is a critical step towards net zero goals for countries around the world. Biofuels, hydrogen, e-fuels, and electricity will all play a role in the energy transition, but electrification is expected to be the most widely applicable. Continuous in-road charging, or electric road systems (ERS) has the potential to remove barriers to further integration of electric vehicles (EVs) in the road transport sector. ERS also has the potential to change how roads and EVs are designed (e.g., smaller batteries) to further reduce environmental impacts of transport.

The session will address the latest advances in ERS design methodologies, optimization strategies, and integration techniques to enhance energy efficiency and sustainability. Research results, case studies, and implementation examples will be presented to share both opportunities and challenges with ERS.

TOPIC 21

Measures to reduce the carbon footprint of pavements

Technical Session D02 *- Measures to reduce the carbon footprint of pavements Part 1*
Technical Session D03 *- Measures to reduce the carbon footprint of pavements Part 2*

Pavements produce several GHG emissions during the different stages of their life cycle: i.e., during the production of the construction materials, during the construction of the pavement itself, or during its use stage including maintenance.

This session will present case studies or research projects on calculation methods of the carbon footprint of a project, how to introduce carbon footprint in the tender phase of a project, how to reduce the carbon footprint during the pavement life cycle, etc.

TOPIC 22

Decarbonisation of road construction and maintenance.

Technical Session D05 *- Decarbonisation of road construction and maintenance Part 1*
Technical Session D06 *- Decarbonisation of road construction and maintenance Part 2*

Decarbonisation of road construction and maintenance is one of the biggest challenges in the road industry.

These two Sessions will focus on current strategies, programmes, tools and trends in decarbonising road construction and maintenance. The goal of decarbonisation efforts should be to significantly reduce greenhouse gas emissions.

Topics:

- Strategies and programmes for decarbonisation in road design, construction and maintenance.
- Planning, coordinating and supervising the activities related to the delivery of materials, equipment and workforce required for the road construction project in terms of carbon dioxide emissions.
- Designing road infrastructure with consideration of decarbonisation at the construction and maintenance stage.
- Measures and methods of road decarbonisation in road construction and maintenance.
- Selection of the type of equipment (conventional and special) and related work categories in road construction and maintenance decarbonisation.
- Decarbonisation from the perspective of contracts, financing and incentives.
- Indicators in road construction and maintenance decarbonisation.
- Monitoring of decarbonisation strategies, programmes and actions.
- Carbon footprint calculators in road construction and maintenance.

TOPIC 23

Comparative Analysis of the Evolution of Road Statistics

Technical Session D09 *- Comparative Analysis of the Evolution of Road Statistics*

The world of road infrastructure consists of several key elements that have evolved over time.

The Session will examine some of the indicators related to the evolution of one or more elements of the road network. The proposed indicators will be presented and compared on a national and international scale.

Accordingly, the proposed indicators could be made on a country's infrastructure as a whole (evolution of overall statistics on existing road infrastructure), studies of traffic trends at the national road network level (passenger or freight), evolution of environmental impacts of a country's traffic on the air quality (according to the different components), evolution of safety statistics on the accidents at a country's scale, or combination of several types of indicators. Indicators could be quantitative or qualitative like road policies

The proposed indicators can be cross-referenced with socio-demographic, economic, and environmental factors. The study will include data sources and indicators' definitions, as well as the quality and reliability of the data collection. It is possible to integrate indicators from several data sources, present survey tools that measure the evolution of indicators over time, and innovative data collection typologies.

Technical Session R07 *- Resilience and sustainable operation of tunnels*

In the context of road tunnels, resilience could be described as the ability to keep the tunnel safely available for traffic, during various abnormal situations, like traffic incidents, technical malfunctions, extreme weather conditions, other natural and man-made hazards, or maintenance and refurbishments. In short, resilience is the ability to prepare for, adapt to and recover from abnormal events.

The new cross-cutting topic of sustainability with a focus on the operation and maintenance of road tunnels deals with new aspects regarding reduction of energy consumption and use of renewable energy sources for tunnel operation. Also, the use of tunnels by active mobility users (pedestrians, cyclists) contributes to more sustainable and greener transport through road tunnels. Special safety aspects as well as international good practices will be discussed.

Presentations in this session will focus on the final Technical Report on Resilience from 2020-2023 Work Cycle as well as the results of the resilience session we will have in the International Seminar on Tunnels in China in May 2025. Additionally, first outputs of TC4.4 on sustainable operation of tunnels as well as active mobility users in road tunnels will be presented.

FORESIGHT SESSIONS

Foresight Sessions are co-organized with international and regional organizations that partner with PIARC. These sessions aim to enhance the global impact of the Congress as the major global forum of discussion and exchange for road and road transport.

Delegates can expect dynamic discussions that explore emerging challenges, future trends, and innovative solutions within the three main pillars of the Congress: **winter service, resilience and decarbonisation**. Bringing together global experts and key stakeholders, these sessions will provide valuable insights to help shape the future of road and transport infrastructure in a rapidly evolving world.

Three sessions are already defined, while others are currently under development. Stay tuned for more details on session topics and speakers in the coming months.

FORESIGHT SESSION #1

TRANSALPINE COOPERATION

Building on the discussions of the Ministerial Session, this foresight session will bring together road authorities from across the Alpine region for a high-level exchange on shared challenges and opportunities. Representatives will present their national and regional perspectives on infrastructure development, climate resilience, and mobility in mountainous terrain, with a view to strengthening transalpine cooperation. The session aims to foster dialogue, alignment, and future coordination among Alpine countries.

