FOREWORD
FROM THE PRESIDENT’S DESK

Dear Colleagues and Friends

The current cycle is ending. It has been a very busy cycle with its own challenges due to the un-invited guest that imposed itself on us – Covid 19. We are thankful that it too has passed but we should remain prudently watchful. It has been a busy cycle with our knowledge sharing publications, seminars, workshops, and collaboration with our partner organizations. I express my sincere gratitude to all members of the various technical committees and task forces including the various host countries who hosted meetings, seminars, and workshops without whom we would not have reached this point in the current cycle. In addition my sincere thanks to the various member countries for their financial and in-kind support for the special reports including for seconding the technical advisors.

The year 2023 began with the various Commissions finalizing their respective terms of references and meeting schedules. The ExCom held its first in-person meeting in Prague – the venue for the 27th World Road Congress. Both the strategic planning commission (SPC) and communications commission (ComCom) have completed their tasks. The strategic plan (SP) including the communications plan (CP) for the 2024 – 2027 cycle have been completed.

These have been endorsed by ExCom and have recommended them for approval, by the Council. These documents will be the beacons that will guide the work of the Association during the upcoming cycle. The SP lays out the vision and identifies the goals and objectives for the next cycle. Gender diversity and inclusion has been mainstreamed into the SP. The CP provides clear guidelines to improve the visibility of the Association, use of its products and providing decision makers with relevant information regarding developing trends including attracting new and younger members to PIARC.

The Finance Commission (FC) continues to keep a beady eye on the finances of the Association and prudent use of its finances. It is newsworthy to report that the collection rate of subscriptions has increased with a concomitant impact on the number of members in good standing – thanks to the incessant efforts of Robin Sébille. This has enabled ExCom to endorse the recommendation of the FC, and to recommend to Council that the subscriptions for the 2024 be retained at the current rate – no upward adjustment.

Notwithstanding retaining the fees at the 2023 rate, the Association faces some financial headwinds going forward. The FC will apply it collective mind to place an adjusted budget for the financial year 2024. The Council will be kept abreast of any future development in this matter. However, these headwinds in itself are an opportunity for the Association to review its governance structure, administration and operations.

The ExCom has instituted a review process with the objective of streamlining the governance of the Association including its administration and operations. The review process is timeous and consistent with good corporate governance. It is also an opportunity for the GS led by the SG to evaluate the General Secretariate’s performance and propose indicators – the outcomes of which they would be able to influence.

It is regretful to report the loss of a member. Unfortunately, Costa Rica has resigned from the Association.

However, it is my pleasure to report that the Association has two new member countries and one new National Committee (NC). These being Qatar and San Marino, respectively and the Kazakhstan national committee. A warm welcome is extended to Qatar, San Marino, and the National Committee of Kazakhstan. We look forward to their full participation in PIARC’s activities, and we are confident that their respective experiences will enrich the knowledge base of PIARC.
The World Road Congress represents four years of planning and organizing. My congratulations to the local organizing committee who has worked endlessly to put on this premier event of road congresses. The Congress programme showcases the work of the twenty-four committees and taskforces, as well as several specialized sessions and workshops dealing with topics of current and future interests and trends. It has something for all attendees. Attached to the Congress is an exhibition, intended to provide, road administrations, the road construction industry, engineering, technology, and safety industries including academia, with a platform to demonstrate their products and services.

“Together Again on the Road” is the theme of the 27th World Road Congress. It is after fifty-two years that we are once again together in Prague and in-person since the un-invited guest – Covid 19 – kept us apart. We certainly hope that the networking opportunities offered at the sessions, technical visits and various social events will go a long way in shortening the distance between decision makers and practitioners.

Similarly, the organizers of the 17th World Winter Services and Resilience Congress to be held in Chambéry in March 2026 are on track with their preparations. The Memorandum of Understanding (MoU) will be signed in Prague.

It just remains for me to wish all our delegates and exhibitors an enjoyable and successful Congress.

