### **ANNUAL REPORT**

October 2016 – September 2017

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## **1** Foreword from the President

This 2016-17 activity report is the first I've been asked to preface; presented in an abridged format, it provides an overview of the work that you Council members, along with your technical experts and the Secretariat General, have completed over the year since the election of new Association governing bodies, in September 2016 in Cape Town (South Africa). The outcomes of these elections, in terms of the Association's Vice Presidents, Commission Presidents or Strategic Theme Coordinators, offer an accurate reflection of the geographic, economic, cultural and linguistic diversity of our members, all bonded by a passion for roads.

I'd like to start by paying homage to our Chilean colleague Alberto Bull Simpfendorfer, who passed away June 18<sup>th</sup> of this year. Alberto had been assigned Strategic Theme A and strived, despite his illness and in conjunction with Ernesto Barrera, to fulfill the mission in its entirety after accepting it last year. Let me also recognize the memory of Jean Mathieu Mbaucaud, former First Delegate of the Congo and Executive Committee member, upon his passing last December. Heavily involved in PIARC activities, he was instrumental first in securing Congo's Association membership in 1998, then in launching the Congolese National Committee in 2005.

The 2016-19 cycle is now in full swing; while apparently still early in this cycle, the Association's Congress schedule is heating up, led by next February's Winter Road Congress in Gdansk and the Abu Dhabi Congress just two years away. The Technical Committees have hit their stride; I'm pleased to point out the numerous seminars and workshops that have already been held and feedback suggests that overall progress until now has been highly satisfactory. We'll address this progress in detail in Rome this coming December at the mid-term meeting halfway through the cycle.

The current Strategic Plan has already been a source of innovation in its handling of topic content, particularly by adding a fifth theme, dedicated to the environment and climate change, to the Association's traditional fields of emphasis. On top of this, the past year has been characterized by upgrades to the General Secretariat's mode of operations. For starters, we are now a trilingual organization (English, Spanish, French) from the standpoint of exchanges between the General Secretariat and its members, papers published, and the *Routes/Roads* magazine (in both print and electronic formats). This evolution had been discussed for quite a while, at times heatedly, during previous Council meetings. As someone who hails from a trilingual country (and not just bilingual as is often believed), I'm able to gauge both beneficiaries' satisfaction with these changes (perhaps their disappointment too) and the demands they place on Secretariat General staff in terms of expanded translation needs, in addition to forcing those of us responsible for producing content to exercise even greater discipline.

This year has also shined the spotlight on communication: you're already the recipient of a monthly newsletter; the website has undergone more extensive transformation; and other initiatives are in the works, backed by the Communication Commission. These developments are sponsored by the General Secretariat, as part of its implementation of the plan approved last year, calling for: recruitment of a Communications Manager; enhanced visibility on the Web; and a noteworthy presence at the most high-profile international road events, among which I would naturally include TRB and the OECD's International Transport Forum, two major transportation organizations with whom our ties have strengthened over the years.

Communication is only tangible if it can count on a solid support; I'm referring here to the Association's technical output, led by its Committees' reports. It might seem paradoxical to be highlighting such output in October 2017 given that the previous cycle was concluded with the Seoul Congress two years ago. But experience has shown that only steady effort is able to produce, verify and (as needed) translate technical reports that surpass the milestones set by a Congress. I'm pleased to announce that with a few exceptions, all scheduled reports are now published or currently being published, in all three of our working languages. Thanks go not only to the TC Chairs or Secretaries from the former cycle, who on occasion devoted far more time than what their initial mission called for, but also to the countries and regional associations that accepted to absorb the cost of some translations. We are indeed truly grateful.

Beyond the activities of the President, General Secretariat and Commissions, which tend to be more readily remarked by all, I'd like to conclude by citing the works produced by members, governments, technical committees and experts, all of which benefit to the Association. I know how much each of these parties has been committed to PIARC and seeing it thrive in spite of the myriad constraints and challenges along the way.

Let's turn our attention now to the snows of Poland and sands of Abu Dhabi, in expressing the strong wish that the two years of upcoming Congresses will sustain this tremendous enthusiasm and shared effort, to the benefit of our members and all road industry partners.



Claude Van Rooten President of the World Road Association (PIARC), 2017-2020

# 2 Activities from October 2016 to September 2017

## 2.1 Executive Committee

The Executive Committee manages the Association in accordance with the guidelines and decisions of the Council, with the goal (Goal 1) set by the Strategic Plan to constantly improve the management and operation of the Association.

The Executive Committee holds two meetings a year. They were held on 20-21 September 2016 in Cape Town (South Africa) for the outgoing Executive Committee of the 2012-2016 cycle; and on 28 February-1<sup>st</sup> March 2017 in Abu Dhabi (United Arab Emirates) for the new Executive Committee of the 2017-2020 cycle, who was elected at the Council meeting in Cape Town on 22 September 2016. The current membership of the Executive Committee is included in Annex 1 of this report.

The first meeting of the new Executive Committee was essentially devoted to setting up the new Commissions and allocating specific missions to the Vice Presidents and a number of members of the Commissions. It was therefore decided to entrust the three Vice Presidents with an ambassador mission, each of them acting as the privileged contact person for the members and partners of the Association in his region of the world.

### 2.1.1 Strategic Planning Commission

The Strategic Planning Commission (SPC) met on 19 September 2016 in Cape Town. It was the last SPC meeting of the 2012-2016 cycle to be chaired by Jeffrey Paniati (United States). Then the new SPC Commission met shortly after it was elected, in Abu Dhabi (United Arab Emirates), under the chairmanship of Oscar Callejo (Mexico). Other meetings were also held by videoconference.

