



## Editorial

**Saverio Palchetti**

**Representative of PIARC World Road Association National Committees**

### **AN ACTION PLAN PROPOSAL BY THE PIARC NATIONAL COMMITTEES**

At our annual meeting held on October 26 in Yokohama (see my editorial N. 53) I spoke about the need for a **more dynamic approach of the National Committees** within the activities of the Association, the importance of regional and local factors, the role of the First Delegates, seminars and the importance of other joint initiatives. All this within an advanced stage of elaboration of the new strategic plan and in preparation, at international and national level, for the next World Congress in Abu Dhabi. Also in editorial n. 53, I drew your attention to the importance of the issue of the quality of technical-scientific knowledge that PIARC must ensure and the global sharing of knowledge in the road sector, a fundamental objective of the Association.

As Representative of the National Committees, or Delegate as I proposed, I had drawn up, from the meeting in Bonn in October 2017, an important reference framework as a premise for any shared innovative strategy and I spoke of an inclusive and cooperative strategy between the National Committees (the metaphor of the dancers of Matisse). Some fundamental shared and endorsed premises are :

- The competent Ministry (normally Transport and/or Infrastructure) acknowledges the importance of PIARC's role and nominates PIARC's First Delegate which is the main contact of the Association in the specific country;
- PIARC acknowledges the National Committee based on the Statute proposal made by the First Delegate;
- The National Committee is established with the appointment of its President and members;
- The First Delegate designates the national experts in the Technical Committees and in the International PIARC Task Forces with the support of the National Committee;
- The PIARC National Committees mobilize the national road transport community in order to:
  - promote the dissemination at national level of the best developed international practices;
  - promote at international level the best developed national practices.
- The National Committees elect the Representative of the National Committees in the PIARC Executive Committee.

Therefore, in the more modern vision of a PIARC National Committee we cannot omit the digital integration for a faster circulation of information and freedom of communication. PIARC needs to continuously guarantee absolute quality and total transparency of the technical documents produced according to a dynamic and a constantly evolving knowledge. The static knowledge of the book, however, remains in any case fundamental over time. Finally, to overcome the division of knowledge, the boundary between knowledge the maximum amount of mobility must be ensured, of fusion between materials, of dismantling cognitive silos through the analysis of the reports produced in order to raise awareness of the knowledge produced so far and to project ourselves into the future

remembering we must not talk just to an elite from a part of the world and we must not leave anyone behind.

Following the meeting in Yokohama, a particular interest emerged on behalf of the **PIARC National Committees of Canada and Quebec** – the President of the Canadian NC Jean-Francois GYSEL and the President of the Quebec NC Claude CARETTE were also present in the meeting - to further study the issues regarding the National Committees. I therefore appreciated the invitation on behalf of the two NCs last January to be present for two fruitful days in Montreal during their meetings in the presence, among others, of Anne-Marie LECLERC, First Delegate of Canada-Quebec and Honorary President of PIARC, Marie-Claude PETIT, First Delegate of Canada and President of PIARC's Communication Commission and Claudine TREMBLAY, Secretary general of AIPCR-Quebec National Committee. The aim was to discuss the performance of National Committees and their contribution to the Association. Following the work carried out in these meetings and subsequent improvements, a substantial **action plan** was drawn up that proposes concrete improvement solutions regarding five themes (see also the AIPCR-Quebec national Committee report in this bulletin): 1. Structure and governance of the NCs 2. Value added for NCs 3. Support to NCs 4. Exchanges among NCs 5. Visibility and awareness of NCs. The document includes details on the effects, benefits, actors involved and deadlines for the implementation of actions.

The document transmitted to all of you last week is, due to tight deadlines, an **operational summary** that will permit to better understand your evaluations. Of course, who is interested in the full document can ask me to forward it.

The results of this consultation, to be presented in Buenos Aires, will be gathered in a **memo containing an outline of the potential improvement** to share with the members of the Executive Committee before the meeting.

As a result of your comments, some activities could be promoted in the next few months, while others might need further in-depth discussion during the statutory meeting in Abu Dhabi next October, at the moment foreseen in the morning of **Saturday October 5**.

I would like to remind everyone that **Friday April 12** in Buenos Aires an informal meeting of First Delegates and of the South American National Committees is foreseen, to which, however, you are all welcome.

Successful work to all!

**Saverio Palchetti**  
**Representative of National Committees**



Meeting in Yokohama (October 26 2018) and Montreal (January 15 2019)

# NC News, Events, Seminars and Conferences



## **BULGARIA**

### **Approved measures to reduce road traffic accidents by 2020**

At this month's meeting the Council of Ministers of Republic of Bulgaria, were approved measures for limiting the traffic injuries until 2020. They are based on the final document from the National Transport Infrastructure Conference, organized by the Bulgarian National Committee – BFTI in Nessebar, Burgas.

The government has adopted an integrated "Safe System" approach with Vision zero injured and seriously wounded for national policy to achieve a high level of safety on the roads of the Republic of Bulgaria.

2019 is declared a year of active work for the quality of life and health of road users under the motto "Keep your family safe on the road". The focus is placed on the role of the family environment as a factor for risky behavior on the road.