See you in Prague.

*Nazir Alli*
*President*
# CONTENTS

1. ACTIVITIES FROM OCTOBER 2022 TO SEPTEMBER 2023 ...................... 3
   1.1 COUNCIL ........................................................................... 3
   1.2 EXECUTIVE COMMITTEE ......................................................... 3
   1.3 CONFERENCE OF NATIONAL COMMITTEES .......................... 3
   1.4 GENERAL SECRETARIAT ......................................................... 4
   1.5 CONGRESSES OF THE WORLD ROAD ASSOCIATION ............ 4
   1.6 TECHNICAL COMMITTEES AND TASK FORCES .................... 4
   1.7 SPECIAL PROJECTS ............................................................... 5
   1.8 COMMUNICATION ................................................................ 5
   1.9 PIARC WEBSITE WWW.PIARC.ORG ..................................... 5
   1.10 ONLINE MANUALS ............................................................... 6
   1.11 PUBLICATIONS ................................................................. 6
   1.12 COOPERATION WITH OTHER ASSOCIATIONS/ORGANIZATIONS - PARTNERSHIPS ... 6
   1.13 SOFTWARE ........................................................................ 7

2. APPENDIX 1 – THE ASSOCIATION IN 2022-2023 ................................. 8
   2.1 ORGANISATION .................................................................. 8
   2.2 GOVERNING BODIES ............................................................ 8
   2.3 MEMBERS OF THE ASSOCIATION .......................................... 9
   2.4 NATIONAL COMMITTEES ....................................................... 10
   2.5 GENERAL SECRETARIAT ......................................................... 11

3. ANNEX 2. STRATEGIC PLAN 2020-2023 .............................................. 12

4. ANNEX 3. PIARC PUBLICATIONS ..................................................... 14
   4.2 REPORTS PUBLISHED IN 2022-23 ........................................ 14
   4.2 SPECIAL PROJECT REPORTS PUBLISHED IN 2021-2022 ........ 15
   4.3 MOST DOWNLOADED TECHNICAL REPORTS (TOP 25) .......... 15
1. ACTIVITIES FROM OCTOBER 2022 TO SEPTEMBER 2023

1.1 COUNCIL

In November 2022, for the first time since the outbreak of the Covid crisis, the Council could at last meet in person. This Council took place in Dakar (Senegal), and it was the first time that the Council was meeting in Sub-Saharan African, a long-awaited first. Our Senegalese host had been planning for this event for three years; the welcoming atmosphere as well as the quality of the debates were particularly appreciated.

1.2 EXECUTIVE COMMITTEE

The Executive Committee manages the Association in accordance with the guidelines and decisions of the Council.

The Executive Committee met in person in Dakar (Senegal), immediately after the Council meeting, and in Dehradun (India) in April 2023 with almost all its members present. It was the first time that India hosted an official PIARC meeting. The Executive Committee also online on September 6-7.

1.2.1 Strategic Planning Commission

The Strategic Planning Commission (SPC) met several times in virtual format throughout the year and in person in London in February. The main issues dealt with by the SPC in 2023 were:

- Monitoring the activities of the Committees and Task Forces (organization, work plans, participation of members, cross-cutting issues, etc.);
- Preparing the draft Strategic Plan to be approved by the Council;
- Steering the special projects’ programme.

A mid-term meeting was organised by the General Secretariat in Bilbao, Spain, in January with almost all Committee chairs and secretaries in attendance, in order to review progress on the deliverables and share best practice.

1.2.2 Finance Commission

Over the period, the Finance Commission (FinCom) met twice, in March 2022 in Bonn, Germany, and in June 2023 in Paris, France. It monitored the implementation of the budget and drafted the new one. The Commission noticed the progress made in governmental fee collection.

1.2.3 Communications Commission

The Communications Commission (ComCom) organised numerous online meetings all year around. In particular, it could produce a draft strategy on communications, to be approved by the Council, and oversee the Prize competitions for the World Road 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, and steered a special project dedicated to fostering understanding of gender inclusion and diversity issues in the Association’s bodies.

