



# ANNUAL REPORT

*OCTOBER 2023 - SEPTEMBER 2024*



[www.piarc.org](http://www.piarc.org)



# **ACTIVITY REPORT**

***OCTOBER 2023 – SEPTEMBER 2024***

# FOREWORD

## FROM THE PRESIDENT'S DESK

Dear Colleagues and Friends,

As I pen my last report to you, my heart swells with a mixture of emotions. Serving as the President of our Association – PIARC has been a humbling and gratifying experience. I take this opportunity to express my sincere gratitude for the opportunity to lead, learn and grow alongside such a remarkable community of professionals. Soon I will be the Past President of the Association, after a 3-year term marked at its beginning by the uninvited and unwelcome guest named Covid, by the 16th World Winter Service and Road Resilience Congress in Calgary in, 2022. In the middle of the term I had the pleasure of sharing the 27th World Road Congress in Prague with you all, and now its end by the Council meeting in Andorra. The unwelcome Covid occurrence demonstrated the capacity of PIARC to navigate through hard times and to be resilient in order to serve the needs of its members. The General Secretariate led by the leadership ably steered the ship through stormy seas...well done!

In 2021, when I was elected, we were still unable to travel, at least on long distances. Personal contacts were limited which adversely impacted the Calgary Congress. The choice was either to cancel the Congress or make headway differently. Again, PIARC and the host were equal to the challenge by arranging to hold the Calgary Congress fully online...it was a remarkable occasion and by all accounts met its objectives and thoroughly enjoyed by all. A major challenge for the organisers, who had to develop new tools, as well as for the audience, which adapted to unusual times. A success, though, in spite of the conditions, but we missed the Calgary snow and the promised rodeo for ever. These circumstances make the proposal of Canada to host the 29th World Road Congress in Vancouver in October 2027 particularly fitting. The Vancouver Congress will be a fitting occasion to savour every moment and the Canadian hospitality.

Still looking back into the past, I can but hail the success of the Prague Congress. Extremely dense, extremely rich in terms of content, it welcomed 40 ministerial delegations and more than 4,000 delegates from 121 countries. These impressive figures are testimony to the need to meet in person to shake hands in the course of exchanges of professional interests and to keep up to date with the latest technological developments. Many thanks have already been given to our Czech and Slovak hosts, but I would like to offer them again.

These three years were also a period of expansion for PIARC. First of all, extension in membership: during this cycle, we had the joy to welcome 7 new countries: Kazakhstan, Qatar and San Marino in 2022, Djibouti and Georgia in 2023, Armenia and Rwanda in 2024. New countries are knocking at the door. Such a figure and such a geographic spread is an encouragement to go on, in a period when the relevance of roads is questioned in some parts of the world.

Another expansion, this time internal, can be seen in the appointments of experts to the Technical Committees of the new 2024-2027 work cycle. With a stable number of Technical Committees, we now count around 1,800 experts, which is an almost 50% increase compared to the previous cycle. These experts, representing a wider geographical expansion, having more women, more members from academia – it's no secret that there is still much to do in these areas – have actively begun to address the topics from the new Strategic Plan. The latter now considers decarbonization a major issue, embedded in all strategic themes. Technical committees have already organised international seminars and produced the first written releases of the cycle, which is a premiere in the first year of a work cycle.

As I step down from my role I do so with a sense of fulfilment and optimism for the future. I am confident that the incoming President and office bearers will continue the one hundred-and fifteen-year tradition of taking the Association to greater heights. The friendships I have forged, the lessons learned, and the inspiring growth I have witnessed will remain with me forever. I leave with a heart full of gratitude and a deep sense of achievement in what we have accomplished together. I express my sincere gratitude to all members of the Association, particularly the First Delegates and the members of the Executive Committee, who have helped me with their commitment and precious advice throughout these three years, as well as the Secretary General and all his staff for their relentless and competent efforts to achieve the goals of the Association.

Thank you all for the incredible journey. It has been an honour and privilege to serve as your President.

**Nazir Alli**  
*President*

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## 1. ACTIVITIES FROM OCTOBER 2023 TO SEPTEMBER 2024

### 1.1 COUNCIL

On September 30, 2023, on the eve of the 27<sup>th</sup> World Road Congress in Prague, the Council met in person. 104 delegates, representing 205 votes in total, attended the event. The Council selected Calgary as the hosts of the next World Road Congress, among three very good proposals. An online vote was also organised to admit Armenia as PIARC's 128<sup>th</sup> government member in June 2024.

### 1.2 EXECUTIVE COMMITTEE

The Executive Committee manages the Association in accordance with the guidelines and decisions of the Council. It met in hybrid mode in Rome (Italy) in April 2023 with almost all its members present in person; this was followed by a successful seminar on decarbonization and resilience. It also took place in hybrid mode in on September 30-October 1st in Cape Town (South Africa).

#### 1.2.1 Strategic Planning Commission

The Strategic Planning Commission (SPC) met several times in virtual format throughout the year. The main issues dealt with by the SPC in 2024 were:

- Supporting and monitoring the activities of the Technical Committees (organization, work plans, participation of members, cross-cutting issues, etc.);
- First outcomes of the new cycle, particularly the kick-off meetings held in Paris, Jan-Feb. 2024;
- Finetuning the terms of reference of the Committees
- Steering the special projects' programme
- Launching the new Strategic Outsourced Tasks mechanism, whereby a consultant supports the work of some Committees on key priority topics.

#### 1.2.2 Finance Commission

Over the period, the Finance Commission (FinCom) met twice, in March 2024 in Paris, France, and in July 2024 in Brussels, Belgium. It monitored the implementation of the budget and drafted the new one. The Commission noticed the progress made in the collection of governmental fee and made proposals for an updated financial strategy. The Commission expressed its concern at the depletion of the financial reserves of the Association and expressed a strong view that the situation should be remedied. The Commission comprehensively considered various options and agreed to (a) present a four-year rolling budget which will be updated each year; (b) maintain a positive balance at the end of each four year cycle; (c) investigate other sources of revenue for the Association including seeking cost saving measures; and (d) preserve the reserve balance as shown in the four year budget proposal.

#### 1.2.3 Communications Commission

The Communications Commission (ComCom) organised numerous online meetings all year around. In particular, it prepared recommendations for hybrid meetings and for a wider electronic dissemination of the Routes/Roads magazine. It also prepared the Prize competition for the upcoming World Winter Service and Road Resilience Congress. ...

#### 1.2.4 Promotion of Gender Inclusion and Diversity

The dedicated team that was set up by the Executive Committee met several times over the period. It implemented the action plan and a strategy, which had been approved by the Council in 2022. Among others, it promoted PIARC's strategy internally and externally, took part in the international Women in Engineering Day in June, organised a workshop in Madrid (Spain) in March, and steered a special project dedicated to fostering understanding of gender inclusion and diversity issues in the Association's bodies. The "PGID" team liaised with Technical Committees to ensure that ensure that their work products are conscious of, and where applicable, reflected GID issues. The Executive Committee granted it full Commission status in October 2024.

### 1.3 CONFERENCE OF NATIONAL COMMITTEES

During the past period, a new National Committee was approved for Thailand, and the representative of the NCs made initial recommendations to boost the activity of National Committee that seem to be inactive.

### 1.4 GENERAL SECRETARIAT

The General Secretariat (GS) continued its main tasks, which include providing support to the Association's bodies, day-to-day running of the Association, participation in the work of the Commissions and publication of the Routes/Roads magazine.

In addition, the following actions were carried out during the past year (they are described in more detail in the next pages):

- Organizing the 27<sup>th</sup> World Road Congress in Prague in October 2023;
- Providing assistance and guidance to the Committees and Task Force, particularly through the kick-off meetings held in Paris in January-February 2024;
- Helping organize seminars and other events;
- Publication of reports produced by the Technical Committees ;
- Promotion activities, including social networks, events, and the Routes/Roads magazine;
- Maintenance of the web-based manuals of the Association (see paragraph 1.12);
- Cooperation with partner associations and institutions (see paragraph 1.12).