FORESIGHT SESSION #2

CIRCULAR AND SUSTAINABLE ROAD INFRASTRUCTURE

Organized by Forum of European National Highway Research Laboratories (FEHRL) and European Road Federation (ERF)

This session will explore a holistic approach to developing circular, sustainable, and resilient transport infrastructure, integrating innovation across the entire construction supply and value chain. It will highlight how digital tools, advanced materials, and new design practices can transform both urban and interurban road systems.

Key themes include the use of open-source digital platforms for circularity analytics and engineering integration, the adoption of modular and eco-design principles, the promotion of bio-based and secondary materials, and the integration of traffic simulation data and future mobility scenarios (including autonomous vehicles) into infrastructure planning.

Participants will discover how cutting-edge technologies and smart design can accelerate the transition toward more adaptable, efficient, and future-ready transport infrastructure.

FORESIGHT SESSION #3

ADAPTING INLAND TRANSPORT TO CLIMATE CHANGE

Organized by UNECE, UNCTAD, UNESCWA, PIANC, University of the Aegean, University of Birmingham, and ClimateSense

This session will explore how inland transport systems can adapt to the growing risks of climate change through a holistic and forward-looking approach. It will examine the legal and regulatory frameworks that shape adaptation, present essential baseline data and climate projections, and showcase practical tools and methodologies for conducting climate risk assessments and developing effective responses—while avoiding maladaptation.

Drawing on the 2020–2025 work of the UNECE Group of Experts and the flagship report "Towards Climate Change Resilient Transport Systems," this session brings together global expertise to help chart a resilient future for inland transport.

FORESIGHT SESSION #4

ROAD WEATHER RESEARCH ORGANIZED WITH STANDING INTERNATIONAL ROAD WEATHER COMMISSION (SIRWEC)

Although its name may suggest a broad meteorological focus, the Standing International Road Weather Commission (SIRWEC) has long been a leading force in winter service innovation advancing knowledge, practice, and resilience in road weather management. Many foundational technologies and best practices in winter maintenance trace their origins to SIRWEC's bi-annual conferences.

The last conference in Amsterdam 2024 marked the 40th anniversary of SIRWEC, a milestone that offered an important moment for reflection and future vision. Throughout the 40 years, there has been a long-standing collaboration between SIRWEC and PIARC. This collaboration will reach new a new level in 2026 as we propose to fully integrate the next SIRWEC conference within PIARC's 2026 event in Chambéry.

SIRWEC will deliver its usual dynamic conference programme including international speakers from practice, industry and academia to discuss the latest developments in winter service delivery while peering into an uncertain and fast-changing future shaped by climate shifts and technological disruption.

FORESIGHT SESSION #6

WINTER SERVICE STRATEGIES FOR AIRPORTS

Operating an airport in snowy, mountainous regions requires exceptional coordination, rapid mobilization, and tailored equipment. This foresight session explores the organization, resources, and challenges involved in maintaining safe and efficient airport operations during harsh winter conditions.

Drawing from real-world case studies—including alpine airports known for their extreme weather exposure—this session will examine best practices for runway clearing, de-icing procedures, staff mobilization, and equipment deployment. Participants will gain insights into the scale and complexity of winter operations, including how hundreds of personnel and specialized vehicles are coordinated to keep over a million square meters of airside infrastructure safe and operational.

With increasing pressure on reliability and safety in winter, this session offers a valuable look on how airports are innovating to meet the challenge—minimizing disruption while ensuring continuity of service.

FORESIGHT SESSION #7

WORK IN PROGRESS

SPECIAL PROJECTS SESSIONS

Four Special Projects Sessions will present the results of PIARC Special Project mechanism on emerging topics identified by member countries. The most recent four projects will be presented:

- **Artificial intelligence in the road sector.**
- **Management of work zones.**
- **Safer infrastructure and traffic management for motorcyclists.**
- **Rapid impact assessment following a disaster.**

WORKSHOPS

The Congress programme will offer some workshops as well, with a more hands-on approach to practical aspects of the Congress thematics. These workshops will be organised either by PIARC Technical Committees often in collaboration with one another or by partner organizations.

POSTER SESSIONS

The Poster Sessions of the Congress will offer delegates the opportunity to meet and discuss with all authors of the call for papers. Regardless of whether they have been invited to give an oral presentation during the Technical Sessions, all will participate in the Poster Sessions, which are scheduled for half a day following the corresponding Technical Session. Located centrally in the Exhibition area, they will become an arena for in-depth discussions with the authors.

CHAMBÉRY **WORKSHOPS**

WORKSHOP #1

PIARC FRAMEWORK ON CLIMATE CHANGE

This interactive workshop will focus on the methodological approach to improving road resilience as outlined in the 2023 PIARC Framework. While the framework was presented by Technical Committee 1.4 at the 2023 Prague Congress, this session offers a much-needed opportunity to gather valuable feedback and input from a broader range of stakeholders.

Designed as a participatory, brainstorming-style workshop, the session invites participants to share their experiences, challenges, and best practices in addressing road resilience and adaptation to climate change. Discussions will help identify practical insights, validate the framework's applicability across diverse contexts, and shape future updates.

All attendees engaged in climate adaptation, infrastructure planning, or road asset management are encouraged to contribute their perspectives and help co-develop a stronger, more globally informed approach to road resilience.

WORKSHOP #2

WORK IN PROGRESS

WORKSHOP #3

BEYOND BOUNDARIES – MULTI-DIMENSIONAL DISASTER RESILIENCE

In an era of increasingly frequent and severe climate events, road authorities are under pressure to strengthen the resilience of transportation networks—despite limited maintenance budgets and a rapidly evolving fiscal environment. This workshop explores how to proactively build climate adaptation into asset management and planning practices, using a systems-based lens to address complex, cascading risks such as those triggered by extreme weather.