1.3 CONFERENCE OF NATIONAL COMMITTEES

The National Committees did not meet during the period, after the meeting that had taken place in Dakar, Senegal, in November 2022. There was no online conference for National committees, and all look forward to the in-person meeting to be held in Prague. During the period, Kazakhstan created a new national committee, with the approval of the Executive Committee.
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 (described in more detail in the next pages):

- providing assistance and guidance to the Committees and Task Force;
- helping organize seminars and other events;
- publication of reports produced by the Technical Committees;
- promotion activities, including events, social networks 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;
- Kaouther Machta (Tunisia) in replacement Evelina Åkesson (Sweden) for partnerships;
- Jenny Cook (UK) in replacement of Lina Grandlund (Sweden) on gender inclusion and diversity and partnerships.

Véronique Anselin, head assistant, retired after 37 years working for PIARC and was replaced by Isabelle Fanguinovény. The General Secretariat also recruited Perrine Marchand to support reinforced communication activities.

1.5 Congresses of the World Road Association

1.5.1 XXVIIth World Road Congress (2023)

The final phase of the preparation of the Prague Congress went at full pace. Audience seems very promising (more than 3,000 expected delegates) and the programme particularly comprehensive.

1.5.2 XVIIth International Winter Service Congress (2026)

Preliminary discussions were held with the Chambéry organising committee in order to finalize a Memorandum of Understanding with PIARC to be signed during the Prague Congress.

1.5.1 XXVIIIth World Road Congress (2027)

A call for proposals was organised, with bids received from three countries. The Council will make its decision during its meeting in Prague.

1.6 Technical Committees and Task Forces

Physical meetings and seminars resumed as the Covid crises faded away. The following seminars and workshops took place over the period:

- Road Asset Management Manual, Online, organised from Paris (France), July 2023
- Sustainable road freight transport for economic and social development, Arusha (Tanzania) May 31 - June 02, 2023
- Road mobility projects in urban regions, Buenos Aires (Argentina) May 15-17, 2023
- Innovative road operation concepts for safe and sustainable mobility, Rabat (Morocco), 11-13 May 2023
- Inspection, management and rehabilitation of Road Bridges, Kobe (Japan), 11 May 2023
- Resilient, sustainable and safe rural roads & earth structures for a better future, Tunis (Tunisia), 03-05 May 2023
- Tunnels, Dehradun (India), April 2023
- Performance-based Asset Management of Land Transport Infrastructure and Services for Sustainable Development, Dakar (Senegal), 07-09 March 2023
- International Pavement Seminar, Kuala Lumpur (Malaysia), 07-09 March 2023
• Sustainability and Disaster Management for Roads, Cancún (Mexico), 08-11 February 2023
• Low and Lower-Middle Income Countries – Impact of ecology and climate transition on project preparation: financing, capacity building, technical standards, Online, organised from Paris (France), 14 December 2022
• Sustainable Mobility for Resilient Cities and Peri-Urban Regions, Tunis (Tunisia), 23-25 November 2022
• Climate Change, Resilience and Disaster Management for Roads, Yogyakarta (Indonesia) and online, 22-24 November 2022

TCs and TFs also continued producing written documents from the cycle, mostly case studies and literature review (see Annex 3). As of writing, about 80 documents have been published, which is a very high number. The Association has been able to reach the objective of delivering timely knowledge products to its count.

1.7 Special Projects

In 2022, three new special projects started, thanks to significant financial support from Member Countries:

• Carbon Neutrality of Road Transport, published in April 2023
• Knowledge Sharing on Road Safety: the aim was to publicize the acquis of PIARC regarding Road Safety, be it in the electronic manual or the technical reports. Key messages were delivered and two webinars organized.
• Social Equity: under finalization
• Gender inclusion in the road sector: under finalization

1.8 Communication

The period proved particularly fruitful in communication activities; and last year intern was recruited on a permanent basis.