During the period, new technical advisors joined the General Secretariat:

- Rahul Gupta (India) in replacement of Pavel Šušák (Czech Republic), for Strategic Theme 4, on a part-time basis;
- Kaouther Machta (Tunisia) in replacement Evelina Åkesson (Sweden) for partnerships, on a part-time basis;
- Jenny Cook (UK) in replacement of Lina Grandlund (Sweden) on gender inclusion and diversity and on partnerships. She left in July 2024.
- Go Hirochi (Japan) replaced Kei Senoo (Japan) – he is also temporarily supported by a Japanese trainee from the Japanese Ministry in charge of Transport, Kazuyuki Fujita.

An appeal has been made to all member countries to second staff to the General Secretariate. A sincere gratitude is expressed to all those who have seconded staff to the General Secretariat.

A new head assistant, Agnès Colombo, was recruited in early 2024 to replace Isabelle Fanguinovény, who had decided to leave PIARC. The General Secretariat also recruited Veronika Fedorchenko in September 2024 to support reinforced communication activities (replacing Perrine Marchand).

### 1.5 CONGRESSES OF THE WORLD ROAD ASSOCIATION

#### 1.5.2 27<sup>th</sup> International Winter Service Congress (Chambéry, March 2026)

Regular contacts are established between PIARC, the local organising committee and the PCO for the Chambéry congress. The international call for papers was published in September 2024. Things are progressing well.

#### 1.5.1 28<sup>th</sup> World Road Congress (Vancouver, October 2027)

During the 2023 Council meeting, Vancouver, Canada, was chosen to host the 28<sup>th</sup> World Road Congress. The Memorandum of Understanding is under finalization.

### 1.6 TECHNICAL COMMITTEES

Committees also finished producing written documents from the previous cycle, mostly case studies and literature review (see Annex 3). All over the 2020-2023 cycle, about 100 documents have been published, which is a very high number. The Association has been able to reach the objective of delivering timely knowledge products.

As 2024 is the first year of a new work cycle, we organised “kick-off” or inception meetings in Paris for all Committees:

- Kick-off meetings for Strategic Theme 3 Safety and Sustainability, January 31 – February 2, 2024



- Kick-off meetings for Strategic Theme 4 Resilient Infrastructure & Road Statistics, February 5-7, 2024
- Kick-off meetings for Strategic Theme 2 Mobility, February 7-9, 2024
- Kick-off meetings for Strategic Theme 1 Road Administration & Terminology, February 12-14, 2024

Besides, Committees organised the following events, which is rare and a positive development during this first year of the cycle:

- PIARC-ATC Workshop on Gender inclusion in the Road Sector, Madrid (Spain), March 21, 2024
- International Seminar "Transport Agency of the Future", Bangkok (Thailand), September 4-6, 2024
- International Workshop "Road Safety", Bangkok (Thailand), September 4, 2024
- International Forum "Highway Investment and Financing Innovation and Value Enhancement of Green and Smart Construction and Maintenance", Zhengzhou (China), September 21-27
- International Summit on Tunnels, Sydney, Australia, September 23-27, 2024
- International Seminar "Advances in Bridge Management", Bengaluru (India), September 25-27
- PIARC Webinar "Renewal and Rejuvenation of Aging Infrastructure", online from Paris (France), October 2, 2024
- Workshop "Road Infrastructure for Road Transport Decarbonization", online from Melbourne (Australia), October 10, 2024
- International Workshop "Freight Vehicle Permitting and Road or Bridges Access Regulation", Istanbul (Türkiye), October 16, 2024
- International Workshop "Sustainable Rural and Interurban Road Network", Timișoara (Romania), October 24, 2024

## 1.7 SPECIAL PROJECTS

In 2023, three new special projects started, thanks to significant financial support from Member Countries. Their final reports are available:

- [2023SP02EN](#) - Biking for the Future
- [2023SP03EN](#) - Managing Innovation in Transport Agencies
- [2023SP04EN](#) - Social Equity and Social Accessibility

## 1.8 COMMUNICATION

The period proved particularly fruitful in communication activities, thanks to a new staff member.

- An average 4 news per month on the website plus push mail for some of them;
- A now well-established monthly newsletter in 3 languages (11 issues a year);
- An active presence on social networks (8,500 followers as a whole and 3 posts per week),
- A strong development of PIARC videos, available on our Website and on YouTube;
- PIARC's presence at key events (TRB 2024 and ITF 2024) to advertise for upcoming events;
- PIARC GS Support to ComCom.

## 1.9 PIARC WEBSITE WWW.PIARC.ORG

Increased communication efforts and improved measurement tools, as well as an easier cookies acceptance design, clearly demonstrate a surge in the interest for the website (number of visits, number of users). Since August 2023, the statistical data has come from a new IT solution (Matomo). We have seen a significant increase of 47% increase in website traffic. This is partly the result of the dynamic created by the Prague Congress and partly the result of putting our productions and communication campaigns online.



**PIARC Website – Number of visits** (consultations by the General Secretariat are not considered in these statistics)

Period	01/08/2021 - 31/07/2022	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	60,626	108,487	159,685
Number of single users	24,986	66,069	90,136
Number of pages viewed	300,501	417,851	497,561
Average number of pages per visit	4.96	4.18	3.11
Average duration of visits (minutes)	4:09	3:34	3:22

### 1.10 ONLINE MANUALS

There are currently six online manuals:

1. [Disaster management](#) (website)
2. [Road asset management](#) (website)
3. [Road safety](#) (website)
4. [RNO & ITS](#) (website)
5. [Road tunnels](#) (website)
6. [Earthworks](#) (separate reports)

Since the summer of 2024, we've been undergoing major development, with the migration of Drupal 7 manuals (obsolete versions dating from 2013) to the latest version of the CMS, Drupal 10. Thanks to funding from some member countries, the pilot manual is RSM, with a launch scheduled for early 2025. The migration of the other manuals will follow during 2025.

**Road Safety** - Number of visits (version updated June 2024): +48%

Period	01/08/2021 - 31/07/2022	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	28,270	34,185	50,741
Number of single users	21,599	26,551	42,997
Number of pages viewed	74,611	82,482	96,942
Average number of pages per visit	2.64	2.41	1.91
Average duration of visits (minutes)	3:07	2:43	2:05

This current of PIARC RSM provides updates to each of the chapters by incorporating new information and details. Newly released PIARC publications are highlighted throughout by providing RSM user weblinks to each of them:

- Road Safety Audits Guidelines for Road Projects
- Saving Lives Around the World with Proven Countermeasures
- Specific Road Safety Issues for LMICs: Illustrative Examples - Collection of Case Studies
- Road Safety in LMICs: Identification and Analysis of Specific Issues - Literature Review
- New case studies have been added to a web library and are linked throughout the RSM chapters by providing a summary and associated link to each of the case studies.
- Placed in multiple chapters and different sections. The manual has received updates to reference materials, and modifications to multiple chapters.

The next edition (early 2025) will include up-to-date detailed technical information and recommendations.

#### Disaster Management– Number of visits : +153%

Period	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	5,626	14,272
Number of single users	4,096	13,111
Number of pages viewed	14,288	23,302
Average number of pages per visit	2.96	4.18
Average duration of visits (minutes)	4:16	1:08

#### Asset Management - Number of visits +15%

Period	01/08/2021 - 31/07/2022	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	7,246	7,230	8,330
Number of single users	4,972	4,822	6,492
Number of pages viewed	27,050	28,899	28,561
Average number of pages per visit	3.73	4	3.43
Average duration of visits (minutes)	4:26	4:28	3:29

#### Road Network Operations & ITS – Number of visits +17%

Period	01/08/2021 - 31/07/2022	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	7,246	7,230	8,330
Number of single users	4,972	4,822	6,492
Number of pages viewed	27,050	28,899	28,561
Average number of pages per visit	3.73	4	3.43
Average duration of visits (minutes)	4:26	4:28	3:29

Number of visits	53,646	42,388	49,529
Number of single users	44,416	34,679	43,861
Number of pages viewed	92,990	69,533	72,764
Average number of pages per visit	1.73	1.64	1.47
Average duration of visits (minutes)	2:06	1:43	1:21

### Road Tunnels (V1 + V2) – Number of visits: +56%

Period	01/08/2021 - 31/07/2022	01/08/2022 - 31/07/2023	01/08/2023 - 31/07/2024
Number of visits	43,329	37,211	58,199
Number of single users	36,443	30,731	53,961
Number of pages viewed	94,328	78,253	106,299
Average number of pages per visit	2.18	2.10	1.83
Average duration of visits (minutes)	2:06	2:09	1:39

## 1.11 PUBLICATIONS

### 1.11.1 Technical reports

17 new reports have been published over the period, as well as some translations into French and Spanish of reports published the previous years. Many such translations are still missing however.