The measures, aimed to reduce traffic accidents until 2020 are in line with paragraph 3 of Protocol No. 36 of the Council of Ministers of 12 September 2018 and represent the responsibility of the institutions to carry out coordinated actions within the specified deadlines for achieving the objectives of the National Strategy for Improvement of Road Safety in Republic of Bulgaria for the period 2011-2020.

### **Decree of the Council of Ministers on the establishment of a State Agency for Road Safety**

The National Road Safety Improvement Strategy of Republic of Bulgaria for the period 2011-2020 (the Strategy) defines traffic safety as the right and responsibility of everyone and aims to reduce the consequences of road accidents (50% compared to 2010, less than 388 people) and wounded (by 20% compared to 2010, less than 6363), to be achieved by 2020.

The expected results of the creation of the State Agency for Road Safety should be sought in several ways: improving road safety coordination; ensuring road safety policy with objective, impartial and comprehensive data and analysis; ensuring monitoring and control of the results of policy implementation and evaluating the effectiveness of the actions taken; implementation of measures to ensure road safety in all ongoing WMD projects; improving public awareness.

Bulgarian Forum for Transport Infrastructure succeeded to make 5 general propositions during the public consultations and they were all adopted. They included the involvement of BFTI in the work of the new Road Safety Agency.

### **XII National Transport Infrastructure Conference**

Bulgaria's National committee started the organization of the XII-th National transport infrastructure conference with international participation - "Bulgaria and The Balkans – connectivity". It will take place in Nessebar, between 10 and 12 of October 2019, under the slogan "Mission Road Safety". Following the traditions, the Organizers, including Bulgaria's National committee and University of architecture, civil engineering and geodesy, are expecting more than 400 participants from more than 25 countries.

Bulgaria's National committee and University of Architecture, Civil Engineering and Geodesy start two new and very important initiatives.

## Research Center

The establishment of the first Research center in Bulgaria, which will concentrate and organize the scientific potential of Bulgaria's road science, using the most modern techniques including close participation between the science and the business. The Research center is named "Safe Roads" and will include a place for Constructive workshop, laboratory and computers with the newest software for education and science work. The center will be used for education of students, PhD students, academical staff, for new researches and so on.

## Safe Roads Academy



***Restoration of more than 60 years old art work, found on the wall during the reconstruction of the Research center. The art work is in graffiti style and represent elements of the Bulgaria's most important historical places.***

The second initiative is the establishment of the Safe Roads Academy. The main purposes of the newly established academy will be training, education and certification of engineers in different areas, including the national and regional administration. The Academy will follow the tradition, created at the University of Architecture, Civil Engineering and Geodesy and will be the only one in Bulgaria to train and certify Road Safety Auditors.

## Common Assembly of BFTI



This month took place the first meeting of the common assembly of BFTI, as the National Committee of Bulgaria to the World Road Association. It intended to select a new governing board to continue the Forum's ideas and work, especially in the context of the PIARC vision. The new members of the Management Board are:

- Prof. Dr.ec.sc. Eng. Nikolay MIHAYLOV, Head of the Department of Roads and Transport Facilities at the University of Architecture, Civil Engineering and Geodesy
- Prof. Dr. Eng. Rumen MILANOV, Department of Roads and Transport Facilities at the University of Architecture, Civil Engineering and Geodesy
- Prof. Dr. Hristina NIKOLOVA, Department of Economics of Transport at the University of National and World Economy
- Dr. Stoyan BARZAKOV, a member of the international association of independent law firms INTERLAW
- Eng. Veselin KOZHUHAROV, former director of Transport and Reconstruction of Transport,

The establishment of Technical Committees in different areas was also discussed at the General Assembly. The idea is Bulgarian participants in the committees to take an active part in the next four-year work cycle of the PIARC 2020-2023. The Technical Committees in BFTI which will be established are: ROAD SAFETY, ROAD FLOORINGS, TRANSPORT INFRASTRUCTURE MANAGEMENT, BRANCHES, etc.



## **CANADA-QUEBEC**

### **2018 Annual General Meeting of Québec's National Committee (AIPCR-Québec)**



On December 7, 2018, in Québec City, more than 40 people attended the 2018 Annual General Assembly of Québec's National Committee (AIPCR-Québec). The first and second delegates from Canada-Québec to PIARC reported on the Association's current events. The highlight of this annual meeting remains the progress of the work of PIARC Technical Committees delivered by the Technical Coordinator and Strategic Theme Coordinators in Québec.

Among the other subjects that were discussed during the meeting, it is worth mentioning the process of sharing AIPCR-Québec's tasks with AQTr (Association québécoise des transports), the latter taking over part of the organizational and management work related to AIPCR-Québec's activities, while the technical work will continue to be supervised by the technical coordinator and the people responsible for the strategic themes.

A review of the October 2018 statutory meetings in Yokohama was also conducted. The new PIARC international name was announced: "PIARC", which will be accompanied, if necessary, by the designations *World Road Association*, *Association mondiale de la route* and *Asociación Mundial de la Carretera* in the three official languages. It was also announced that this new name will become official as of the 2020-2023 Strategic Plan.

The subject of the lunchtime conference was the ministère des Transports du Québec's (MTQ) Sustainable Mobility Policy, presented by Director General – Sustainable Mobility Policy and Electrification, Ms. Évangéline LÉVESQUE.