• 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 TRB 2023 and ITF 2023 to advertise for upcoming events;
• Extensive support to the Czech Local Organizing Committee for the WRC 2023
• 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). The upcoming Prague congress may not be alien to this particularly encouraging achievement.

PIARC Website – Number of visits

<table>
<thead>
<tr>
<th>Period</th>
<th>01/08/2020 - 31/07/2021</th>
<th>01/08/2021 - 31/07/2022</th>
<th>01/08/2022 - 31/07/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visits</td>
<td>69,456</td>
<td>60,626</td>
<td>108,487</td>
</tr>
<tr>
<td>Number of single users</td>
<td>26,854</td>
<td>24,986</td>
<td>66,069</td>
</tr>
<tr>
<td>Number of pages viewed</td>
<td>344,842</td>
<td>300,501</td>
<td>417,851</td>
</tr>
<tr>
<td>Average number of pages per visit</td>
<td>4.96</td>
<td>4.96</td>
<td>4.18</td>
</tr>
</tbody>
</table>
Average duration of visits (minutes) | 4:22 | 4:09 | 3:34

Note: consultations by the General Secretariat are not considered in these statistics.

### 1.10 Online Manuals

The first three online manuals of the Association were introduced during the Seoul Congress in November 2015. Updates were presented during the Abu Dhabi Congress. In addition, the Association published a fourth manual in October 2017, dedicated to Road Asset Management.

A fifth manual, dedicated to disaster management, was launched in August 2022: [https://disaster-management.piarc.org/en](https://disaster-management.piarc.org/en)

Progress in the latest period concerned linguistic versions: the second version of the tunnels manual is now fully available in English, French and Spanish, the Risk Management Manual is about to be online in the three languages as well and the French version of the Asset Management Manual is also online since July 2023.

### 1.11 Publications

#### 1.11.1 Technical reports

33 new reports as well as translations into French and Spanish of reports published the previous years have been published.

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 now printed in three separate monolingual editions in English, French and Spanish.

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

- RNO/ITS – RR 395, December 2022
- Road Tunnels - RR 396, March 2023
- Women Paving the way - RR 397, June 2023,
- Roads and Biodiversity - RR 398, September 2023.

### 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 (updated MoU to be signed in Prague during the Congress).

As agreed, two new MoUs signed 2023

- IENE Infrastructure and Ecology Network Europe
  - Linked with TC3.4 Environmental Sustainability in Road Infrastructure and Transport
• JBP Japan Bosai Platform
  ○ Linked with TC 1.51.5 Disaster Management

1.12.2 Meetings and events

In 2023 some meetings still remain virtual, but many meetings are organized as physical or hybrid meetings. PIARC took an active part in the following events (keynote speech, booth, lecture, etc.)

• PIARC Advisory Group meeting, 14 December 2022
  PIARC and 15 partner organisations discussed recent activities and trends in the road sector, on the theme of ‘Decarbonisation’.
• COP 27, virtually, 16 November 2022
  TC 1.4 Chair Caroline Evans presented PIARC work on engineering the vision for climate resilient transport.
• TRB annual meeting, Washington DC (USA), 8-12 January 2023
  PIARC organized a workshop on Decarbonisation with presentations from TC 4.1 (pavements) and TF 2.2 (electric road systems).
• UNECE Inland Transportation Committee, Geneva (Switzerland), 21-22 February 2023
• UN Road Safety Collaboration (UNRSC), virtual, 9 March 2023
• Sum4All consortium meeting, virtual, 13 March 2023
• International Transport Forum (ITF) 2023 Summit, Leipzig (Germany) 23-26 May 2023
• EUPave (European Concrete Paving Association) 14th International Symposium on Concrete Roads, Krakow (Poland) 24-26 June 2023
• Vision Zero conference 2023, Stockholm (Sweden) 26-27 June 2023
• REAAA (Road Engineering Association of Asia and Australasia) Asia Australasia Road Conference 2023, Labuan Bajo, (Indonesia), 24-27 Aug. 2023

1.13 Software

1.13.1 HDM-4

No major development occurred in 2022 or 2023. The Council decided in 2021 to invest royalties from the software sales in further developments of the system, which are now led by the World Bank. The Bank is currently developing this new update.