The detailed list of these documents is included in Annex 3 of this annual report.

### 1.11.2 Routes/Roads magazine

The *Routes/Roads* magazine is an essential product of the Association, contributing to its mission of knowledge dissemination. *Routes/Roads* is printed in three separate monolingual editions in English, French and Spanish.

The topics covered since the last Council meeting are as follows:

- Prague Congress Prizes – RR 399, December 2023
- Decarbonization of Roads - RR 400, March 2024
- Prague Congress Report - RR 401, June 2024
- Roads and Cycling - RR 402, September 2024.

## 1.12 COOPERATION WITH OTHER ASSOCIATIONS/ORGANIZATIONS - PARTNERSHIPS

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. We have been able to develop an ambitious plan of activities thanks to our Technical Advisor for Partnerships, who is seconded from Sweden.

#### 1.12.1 Main PIARC partners

PIARC partners are, amongst others, regional road organisations: CEDR, REAAA, DIRCAIBEA, AGEPAR, ASANRA. The reasons to work with them are to access all countries actively, to avoid any overlap of activities and, all in all, to serve the needs of all road organisations efficiently.

PIARC has Memorandums of Understanding with several of the regional road organisations; CEDR (Europe) and with NVF (Nordic countries), REAAA in Asia, AGEPAR in Africa (an updated MoU was signed in Prague during the Congress).

Two new MoUs were signed 2023: IENE Infrastructure and Ecology Network Europe (Linked with TC3.4 Environmental Sustainability in Road Infrastructure and Transport) and with JBP Japan Bosai Platform (Linked with TC 1.51.5 Disaster Management).

#### 1.12.2 Meetings and events

In 2023-24 some meetings still remain virtual, but contacts developed actively with many partner, in particular through their involvement in our World Road Congress.

- TRB annual meeting, Washington DC (USA), January 2024
- United Nations's UNECE Inland Transportation Committee, Geneva (Switzerland)
- UN Road Safety Collaboration (UNRSC)
- International Transport Forum (ITF) 2023 Summit, Leipzig (Germany) 23-26 May 2023
- REAAA Council in Bangkok, September 2024
- International Road Federation (Geneva)
- International Road Federation (Washington)
- IBTTA - International Bridge, Tunnel & Turnpike Association

### 1.13 SOFTWARE

#### 1.13.1 HDM-4

No major development occurred in 2022 or 2023. The Council decided in 2021 to no longer be actively involved in the development of the software, since the World Bank is now leading the process. Updates are indeed under way and a new version is expected for 2026.

#### 1.13.2 QRAM

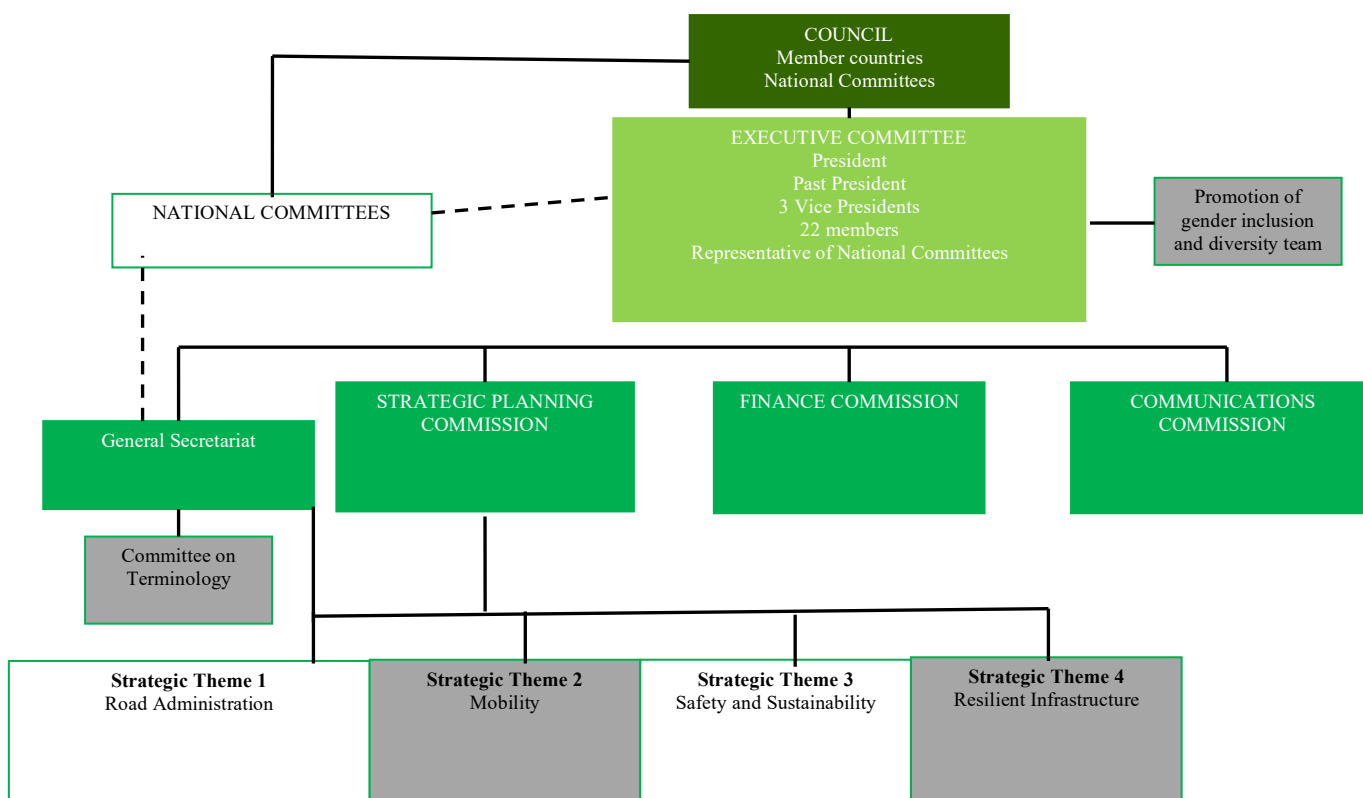
A new version of this software was released in April 2023. All funds allocated by donors have now been used. New upgrades could be developed in 2025-2026.

## 2. APPENDIX 1 – THE ASSOCIATION IN 2023-2024

### 2.1 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.



### 2.2 GOVERNING BODIES

The Council is the highest governing body responsible for the Association.

As of 30 September 2023, the Executive Committee comprises the following membership:

- President: Mr. Nazir Alli (South Africa)
- Past President: Mr. Claude Van Rooten (Belgium)
- Vice-Presidents: Mrs. Emma Lía Albrieu Cipollina (Argentina), Mr. Geoff Allan (Australia), Mr. Mark Henry Rubarenzya (Ouganda)
- Members: Mr. Ernesto Barrera (Chile), Mr. Randall Cable (South Africa), Mr. Mamoudou Alassane Camara (Senegal), Mrs. Sandrine Chinzi (France), Mr. Mārtiņš Dambergs (Latvia / BRA), Mrs. Gloria Shepherd (USA), Mr. Hugh Gillies (United Kingdom), Mr. Juan Pedro Fernández Palomino (Spain), Mr. Setsuo Hirai (Japan), Mr. Whe-Kyoung Kim (Republic of Korea), Mr. Joshua LaRocque (Canada), Mr. Václav Neuvirt (Czech Republic), Mr Sanjay Nirmal (India), Mr. Bine Pengal (Slovenia), Mrs. Anne-Séverine Poupeleer (Belgium), Mrs. Emanuela Stocchi (Italy), Mrs. Claudine Tremblay (Canada-Québec), Mr. Jesus Felibe Verdugo Lopez (Mexico), Mr. Alexander Walcher (Austria), Mrs. Birgitta Worringen (Germany), Mr. Chungeng Wu (People's Rep. of China) and Mr. Clemente Poon Hung (Mexico), representative of National Committees on the Executive Committee

- Secretary General: Mr. Patrick Malléjacq (France).