Participants will delve into current practices for risk assessment, prioritization of investments, and strategies to enhance resilience both through routine maintenance and targeted capital investments. The session will also examine how spatial data and hazard mapping can help pinpoint vulnerable assets, anticipate the consequences of failure, and guide decision-making. This workshop invites road authorities, planners, and resilience professionals to share experiences and tools that can help turn risk into readiness—across jurisdictions, sectors, and boundaries.

WORKSHOP #4

IMPACT OF OVERWEIGHT VEHICLES ON PAVEMENTS AND BRIDGES – A HOLISTIC VIEW

Overweight vehicles accelerate damage to pavements and bridges, increasing maintenance costs and safety risks. This workshop unites insights from PIARC Technical Committees 2.3, 4.1, and 4.2 to examine these impacts from a multidisciplinary perspective.

Topics include structural effects, monitoring and enforcement challenges, and strategies for balancing freight efficiency with infrastructure protection. Through expert contributions and case studies, participants will explore effective approaches to managing overweight vehicle impacts and extending asset lifespans.

WORKSHOP #5

TRANSPORT SYSTEM RESILIENCE

This session will explore the adaptation of inland transport as an integrated system in the face of climate change. It will present a holistic approach to managing adaptation across the sector, with attention to the legal and regulatory frameworks that shape climate resilience efforts.

Participants will gain insight into the climate baseline information required to understand current conditions, as well as projections needed to assess potential future scenarios and their implications for inland transport. The session will also highlight key tools and methodologies that practitioners can use to conduct climate risk assessments and to design effective responses that minimize the risk of maladaptation.

The discussion will be grounded in the work of the UNECE Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (2020–2025), drawing from the group's report Towards Climate Change Resilient Transport Systems and related knowledge products.

WORKSHOP #6

INNOVATION IN THE ROAD SECTOR – LEADING THE WAY IN TRANSPORTATION

This workshop highlights cutting-edge innovations transforming the road sector. From smart infrastructure and digital technologies to sustainable materials and automated systems, participants will explore breakthrough solutions driving efficiency, safety, and environmental performance.

Featuring real-world examples of pioneering projects, PIARC Technical Committee 2.4 together with other experts will showcase how innovation is shaping the future of road construction, maintenance, and operations—keeping the transportation sector at the forefront of technological progress.

WORKSHOP #7

NATURAL HAZARDS RISK FOR MOUNTAIN ROAD INFRASTRUCTURE

Mountain road infrastructure faces unique challenges from natural hazards such as extreme weather events and landslides. This workshop will focus on assessing these risks and exploring strategies to improve resilience and safety.

Drawing on expertise and case studies, participants will discuss monitoring, risk management, and mitigation approaches tailored to mountainous environments, helping to safeguard vital transportation links under changing climatic conditions

WORKSHOP #8

DECARBONISATION IN ROAD CONSTRUCTION AND MAINTENANCE

This workshop focuses on reducing the carbon footprint of road construction and maintenance projects. It explores five key areas examined by PIARC Technical Committee 4.5: improving logistical and technological efficiency, introducing new technologies for measuring and inspecting decarbonisation efforts, decarbonizing project logistics and equipment, and utilizing carbon calculators.

Participants will examine real-world impact assessments across all project stages, identify common sources of carbon emissions, and discuss practical strategies to mitigate them. Through case studies and best practice analyses, the session aims to highlight effective decarbonisation indicators and measures for sustainable infrastructure development.

WORKSHOP #9

WINTER SERVICE FOR WINTER OLYMPICS 2030 – ENSURING ACCESS TO SKI RESORTS AND OLYMPIC SITES IN THE FRENCH ALPS

As the French Alps prepare to host the 2030 Winter Olympic Games, ensuring reliable winter access to ski resorts and Olympic venues is a critical priority. This workshop will explore the strategies, technologies, and coordination efforts needed to maintain safe and efficient mobility in the face of challenging alpine weather conditions.

Participants will examine the unique demands of mountainous terrain, increasing traffic volumes, and heightened expectations around safety, performance, and sustainability. The session will highlight innovative approaches to snow and ice control, weather forecasting, interregional collaboration, and emergency planning.

With a focus on real-world implementation, the workshop will showcase how road authorities, local governments, and tourism stakeholders are working together to ensure seamless access, even during peak winter periods and major international events.

WORKSHOP #10

RESEARCH ON THE FUTURE OF ROAD INFRASTRUCTURE – INFRA 2050

This workshop explores forward-looking research initiatives aimed at shaping the future of road infrastructure through the INFRA 2050 programme. Participants will learn about emerging trends, innovative materials, smart technologies, and sustainable design practices that will define roads in the coming decades.

Focusing on resilience, adaptability, and environmental sustainability, the session highlights how cutting-edge research is guiding the transformation of infrastructure to meet the demands of 2050 and beyond.

PIARC **PRIZES**

In the lead up to the Congress, PIARC is running an International Prize Competition for the best papers, including those identified by PIARC Committees and those nominated by National Committees who are hosting their own national competitions. These prizes are intended to promote professional excellence, research, innovation and applications that demonstrate great interest and success in all areas of roads and road transport.