The content of the XXVIth World Road Congress, which will be held in Abu Dhabi, United Arab Emirates, in October 2019, was presented; thus, three proposals for conferences from Québec were accepted for the 2019 World Congress sessions.

Finally, the first details about the XVIth International Winter Road Congress, which will take place in Calgary, Canada, in February 2022, were discussed.

## **Meeting of AIPCR-Québec and the PIARC Canadian National Committee with the Representative of the National Committees**

On January 14 and 15, 2019, the Representative of PIARC National Committees, Mr. Saverio PALCHETTI, met in Montréal with representatives of AIPCR-Québec and the PIARC Canadian National Committee to discuss the functioning of the National Committees. The objective of the meeting was to submit to PIARC elements for improving the organization of national committees in order to enhance their effectiveness and increase their impact.

The topics for discussion focused on five main areas for improving the work of PIARC National Committees:

1. improving the structure and governance of national committees;
2. benefits and added value in establishing a national committee;
3. better support for the work of national committees;
4. development of exchanges between national committees;
5. increased awareness of national committees.

Following these discussions, a proposal for actions will be submitted to the PIARC General Secretariat for presentation at the next PIARC Executive Committee meeting in April 2019 in Buenos Aires, Argentina.



## **54th Transportation Annual Congress and Exhibition of the Association québécoise des transports (AQTr)**

As the AQTr International Expert Committee, AIPCR-Québec will be present at the 54th Transportation Annual Congress and Exhibition of the AQTr, which will be held from April 8 to 10, 2019, at the Saint-Hyacinthe Convention Center, in Québec. The theme of this year's Congress is "The Four Pillars of Transportation: Diversity, Sustainability, Development and Challenges".

The AQTr Annual Congress is one of the major mobilizing events in the field of transportation in Québec. It is characterized by the wealth of information in its conferences, the relevance and expertise of each speaker, its trade exhibition and the various activities offered. It represents an important moment in the year for anyone working in the transportation sector in Québec.

International speakers are invited to give technical conferences as part of the Congress. PIARC member international experts have participated in the event in the past: AQTr, through AIPCR-Québec, which is its International Expert Committee, wishes to increase the presence of these PIARC member experts at its events.

As in each of the previous editions, the 2019 AQTr Annual Congress will allow several AIPCR-Québec representatives to participate in the Congress conferences and present the advances in their field. It will also be an opportunity to reward a student who has won a grant in the 19<sup>th</sup> AIPCR-Québec Essay Competition.

## ECUADOR



Activities carried out by the National Committee of Ecuador in the last quarter of 2018.

1. Attendance at the PIARC Council meeting, held in Yokohama, Japan, on 23 and 24 October 2018
2. Attendance at the meeting of the National Committees in Yokohama on 25 October 2018
3. Continued promotion at national level for the XXVI World Road Congress to be held in Abu Dhabi from 6-10 October 2019
4. Technical information meetings on different topics concerning road issues that relate to this theme
5. Programming for the organization of the first National Technical Days on road maintenance.



## GERMANY

The following translations of Guidelines and Directives from FGSV were made in 2018

FGSV-No. 591 / B 8.3

TP BF-StB – Technical testing regulations for soil and rock in road construction

- Part B 8.3 – Dynamic Plate Load Testing with the Light Drop-Weight Tester, Edition 2012/Translation 2018



FGSV-No. 591 / B 8.4

TP BF-StB – Technical testing regulations for soil and rock in road construction -

- Part B 8.4 – Calibration Rules for the Light and Medium Drop-Weight Tester, Edition 2016/Translation 2018



FGSV-No. 610 / 8.3.1 E

TP Gestein-StB – Technical testing regulations for aggregates in road construction

- Part 8.3.1: Determination of the infiltration coefficient by the vertical tube infiltrometer,  
- Laboratory method, Edition 2012, Translation 2018



FGSV-No. 610 / 8.3.2 E

TP Gestein-StB – Technical testing regulations for aggregates in road construction

- Part 8.3.2: Determination of the infiltration coefficient by the modified vertical tube in  
infiltrometer,  
- In situ method, Edition 2012, Translation 2018



FGSV-No. 720 E

AL DSR-Prüfung (BTSV) – Test description for determining the deformation behaviour of bitumen and bituminous binders using a Dynamic Shear Rheometer (DSR) – Part 4: Binder Fast Characterisation Test, Edition 2017, Translation 2018



FGSV-No. 721 E

AL DSR-Prüfung (konstante Scherrate) – Test description for determining the phase transition temperature of viscosity modified binders using a Dynamic Shear Rheometer (DSR),

- Part 3: Testing with a constant shear rate, Edition 2017, Translation 2018



## **Trinational Research Project "Management of Coaches and Long-Distance Buses in Urban Areas"**

Rising coach and long-distance bus transport is causing major challenges in handling traffic due to the limited amount of available space, in particular in urban areas. Challenges include a lack of possibilities for stopping, short-term and long-term parking, facilities which are not sufficiently equipped for their requirements, obstruction to the remaining traffic, environmental conflicts such as noise and air pollutant emissions and a lack of barrier-free access. Challenges are comparable in all D-A-CH countries (the German-speaking countries Germany, Austria and Switzerland), so for the first time a trinational research project, funded by all the three research associations FGSV, FSV and VSS, could be completed at the end of the year 2018 (with public meetings in Cologne, Vienna and Bern) and will be made available.