The SPC Commission has been focusing on its work program, which includes the drafting of the next Strategic Plan of the Association for the 2020-2023 period. The Commission has also reviewed the completion of the reports from the 2012-2015 work cycle; and supervised the progress of the work of the current Technical Committees and Task Forces.

### 2.1.2 Finance Commission

The Finance Commission met on 23-24 January 2017 in Barcelona (Spain), and on 18-19 September 2017 in Paris (France), under the chairmanship of Friedrich Zotter. In addition to its usual tasks, i.e. reviewing the previous year's accounts, implementation of the current year budget and preparation of the next budget, the Commission has started to develop a financial strategy for the Association, on proposal of the Chairman.

It should be pointed out that starting in 2016, the Association is required to have its accounts certified by an external accountant, for legal reasons linked to the amount of the subsidy provided by the French government.

### 2.1.3 Communications Commission

The Communications Commission (ComCom) met in Abu Dhabi (United Arab Emirates) on 3 April 2017, under the chairmanship of Diane Gamble (New Zealand) and has held several meetings by videoconference. ComCom contributes to identify the strategic direction of the work of the General Secretariat, who has strengthened its communications skills in February 2017.

Over the past year, the Communications Commission has created three working groups focusing on the following topics:

- **Cluster 1** Strategic partnerships, events programme, congresses + prizes and website
- Cluster 2 Products policy, several collections, products promotion, editorial board for Routes/Roads
- Cluster 3 Internal communications, review of the Blue Guide, member development.

## **2.2 Conference of PIARC National Committees**

The conference of National Committees (NC) met at a conference on the occasion of the Council meeting in Cape Town in September 2016. An assessment of the past cycle's activities was made, ending with the Cape Town meeting. Bojan Leben (Slovenia), outgoing representative of National Committees, gave considerations on possible future developments for the new mandate, i.e. energizing the National Committees; ensuring a closer cooperation among them; aiming at a wider use of each NC website.

Lastly, the National Committees have elected Saverio Palchetti (Italy) as representative of National Committees on the Executive Committee for the 2016-2019 cycle.

### 2.3 General Secretariat

In addition to the logistic support brought by the General Secretariat (GS) to the Association's bodies, the day-to-day running of the Association, the participation in the work of the Commissions and the publication of the Routes/Roads magazine, it is worth pointing out the following actions led during the past year (described in more detail in the next pages):

- recruitment of a communications manager, Marina Domingo Monsonís, in charge of implementing the communications plan presented in Cape Town;
- release online of almost all Technical Reports from the 2012-2015 cycle (see paragraph 2.7) and the proceedings of the XXVth World Road Congress in Seoul;
- further development of the various web-based Manuals of the Association (see paragraph 2.8);
- co-operation with partner associations and institutions (see paragraph 2.9).
- launch of the Special Projects selected at the Cape Town meetings.

Lastly, Kirsten Graf-Landmann from Germany has joined the team of the General Secretariat as part-time Technical Advisor, in charge of Strategic Theme C – Road Safety.

### 2.4 Congresses of the World Road Association

#### 2.4.1 XXV<sup>th</sup> World Road Congress, Seoul, November 2015

The Proceedings of the Congress were finalized and published on DVD and on line on the website of the Association.

### 2.4.2 XVth International Winter Road Congress, Gdansk (Poland) 20-23 February 2018

The period since September 2016 has been marked by the following: setting up of the Polish Organizing Committee of the congress; several meetings have taken place in Poland to assess the progress of preparation; in the course of 2017, opening of online registration to the Congress and exhibition. Lastly, the result of the call for papers is particularly fruitful, with nearly 300 abstracts submitted and a total of 179 papers selected for the Congress.

### 2.4.3 XXVIth World Road Congress, Abu Dhabi, 6-10 October 2019 (UAE)

At the meeting held in Abu Dhabi in February 2017, the congress hosts gave the Executive Committee a status update of preparation of the XXVIth World Road Congress and the exhibition. The congress and events company that will organize the Congress has also been selected by the hosts.

#### 2.4.4 XVIth International Winter Road Congress 2022

The call for candidacies for hosting the XVIth International Winter Road Congress was launched in 2017. Two proposals have been received within the timeframe, namely Calgary (Canada) and Chambéry (France).

## **2.5 Technical Committees and Task Forces**

PIARC's 22 Technical Committees and Working Groups have completed the launch process of their work, which includes developing a detailed work program and a calendar of meetings covering the full 2016-2019 cycle.

Resulting from the work achieved so far, seminars have also been held, at the following dates and locations:

- TC B.1 & B.3 seminar in Rosario (Argentina), 24-27 October 2016, in connection with the Argentine Seminar on road traffic and management;
- TC B.4 seminar in Foz de Iguaçu (Brazil), 7-8 November 2016, in connection with a conference on weigh-in-motion;
- TC E.1 workshop in Seoul (South Korea), 20-23 November 2016;
- TC E.2 workshop in Melbourne (Australia), 10-14 November 2016;
- TC B.4 seminar in Mexico City (Mexico), 27-28 March 2017;
- TC D.3 workshop in Madrid (Spain), 4-6 April 2017;
- TC C.1 workshop in Marrakech (Morocco), 5-8 April 2017;
- TC C.2 workshop in Santiago (Chile), 30 April-5 May 2017, in connection with the Chilean Road Safety Congress;
- TC D.1 & D.4 seminar in Santa Cruz (Bolivia), 22-26 May 2017;
- TC E.3 workshop in Tokyo (Japan), 30-31 May 2017;
- TC B.3 seminar in Beijing (P. R. China), 6-8 June 2017, in connection with the World Transport Convention;
- TC B.2 seminar in Mendoza (Argentina), 27-29 May 2017, in connection with the Argentine Winter Road Congress;
- TC D.2 seminar in Cancún (Mexico), from 21 to 22 August 2017;
- TC D.5 workshop in Cape Town (South Africa), 18-20 October 2017.