The six categories, each supported by a PIARC Prize partner country, reflect PIARC's past experiences, strategic priorities and the themes of the Congress:

1. **WINTER SERVICE**
2. **RESILIENCE**
3. **ADAPTATION TO CLIMATE CHANGE**
4. **DECARBONISATION**
5. **YOUNG PROFESSIONAL AUTHORS**
6. **LOW-AND MIDDLE-INCOME COUNTRY AUTHORS**

An international jury will evaluate the papers to select winners. The jury, composed of representatives from the PIARC Prize partner countries and members of the General Secretariat, will be led by the Chair of the Communications Commission.

PIARC Prize winners will be honored during the Opening Ceremony.

Good luck everyone!

TECHNICAL VISITS

LOCATED IN THE HEART OF THE WORLD'S LARGEST SKI AREA—THE NORTHERN ALPS—CHAMBÉRY IS PARTICULARLY IMPACTED BY THE **CHALLENGES OF WINTER SERVICE, ROAD RESILIENCE, AND DECARBONISATION**.

WINTER SERVICE

In the departments of Savoie and Haute-Savoie alone, the winter sports economy includes 110 resorts, generates €5.8 billion in economic benefits, accounts for 41.1 million overnight stays, and 33.8 million skier-days. Savoie is the second most popular tourist investment destination in France after Paris. Managing access to the resorts is therefore crucial and requires perfect coordination between various stakeholders (the State, local authorities, highway management companies, etc.) to ensure operational efficiency and rapid response.

In Savoie, in continuity with the national highway and road network, the department maintains over 3,000 km of roads, nearly a third of which (900 km) are located above 1,000 meters in altitude. Snow removal operations extend up to the summit of the Col de l'Iseran at 2,764 meters. Snow depths can reach up to 10 meters in some mountain passes, requiring prior marking to identify the snow-clearing route.

ROAD RESILIENCE

Chambéry and the Savoie region are frequently affected by rockfalls that can paralyze road and rail traffic, as evidenced by the 19-month closure of the Paris-Milan line or the recent closure of access to the Tarentaise resorts just before the critical winter holiday period. In response to these high-stakes crises, the inhabitants of Savoie have demonstrated responsiveness and ingenuity to restore access and ensure safe travel.

DECARBONISATION

As strategic transit routes between Italy and Switzerland, the highways of Savoie and Haute-Savoie are heavily used by international freight transport. Numerous pilot projects have been launched to reduce greenhouse gas emissions and protect the fragile valley environments.

The expertise of local stakeholders in winter management, road resilience, and decarbonisation, along with the dynamism of this ecosystem committed to addressing environmental challenges related to mountain tourism, allows for a rich and varied offering of technical visits. The full programme will be presented when registration opens, but here is a preview of its diversity:

FRÉJUS TUNNEL SAFETY GALLERY AND CHARMAIX VIADUCT

The Fréjus tunnel is one of the longest road tunnels in the world (12.8 km). A second tube is currently being completed and should be in service by the time of the Congress. The initial aim of this project was to comply with European and national legislation on tunnel safety, which required the creation of 34 safety shelters under traffic, connected to an evacuation route. This gallery was needed primarily to build these shelters without disrupting traffic in the tunnel, as well as for evacuation purposes. To further improve safety in the event of a fire, it was finally decided in 2012 to move the Italy-France direction traffic lane in this second tube, leaving only one lane in the France-Italy direction in the existing tube. The civil engineering work took place between 2009 and 2019, and the equipment was installed between 2020 and 2024. Developing, testing and commissioning a new supervision tool to manage not only the new tube but also the old one was a particularly delicate task.

On the access ramp to the Fréjus tunnel, the Charmaix viaduct is an engineering structure located on a slow-moving slope. The first viaduct, built at the end of the 1970s, had reached the limits of the movements it could support, so a new structure, better adapted to ground movements, was built between 2017 and 2023 to replace the old one.

CÉSAR TRAFFIC CONTROL CENTER AND NUANCES DISTRICT

This control center continuously receives and processes data from surveillance equipment, traffic counters, weather stations, emergency call networks, audio links, and phone calls.

It is managed by AREA, a company with strong expertise in mountain highway viability and tunnel management.

OSIRIS TRAFFIC CONTROL CENTER

The OSIRIS control centre (Organisation pour la Sécurité et l'Information Routière des Itinéraires de Savoie - Organisation for Road Safety and Information on Savoie Routes) was set up in 1991 to provide optimum, coordinated management of the road networks serving the ski resorts. It has been managed by the DIR Centre-Est (road authority) since 2007, in partnership with the Département of Savoie.

The OSIRIS control centre monitors the departmental and national network in Savoie, as well as the continuous supervision of 9 road tunnels. To do so, it uses a number of systems and procedures to inform users, manage equipment (cameras, variable message signs, barriers, ventilation, etc.), maintain them and initiate action.

During the winter, a reinforced organisation is deployed to deal with winter migrations for the Tarentaise and Maurienne resorts, as part of a pre-crisis approach to deal quickly with any unforeseen events, in particular inter-departmental co-operation at the OSIRIS control centre on Saturdays with heavy traffic.

COURCHEVEL ALTIPORT

The oldest altiport, also known for its short runway (537 meters), high altitude (2,008 m), and steep slope (18.66%), the steepest in the world for an international airport.

SECURING THE ARLY GORGES

Closed in February 2019 following a landslide of 8,000m³, the Arly Gorges road underwent two years of safety works. This major project required the creation of a new route and the construction of two structures less exposed to rockfalls.

LYON–TURIN

Visit the infrastructure under construction (base tunnel, entrance portal and work platforms) to discover this major 57.5 km rail link between the Maurienne valley and the Val di Susa. This cross-border tunnel is an important link in the Mediterranean corridor and will enable a large proportion of the goods currently transported by road to be carried.