1.13.2 QRAM

A new version of this software was released in April 2023. All funds allocated by donors have now been used
2. APPENDIX 1 – THE ASSOCIATION IN 2022-2023

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 (Uganda)
- Members: Mr. Jorge Arganis Díaz-Leal (Mexico), 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. Joshua LaRocque (Canada), Mr. Hyeon-Seung Lee (Republic of Korea), Mr. Václav Neu virt (Czech Republic), Mr Sanjay Nirmal (India), Mr. Bine Pengal (Slovenia), Mrs. Anne-Séverine Poupelee (Belgium), Mrs. Emanuela Stocchi (Italy), Mrs. Claudine Tremblay (Canada-Québec), 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 September 2023, the Association’s member countries include 125 national member governments, from around the world. Qatar and San Marino became members in 2022. 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.

<table>
<thead>
<tr>
<th>PIARC National Member Governments (as of 30 September 2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALGERIA</td>
</tr>
<tr>
<td>ANDORRA</td>
</tr>
<tr>
<td>ANGOLA</td>
</tr>
<tr>
<td>ARGENTINA</td>
</tr>
<tr>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>AUSTRIA</td>
</tr>
<tr>
<td>AZERBAIJAN</td>
</tr>
<tr>
<td>BAHRAIN</td>
</tr>
<tr>
<td>BANGLADESH</td>
</tr>
<tr>
<td>BELGIUM</td>
</tr>
<tr>
<td>BENIN</td>
</tr>
<tr>
<td>BHUTAN</td>
</tr>
<tr>
<td>BOLIVIA</td>
</tr>
<tr>
<td>BOTSWANA</td>
</tr>
<tr>
<td>BRAZIL</td>
</tr>
<tr>
<td>BULGARIA</td>
</tr>
<tr>
<td>BURKINA FASO</td>
</tr>
<tr>
<td>BURUNDI</td>
</tr>
<tr>
<td>CAMBODIA</td>
</tr>
<tr>
<td>CAMEROON</td>
</tr>
<tr>
<td>CANADA</td>
</tr>
<tr>
<td>CANADA-QUÉBEC</td>
</tr>
<tr>
<td>CAPE VERDE</td>
</tr>
</tbody>
</table>
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 Association has in total 49 National Committees or organizations recognized as acting as a National Committee.

National Committees

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

As of 30 September 2023, 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, South Korea, Mexico, the United Kingdom, Tunisia (part time) India (part time) and Poland (part time) for various durations.
- seven permanent staff who are salaried by PIARC: Isabelle Fanguinovény (executive assistant), Alain Charles (web manager), Marina Domingo Monsónis and Perrine Marchand (communications), Cécile Jeanne (publications), Hanitra Rabetaliana (accounts), Nathalie Sabbah (office clerk).
- one apprentice: Ethan Wilton, a master 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)
- 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)
- Jenny Cook (UK) is in charge of partnerships as well as gender inclusion and diversity equity issues.
- Aleksandra Cybulska (Poland) joined the team on 1st June 2019 as event planning Coordinator (part time position; based in Poland).
- Kaouther Machta (Tunisia) is in charge of Congress sessions and partnerships (part time position; based in Tunisia).
3. ANNEX 2. STRATEGIC PLAN 2020-2023

The Council approved the Strategic Plan 2020-2023 at its meeting in Abu Dhabi (United Arab Emirates) in October 2019. 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 Abu Dhabi 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 2020-2023 period