### 2.6 New developments in the website www.piarc.org

The website is at the heart of the Association's communications and operations.

The English and French version of the website are updated by the General Secretariat, while the Spanish version is updated by the secretariat of the Spanish National Committee (ATC).

World Road Association – Annual Report

The current version of the website was introduced on the occasion of the World Road Congress in Mexico City at the end of September 2011. Over the last year, no major development was introduced. In accordance with the decisions made, reflections about redesigning the website have started. The aim is to improve search and reading comfort and adjust to new digital tools such as responsive web design.

The table below shows the statistics of the number of visitors of the website, which have remained perfectly stable over the past year.

Period	1 Aug 2015 – 31 Jul 2016	01 Aug 2016 – 31 Jul 2017
Number of visits	90 611	94 288
Number of single users	46 176	46 403
Number of pages viewed	494 826	497 071
Average number of pages per visit	5,46	5,27
Average duration of visits (minutes)	5:09	4:47

Note: consultations by the General Secretariat are not taken into account in these statistics.

These figures are expected to increase over the next year, as the communications manager recruited in February 2017 is focusing on adding new contents on a more regular basis.

Document	Downloads
2016R35EN.pdf - Experience with Significant Incidents in Road Tunnels	527
Strategic-Plan-2016-2019-November-World-Road-Association.pdf	516
05-05-B.pdf - Fire and Smoke Control in Road Tunnels	500
2017R01EN.pdf - Design fire characteristics for road tunnels	488
2016R03EN.pdf – Fixed firefighting systems in road tunnels: Current practices and recommendations	395
Gdansk-2018-Call-For-Papers-World-Road-Association-PIARC.pdf – Gdansk 2018 Call For Papers	366
2016R17EN-Road-Pavements.pdf - State of the art in monitoring road condition and road/vehicle interaction	311
2016R20EN.pdf - Human Factors Guidelines for a safer Man-Road Interface	304
2016R19EN.pdf - Road Tunnels: Complex underground road networks	295
WEB-2012R05-EN-revise.pdf - Road tunnels: vehicle emissions and air demand for ventilation	279
2016R07EN.pdf - Preserve your Country's roads to Drive Development	274
WEB-2011R02.pdf - Road tunnels: operational strategies for emergency ventilation	261
05.14 VCD pdf _ Road Tuppela: Vahiala Emissiona and Air Domand for	
05-14-VCD.pdf – Road Tunnels: Vehicle Emissions and Air Demand for Ventilation	259
2016R18EN.pdf - Expected service life of wearing courses	255
2016R12ENpdf - Methodologies and tools for risk assessment and management applied to road operation	248
2016R04EN.pdf - Assessment of budgetary needs and Optimization of maintenance strategies for multiple assets of road network	246
05-16-bilingue0207.pdf - Systems and equipment for fire and smoke control in road tunnels	242
SpecialProject-ClimateChange-EN.pdf - International climate change adaptation framework for road infrastructure	237
2016R24EN.pdf - The Role of Engineering in Combatting Driver Distraction and Fatigue Road Safety Risks	229
Plan-Estrategico-2016-2019-Noviembre-Asociacion-Mundial-de-la-Carretera- PIARC.pdf	223
2016R16EN-Tunnel-Operation.pdf - Lay bys and protection against lateral obstacles - Current practices in Europe	218
2016R29EN.pdf - Appraisal of sustainability of transport infrastructure plans	217
Plan-strategique-2016-2019-Novembre-Association-Mondiale-de-la-Route- AIPCR.pdf	203
2016R35ES.pdf - Experiencia con incidentes significativos en túneles de carretera	197
2016R22EN.pdf - Guide to good practice Performance Frameworks of Road and Transport Administrations	195
Total: 3 976 single documents for 42 299 downloads	42 299

It is not possible to make a comparison of downloads from one year to the other as the documents released on line are renewed every year. This is particularly the case for the 2016-2017 period, with a considerable number of technical reports released on line. It should be pointed out that most of the reports viewed are in English language. Also, there is a high interest for the reports produced by the Technical Committee on Tunnel Operations, accounting for half of the reports listed in the top 25 downloads.

### 2.7 Electronic Manuals

The three electronic manuals of the Association were introduced during the Seoul Congress in November 2015. Over the 2016-2019 work cycle, the related Technical Committees (TC) are responsible for developing and updating the manuals. The TCs involved have organized themselves to achieve that task, combining research and technical rigor—one of the strengths of the Association—with the constraints of this new media.

In addition, the Association is further implementing its policy aiming at expanding the electronic manuals, with the release online, in early October 2017, of the manual on Road Asset Management produced within the TC on Asset Management.

As a support to the related TCs, the General Secretariat brings support services to the definition and design of the manuals, and organizes an exchange of experiences among practitioners as was the case at a meeting held in Paris in January 2017.