VISIT TO THE VILLETON FACTORY

This company has specialized for 40 years in the design and manufacture of snow removal equipment and vehicle outfitting for winter services.

ROAD RD 925: MUNICIPALITY OF BEAUFORT

Visit to the facilities installed by the Savoie department to protect against a large-scale landslide caused by melting snow, and presentation of a special block protection system.

E-ROAD EXPERIMENTATION

This ambitious project aims to demonstrate the capabilities of Alstom's APS technology to develop an electric road system for decarbonizing long-distance road mobility in France-and potentially Europe-by 2030.

VISIT TO THE MND GROUP SITE

A pioneer and global leader in active avalanche mitigation, MND SAFETY delivers innovative, non-explosive solutions to protect critical infrastructure such as mountain roads, railway lines, and tunnels. Backed by unique "Made in the Alpes" expertise, our automated and connected systems (including Gazex, O'BellX, and DaisyBell) are deployed and operational in strategic, high-risk areas across more than 22 countries.

Join us for a behind-the-scenes tour of our industrial facility in Sainte-Hélène-du-Lac, at the heart of the Savoie region.

https://mnd.com/mnd-safety

5TH WORLD **SNOWPLOUGH CHAMPIONSHIP**

WORLD SNOWPLOUGH CHAMPIONSHIP 2026

MARCH 10–12, 2026 – SAVOIEXPO CHAMBÉRY, FRANCE

SHOWCASING EXCELLENCE IN SNOW CLEARING

As part of the 17th World Congress on Road Winter Service, Resilience and Decarbonisation, the World Snowplough Championship returns to celebrate the skill, precision, and dedication of Snowplough operators from around the globe.

From Tuesday, March 10 to Thursday, March 12, 2026, top drivers will compete on specially designed circuits located just steps from the congress venue. The grand finale, held on the afternoon of Thursday, March 12, will be open to both congress attendees and the general public—an opportunity to shine a spotlight on these essential professions that keep our roads safe in winter.

A TEST OF SKILL AND PRECISION

Participants will operate a variety of snow removal vehicles under time constraints, navigating technical courses that simulate real-world snow-clearing conditions. The competition will include:

- Training sessions
- Qualification rounds
- Final showdown

Each challenge is designed to test maneuverability, accuracy, and efficiency-hallmarks of a true snow-clearing professional.

AN INTERNATIONAL GATHERING

More than just a competition, the championship is a celebration of camaraderie and expertise, bringing together professionals from across the globe. It is a unique opportunity to exchange best practices, build connections, and promote innovation in winter road service.