The basis of the investigation into the coach and long-distance bus market is a clear differentiation between the two segments. **Coach transport** is occasional traffic which transports previously formed groups of passengers when required, upon the initiative of a client or a transport company itself. **Long-distance bus transport** connects stops on scheduled services over greater distances.

The main objective of the project was the formulation of common principles for the planning, shaping and management of facilities for coaches and long-distance buses. In order to reach this objective, the current situation was analysed in the first stage, notions were clarified, objectives and requirements were derived and approaches to solutions were identified.

Subsequently, a planning process for concepts and facilities was developed in a second phase. The various topics were worked through to this end, including volume analysis, operating concepts, location planning, equipping and developing facilities, managing and regulating as well as possible business models for running the facilities. A planning handbook is one of the results of the research project, which was divided into 11 work packages. The three research teams, led by the Swiss team, were accompanied by support committees, the technical coordination and a project control.

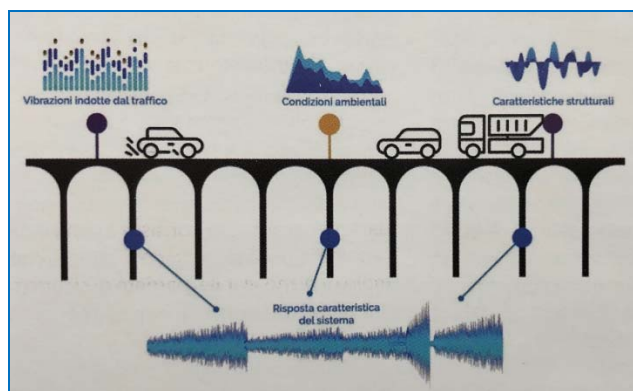
## **ITALY**



### **1. "PAPERS" CONTRIBUTION BY ITALIAN EXPERTS AT THE PIARC WRC ABU DHABI 2019**

The Italian Secretariat endorsed the experts in the elaboration of papers in response to the PIARC Call for the WRC in Abu Dhabi. To be noted that Italy with 37 replies to the Call is the second country in the PIARC world with contributions for the next World Road Congress. Furthermore, a national report was presented entitled: "Innovative Transport solutions to optimize Access and Mobility", written by Luigi CARRARINI, Responsible for Technological Infrastructure and Installations of Anas S.p.A. Another important contribution from Anas is represented by the paper written by Fulvio SOCCODATO, Responsible for the Infrastructural Asset Network of Anas entitled "The seismic events in central Italy in 2016-2017 and the road works interventions". This report covers the interventions by Anas for the repair of the state roads after the earthquakes that have recently struck central Italy (see figure below).





Anas' bridge monitoring system

## 2. MEETINGS OF THE CHAIRMEN, VICE-CHAIRMEN AND SECRETARIES OF THE PIARC ITALIAN TECHNICAL COMMITTEES, Rome 6 December 2018 e 30 January 2019

The sixth and seventh meetings of the Chairmen, Vice Chairmen and Secretaries of the PIARC Italian Technical Committees were held to discuss the final documents summarizing the activities of the 2016-2019 cycle of the national Technical Committees and Task Forces. As known, Italy activated on a national level approximately the same number of Technical Committees and Task Forces (CT/TF) as PIARC, respectively 17 and 2, concluding the work in December 2018. Also, another topic addressed was the preparation of the national and international activities for 2019.

The second meeting of January 2019 (see photo below) focused on PIARC Italia's private partners and Associations involved in the transport and infrastructure sectors which will participate and sponsor in the National Congress to be held in May in Rome and the world Congress in Abu Dhabi. The program of the National Congress contemplates two days at the Scuola Superiore di Polizia (Police Academy) where four round tables will be organized on the themes of security and safety, infrastructure monitoring, technological road applications and sustainability.

With regard to the Italian stand at the WRC in Abu Dhabi, a good participation is foreseen of private partners and sponsors. A program is being defined in order to give a good visibility to the participants.



Meeting of last January 30 in Rome

## 3.XXVIII PIARC C.N.I. National Congress May 14-15-16, 2019

The next Italian National Congress will be held on May 14-15-16 in Rome with the title "The Roads of the Future: safe, monitored, connected and sustainable". The Congress has the patronage of the Ministry of Infrastructure and Transport, Anas S.p.A. and OICE (Engineering and Consultancy Organization) which foresees the recognition of professional training credits by the Order of Engineers of the Province of Rome



Heading of the XXVIII National Italian Congress Program

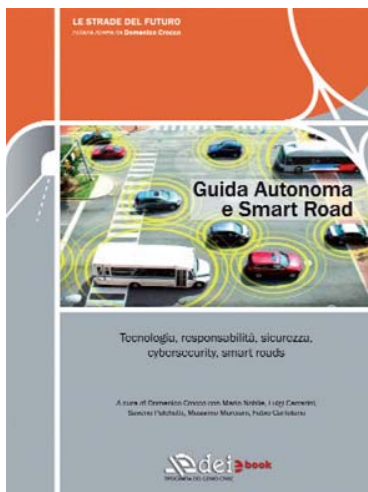
28 PIARC Italian National Congresses have been held since 1913.