It is interesting to review the statistics on the evolution of consultation of online manuals. First, two general comments: the number of pages per visit and the average duration of each visit is decreasing as users have become more familiar with the online manuals and reach straight the information they are looking for. In addition, the consultation of the Road Safety Manual and Road Network Operations Manual has remained stable, based on an extrapolation of the November 2015 to July 2016 period to a full year. In contrast, the consultation of the Road Tunnels Manual has more than doubled, in line with the long-standing success of the PIARC reports in the area of tunnels. The multilingual feature of the Road Tunnels Manual probably also contributes to its success.

Period	01 Nov 2015 – 31 July 2016 9 months	01 Aug 2016 – 31 July 2017 12 months	
Number of visits	11 048	14 970	
Number of single users	7 671	10 646	
Number of pages viewed	46 635	50 826	
Average number of pages per visit	4,22	3,4	
Average duration of visits (minutes)	4:11	3:47	

#### Road Safety Manual

### Manual on Road Network Operations and ITS

Period	01 Nov 2015 – 31 July 2016 9 months	01 Aug 2016 – 31 July 2017 12 months		
Number of visits	7 579	10 854		
Number of single users	5 173	7 604		
Number of pages viewed	36 331	42 660		
Average number of pages per visit	4,79	3,93		
Average duration of visits (minutes)	5:14	4:22		

#### Road Tunnels Manual

Period	01 Nov 2015 – 31 July 2016 9 months	01 Aug 2016 – 31 July 2017 12 months	
Number of visits	7 910	20 793	
Number of single users	5 390	15 780	
Number of pages viewed	42 353	75 528	
Average number of pages per visit	5,35	3,63	
Average duration of visits (minutes)	5:58	3:38	

## 2.8 Publications

#### 2.8.1 Technical reports

Thirty-two reports from the 2012-2015 cycle have been released online in English over the past year. Thirty reports have also been published in French and thirteen in Spanish. The work is now almost completed and has required hiring temporary staff.

Translations that were not provided by the Technical Committees were able to be achieved thanks to the support of AGEPAR, Canada, Canada-Quebec and France for the French language; thanks to ASANRA for the English language; and thanks to DIRCAIBEA member countries for the Spanish language (Chile, Colombia, Costa Rica, Cuba, El Salvador, Mexico), and also Spain and Mexico for the revision process.

The list of reports is included in Appendix 3 of the Annual Report.

#### 2.8.2 Routes/Roads magazine

The *Routes/Roads* magazine is an essential product of the Association, contributing to its mission of knowledge dissemination. Two major changes occurred during 2017: *Routes/Roads* is now published in the three working languages of the Association, starting with the electronic version in January 2017, and in June 2017 for the printed format; the second change is the introduction of commercial advertising from 2017 on.

*Routes/Roads* is from now on printed in three separate monolingual editions in English, French and Spanish, with a refreshed layout and design to make it more attractive.

The topics covered since the Council meeting in Cape Town are the following:

- General Report of the Seoul Congress RR 371, December 2016
- Governance of Multimodal Transport RR 372, March 2017
- Autonomous Vehicles, Connected Vehicles RR 373, June 2017
- Innovative Techniques RR 374, September 2017.

## 2.9 Special Projects

While 2015 had been marked by the simultaneous release of three electronic manuals, the past period since Cape Town was marked by the programme of Special Projects reaching cruising speed. After producing two documents in 2014-2015 on road maintenance and on climate change, the Association's intention is to complete two medium-size projects every year. Over the 2016-2017 period, the projects selected are « Unpredicted Infrastructure Failure » and « Use of Unmanned Aerial Systems (UAS) ». These should be completed in September 2017.

## 2.10 Cooperation with other associations/organizations

Promoting cooperation with regional associations of road administrations and with international organizations having similar objectives is one of the goals of the Association's Strategic Plan. This enables to position roads as a key player of the transport system and also contributes to a fruitful development of the products of the Association.

The past year was marked by several actions that were initiated to contribute to this goal:

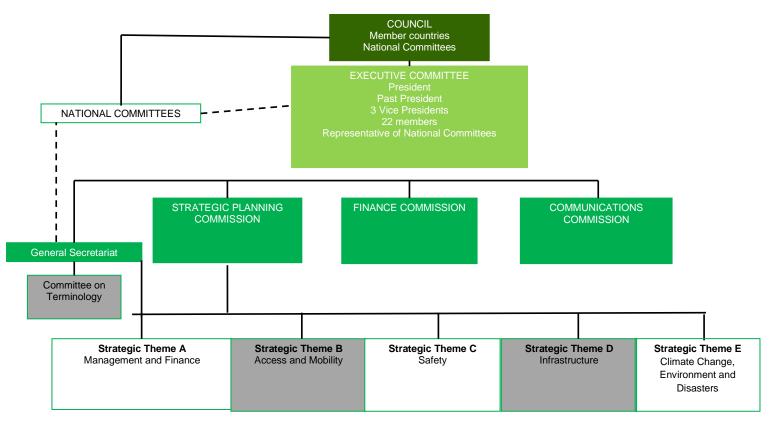
- involvement of experts from the World Bank and the International Transport Forum notably, as associate members of Technical Committees;
- participation of the General Secretariat in the meetings of the Conference of European Directors of Roads (CEDR) with a view to coordinating the activities and strategic plan of both organizations;
- ongoing reflections on the future of the HDM-4 software; in particular through webex meetings of the interim steering group; Oscar de Buen has also received mandate to set up an internal working group on the future developments of HDM-4 and to ensure the strategic representation of the Association during discussions with the partners and stakeholders on the future developments of HDM-4, with the support of the General Secretariat; technical improvements are planned to be implemented during 2018;
- intervention by the PIARC President and participation of the Secretary General in the International Transport Forum in June 2017 in Leipzig (Germany); on that occasion, the Gdansk 2018 International Winter Road Congress was promoted on a joint booth run by Poland and PIARC;
- signature of a new protocol of agreement with the Nordic Road Association-NVF;
- Signature of a protocol of agreement with the South-East Europe Transport Observatory (SEETO);
- Participation of the PIARC President and General Secretariat in the 29<sup>th</sup> Baltic Road Conference in Tallinn (Estonia), organized by the Baltic Road Association in August 2017. On that occasion, the XVth International Winter Road Congress Gdansk 2018 was promoted on a joint booth with Poland;
- Participation of the General Secretariat in the 33<sup>rd</sup> Council meeting of road directors of Iberia and Ibero-America (DIRCAIBEA) in Asunción (Mexico) in May 2017; this included coordination of the four joint working groups;
- Participation of the General Secretariat in the REAAA Council meeting in Indonesia in March 2017 in view of the preparation of joint seminars and setting up joint working groups;
- actual launching of two African task forces in coordination with AGEPAR on design standards for African highway network; and on updating practical rules of pavement design for French speaking African countries.