<table>
<thead>
<tr>
<th>Strategic Theme</th>
<th>Goal</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Theme 1 - Road Administration</strong></td>
<td>The external operating context related to road infrastructure and road transport is constantly evolving in response to large social, economic, and environmental shifts. This affects the financing and risk managing for the construction, rehabilitation, and maintenance of road assets that are priorities in transportation, since sometimes the public-sector budgets are not enough to meet future funding requirements. In addition, safety and security in road systems, technological advances, data-driven and digitalization of road infrastructure, as well as resilience to climate change and extreme weather events are challenged issues that all Road Administrations are facing.</td>
<td>Ernesto BARRERA GAJARDO (Chile)</td>
</tr>
<tr>
<td><strong>Strategic Theme 2 - Mobility</strong></td>
<td>The goal of this Strategic Theme is to provide good knowledge and some sustainable answers to all communities in the fields of people mobility and goods transportation, taking into account what follows: challenges for mobility policies mentioned above, the opportunity of new technologies, and the increasing need to have a good alignment between mobility policies and the broader goals of communities, in a context where those goals are changing.</td>
<td>André BROTO (France)</td>
</tr>
<tr>
<td><strong>Strategic Theme 3 - Safety and Sustainability</strong></td>
<td>There is a growing awareness worldwide that the strategy and policies, which are formulated by road administrators and transport-related organizations, enhance safety and security in road systems during the design, construction, and operation of road infrastructure. This environment steers them to producing practical solutions to improve road safety with further developed technologies and to raise awareness of cybersecurity for strengthening road and transportation security. Pursuing the efficient road operation especially in winter service, optimizing the maintenance cost of road assets, and contributing to the sustainable environment are also essential for road administrators and transport-related organizations to manage road infrastructure successfully.</td>
<td>Keiichi TAMURA (Japan)</td>
</tr>
<tr>
<td><strong>Strategic Theme 4 - Resilient Infrastructure</strong></td>
<td>Roads are important, and in some cases even critical, infrastructures that make an important contribution to the social and economic well-being of the society. In this context, ensuring the availability, safety and reliability of road transport infrastructure is crucial. This should include, in addition to normal operation, in particular planning, preparation, response and rehabilitation in the event of unplanned and unforeseen natural or other events, and also includes the safe operation of road networks in the event of events that may have an indirect impact on availability and reliable operation, such as pandemics or black swan events. Against this background, owners and operators of roads are required to proactively manage risks for the infrastructure itself and its users. This poses the challenge of assessing all existing threats and, if necessary, taking measures to ensure availability as far as possible under all conditions.</td>
<td>Jürgen KRIEGER (Germany)</td>
</tr>
</tbody>
</table>