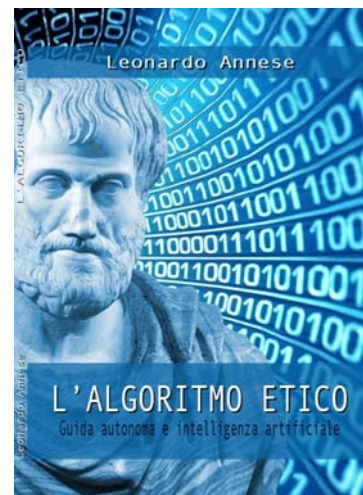
The PIARC Italy Congresses have been held in various parts of Italy from 1953 until 2006

#### 4. REPORT OF THE ITALIAN TECHNICAL COMMITTEE “CONNECTED AND AUTOMATED DRIVING “

The four Working Groups within this Committee: 1. Automated Vehicles, 2. Smart Roads, 3. Cybersecurity, 4. Regulation completed their activities and the Italian Secretariat produced their report (see image below).



“Connected and automated driving” Report



Publication by Leonardo ANNESE

#### 5. PRESENTATION OF THE BOOK “L’algoritmo etico” (The ethical algorithm) by Leonardo ANNESE

Within the Book Collection “The Roads of the Future” directed by Mr. Domenico Crocco, the book “L’algoritmo etico” (The ethical algorithm)” written by Leonardo Annese (see photo above), member of PIARC TC C1, proposes to deepen the ethical aspect of the Artificial Intelligence with particular attention to Smart Roads.

## KOREA

### **2018 PIARC Korean National Committee Council Meeting**

**December 20, 2018, Seongnam, Korea**

PIARC Korean National Committee (NC) held its council meeting on December 20, 2018 at the Korea Road Association office at Seongnam. Total 14 participants, including Yoon Woo Lee from the Ministry of Land, Infrastructure and Transport (MOLIT) in Republic of Korea on behalf of the First Delegate, chairperson of the Korean NC, and PIARC ExCom member, attended the meeting in order to share the results from 2018 PIARC Annual Meeting in Yokohama as well as to discuss the participation of the 26<sup>th</sup> World Road Congress.

The meeting was officially started with Kee CHOO CHOI, the chairperson of PIARC Korean NC. Following with the brief presentation on result from 2018 PIARC Annual Meeting in Yokohama, council members discussed the importance of TC activities and new 2020-2023 strategic themes. At the meeting, council members acknowledged to encourage Korean TC member's engagement in respective TC activities as well as TC Board nomination procedure. Thereby, it would strengthen the role of PIARC TC members from Korea in international road engineering network.

Also, at the meeting, council members discussed about the 26<sup>th</sup> World Road Congress (WRC) in Abu Dhabi and all agreed to participate WRC by holding the Korean pavilion. As Korea is the immediate World Road Congress host country in 2015, the committee highly encouraged PIARC members in Korea as well as support Korean Companies' participation. And Kang HOON LEE, PIARC ExCom member and vice president of Korea Expressway Corporation, promises strong support for Korean pavilion in the 26<sup>th</sup> WRC.

Regarding the national report, there has been discussion about the current research trend in Korea. Since there are many researches on safety issues, committee agreed to write about progress of road safety in Korea based on case studies of advanced technologies and data. The report will introduce the latest technologies such as Korea Institute of Civil Engineering and Building Technology (KICT)'s SOC Evaluation Research Center and K-City Project.

The meeting provided an opportunity for council members to exchange opinions to prepare strategic plan to increase participation and broaden PIARC activities in 2019.



2018 PIARC Korean National Committee Meeting

### **PIARC Korean National Committee Technical Committee Workshop**

**28<sup>th</sup> Feb. 2019, Korea NC Secretariat Office**

PIARC Korean National Committee (NC) held its Technical Committee Workshop on 28<sup>th</sup> Feb. 2019 at the Korea NC Secretariat office. Total 24 participants including the chairperson of the Korean NC and 23 TC members attended the workshop in order to share the results and outcomes from the 6<sup>th</sup> PIARC TC Meetings of 2016-19 strategic period.

The workshop was officially started with Prof. Keechoo CHOI, the chairperson of PIARC Korean NC. Following with the brief presentation of Korean TC activities and 26<sup>th</sup> WRC participation, Prof. Keechoo CHOI also encouraged TC members to actively participate in respective TC activities to promote sustainable exchange in the upcoming new strategic period.