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

- Strategic Planning Commission (SPC), chaired by Mr. Geoff Allan (Australia) ;
- Finance Commission, chaired by Mrs. Anne-Séverine Poupeleer (Belgium);
- Communications Commission, chaired by Mrs. Claudine Tremblay (Canada-Québec).

### 2.3 MEMBERS OF THE ASSOCIATION

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

As of 30 October 2024, the Association's member countries include 128 national member governments, from around the world. Georgia and Djibouti became members in 2023, Armenia and Rwanda in 2024. Approximately two thirds of the member countries are developing countries or countries in transition. In addition, there are 522 collective members and 1,186 individual members from more than 140 countries.

#### PIARC National Member Governments (*as of 30 September 2024*)

ALGERIA*	CZECH Rep.	KAZAKHSTAN	RUSSIA
ANDORRA	DENMARK	LITHUANIA	RWANDA
ANGOLA°	DJIBOUTI	LUXEMBOURG	SAN MARINO
ARGENTINA	DOMINICAN Rep.*	MADAGASCAR	SAUDI ARABIA
ARMENIA	ECUADOR	MALAYSIA	SENEGAL
AUSTRALIA	EL SALVADOR	MALI	SINGAPORE
AUSTRIA	EGYPT*	MALTA	SLOVAK REPUBLIC
AZERBAIJAN*	ESTONIA	MAURITANIA	SLOVENIA
BAHRAIN*	ESWATINI*	MAURITIUS	SOUTH AFRICA
BANGLADESH	FINLAND	MEXICO	SPAIN
BELGIUM	FRANCE	MOLDAVIA	SRI LANKA*
BENIN	GABON*	MONGOLIA	SWEDEN
BHUTAN*	GEORGIA	MOZAMBIQUE	SWITZERLAND
BOLIVIA*	GERMANY	MOROCCO	SYRIA*
BOTSWANA	GHANA*	MYANMAR	TANZANIA
BRAZIL*	GREECE	NAMIBIA	THAILAND
BULGARIA	GUATEMALA*	NEPAL*	TOGO*
BURKINA FASO	GUINEA	NETHERLANDS	TONGA*
BURUNDI*	HONDURAS*	NEW ZEALAND	TUNISIA
CABO VERDE*	HUNGARY	NICARAGUA	TURKEY
CAMBODIA*	ICELAND	NIGER	UGANDA
CAMEROON*	INDIA	NORWAY	UKRAINE

CANADA	INDONESIA	PAKISTAN*	UNITED KINGDOM
CANADA-QUÉBEC	IRAN	PANAMA*	UNITED STATES OF AMERICA
CHAD*	IRELAND	PAPUA NEW GUINEA*	UNITED ARAB EMIRATES
CHILE	ISRAEL	PARAGUAY	URUGUAY
CHINA (PEOP. REP.)	ITALY	PERU*	UZBEKISTAN*
COLOMBIA	JAPAN	PHILIPPINES	VENEZUELA*
CONGO (REP.)*	KAZAKHSTAN*	POLAND	VIET NAM
CONGO (DEM REP)	KENYA	PORTUGAL	YEMEN*
CÔTE D'IVOIRE	KOREA (Rep.)	QATAR	ZIMBABWE*
CROATIA	KUWAIT*	ROMANIA	
CUBA*	LATVIA		

\* Countries considered inactive, with 4 years or more of fee arrears (35 in total)

## 2.4 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 Road Association of Thailand was recognized as National Committee in 2024.

The Association has in total **50 National Committees** or organizations recognized as acting as a National Committee.

### National Committees

Algeria	Chile	Italy	Portugal
Argentina	Congo (Rep.)	Japan	Romania
Austroroads ( <i>Australia, New Zealand</i> )	Colombia	Kazakhstan	Senegal
Austria	Côte d'Ivoire	Korea (Rep.)	Slovak Republic
Belgium	Czech Republic	Madagascar	Slovenia
Benin	Dominican Rep.	Malaysia	Spain
Bulgaria	Ecuador	Mali	Switzerland
Burkina Faso	France	Mexico	Tanzania
Cameroon	Germany	Mongolia	Thailand
Canada	Greece	Morocco	Tunisia
Canada-Québec	Hungary	Niger	United Kingdom
	India	Paraguay	United States
	Ireland	Poland	Uruguay



## 2.5 GENERAL SECRETARIAT

As of 30 October 2024, 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 Flórez, seconded by Spain.
- seven Technical Advisors seconded by Japan (two persons), South Korea, Mexico (part time), Tunisia (part time), India (part time) and Poland (part time) for various durations.
- seven permanent staff who are salaried by PIARC: Agnès Colombo (executive assistant), Alain Charles (web manager), Marina Domingo Monsónis and Veronika Fedorchenko (communications), Cécile Jeanne (publications), Hanitra Rabetaliana (accounts), Nathalie Sabbah (office clerk).
- one apprentice: Ethan Wilton, as a master's degree student (Chief Technology Officer & Tech Lead)

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

- Jorge Monforte Alarcón (Mexico) since April 2022, he has been working part-time for the General Secretariat and follows the work of Strategic Theme 1 (Road Administration). (part time position ; based in Mexico)
- Jeayoun Kim (South Korea) joined PIARC General Secretariat in Paris in March 2022, to follow Strategic Theme 2 (Mobility). (full time position ; based in Paris)
- Kei Senoo is seconded by Japan since February 2022 and follows Strategic Theme 3 (Safety and Durability). (full time position ; based in Paris)
- Kazuyuki Fujita (Japan), based in Paris, for the period October 2024-March 2025; he is working on strategic outsourced tasks.
- Rahul Gupta (India) works part time for PIARC, from Delhi; and is in charge of Strategic Theme 4 (Resilient infrastructure) (part time position ; based in India)
- Aleksandra Cybulska (Poland) joined the team on 1st June 2019 as event planning Coordinator (part time position; based in Poland); she will leave her position after the 2024 Council in November 2024
- Kaouther Machta (Tunisia) is in charge of Congress sessions and partnerships (part time position; based in Tunisia).

Multiple changes are expected in 2025, and a call for candidates will be issued for Promotion of gender inclusion and diversity, Partnerships and Members' engagement, in particular.

### 3. ANNEX 2. STRATEGIC PLAN 2024-2027

#### 3.1. STRATEGIC THEMES FOR THE 2024-2027 PERIOD

The Council approved the Strategic Plan 2024-2027 at its Council meeting in Prague (Czech Republic) in September 2023.

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 2024-2027 period

Strategic Theme 1 - Road Administration	
Goal	T Road administrators are responsible for ensuring that road and road related infrastructure is managed effectively and efficiently. This includes a wide range of tasks, from maintaining and improving road networks, to managing finance and procurement, to planning for the resilience of these networks in the face of climate change and other hazards.
Coordinator	Caroline EVANS (Australia)
Strategic Theme 2 - Mobility	
Goal	Mobility on roads is a crucial aspect of modern society, enabling people to access essential services, engage in economic activities, and connect with others. The way roads are designed, built, and managed has a significant impact on people's accessibility and mobility, safety, and the environment.
Coordinator	André BROTO (France)
Strategic Theme 3 - Safety and Sustainability	
Goal	Road safety and sustainability are important issues that need to be addressed in road operations. There are several key areas that need to be considered in order to ensure that roads are safe and sustainable for all users. Road safety and sustainability are important issues to be addressed in road operations. Approximately 1.35 million people lose their lives while driving, cycling, or walking on the road every year. Another 50 million are seriously injured, and many are left permanently disabled as a result. Roads have significant sustainability issues, including environmental impacts, such as air pollution and climate change, and impacts on ecosystems. Road safety is also a critical sustainability issue, with the loss of life and productivity costing countries productive opportunities.
Coordinator	Keiichi TAMURA (Japan)
Strategic Theme 4 - Resilient Infrastructure	
Goal	Resilient road infrastructure is essential for ensuring the safety and reliability of our transportation systems. Building and maintaining roads that are able to withstand natural hazards and other challenges, we can help ensure that people are able to travel safely and efficiently.
Coordinator	Hari KALLA (USA)
Strategic Theme 5 - Decarbonization	
Decarbonization is considered a Strategic Theme per se, embedded in all previous four ones.	
Coordinator	Fabio PASQUALI (Italy)

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 four Strategic Themes above, while the Terminology Committee is directly linked to the General Secretariat.