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 theTerminology Committee is directly linked to the General Secretariat.
| TC 1.1 Performance of Transport Administrations | Christos S. Xenophon (USA) | Alan Colegate (Australia) | Joseph Ahissou (Benin) | José Manuel Blanco Segarra (Spain) |
| TC 1.2 Road and Transport Planning for Economic and Social Development | Fabio Pasquali (Italy) | Mark Brown (UK) | Abdelkader Faham (Algeria) | Alicia Haydee Llordi (Argentina) |
| TC 1.3 Finance and Procurement | Francesco Scoundone (Italy) | Francesco Micci (Italy) | Jean Max Gillet (France) | Hector Ovalle (Mexico) |
| TC 1.4 Climate Change and Resilience of Road Networks | Caroline Evans (Australia) | Louis Bettini (Australia) | Fabien Palholt (France) | Juan Fernando Mendezza Sanchez (Mexico) |
| TC 1.5 Disaster Management | Yuko Aoda (Japan) | Neil Fisher (New Zealand) | Alain Lefebvre (Belgium) | Marcelo Medina Santibanez (Chile) |
| TF 1.3 Well-prepared Projects in LMICs | Michel Démarré (France) | Chris Furneaux (UK) | tbd | Clemente Poon (Mexico) |
| TC 2.1 Mobility in Urban Areas | Andrea Simone (Italy) | Ian Patey (UK) | Sandrine Roux (France) | Luis Miranda Adorno (Canada-Québec) |
| TC 2.2 Accessibility and Mobility in Rural Areas | Suleiman Gussman (Burkina Faso) | tbd | Imen Makhouf (Tunisia) | Mariano Barone (Argentina) |
| TC 2.3 Freight | Martin Ruesch (Switzerland) | Tiffiny Julian (USA) | Bernard Jacobi (France) | Carlos Santillan Doherty (Mexico) |
| TC 2.4 Road Network Operation / Intelligent Transport Systems | Valentina Galasso (Italy) | James Elliott (UK) | Kaoutar Macht (Tunisia) | Daniel Rissomann (Argentina) |
| TC 2.5 New Mobility and its Impact on Road Infrastructure and Transport | Ana Luz Jimenez (Spain) | Ian Patey (United Kingdom) | Abdelmonem Hedhil (France) | Antonio Granado (Spain) |
| TF 2.1 New Mobility and its Impact on Road Infrastructure and Transport | Jan Pettersson (Sweden) | Doron Nicolaides (UK) | Patrick Duprat (France) | Jesús Leal Bermejo (Spain) |
| TC 3.1 Road Safety | John Milton (USA) | Lucy Wicksman (United Kingdom) | Lise Fournier (Canada-Québec) | Roberto Llamas Rubio (Spain) |
| TC 3.2 Winter Service | Peter Nutz (Austria) | Steven Lund (USA) | Stéphanie Gaude (France) | José Carlos Valdecantos Alvarez (Spain) |
| TC 3.3 Asset Management | Gerard Flintsch (USA) | James Smith (Canada) | Pascal Rossigny (France) | Miguel Valdes Flores (Chile) |
| TC 3.4 Environmental Sustainability in Road Infrastructure and Transport | Eric Dimnet (France) | Tamara Nicholson (USA) | Mathieu Chabot-Morel (Canada-Québec) | Sergio López Noriega (Mexico) |
| TF 3.1 Road Infrastructure and Transport Security | Saverio Palchetti (Italy) | Chris Johnson (Canada) | Philippe Chanard (France) | Luz Angela Gracia HERNANDO HERNÁNDEZ (Mexico) |
| TC 4.1 Pavements | Margo Briessinck (Belgium) | Gina Ahlstrom (USA) | Aida Bergaoui Sria (Tunisia) | José del Cerro Grau (Spain) |
| TC 4.2 Bridges | Kyohiro IMAI (Japan) | Joseph Hartmann (USA) | Pierre Gilles (Belgium) | Gonzalo Arias Hofman (Spain) |
| TC 4.3 Earthworks | Patrick Bossion (France) | Paul Nowak (UK) | Yasmine Boussafi (France) | Natalia Pérez Garcia (Mexico) |
| TC 4.4 Tunnels | Ingo Kaundinya (Germany) | Thabo Masschu (South Africa) | Hélène Montegut (France) | Rafael López Guajardo (Spain) |
| TF 4.1 Road Design Standards | Mariusz Kiec (Poland) | Margaret Njogu Ooi (Kenya) | Matthieu Holland (France) | Fernando López Menchero Díez (Spain) |
| Terminology | Bernard Jacob (France) | Mitsuru Saito (USA) - acting | Emanuela Stocchi (Italy) | Carlos Santillan Doherty (Mexico) |
| Road Statistics | Hirofumi Ohnishi (Japan) | Tomonobu Tanino (Japan) | | |
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 and the automated translation tools allowed to have almost all these documents, drafted in English, to be put online with very few delay.