During the workshop, 11 TC members presented on their research activities and outcomes. The detail information of each theme was as below:

Topic	Presenter	Main Contents
A.2. Road Transport System Economics and Social Development	Yongseok KO (Korean Research Institute for Human Settlements)	<ul style="list-style-type: none"> <li>- Introduction of WG's progress on international seminar called "Transport in the Fourth Revolution, The Dynamical Low-income World" in Tanzania</li> <li>- Introduction of Korean expressway development</li> <li>- Presentation of France, England, Czech, Japan, Tanzania</li> <li>- Field study to Arusha road</li> </ul>
B.1. Road Network Operations (ITS)	KeechoO CHOI (Ajou University)	<ul style="list-style-type: none"> <li>- Applications of Low Cost ITS and Big Data</li> <li>- Introduction of Korea's T-Map as a case studies of Low Cost ITS</li> <li>- Reflections on the International Seminar on Integrated Road Transport &amp; Mobility</li> <li>- Introduction of WG's progress and quality control of report</li> <li>- Report submission for WRC 2019</li> </ul>
B.2. Winter Service	Suk Jin JEONG (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Reflection on 15<sup>th</sup> Winter Road Congress</li> <li>- Publication of 'Snow and Ice Data Book'</li> </ul>
B3. Sustainable Multimodality in Urban Areas	Ok NAMKUNG (Seoul National University)	<ul style="list-style-type: none"> <li>- Contribution to Routes/Roads Magazine by introducing Seoul Subway Transfer Map for Users with Reduced Mobility</li> <li>- Sharing the issues in Republic of South Africa such as toll road management, climate change etc.</li> </ul>
B.4. Freight	Yoon-Hyuk CHOI (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Sharing the issues related to freight efficiency, environment</li> <li>- Introduction of Japan's freight efficiency policy in aging society</li> </ul>
D.1. Road Asset Management	Hye-Ok LEE (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of Korea Expressway Corporation's road asset management system</li> <li>- Reflection of 10<sup>th</sup> Malaysian Road Conference &amp; Exhibition</li> </ul>
D.2. Pavement	Seung Hwan HAN (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of WG'S progress</li> <li>- Sharing the issues related to the long-term and sustainable pavement</li> <li>- Sharing different issues related to pavement, such as carbon tax, EME System</li> </ul>
D.3. Bridge	Heungbae GIL (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of WG'S progress</li> <li>- Introduction of DarsGo Smart tolling System</li> <li>- Reflections on the 14<sup>th</sup> Slovenia Congress on Roads and Transportation</li> <li>- Sharing policy issues of France, Slovenia, Japan</li> </ul>
D5. Road Tunnel Operations	Nam Goo KIM (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of WG's progress on RAMS report, DG-QRAM Software upgrade</li> <li>- Sharing different issues related to large underground infrastructure, tunnel safety and management</li> <li>- Technical visit to Mont Blanc tunnel</li> <li>- Reflection on PIARC International Conference</li> </ul>
E.2. Environment Considerations in Road Projects and Operations	Chan Su REEM (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of WG's progress</li> <li>- Introduction of Korea's road noise related policy</li> <li>- Sharing policy issues related to air quality and noise</li> <li>- Technical visit to M30 underground tunnel</li> </ul>
TF B.2. Automated Vehicles: Challenges and Opportunities for Road Operators and Road Authorities	Ji Woon KANG (Korea Expressway Corporation)	<ul style="list-style-type: none"> <li>- Introduction of Korea's Presidential Committee on the Fourth Industrial Revolution (PCFIR) and C-ITS</li> <li>- Sharing policy issues on France, England, Japan, Australia</li> </ul>

The workshop provided a valuable opportunity for TC members to exchange perspectives and suggestions on the areas concerned as well as to integrate the work for 2019 World Road Congress.



2018 PIARC Korean National Committee Technical Committee Workshop

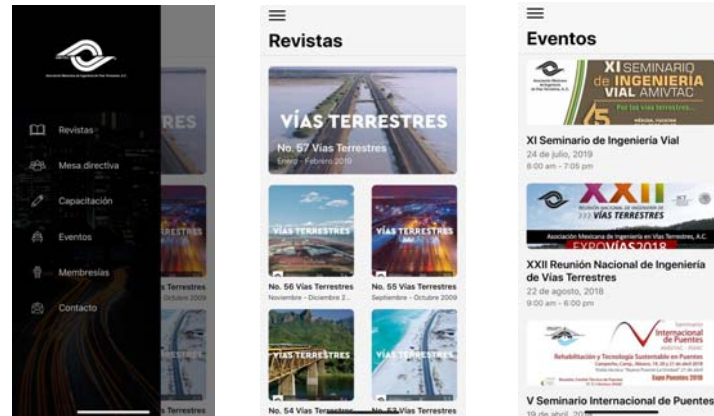


## MEXICO

### **AMIVTAC's app**

January 2019

To improve the Communication among its members, the Mexican Roadways Engineering Association developed an app that allows users to be aware of AMIVTAC's activities, publications, events, etc. This app is available for free for iOS and Android devices.



### **National Competition, PIARC prizes 2019**

January 2019

After the success of the first stage of the national competition of PIARC prizes 2019, AMIVTAC continues working on the development of the competition and providing support to the authors who are working on their articles. In the upcoming months, a jury of experts will be integrated who is going to evaluate the delivered articles to choose a winner in each one of the categories.

### **XI Roadways engineering seminar**

Merida, Yucatan. 24<sup>th</sup> – 27<sup>th</sup> July 2019

To promote the exchange of knowledge, AMIVTAC organizes the XI Roadways engineering seminar that will be celebrated at the southeast of our country. This event gathers both public and private sector as well as students from all the states of Mexico.