# Annex 1. The Association in 2017

## Organisation

The World Road Association (PIARC), established in 1909 as a non-profit organization, is the oldest international association concerned with all issues related to roads and road transport. The Association was granted consultative status with the United Nations Economic and Social Council in 1970.

The current structure of the organization is presented below.



### THE WORLD ROAD ASSOCIATION STRUCTURE

## **Governing bodies**

The *Council* is the highest governing body responsible for the Association. At its meeting held on 21-22 September 2016 in Cape Town (South Africa), 91 delegates, representing 38 member countries were present.

As at 1<sup>st</sup> September 2017, the *Executive Committee* comprises the following membership:

- President: Claude Van Rooten (Belgium)
- Past President: Oscar de Buen Richkarday (Mexico)
- Vice-Presidents: Cheick Oumar Diallo (Mali), Shigeru Kikukawa (Japan), Miguel Ángel Salvia (Argentina)
- Members: Ahmed Al Hammadi (United Arab Emirates), Christine Bouchet (France), Roy Brannen (United Kingdom), Oscar Callejo Silva (Mexico), Richard Charpentier (Canada-Québec), Mārtiņš Dambergs (Latvia / BRA), Lena Erixon (Sweden/ NVF), Mayobanex Escoto (Dominican Republic), Diane Gamble (New Zealand), Stefan Krause (Germany), Bojan Leben (Slovenia), Kang Hoon Lee (Rep. of Korea), Meor Aziz Bin Osman (Malaysia), Monika Milwicz (Poland), José Miguel Ortega (Chile), Marie-Claude Petit (Canada), Maria del Carmen Picón (Spain), Massimo Schintu (Italy), Alex Van Niekerk (South Africa), Walter Waidelich (United States), Dejin Wu (People's Rep. of Chine), Friedrich Zotter (Austria) and Saverio Palchetti (Italy), representative of National Committees on the Executive Committee;
- Secrétaire général : Patrick Malléjacq (France).

Three Commissions, chaired by members of the Executive Committee, assist the activities of the Executive Committee:

- Strategic Planning Commission, chaired by Óscar Callejo (Mexico),
- Finance Commission, chaired by Friedrich Zotter (Austria),
- Communications Commission, chaired by Diane Gamble (New Zealand).

### Members

There are five categories of Association members: national governments, regional authorities, collective members, individual members and honorary members.

As at 1<sup>st</sup> September 2017, *the Association's member countries include 121 national member governments,* from around the world. Approximately two thirds of the member countries are developing countries or countries in transition. In addition, there are approximately 2,000 other members (about half of which are individual members) from more than 140 countries.

### PIARC National Member Governments (as at 1<sup>st</sup> September 2017)

ALGERIA	CROATIA	LATVIA	RUSSIA
ANDORRA	CUBA	LITHUANIA	SALVADOR)
ANGOLA	CYPRUS	LUXEMBOURG	SAUDI ARABIA
ARGENTINA	CZECH Rep.	MADAGASCAR	SENEGAL
AUSTRALIA	DENMARK	MALAYSIA	SINGAPORE
AUSTRIA	DOMINICAN	MALI	SLOVAK REPUBLIC
AZERBAIJAN	Rep.	MALTA	SLOVENIA
BAHRAIN	ECUADOR	MAURITANIA	SOUTH AFRICA
BANGLADESH	EGYPT	MAURITIUS	SPAIN
BELGIUM	ESTONIA	MEXICO	SRI LANKA
BENIN	FINLAND	MOLDAVIA	SWAZILAND
BHUTAN	FRANCE	MONGOLIA	SWEDEN
BOLIVIA	GABON	MOROCCO	SWITZERLAND
BRAZIL	GERMANY	MYANMAR	SYRIA
BULGARIA	GHANA	NAMIBIA	TANZANIA
<b>BURKINA FASO</b>	GREECE	NEPAL	THAILAND
BURUNDI	GUATEMALA	THE NETHERLANDS	TOGO
CAMBODIA	GUINEA	NEW ZEALAND	TONGA
CAMEROON	HONDURAS	NICARAGUA	TUNISIA
CANADA	HUNGARY	NIGER	TURKEY
CANADA-QUEBEC	ICELAND	NORWAY	UGANDA
CAPE VERDE	INDIA	PAKISTAN	UKRAINE
CHAD	INDONESIA	PANAMA	UNITED KINGDOM
CHILE	IRAN	PAPUA NEW GUINEA	UNITED STATES
CHINA (PEOP. REP.)	IRELAND	PARAGUAY	UNITED ARAB
COLOMBIA	ISRAEL	PERU	EMIRATES (UAE)
CONGO (REP.)	ITALY	PHILIPPINES	URUGUAY
CONGO (DEM REP)	JAPAN	POLAND	UZBEKISTAN
COSTA RICA	KENYA	PORTUGAL	VENEZUELA
CÔTE D'IVOIRE	KOREA (Rep.)	ROMANIA	VIET NAM
	KUWAIT		YEMEN
			ZIMBABWE