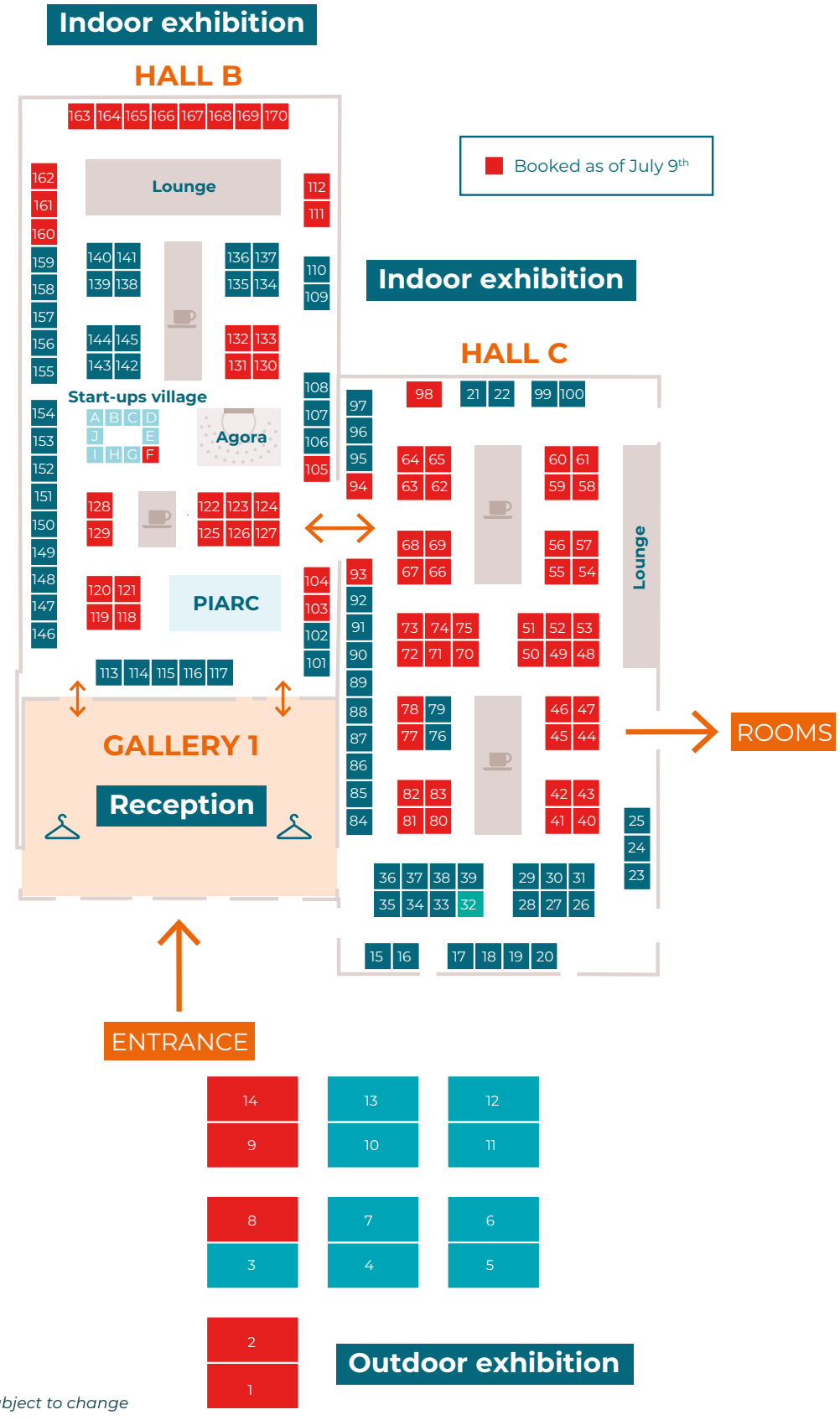
KEY DATES

July/August 2025	Official rules released
October 2025	Registration opens via dedicated platform
Now	Countries will be contacted to know their intent to participate and indicate the number of competitors for further information: f.fournier@chamberymontagnes.com

JOIN US!

Whether you're a seasoned operator, a winter maintenance expert, or simply passionate about road safety, the World Snowplow Championship is an event not to be missed!

EXHIBITION



*This floor plan is subject to change

EXHIBITOR LIST

NAME	BOOTH NUMBER
AEBI SCHMIDT GROUP	94, 8
AREA/EIFFAGE	122, 123, 124, 125, 126, 127
ATMB/SFTRF	130, 133, 131, 132
AVENIR PROTECTIONS	F
EGIS	128
EUROPE SERVICE	9, 14
GILETTA SPA	118, 119, 120, 121
JAPAN ROAD ASSOCIATION	40, 41, 42, 43, 44, 45, 46, 47
KEMION OY	129
KOREA ROAD ASSOCIATION	48, 49, 50, 51, 52, 53
MND	66, 67, 68, 69
PIARC ITALY	70, 71, 72, 73, 74, 75
PROVATIS SA	77, 78
SNOW-KILL	1, 2
STERELA	98
SWISS FEDERAL ROADS AUTHORITY	62, 63, 64, 65
TECONER OY	93
UNIVRSES	105
VAISALA SAS	103, 104

REGISTER NOW!

REGISTRATION FEES

Click here to register now !

PIARC MEMBERS	Incl. VAT (10% tax)
Early *(until Wednesday, January 7, 2026)*	750€
Normal *(from Thursday, January 8, until Thursday, March 5, 2026)*	950€
Late *(from Friday, March 6, 2026)*	1 130€
Low and lower-middle income countries	430€

PIARC NON-MEMBERS	
Early *(until Wednesday, January 7, 2026)*	850€
Normal *(from Thursday, January 8, until Thursday, March 5, 2026)*	1 030€
Late *(from Friday, March 6, 2026)*	1 230€
Low and lower-middle income countries	480€

DAY PASS	
Student (day pass)	Free
Daily participant (day pass)	300€
Visitor exhibition only (day pass)	110€

Accompanying person (3-day programme - see page 34)	370€

The registration fee for delegates include:

- A nominative badge
- Access to sessions, posters and exhibition
- World Snowplough Championship
- Coffee breaks
- Welcome reception (March 10, 2026)
- Proceedings
- 1 technical visit
- Congress bag

The registration fee for student & visitor includes:

- A nominative badge
- Exhibition access
- World Snowplough Championship
- Coffee breaks

Please note all fees will be processed in euros [EUR].

Low and Lower-Middle income countries rate (provide copy of passport) available for countries on the World Bank's official list: **https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups**

This Congress will be held exclusively in person; remote attendance or participation will not be available.

Lunch boxes can be booked during registration at a cost of 25 € Inc. VAT (10% tax) per day. Gala Dinner on March 12, 2026 can be booked during registration at a cost of 110 € Inc. VAT (20% tax).

Your technical visit can **be booked during the registration process**.

To obtain a visa letter, follow the registration process.

REGISTRATION **MODIFICATION** AND **CANCELLATION**

Cancellations received by Wednesday, November 26, 2025 at 23:59 CET will be refunded, minus a 50% administrative fee. No refunds will be issued for cancellations made after this deadline.

A name change will be treated as a modification and will incur a fee of 40 €.

If a badge is lost or forgotten onsite, an administrative fee of 40 € will be charged for the reprint of the badge after identity verification (passport, driving license or other recognized identification documents).

GENERAL **PAYMENT** CONDITIONS

All payments are to be made in € (Euro). Taxes (VAT) may increase without notice and any such change will be reflected in final rates.

Starting Tuesday, February 17, 2026 only credit card payments will be accepted.

Modifications and/or new registrations made on-site will require immediate payment (by cash or credit card).

Upon written confirmation, an invoice payable upon receipt will be issued. This invoice will serve as a binding contract, and the above payment and cancellation terms will then apply.

Full payment of services is requested when registering (credit card and/or Bank transfer). No confirmation or invitation letter will be sent until mci group France has received the payment.

A penalty of 5% late payment interest will be applied in the event of delay in payment. In accordance with art. L-441-6, decree n ° 2021-1115, debtors will be charged a sum of 40 € for collection costs.

No badge will be delivered until full payment of open invoices is received.

METHODS OF PAYMENT

Credit card: only Eurocard/MasterCard, Visa and American Express are accepted. Please note that the merchant name that would appear on your credit card statement would be “mci group France".