### **Magazine: Vías Terrestres**

No. 57, January – February 2019

The 57<sup>th</sup> edition of the Vías Terrestres magazine includes articles related to innovation in pavements and road maintenance, besides an article regarding certifications at airports in Mexico. These and more articles, in addition to previous editions of the magazine, are available electronically for free at AMIVTAC's app and, <http://www.amivtac.org/revista.php>



## POLAND



### 1.Events

#### **a. II Conference on road technology, 28-29 of November 29, 2018, Lublin, Poland**

Polish Road Congress, together with Lublin University of Technology and Polish company producing concrete "Cement Ożarów" organized second edition of Lublin Conference of Road Engineering "substructures - soil reinforcement - concrete roads".

The conference dealt with a wide range of topics: from roads with concrete surface to stabilization and strengthening of the soil and quality monitoring in road construction. The second day of the conference was devoted to this last topic, organized in cooperation with the General Directorate for National Roads and Motorways. Papers and presentations by outstanding experts from the scientific world, road administration units: GDDKiA and Voivodship Road Authorities and road industry companies provided valuable knowledge on the latest technical solutions to improve the condition of the road network, increase road durability and increase the efficiency of outlays for road construction and modernization.

A total of 180 representatives of the road administration, academia and road construction companies attended the conference.

The conference program was divided into thematic blocks referring to the main issues discussed in the course. In the first session, dedicated to concrete pavements, Piotr KIJOWSKI from the Cement Manufacturers Association discussed the new Polish General Technical Specifications for the surface of cement concrete. Specifications define requirements for cement, aggregates and finally for concrete used for pavement construction on national roads.

#### **b. Polish-German joint seminar, Szczecin, Poland, 5-7 of December 2018**

On December 5-7, a Polish-German seminar was held. Polish side was represented by Polish Road Administration - GDDKiA, as well as Polish National Committee of PIARC with presence of high level experts from Technical Universities. From German side were present experts from the German Ministry of Transport which defines the strategy for the development of the road network, BAST which is responsible for technological and research elements as well as FSGV in the development of standards and guidelines and in the same time constitute German National Committee of PIARC. Polish-German seminars are a cyclical meeting, organized alternately in Poland and Germany.

Topics are indicated by experts from both countries and results from current priorities. During the meeting in Szczecin, the experts were divided into four working groups.

1. Contract regulations / tender procedures
2. Road works / road surfaces / road management
3. Environmental protection issues
4. Traffic safety and ITS

The task of each group was to discuss the selected areas and present the most important points that will determine the directions of cooperation in the future.

The last day of the seminar was dedicated to a technical visit. The participants of the seminar had the opportunity to visit the construction site of the S6 road. This is a key investment not only for this region but for the entire communication network in Poland. This road will facilitate transit from Szczecin to Gdańsk in the best standard of an expressway.

### **c. Polish Tunnel Forum, Wrocław, Poland, 23 of January 2019**

Around 100 people took part in the first Polish Tunnel Forum. The honorary patrons of the conference were: General Director of National Roads and Motorways in Poland and Voivode of the Dolnoslaskie Voivodship.

Such a great interest of designers, contractors, and suppliers of solutions in the field of management and safety in tunnels was due to the fact that many tunnel investments were started in Poland, mainly on expressways leading to the southern border of the country. According to Mr. Jarosław WAŚOWSKI, director of the Road Network Management Department of GDDKiA, the total length of tunnels on national roads after completion of these investments will amount to 26550 meters. In the tender phase there are tasks involving the construction of two tunnels. More investments are being prepared, covering a total of 8 tunnels.

Experts presented possible technologies in all stages of construction projects regarding tunnels. It was underline that each project must be initiated by excellent the recognition of the subsoil is crucial.

The event had international character, main speaker was Mr. Marc TESSON - the chairman of the PIARC Technical Committee for the operation of road tunnels.

The subject of his speech were the most important conclusions resulting from last year's conference in Lyon, organized by PIARC, regarding the operation and safety of road tunnels. Much attention has been devoted to new security challenges. They are related to the s technological progress in ITS systems and their application to tunnel management, the dissemination of alternative cars (hydrogen, liquid gas, biodiesel or electric batteries), which may intensify the effects of possible accidents and fires. Among the questions that need to be answered are also the measures that reduce the risk how to organize maintenance treatments in tunnels with particularly high traffic volume and where there are no good detours.

The Polish Tunnel Forum will be a cyclical event organized every year in a different place, in cooperation with the Polish Road Administration. The first Forum was organized in Wrocław. In this region the longest road tunnel in Poland will be built in Stare Bogaczowice, with a length of 2,290 meters.

## **SLOVAKIA**



### **23rd Seminar of Ivan Poliaček**

The 23rd Seminar of Ivan POLIAČEK was held on November 21 - 23, 2018 in Low Tatras. The event was organized by the Slovak Road Association in cooperation with Department of Transportation Engineering of Slovak University of Technology and attended by more than 100 participants.

The Seminar with international participation took place at the occasion of the 80th anniversary of the foundation of the Slovak University of Technology. The expert part of the program was devoted to the road management and road network development, planning design and building of road infrastructure. The next year of the Seminar of Ivan POLIAČEK is going to take place in November 21 – 22, 2019 in Low Tatras.