### **National Committees**

In several member countries, National Committees have been established, or existing organizations have been recognized as acting as National Committee, to promote the Association, provide leadership within the road community on a national level, contribute towards ensuring more participation in the activities and to ensure a wider dissemination of the work of Technical Committees. The representatives of the National Committees meet once a year in conjunction with the Council meeting.

The Association has in total *40 National Committees* or organizations recognized as acting as a National Committee.

Algeria	Canada	India	Portugal
Argentina	Canada-Quebec	Ireland	Romania
Austroads ( <i>Australia,</i>	Chile	Italy	Senegal
New Zealand)	Congo (Rep.)	Japan	Slovak Republic
Austria	Czech Republic	Korea (Rep.)	Slovenia
Belgium	Dominican Rep.	Madagascar	Spain
Benin	Ecuador	Malaysia	Switzerland
Burkina Faso	France	Mali	United Kingdom
Cameroon	Germany	Mexico	United States
	Greece	Mongolia	Uruguay
	Hungary	Morocco	

### **National Committees**

### **General Secretariat**

As at 1<sup>st</sup> September 2016, the PIARC General Secretariat includes:

- A Secretary General, Patrick Malléjacq and a Deputy Secretary General, Robin Sébille, both seconded by France;
- A Technical Director, Miguel Caso-Florez, seconded by Spain;
- four Technical Advisors seconded from Germany, Japan, South Korea, and Mexico (parttime) for various durations;
- seven permanent staff who are remunerated by PIARC: Véronique Anselin (executive assistant), Alain Charles (web manager), Marina Domingo Monsónis (communication), Cécile Jeanne (publications), Marie Pastol (translation-interpretation), Hanitra Rabetaliana (accountancy), Nathalie Sabbah (office clerk), Mélanie Paris (bachelor's degree student in computer science on a learning programme).

With regard to the Technical Advisors, the situation is as follows:

- Woo-Chul Kim (South Korea) joined PIARC General Secretariat in Paris in February 2016; he is in charge of the follow-up of Strategic Theme A;
- Yuya Namiki is seconded by Japan. He joined the PIARC General Secretariat in Paris in September 2017 and follows up on Strategic Theme B; he replaces Junichi Miyazaki (March 2015 – September 2017) in that position;
- Kirsten Graf-Landmann (Germany), works part time in Paris and is in charge of the follow-up of Strategic Theme C;
- Miguel Caso Flórez (Spain), Technical Director, serves as interim Technical Advisor of Strategic Theme D;
- Verónica Arias Espejel (Mexico) is based in Mexico City. Since September 2015, she has been working part-time for the General Secretariat and follows up the work of Strategic Theme E.

## Annex 2. Strategic Plan 2016-2019

The Council approved the Strategic Plan 2016-2019 at its meeting in Seoul (South Korea) in October 2015. The Council delegated to the Executive Committee minor modifications that could result from the comments made by the Council members, from the discussions at the Seoul Congress and from suggestions by the Technical Committees.

The Strategic Plan sets a series of goals for the Association and structures the activity of Technical Committees in five Strategic Themes, each led by a Coordinator.

#### Strategic Themes for the 2016-2019 period

Strategic Theme A – Management and Finance				
Goal	The goal of this Strategic Theme is to encourage the development of policies and strategies that result in transport administrations that perform well, measure performance, and incorporate innovative financing mechanisms to meet the ever changing needs of the road transportation community. It is intended to provide examples of good governance, performance management, evaluation methods, and showcase the efforts of transport administrations that consider and manage risk and incorporate knowledge transfer strategies between agencies operating at different levels of government.			
Coordinator	Ernesto Barrera – interim- (Chile)			
Strategic Them	e B – Access and Mobility			
Goal	The goal of this Strategic Theme is to encourage the improvement of access and mobility provided to the traveling public and industry through efficient road network operation and integration with other transport modes.			
Coordinator	Shigeru Kikukawa (Japan)			
Strategic Theme C – Safety				
Goal	Goal The goal of this Strategic Theme is to improve the safety and efficiency of roa transport, including the movement of people and goods on the network, whil effectively and widely promulgating knowledge of all aspects of road safety an encouraging implementation of positive practices.			
Coordinator	Jean-François Corté (France)			
Strategic Them	e D – Infrastructure			
Goal	The goal of this Strategic Theme is to improve the quality and efficiency of road infrastructure through the effective management of assets in accordance with user expectations and government requirements.			
Coordinator	Oscar Gutierrez (Spain)			
Strategic Them	e E – Climate change, Environment and Disasters			
Goal	The goal of this Strategic Theme is to increase resiliency and protect investments in transportation infrastructure from impacts of climate change events while lessening the impact of road transportation on the environment.			
Coordinator	Roberto Aguerrebere (Mexico)			

The list of PIARC Technical Committees and Task Forces, with the name of Chairs and English, French and Spanish-speaking Secretaries is included in the following page. Technical Committees are linked to one of the five Strategic Themes above, while the Terminology Committee is directly linked to the General Secretariat.