## 3.2. TECHNICAL COMMITTEES / TASK FORCES 2024-2027

## TECHNICAL COMMITTEES / TASK FORCES 2024-2027– LIST OF CHAIRS AND SECRETARIES

	Chair	English-speaking Secretary	French-speaking Secretary	Spanish-speaking Secretary
TC 1.1 Performance of Transport Administrations	Christos S. XENOPHONTOS (USA)	Alan COLEGATE (Australia)	Ariane DUPONT-KIEFFER (France)	José Manuel BLANCO SEGARRA (Spain)
TC 1.2 Contribution of Roads to Economic and Social Development	Ilaria COPPA (Italy)	Tamara NICHOLSON (USA)	Mamadou SAMBA DIALLO (Senegal)	Clemente POON HUNG (Mexico)
TC 1.3 Finance and Procurement	Rafael ALDRETE (Mexico)	Dedy GUNAWAN (Indonesia)	Mohamed LAYE (Senegal)	Milton MARTINEZ MELGAREJO (Mexico)
TC 1.4 Planning the Resilience of Road Networks - Climate Change and other Hazards	Open	Stuart WOODS (New Zealand)	Marie COLIN (France)	Juan Fernando MENDOZA SÁNCHEZ (Mexico)
TC 1.5 Disaster Management	Yukio ADACHI (Japan)	Christopher ENGELBRECHT (USA)	Alain LEFEBVRE (Belgium)	Marcelo MEDINA SANTIBANEZ (Chile)
TC 2.1 Roads for Accessibility and Mobility in Urban and Periurban Areas	Andrea SIMONE (Italy)	Izak VAN DER LINDE (South-Africa)	Sandrine ROUSIC (France)	José DEL CERRO GRAU (Spain)
TC 2.2 Roads for Equity, Accessibility and Mobility in Rural and Interurban Areas	Imen MAKHLOUF (Tunisia)	Open	Souleman OUSSIMAN (Burkina Faso)	Open
TC 2.3 Sustainable Freight	Oliver QUOY (France)	Caroline MAYS (USA)	Bernard JACOB (France)	Carlos SANTILLAN DOHERTY (Mexico)
TC 2.4 Road Network Operations and ITS for Sustainability	Valentina GALASSO (Italy)	Peace HOUNKPE (Benin)	Kaouther MACHTA (Tunisia)	Luz GRADILLA HERNANDEZ (Spain)
TC 2.5 Road infrastructure for Connected and Automated Mobility	Ana Luz JIMENEZ ORTEGA (Spain)	Ian PATEY (UK)	Abdelmenname HEDHLI (France)	Antonio GRANADO PÉREZ (Spain)
TC 3.1 Road Safety	John MILTON (USA)	Auckpath SAWANGSURIYA (Thailand)	Matthieu HOLLAND (France)	Pedro TOMAS MARTINEZ (Spain)
TC 3.2 Winter Service	Peter NUTZ (Austria)	Mohammed TAYYARAN (Canada)	Stéphanie GAUDÉ (France)	José Carlos VALDECANTOS ALVAREZ (Spain)
TC 3.3 Asset Management	Gerardo FLINTSCH (USA)	Michelle BARAN (Australia)	Pascal ROSSIGNY (France)	Miguel VALDES FLORES (Chile)
TC 3.4 Environmental Sustainability in Road Infrastructure and Transport	Eric DIMNET (France)	Fiona WILSON (United Kingdom)	Paul-Yanic LAQUERRE (Canada-Québec)	Maria Norma FERNÁNDEZ BUCES (Mexico)
TC 3.5 Road infrastructure for road transport decarbonization	Jan PETERSSON (Sweden)	Timothy SEXTON (USA)	Patrick DUPRAT (France)	Antonio MURUAIS RODRÍGUEZ (Spain)
TC 4.1 Pavements	Margo BRIESSINCK (Belgium)	Gina AHLSTROM (USA)	Aïda BERGAOUI SRIHA (Tunisia)	Horacio DELGADO (Mexico)
TC 4.2 Bridges	Nicolas BARDOU (France)	Joseph HARTMANN (USA)	Pierre GILLES (Belgium)	Marta PERTIERRA RODRIGUEZ (Spain)
TC 4.3 Earthworks	Patrick BOISSON (France)	Paul NOWAK (UK)	Yasmina BOUSSAFIR (France)	Natalia PÉREZ GARCIA (Mexico)
TC 4.4 Tunnels	Ingo KAUNDINYA (Germany)	Tiago MASSINGUE (South Africa)	Hélène MONGEOT (France)	Rafael LOPEZ GUARGA (Spain)
TC 4.5 Decarbonization of Road Construction and Road Maintenance	Janusz BOHATKIEWICZ (Poland)	Louis BETTINI (Australia)	Josh MATTHEIS (France)	Open
TC 4.6 Road Design Standards	Mariusz KIEC (Poland)	Lethu DLANIWA (South Africa)	Joseph AHISSOU (Benin)	Fernando LOPEZ-MENCHERO DIEZ (Spain)
Road Statistics	Mohamed NOUHI (Canada)	Hirofumi OHNISHI (Japan)	Open	Maria TEBAR (France)
Terminology	Bernard JACOB (France)	Gianluca COSSALE (Italy)	Emanuela STOCCHI (Italy)	Carlos SANTILLAN DOHERTY (Mexico)

3.3. KEY PERFORMANCE INDICATORS



Goal 1: PIARC will have a growing and engaged membership.

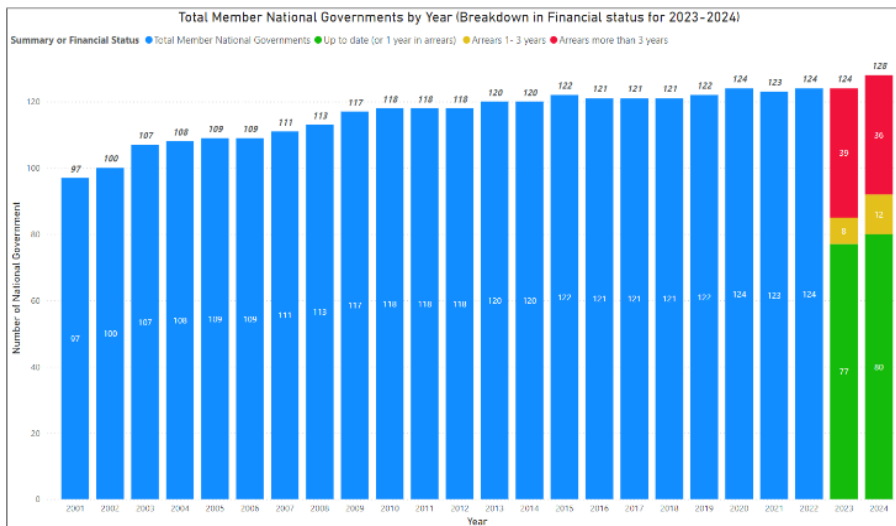
Goal 1: PIARC will have a growing and engaged membership

- The following slides are a series of data graphs that highlight:
  - National Government by current and historic financial membership
  - Collective member by region
  - Individual members by region and gender
  - National Government income classification
  - National Government by region and payment status
  - National Government by World Bank Income Classification
  - Technical Committee membership by gender
  - Technical Committee membership by region



Total Member National Governments by Year

Breakdown by Financial status for 2023-2024



Small increase 2015 2023 (2)

Discernable increase 2024 (4).