Bank transfer: please make your payment to:

VH 2026 c/o mci group France
Bank: Crédit Lyonnais - ESDC LYON GDS COMPTES
18 rue de la République - 69002 Lyon
SWIFT CODE: CRLYFRPP
IBAN: FR91 3000 2056 6600 0006 0133 P15

Please indicate the participant's name, identifier and “VH 2026” on ALL payments (for example, VH2026 - I/XX).

All expenses shall be borne by ordering customer.
Please note that intermediary bank fees may be applied, please verify with your local bank.

Cheques: please note that payments by personal cheques are not accepted.

Refunds will be made after the event according to your payment method.

SOCIAL PROGRAMME
GALA DINNER

A HIGHLIGHT OF THE PIARC 2026 CONGRESS

Join us for one of the most anticipated moments of the 17th WORLD Congress on Road Winter Service, Resilience and Decarbonisation, hosted by PIARC and COVH in Chambéry from March 10 to 13, 2026. The gala dinner, scheduled for Thursday night, promises to be an unforgettable celebration filled with warmth, networking, and elegance.

Set in SavoiExpo, this evening will bring together participants from around the globe — experts, researchers, and public and private decision-makers — for a refined dinner. It is the perfect opportunity to expand your network, engage in informal exchanges, and celebrate the progress of the road sector.

WHEN?
THURSDAY, MARCH 12, 2026

WHERE?
SAVOIEXPO IN CHAMBÉRY

FEE: €110 INCL. VAT
(BOOKABLE DURING CONGRESS REGISTRATION)

And to kick off the week in style, don't miss the **Welcome Cocktail on Tuesday, March 10 (in the Exhibition Hall)**, a friendly and informal gathering to meet fellow participants and set the tone for a week of collaboration and innovation.

RESERVE YOUR SPOT NOW WHEN REGISTERING ON THE CONGRESS OFFICIAL WEBSITE

ACCOMPANYING PERSON PROGRAMME

CHAMBÉRY'S CENTRAL LOCATION IN A PRIVILEGED ENVIRONMENT OFFERS A VARIED PROGRAMME FOR ACCOMPANYING GUESTS.

THE 3-DAY PROGRAMME INCLUDES:

TUESDAY, MARCH 10, 2026 AFTERNOON

A guided tour of Chambéry with a guide to explore its historic alleyways, the famous Elephant Fountain, and the Château of the Dukes of Savoy. At the end of the visit, participants will enjoy a carillon concert—one of the largest in Europe—at the foot of the château.

WEDNESDAY, MARCH 11, 2026

A day between peaks and canals, discovering Chamonix and Annecy. After ascending the Aiguille du Midi to take in a breathtaking view of the Mont Blanc massif, participants will have lunch at a restaurant in Chamonix with mountain views, before heading to Annecy to explore the old town and stroll along the lake.

THURSDAY, MARCH 12, 2026

A day by the water around Lake Bourget, the largest natural lake in France. After a cruise on Lake Bourget and a visit to Hautecombe Abbey—a Gothic gem and necropolis of the Counts of Savoy—participants will enjoy lunch at a traditional restaurant in Chanaz, a charming village on the Savières Canal, also known as the "Little Savoyard Venice." The afternoon will be dedicated to visiting a traditional mill where walnut and hazelnut oils are still produced and offered for tasting.

© GCAT_085710_Alexandre Gendron

VISIT **CHAMBÉRY**

CHAMBÉRY AND ITS SURROUNDINGS:
A DESTINATION WITH MANY FACETS!

The Savoie department, in southeastern France, is hosting the World Congress on Road Winter Service, Resilience and Decarbonisation for the second time—the first edition having taken place over 50 years ago (1971) in the ski resort of Valloire.

The 17th edition will be held in Chambéry, the former capital of the Dukes of Savoy, also known as the "City of the Dukes." This dynamic city is located in France's second-largest economic region and in the department with the highest number of iconic ski resorts in the Northern Alps. Chambéry benefits from a central geographical location, easily accessible by plane, train, or car.

GETTING TO CHAMBÉRY

By plane: Chambéry is 45 minutes from the 2 international airports of Lyon Saint-Exupéry (France) and Geneva (Switzerland)

By train: Chambéry is 3 hours from Paris or Torino (Italy) and 4 hours from Milan (Italy) with direct high-speed train connections.

By car: Alpine motorways (A41, A43) meet near Chambéry, ensuring optimised travel times from neighbouring Switzerland and Italy.

A BIT OF HISTORY...

Nestled in the heart of the Alps, in an exceptional setting of lakes, vineyards, mountains, and natural parks, Chambéry is a city rich in tradition, blending history, culture, and nature.

Its well-preserved historic center, with colorful medieval facades and surprising trompe-l'œil paintings, reflects over 1,000 years of shared history with Italy.

For six centuries, Chambéry and Savoie, along with Turin and Piedmont (in Italy), were united under the House of Savoy, which was part of the Kingdom of Sardinia.

In 1860, following an agreement between Victor Emmanuel II, King of Sardinia, and France—ratified by a referendum—the region of Savoie was officially annexed to France.

THE "DOLCE VITA" IN CHAMBÉRY...

A human-scale city of 60,000 residents at the heart of an urban area of 140,000, Chambéry is a destination that will charm nature lovers, history enthusiasts, and foodies alike.

In Chambéry, time slows down to enjoy strolls through the historic center, discover independent and designer boutiques, museums, quaint alleyways, and gourmet stops along the way.

CHARM AND AUTHENTICITY DEFINE THE CITY OF THE DUKES!

The heart of Chambéry has retained a medieval layout, which you'll appreciate as you wander through the old town.