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#### TECHNICAL COMMITTEES 2016-2019 – LIST OF CHAIRS AND SECRETARIES

	Chair		English-speaking Secretary		French-speaking Secretary		Spanish-speaking Secretary	
CT A.1 Performance of Transport Administrations	José Manuel BLANCO SEGARRA	Spain	Christos S. XENOPHONTOS	United States	Michel DEMARRE	France		
CT A.2 Road Transport System Economics and Social Development	Fred AMONYA	United Kingdom			Marieme Ndoye DECRAENE	Senegal	Alicia Haydee LORDI	Argentina
CT A.3 Risk Management	Ioannis BENEKOS	Greece	Firas IBRAHIM	United States	Alain LEFEBVRE	Belgium	Gustavo MORENO RUÍZ	Mexico
TF A.1 Innovative Financing	Massimo SCHINTU	Italy	Zara FOX	Australia	Christophe BOUTIN	France		
TF A.2 Coordination between National and Sub- National Authorities	King GEE	United States					Clemente POON	Mexico
CT B.1 Road Network Operations/Intelligent Transportation Systems	Jacques EHRLICH	France	Valentina GALASSO	Italy	Sylvain BELLOCHE	France	Daniel RUSSOMANNO	Argentina
CT B.2 Winter Service	Didier GILOPPE	France	Alan CHAMBERS	United Kingdom			José Carlos VALDECANTOS	Spain
CT B.3 Sustainable Multimodality in Urban Areas	André BROTO	France	Harlan MILLER	United States	Mathieu LUZERNE	France	Oscar FARINA	Argentina
CT B.4 Freight	Martin RUESCH	Switzerland	Jonathan JAMES	United Arab Emirates	Bernard JACOB	France	Carlos SANTILLAN DOHERTY	Mexico
TF B.1 Road Design and Infrastructure for Innovative Transport Solutions	Éric OLLINGER	France	Ian PATEY	United Kingdom	Abdelmename HEDHLI	France	Ana Luz JIMÉNEZ ORTEGA	Spain
CT C.1 National Road Safety Policies and Programs	Roberto ARDITI	Italy	Rob McINERNEY	United Kingdom	Laurent CARNIS	France	Juan Emilio RODRIGUEZ PERROTAT	Argentina
CT C.2 Design and Operations of Safer Infrastructure	Shaw Voon WONG	Malaysia	Lucy WICKHAM	United Kingdom	Matthieu HOLLAND	France	Alberto MENDOZA DÍAZ	Mexico
TF C.1 Infrastructure Security	Saverio PALCHETTI	Italy			Philippe CHANARD	France	Wilfredo AMODEO	Cuba
CT D.1 Asset Management	Thomas LINDER	Germany	Gerardo FLINTSCH	United States	Pascal ROSSIGNY	France	Ricardo SOLORIO	Mexico
CT D.2 Pavements	Seung-Hwan HAN	South Korea	Johan MAECK	Belgium	Serge KRAFFT	France	Diego CALO	Argentina
CT D.3 Bridges	Kiyohiro IMAI	Japan	Scot BECKER	United States	Pierre GILLES	Belgium	Luis ROJAS NIETO	Spain
CT D.4 Rural Roads and Earthworks	Roberto SANDOVAL	Bolivia	Iqbal GOOLAM-HOOSEN	South Africa	Isabelle LAPPE	France	Natalia PÉREZ GARCIA	Mexico
TC D.5 Road Tunnel Operations	Marc TESSON	France	Gary CLARK	United Kingdom	Jean-Claude MARTIN	France	Rafael LOPEZ GUARGA	Spain
CT E.1 Adaptation Strategies/Resiliency	Jürgen KRIEGER	Germany	April MARCHESE	United States	Eric DIMNET	France	Juan Fernando MENDOZA SÁNCHEZ	Mexico
CT E.2 Environment Considerations in Road Projects and Operations	Helen MURPHY	Australia	Rob HANNABY	New Zealand			Sergio LÓPEZ NORIEGA	Mexico
CT E.3 Disaster Management	Keiichi TAMURA	Japan	Yukio ADACHI	Japan			Marcelo MEDINA SANTIBANEZ	Chile
Terminology	Daniel VERFAILLIE	Belgium	Annelies GLANDER	Austria	François GUÉNOT	Switzerland	Cristina HIGUERA TOLEDANO	Spain