Arrears:

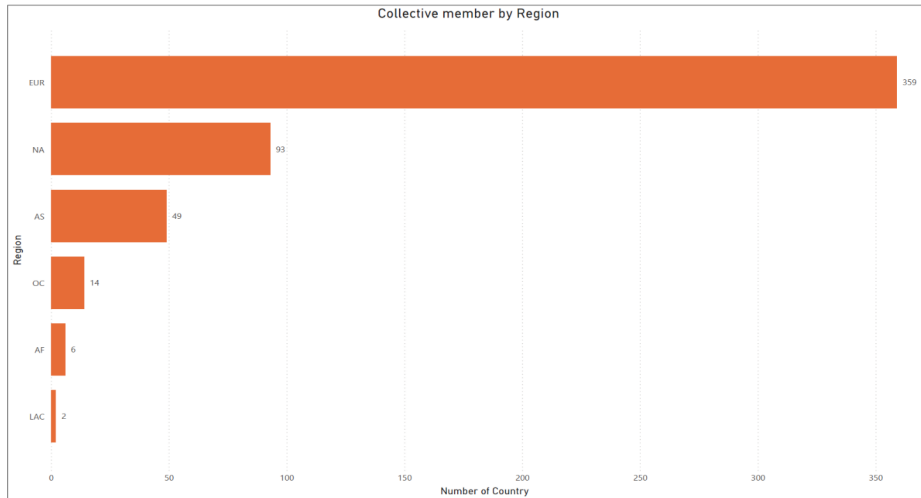
- 39 - 2023 and
- 36 - 2024,

Indicates a persistent issue with long-term arrears.

Issue for revenue of PIARC.



## Collective member by Region



Disparities in collective membership.

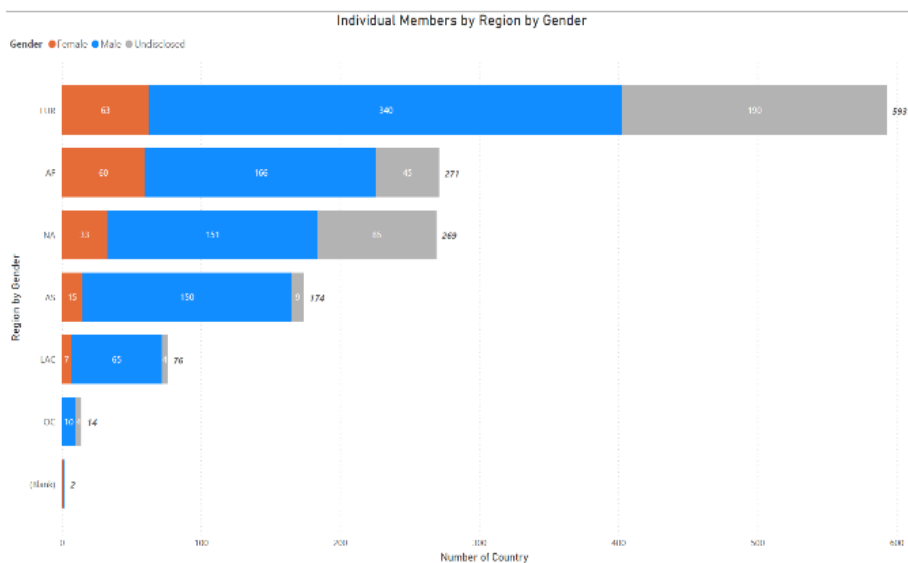
Asia, Oceania, Africa, and Latin America and the Caribbean have much smaller representations, indicating potential areas for growth and increased engagement.

Strategies to enhance membership in underrepresented regions could help balance this disparity and foster a more inclusive global membership base.

May assist revenue.



## Individual Members by Region by Gender



Significant members in Europe

Reasonable membership in Africa & North America.

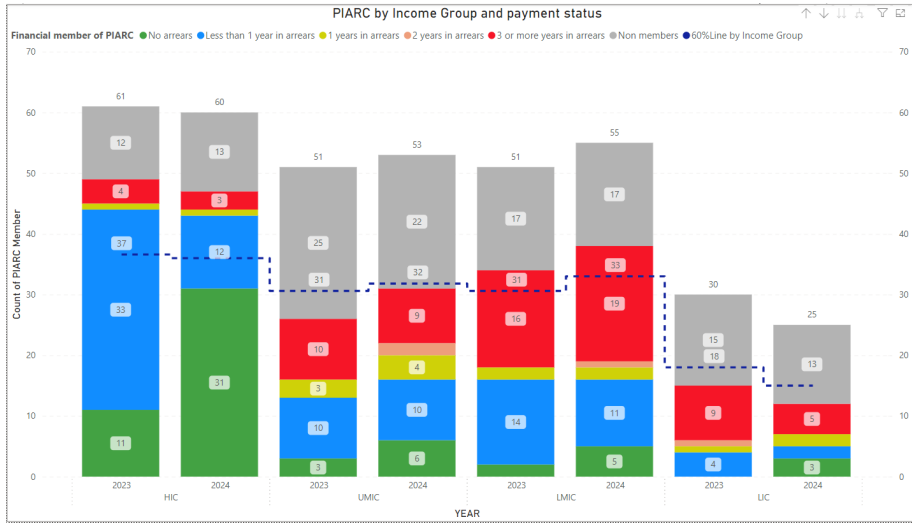
Opportunities to improve in Asia, Latin America and the Caribbean and Oceania.

Males largely outnumber female individual members in every region, with the largest membership in Europe.



## National Government Membership by Income Classification

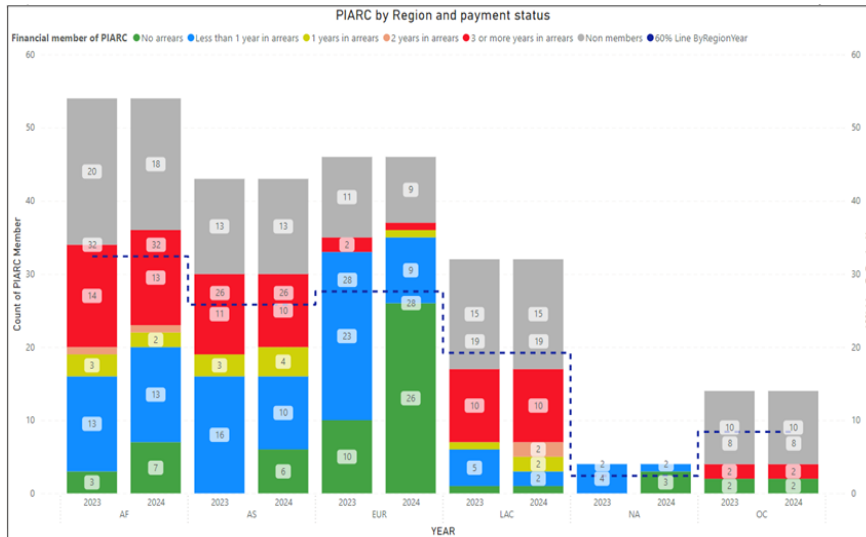
High, upper-middle, lower-middle and low for 2023 and 2024



Among the four income classification groups, only high-income countries have over 60 percent of recently paid members of PIARC.