HERE ARE SOME OF THE CITY'S MUST-SEES

PLACE SAINT-LÉGER

The city's central square and former main thoroughfare. Behind its colorful facades, explore the secret passageways known as "allées," which are the soul of the city, connecting courtyards and private mansions.

RUE BASSE DU CHÂTEAU

Starting from Place Saint-Léger, this is Chambéry's oldest street, immersing visitors in the Middle Ages with its former shops. It was once the only access to the château.

RUE DE BOIGNE AND THE ELEPHANT FOUNTAIN

Named after General Count de Boigne, a great benefactor of Chambéry, this arcaded street was modeled after the elegant porticoed streets of Turin. It leads directly to the city's iconic monument—the Elephant Fountain—built in 1838 in honor of Count de Boigne and affectionately nicknamed "the four without butts" by locals.

THE CHÂTEAU OF THE DUKES OF SAVOY

Visible from Place Saint-Léger or Rue de Boigne, this fortress and princely palace symbolizes the power of the Counts and Dukes of Savoy. It comprises buildings constructed between the 13th and 19th centuries, including the magnificent Sainte-Chapelle, visible from the château square.

Since 1860, the château has housed the Prefecture and the Departmental Council of Savoie.

CHAMBÉRY'S SURROUNDINGS: NATURE JUST STEPS FROM THE CITY!

Nestled between the Bauges and Chartreuse mountain ranges, surrounded by lakes and peaks, Chambéry and its valley enjoy a truly privileged setting.

Bordered by three protected natural parks and serving as a perfect base for Alpine getaways, the Chambéry Montagnes destination offers a vast playground for year-round activities: skiing, hiking, swimming, paddleboarding, water skiing, cycling, mountain biking, trail running, caving, zip-lining, paragliding, gliding, climbing, via ferrata, scenic walks, wine tourism, arts and crafts, and more.

GENTLE MOUNTAINS...

Located between Chambéry, Aix-les-Bains, Annecy, and Albertville, the Bauges Regional Natural Park—a UNESCO Global Geopark—is a land of tradition and terroir, home to remarkable flora and fauna, and known for its exceptional underground and aquatic heritage.

This is where the famous Tome des Bauges AOP cheese is made, available from local cheesemongers. This cow's milk cheese is also delicious melted over potatoes with a green salad!

The heart of the Bauges is rich in artisanal crafts and typical villages, surrounded by breathtaking panoramas, which can be admired from the Revard or Semnoz viewpoints, both accessible by car.

In winter, the Bauges mountains don their white coat and welcome visitors to the family-friendly resorts of Aillons-Margériaz (ideal for alpine skiing) and Savoie Grand Revard, renowned for Nordic skiing in a "Great North" atmosphere.

But that's not all! Other activities include biathlon, snowshoeing, dog sledding, ski joëring, and sledding—fun for the whole family!

...AND WATER PLEASURES

From the natural pools and terraces of the Chéran River in the Bauges, to the turquoise waters of Lake Annecy just 30 minutes away, the pristine Lake Aiguebelette, or the wild beauty of Lake Bourget—France's largest natural lake, just 10 minutes from Chambéry—there's no shortage of aquatic and water sports activities when the warm weather arrives!

WINE: A MILLENNIA-OLD REGIONAL TRADITION...

Savoie is one of France's oldest wine regions.

Viticulture has played a major role in shaping the Savoyard landscape and remains a key part of the regional agricultural economy.

A mountain and hillside vineyard, local winemakers have shaped the land over centuries to make it suitable for grape growing.

Today, nearly 800 hectares of vineyards stretch along the foothills of the Bauges and Chartreuse massifs, offering stunning

views of the snow-capped Belledonne and Mont Blanc ranges.

Savoie wines are made from over 20 grape varieties—some unique to the region—a remarkable number for such a small wine area!

Still relatively undiscovered, Savoie wines are increasingly sought after by top French and international restaurants and have been gaining popularity in recent years.

CHAMBÉRY MONTAGNES: A SAVOYARD ELIXIR!

Chambéry Montagnes is a destination you'll love discovering...

You'll enjoy its unique blend of culture, outdoor activities, stunning landscapes, and gastronomy, along with the charm and authenticity of its historic center.

SPONSORS' AND PARTNERS' ACKNOWLEDGEMENTS

THANK YOU TO SPONSORS AND PARTNERS THAT HAVE ALREADY JOINED THE ADVENTURE. IF YOU WISH TO INCREASE YOUR VISIBILITY, BECOME A SPONSOR OR AN EXHIBITOR.

PLATINUM

AREA

EIFFAGE

VINCI

GOLD

ATMB

SFTRF
TUNNEL ALPIN DU FRÉJUS
AUTOROUTE DE LA MAURIENNE A43

ARGENT

MND

BRONZE

aebi schmidt group

NATIONAL PAVILIONS

PIARC Italian National Committee

PIARC SWITZERLAND

Korea Road Association

PIARC JAPAN

SCIENTIFIC & INSTITUTIONAL PARTNERS

AFGC

ASFA

AFTES

C2ROP

Cerema

CETU

Cluster montagne

FONDATION UNIVERSITÉ SAVOIE MONT BLANC

France Ciment

infra 69

ROUTES DE FRANCE

CONTACT

17th World Congress on Road Winter Service, Resilience and Decarbonisation

mci group France
25 rue Anatole France - 92300 Levallois-Perret, France

(+33) 1 53 85 82 59
Info@piarc-chambery2026.com

FOLLOW US ON SOCIAL NETWORKS

www.piarc-chambery2026.com