## SPAIN



### **COURSE FOR OPERATORS OF AUSCULTATION EQUIPMENTS FOR ROAD PAVEMENTS – Madrid, 31 January to 8 February 2019**



The purpose of this classroom course has been to provide additional training for operators of auscultation equipment, with the aim to ensure not only an increase in the quality of the measurements made, but also the establishment of minimum common criteria in the collection of data, based both on existing data collection legislation and on the experience gained over the years in the field of auscultation.

**COURSE DIRECTOR:** Mr. Julio José VAQUERO GARCÍA - Civil Engineer. Chairman of the ATC Technical Committee “Road Pavement”.

**Head of the Service:** Auscultation of Road Surfaces and Pavements. General Directorate for Roads. Ministry of Development.

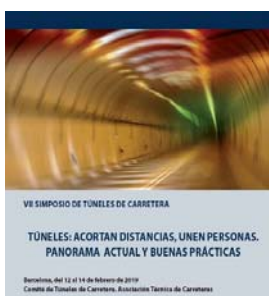


Photo of the group

### **VII ROAD TUNNELS SYMPOSIUM “Tunnels: Shorten distances, connecting people. Current overview and good practices”**

This Symposium held in Barcelona on 12, 13 and 14 February, organized by our Technical Committee “Road Tunnels” and attended by 600 national and international participants, has been a great success. 20 companies/organizations participated in the trade exhibition showing their innovative equipments, products and services.

Patrick MALLÉJACQ, PIARC General Secretary, gave a presentation on PIARC activities and promoted the next PIARC 26<sup>TH</sup> WORLD ROAD CONGRESS in Abu Dhabi in October this year.





On the occasion of the VII Road Tunnels Symposium the Spanish National Committee "Road Tunnels" has published a book under the direction of Mr. Rafael LÓPEZ GUARGA, Chairman of our National Committee.

All those attending the Symposium has received a free copy of the book.

### RUTAS Magazine



Number 177 (October-December 2018) of our quarterly RUTAS Magazine has been released.

We offer the possibility of downloading our RUTAS Magazine in digital format from our website: [www.atc-piarc.com](http://www.atc-piarc.com)

If you wish to receive our digital RUTAS Magazine directly, please send an email to: [info@atc-piarc.com](mailto:info@atc-piarc.com)

#### Forthcoming events:

March 2019: Technical Conference on: ***Piers Pathologies and Reinforced-soil walls for Bridges and Road Structures***

The program includes a posthumous tribute to Mr. Carlos OTEO MAZO, who has recently passed away. Mr. Carlos OTEO has been a reference person in geotechnics in Spain, Member of Merit of our Association and Chairman of our Geotechnical Committee, during a decade.

April 2019: Technical Conference on: ***Roundabouts: Design, mobility and safety***



### SWITZERLAND

On the occasion of its annual conference, which took place in Bern on 28 November 2018, the Swiss National Committee was very honoured to welcome Claude VAN ROOTEN, President of the PIARC/PIARC World Road Association. In welcoming this distinguished guest, Andreas HELLER, President of the Swiss National Committee, pointed out that "Mr VAN ROOTEN'S presence shows that Switzerland is recognised within the World Road Association and that our valuable work in the various technical committees is appreciated". Through its National Committee, created in 1932 - one of the oldest committees of the Association - Switzerland has long demonstrated a strong interest in PIARC's activities. She was not only a member of the governing bodies but also, in the person of Olivier MICHAUD, President of the World Road Association.

During his presentation at the opening of the event, Mr. VAN ROOTEN spoke about the important role played by PIARC in the international dissemination of good practices, particularly within the LMIC countries, and the challenges that the Association will face in the near future. Another distinguished guest, Mr. Jürg RÖTHLISBERGER, Director of the Federal Roads Office and 1st Delegate of the Swiss National Committee, also stressed the importance of the exchange of experiences promoted by PIARC, which "allows Switzerland to compare itself with other countries". In his presentation, entitled "Individual mobility and national roads - the challenges", he gave an interesting overview of the country's strengths and weaknesses, including megatrends and areas of action.

Five Swiss representatives in the technical committees then presented the conclusions of the work of their respective committees. Rade HAJDIN, TC D.1 Asset Management, spoke of innovative approaches in this field, Christian GAMMETER, TC D.5 Tunnel Operations reported on "sustainable tunnel operation" with a focus on reliability, availability, ease of maintenance and equipment safety, Martin RUESCH, Chairman of TC B.4 Freight Transport spoke to him about the national policy on multimodal

freight transport and road freight transport management. Marion DOERFEL, M.C. of TC C.2 Design and operation of safer road infrastructure focused in particular on the issue of ensuring the safety of children, all too often victims of fatal accidents, particularly in developing countries, and Philipp STOFFEL reported, in the absence of Manuel ALVAREZ, TC D.3 Bridges, on a "bridge design for inspection and maintenance". The presentations are available in German at <http://www.aipcr.ch/veranstaltungen/jahreskonferenz/jahreskonferenz-2018/>. The members of CN Switzerland will meet in May in Ticino for the 2019 General Assembly and then in Abu Dhabi for the World Road Congress, where the Swiss National Committee will be present with a stand.



# World Road Association Congress



More information: <http://www.piarcabudhabi2019.org>