## National Government Membership by region



60% in four out of six regions

Only 2 Europe and Northern America more than 60% paid members

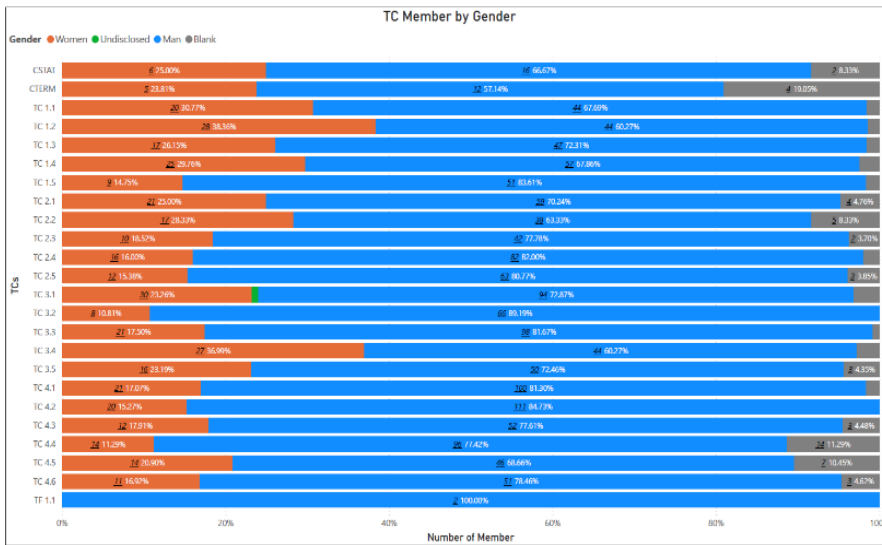
Latin America & the Caribbean, and Oceania low membership rate.

Indicates importance of maintaining contact with countries and seeking feedback on value of PIARC.

Oceania - 30% of countries are PIARC members, with only 2 out of 14 nations having paid their dues in recent years.



## Technical Committee membership by gender



Gender disparity across all committees.

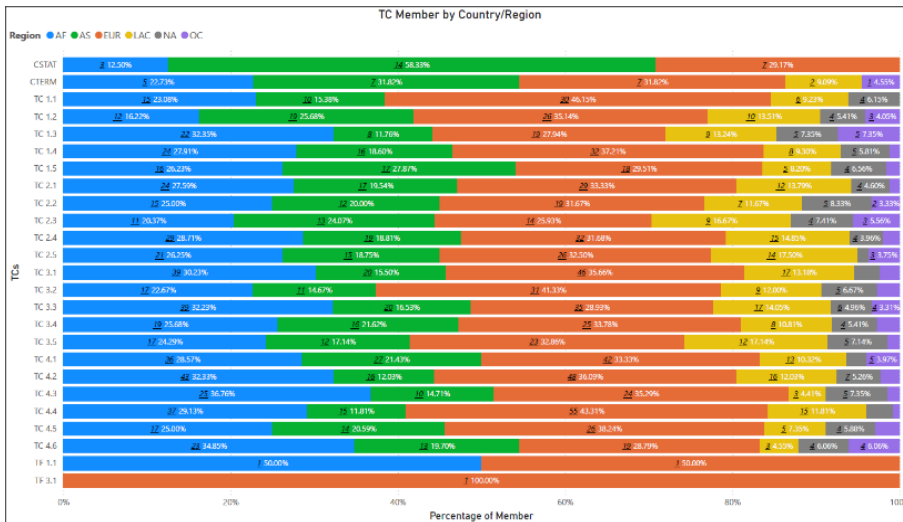
Anecdotally increasing percentage of women in each Task Force.

Highest percentage of women members are:

- TC 1.2 Contribution of Roads to Economic and Social Development - 38%, and
- TC 3.4 Environmental Impacts of Road Infrastructure and Transport - 37%.



## Technical Committee membership by region



Many TC members from Europe and Africa

Less from Northern America & Oceania – reflecting fewest Government members

Asia lower involvement potentially due to time zone, language







**Goal 2:** PIARC will have a nimble, and responsive technical work program that meets the expectations of its membership and adapt to respond to challenges.

## Goal 2: PIARC will have a nimble, and responsive technical work program that meets expectations of members and adapts to respond to challenges (slide 1 of 2)

### 2.1 Reports delivered on time & reviewed by Strategic Theme Coordinators

Use of consistent Terms of Reference and a spreadsheet ease reporting planning (Agenda Item 10)

### 2.2 Dissemination results are monitored on an ongoing basis

Download of publications will be reported as part of the monitoring of publications

### 2.3 Event attendance & satisfaction with events increases

Attendees of seminars and workshops are routinely surveyed – will be reported over cycle.

### 2.4 Increased number of outputs tailored to decision-makers

Report on High Impact Summaries and Briefing Notes published.

World Road Association • Association mondiale de la Route • Asociación Mundial de la Carretera • [www.piarc.org](http://www.piarc.org)



**Goal 2:** PIARC will have a nimble, and responsive technical work program that meets the expectations of its membership and adapt to respond to challenges.

## Goal 2: PIARC nimble responsive technical, meets expectations of its members & responds to challenges (slide 2 of 2)

### 2.5 Experts from LIC & LMICs increased value in PIARC technical committees and task forces

The General Secretariat is developing a survey to monitor.

### 2.6 SPC to continue to provide biannual reports on the implementation of PIARC's strategic plan

Current practice to continue for Work Plan.

This report to measure success of delivery of Section 1 of the Strategic Plan: The World Road Association's strategic direction and organisational goals.

World Road Association • Association mondiale de la Route • Asociación Mundial de la Carretera • [www.piarc.org](http://www.piarc.org)





Goal 3: PIARC products will be useful, relevant and widely accessible.

## Goal 3: PIARC products will be useful, relevant and widely accessible (slide 1 of 2)

### 3.1 Biannual reports on the implementation of PIARC's communications plan

Can be monitored by the Communication Commission and will include number of followers on social media, number of visits to webpage, conversion rate of emails, etc.

### 3.2 Progress on Communications Strategy's longer-term goals and objectives evaluated

Likely be qualitative. It can be an update describing the evaluation of the effectiveness of the Communications Strategy.

### 3.3 Targeted dissemination plans for selected outputs with greatest impact

SPC will work with the Communications Commission to define ways to calculate this measure.



Goal 3: PIARC products will be useful, relevant and widely accessible.

## Goal 3: PIARC products will be useful, relevant and widely accessible (slide 2 of 2)

### 3.4 PIARC products available in three official languages and reflect a range of viewpoints

SPC will work with the Communications Commission to define ways to calculate this measure. Communication Commission could monitor percentage of outcomes available in each language.

### 3.5 Agreements with partners on disseminating publications to harder to reach audiences

SPC will work with the Communications Commission to define ways to calculate this measure.

### 3.6 Increased uptake of PIARC products among all members, particularly decision-makers

The General Secretariat is collecting information to digitally track product usage and event.



Goal 4: PIARC will be a model global not-for-profit member-driven organisation

## Goal 4: PIARC will be a model global not-for-profit member-driven organisation

### 4.1 All members of all PIARC bodies can participate actively and fully and can plan their attendance well in advance

Aim for a schedule of events could be established at least 12 months in advance to allow individuals ample time to obtain necessary authorities and approvals required to plan their travel.

### 4.2 Virtual spaces, hybrid working methods and virtual knowledge-sharing activities (webinars, online conferences, etc) are used and members indicate satisfaction with them

Potentially a survey measure at the end of each cycle.

### 4.3 PIARC revenue remains above expenditure

This measure can be easily determined by the Finance Commission.

## 4. ANNEX 3. PIARC PUBLICATIONS

The 2020-2023 cycle inaugurated new products from the General Secretariat and Technical Committees, along with the traditional Technical Reports and Case studies: Briefing notes and Literature reviews. A significant quantity was issued during the first year of the new cycle.