# **Annex 3. Publications of the World Road Association**

## **Technical reports released on line since October 2016**

#### In English: 32 reports

- 2016R07EN Preserve your Country's roads to Drive Development
- 2016R08EN Cooperative Vehicle Highway Systems
- 2016R09EN Role of risk-assessment in policy development and decision-making
- 2016R10EN Uses of ITS including consideration of planning for future improvements, upgrades and the economy
- 2016R11EN Road network management for improved mobility
- 2016R12EN Methodologies and tools for risk assessment and management applied to road operations
- 2016R13EN Moving freight transport forward Green, smart and efficient
- 2016R14EN Crisis management of unusually severe and/or sustained snow events
- 2016R15FR Promoting sustainable maintenance of rural roads networks
- 2016R16EN Lay bys and protection against lateral obstacles Current practices in Europe
- 2016R17EN State of the art in monitoring road condition and road/vehicle interaction
- 2016R18EN Expected service life of wearing courses
- 2016R19EN Road tunnels: complex underground road networks
- 2016R20EN Human factors guidelines for a safer man-road interface
- 2016R21EN Good Governance and Anti-Corruption Measures
- 2016R22EN Guide to good practice performance frameworks
- 2016R23EN Evolution of the mission and structure of transport administrations
- 2016R24EN The Role of Road Engineering in Combatting Driver Distraction and Fatigue Road Safety Risks
- 2016R25EN Transport Strategies for Climate Change Mitigation and Adaptation
- 2016R26EN Risk Management for Emergency Situations
- 2016R27EN Key Issues for Improving Mobility Strategies in Large Urban Areas
- 2016R28EN Framework for Citywide Road Freight Transport Management
- 2016R29EN Appraisal of Sustainability of Transport Infrastructure Plans and Programs
- 2016R30EN Advanced technology for data collection and infomation to users and operators
- 2016R31EN Sustainability and Climate Change Considerations in Winter Operations
- 2016R32 Land use and safety: Understanding how land use decisions impact safety of the transportation system
- 2016R34EN Vulnerable Road Users; Diagnosis of Design and Operational Safety Problems and Potential Countermeasures
- 2016R35EN Experience with Significant Incidents in Road Tunnels
- 2017R01EN Design fire characteristics for road tunnels
- 2017R02EN Recommendations for sustainable road tunnel operation
- 2017R03EN Adaptation of road bridges to climate change
- 2017R05EN Balancing of Environmental and Engineering Aspects in Management of Road Networks

#### In French:

- 2015R03FR Cadre international d'adaptation au changement climatique pour les infrastructures routières
- 2016R07FR La préservation des routes nationales comme moteur du développement
- 2016R08FR Systèmes coopératifs véhicule-route
- 2016R09FR Rôle de l'évaluation des risques dans l'élaboration des politiques et la prise de décision

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- 2016R10FR Implication des STI : planification des évolutions et modernisation futures, la dimension économique
- 2016R12FR Méthodologies et outils d'évaluation et de gestion des risques appliqués à l'exploitation routière
- 2016R13FR Évolution du transport de marchandises : plus vert, plus intelligent et plus efficace
- 2016R14FR Gestion de crise en cas de chutes de neige prolongées et/ou particulièrement abondantes
- 2016R15FR Promouvoir l'entretien durable des réseaux de routes rurales
- 2016R16FR Garages et protection contre les obstacles latéraux Les pratiques actuelles en Europe
- 2016R17FR Etat de l'art du suivi de l'état des réseaux routiers et interaction route/véhicule
- 2016R18FR Prévision de la durée de vie des couches de roulement
- 2016R19FR Tunnels routiers : réseaux routiers souterrains complexes
- 2016R20FR Guide de facteurs humains pour une interface homme/route plus sûre
- 2016R21FR Bonne gouvernance et mesures anti-corruption
- 2016R22FR Cadres de performance des administrations routières et des transports Guide des bonnes pratiques
- 2016R23FR Évolution des missions et des structures des administrations des transports
- 2016R24FR Rôle de l'ingénierie routière dans la lutte contre les risques, pour la sécurité, de la distraction et de la fatigue des conducteurs
- 2016R26FR Gestion des risques pour les situations d'urgence
- 201627FR Questions clefs pour les stratégies d'amélioration de la mobilité dans les grandes aires urbaines
- 2016R28FR Cadre de gestion du transport routier de marchandises à l'échelle de la ville
- 2016R30FR Technologie avancée de recueil des données et information aux usagers et aux exploitants
- 2016R31FR Durabilité et considération sur le changement climatique dans les opérations de viabilité hivernale
- 206R32FR Aménagement du territoire et sécurité : une introduction à la compréhension des effets de l'aménagement du territoire sur la sécurité du système de transport
- 2016R34FR Usagers vulnérables de la route diagnostic des problèmes de sécurité liés à la conception et à l'exploitation, et mesures correctives potentielles
- 2016R35FR Retour d'expérience en matière d'incidents significatifs dans les tunnels routiers
- 2017R01FR Caractéristiques des incendies de dimensionnement en tunnels routiers
- 2017R02FR Recommandations pour une exploitation durable des tunnels routiers
- 2017R03FR Adaptation des ponts routiers au changement climatique
- 2017R04FR Utilisation optimale des matériaux locaux dans les terrassements routiers

#### In Spanish:

- 2016R07ES Conservar las carreteras de su país para fomentar el desarrollo
- 2016R14ES Gestión de crisis de nevadas excepcionalmente graves y prolongadas
- 2016R17ES Técnicas de vanguardia para la supervisión del estado de las carreteras y la interacción carretera/vehículo
- 2016R18ES La vida útil que se espera de las capas de rodadura
- 2016R19ES Túneles de carretera: Redes complejas subterráneas de carretera
- 2016R21ES Buena gobernanza y medidas anticorrupción
- 2016R22ES Guía de buenas prácticas para marcos del funcionamiento
- 2016R23ES Evolución de la estructura y funciones de las administraciones de transporte
- 2016R30ES Tecnología avanzada para la recolección de datos e información a usuarios y operadores
- 2016R31ES Consideraciones de Sostenibilidad al Cambio Climático en la Vialidad Invernal
- 2016R33ES Gestión de mantenimiento y la mejora de caminos rurales
- 2016R35ES Experiencia con incidentes significativos en túneles de carretera
- 2017R01EN Características de los incendios para el diseño de los túneles de carretera
- 2017R03ES Adaptación al cambio climático de los puentes de carreteras