### 4.1 REPORTS PUBLISHED IN 2023-24

#### In English: 20 reports

- 2024R01EN - Envisioning the Transport Agency of the Future - State of Existing Knowledge

**It should be noted that this report is the first of the 2024-2027 cycle.**

- 2023R53EN – Well-prepared projects in LMICs - Technical report
- [2023R52EN](#) - Super-Single Tires Configuration Overview – Briefing note
- [2023R51EN](#) - Life Cycle and Risk Management – Technical report
- [2023R50EN](#) - Multimodal Solutions for Optimizing Road Networks in Urban And Peri-Urban Areas
- [2023R49EN](#) - New Mobility and Road Infrastructure – Final report
- [2023R48EN](#) - BIM and Digitalization in Road Asset Management – Technical report
- [2023R47EN](#) - New Mobility And Road Infrastructure2 – Technical report
- [2023R46EN](#) - Road Infrastructure And Transportation Security - Technical report
- [2023R45EN](#) - Mainstreaming Biodiversity within Road Infrastructure Projects – Case studies
- [2023R44EN](#) - Mainstreaming Biodiversity within Road Infrastructure Projects – Technical report
- [2023R43EN](#) - Low Emission Zones – Planning and Implementation – Briefing note
- [2023R42EN](#) - Near Road Air Quality – Briefing note
- [2023R41EN](#) - Disaster Management and Recovery Techniques for Road Administrators – Technical report
- [2023R40EN](#) - Road Safety Audits Guidelines for Road Projects – Technical report
- [2023R39EN](#) - Integration of New Technologies in Winter Service - Technical Report
- [2023R38EN](#) - Measures for Improving Resilience of Road Network - Technical Report
- [2023R37EN](#) - Models for Sight Distance in Road Design - A Worldwide Comparison of Standards – Technical report
- [2023R36EN](#) - Innovations and Techniques - Application to Earth Structures in the Future – Technical report
- [2023R35EN](#) - Monitoring and Regulation to Reduce Overloading and Associated Infrastructure Damage on Road Networks – Technical report

#### In French: 2 reports

- [2023R46FR](#) - Infrastructure routière et sûreté des transports - Rapport technique
- [2021R02C-FR](#) – Manuel terrassements – Fascicule 2C - Etudes et projet de terrassement

#### In Spanish: 1 report

- [2023R46ES](#) - Infraestructura viaria y seguridad en el transporte - Informe técnico

### 4.2 SPECIAL PROJECT REPORTS PUBLISHED IN 2023-2024

- [2023SP02EN](#) - Biking for the Future
- [2023SP03EN](#) - Managing Innovation in Transport Agencies
- [2023SP04EN](#) - Social Equity and Social Accessibility

### 4.3 MOST DOWNLOADED TECHNICAL REPORTS (TOP 25)

The above table shows a constant interest for PIARC publications linked to tunnels and road safety, adding this time design standards and road construction related reports.

We have seen an **increase of more than 24% in downloads** over the period compared with the previous period, with peaks during the Prague Congress and the first quarter of 2024.

Of the **18,469 downloads**, the breakdown by language is **14,467 (English - 78.4%)**, **2,519 (French - 13.6%)** and **1,480 (Spanish - 8%)**.

Technical Reports	Downloads by language	Total Downloads
<b>2023R20</b> Measures for improving resilience of pavements - Technical Report Mesures visant à améliorer la résilience des chaussées - Rapport technique Medidas para mejorar la resiliencia de los pavimentos - Informe técnico	304 121 72	<b>497</b>
<b>2023R14</b> Climate Change, Resilience and Disaster Management for Roads - Seminar Changement climatique, résilience et gestion des catastrophes sur les routes - Séminaire Cambio climático, resiliencia y gestión de catástrofes en las carreteras - Seminario	250 101 67	<b>418</b>
<b>2023R28</b> PIARC International Climate Change Adaptation Framework 2023 – Technical Report	302	<b>302</b>
<b>2023R29</b> Renewal and Rejuvenation of Aging Infrastructure - Technical Report	276	<b>276</b>
<b>2023SP01</b> PIARC Road Safety Knowledge Exchange - Special Project	233	<b>233</b>
<b>2022R28</b> Innovative Pavement Maintenance and Repair Strategies - Collection of Case Studies Stratégies innovantes d'entretien et de réparation des chaussées - Collection d'études de cas Estrategias innovadoras de mantenimiento y reparación de pavimentos - Colección de estudios de casos	96 69 46	<b>211</b>
<b>2023R18</b> Forensic Engineering for Structural Failures - Technical Report	209	<b>209</b>
<b>2022R02</b>		<b>207</b>

	Reducing the Life Cycle Carbon Footprint of Pavements (2019R33) - High Impact Summary	108	
	Réduire l'empreinte carbone du cycle de vie des chaussées (2019R33) - Résumé à fort impact	59	
	Reducir la huella de carbono del ciclo de vida de los pavimentos (2019R33) - Resumen de alto impacto	40	
<b>2023R30</b>			<b>205</b>
	Electric Road Systems – A Route to Net Zero - Technical Report	205	
<b>2019R02</b>			<b>203</b>
	Road Tunnels: Vehicle Emissions and Air Demand for Ventilation - Technical report	159	
	Túneles de carretera: emisiones de los vehículos y demanda de ventilación - Informe Técnico	36	
	Tunnels routiers : émissions des véhicules et besoins en air pour la ventilation - Rapport technique	8	
<b>2023R38</b>			<b>200</b>
	Measures for Improving Resilience of Road Network - Technical Report	200	
<b>2023R37</b>			<b>197</b>
	Models for Sight Distance in Road Design - A Worldwide Comparison of Standards - Technical Report	197	
<b>2023R31</b>			<b>197</b>
	PIARC DataBook of Road and Road Transport 2020-2023	197	
<b>2023SP02</b>			<b>194</b>
	Biking for the Future – Special Project	194	
<b>2023R34</b>			<b>185</b>
	Impact of New Propulsion Technologies on Road Tunnel Operations and Safety - Technical Report	132	
	Impact des nouvelles technologies de propulsion sur l'exploitation et la sécurité des tunnels routiers - Rapport technique	36	
	Impacto de las nuevas tecnologías de propulsión en la explotación y seguridad de los túneles de carretera - Informe técnico	17	



<b>2023R26</b>		<b>184</b>
	Improving Road Tunnel Resilience, Considering Safety and Availability - Technical Report	184
<b>05.05.B (1999)</b>		<b>181</b>
	Fire and Smoke Control in Road Tunnels	168
	Maîtrise des incendies et des fumées dans les tunnels routiers	13
<b>2023R11</b>		<b>179</b>
	New Rehabilitation Materials and Technologies for Road Bridges - Briefing Note	179
<b>2023R24</b>		<b>177</b>
	Uniform and Holistic Approaches to Resilience: Climate Change and Other Hazards - Technical Report	177
<b>2015R03</b>		<b>174</b>
	International climate change adaptation framework for road infrastructure	125
	Marco Internacional de Adaptación al Cambio Climático para la Infraestructura Vial	33
	Cadre international d'adaptation au changement climatique pour les infrastructures routières	16
<b>2023R13</b>		<b>165</b>
	Specific Road Safety Issues for LMICs: Illustrative Examples - Collection of Case Studies	165
<b>2023R10</b>		<b>160</b>
	Measures for Increasing the Adaptability of Road Bridges to Climate Change - Technical Report	106
	Mesures visant à accroître l'adaptabilité des ponts routiers au changement climatique - Rapport technique	43
	Medidas para aumentar la adaptabilidad de los puentes de carretera al cambio climático - Informe Técnico	11
<b>2022SP03</b>		<b>160</b>
	Carbon Neutrality of The Road Sector	125
	Neutralité carbone du secteur routier	35

<b>2023R17</b>		<b>159</b>
Optimizing Road Network Operations Using Big Data - Technical Report	159	
<b>2017R01</b>		<b>153</b>
Design fire characteristics for road tunnels	118	
Características del incendio de proyecto en túneles de carretera	23	
Caractéristiques des incendies de dimensionnement en tunnels routiers	12	
<b>Total: 411 different Technical Reports* for 18,469 unique downloads</b>		<b>5,426</b>
<b>Total Top 25: 5,426 is 29.4 % of Total downloads</b>		

\* Unlike the statistical presentation in previous years, where the same technical report downloaded in two or three different languages was counted as two or three different technical reports, this year we have grouped the different language versions of a report together as a single report. As a report downloaded in English, French and Spanish is counted as the same technical report, this explains the apparent reduction in the total number of different technical reports to 411 from 729.

#### Total downloads

Date	Downloads
<b>2023</b>	<b>Total downloads 2023</b>
	<b>7,682</b>
août	1,247
sept	1,446
oct	2,354
nov	1,377
déc	1,258
<b>2024</b>	<b>Total downloads 2024</b>
	<b>10,787</b>
janv	1,671
févr	1,739
mars	1,769
avr	1,389
mai	1,589
juin	1,455
juil	1,175
<b>Total Downloads</b>	<b>18,469</b>



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*World Road Association (PIARC)*

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