4.2 **REPORTS PUBLISHED IN 2022-23**

In English: 33 reports

- [2022R27EN](#) - The Role of Transport Agencies in Shaping Disruptive Technologies and Service Models - Case Study Summary Report
- [2022R28EN](#) - Innovative Pavement Maintenance and Repair Strategies - Case studies
- [2022R29EN](#) - Road Disaster Management Using Latest Information Technologies - Briefing Note
- [2022R30EN](#) - Survey on Winter Maintenance in the City - Case studies
- [2022R31EN](#) - Electric Road Systems - Case studies
- [2022R32EN](#) - Damage-Resilient Bridges in Seismic Areas - Case studies
- [2022R33EN](#) - Climate Change, Other Hazards and Resilience of Road Networks - Case studies
- [2023R01EN](#) - The Role of Transport Agencies in Shaping Disruptive Technologies and Service Models - Technical Report
- [2023R02EN](#) - The Role of Transport Agencies in Shaping Disruptive Technologies and Service Models – High Impact Summary
- [2023R03EN](#) - The Use of Big Data for Road Condition Monitoring - Literature Review
- [2023R04EN](#) - The Use of Big Data for Road Condition Monitoring - Briefing Note
- [2023R05EN](#) - Multimodal Solutions for Optimizing Road Networks in Urban and Peri-Urban Areas - Case Studies
- [2023R06EN](#) - Customer Experience and Public Value Creation – Technical Report
- [2023R07EN](#) - Road Safety in LMICs: Identification and Analysis of Specific Issues - Literature Review
- [2023R08EN](#) - Impact of New Propulsion Techniques on Funding Road Infrastructure - Briefing Note
- [2023R09EN](#) - Damage-Resilient Bridges in Seismic Areas - Technical Report
- [2023R10EN](#) - Measures for Increasing the Adaptability of Road Bridges to Climate Change - Technical Report
- [2023R11EN](#) - New Rehabilitation Materials and Technologies for Road Bridges - Briefing Note
- [2023R13EN](#) - Specific Road Safety Issues for LMICs: Illustrative Examples - Case Studies
- [2023R14EN](#) - Climate Change, Resilience and Disaster Management for Roads - Seminar
- [2023R15EN](#) - Evaluating Impacts of New Mobility in Urban and Peri-Urban Areas - Case studies
- [2023R16EN](#) – New Mobility and Road Infrastructure - Interim Report
- [2023R18EN](#) – Forensic Engineering for Structural Failures - Technical Report
- [2023R19EN](#) – Advancement of Inspection Techniques / Technologies as a part of Bridge Management Systems - PIARC Technical Report
- [2023R21EN](#) – Greening of Freight Transport - Technical Report
- [2023R22EN](#) – The Use of Big Data and Social Networks for Disaster Management - Technical Report
4.2 **Special Project Reports Published in 2021-2022**

- **2022SP03EN** - Carbon Neutrality of The Road Sector

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.
## Technical Reports

<table>
<thead>
<tr>
<th>Title</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of the Art in Road Design Standards - Literature Review</td>
<td>320</td>
</tr>
<tr>
<td>Innovative Pavement Maintenance and Repair Strategies - Collection of Case Studies</td>
<td>302</td>
</tr>
<tr>
<td>Carbon Neutrality of The Road Sector</td>
<td>284</td>
</tr>
<tr>
<td>Measures for Improving Resilience of Pavements - Collection of Case Studies</td>
<td>213</td>
</tr>
<tr>
<td>The Use of Big Data for Road Condition Monitoring - Literature Review</td>
<td>207</td>
</tr>
<tr>
<td>Fire and Smoke Control in Road Tunnels</td>
<td>192</td>
</tr>
<tr>
<td>Smart Roads Classification</td>
<td>188</td>
</tr>
<tr>
<td>Well-Prepared Projects</td>
<td>175</td>
</tr>
<tr>
<td>Utilizing Data to Optimize Road Network Operations - Collection of Case Studies</td>
<td>169</td>
</tr>
<tr>
<td>Climate Change, Other Hazards and Resilience of Road Networks - Collection of Case Studies</td>
<td>165</td>
</tr>
<tr>
<td>Road Tunnels: Vehicle Emissions and Air Demand for Ventilation - Technical report</td>
<td>151</td>
</tr>
<tr>
<td>Road Related Data and How to Use it</td>
<td>151</td>
</tr>
<tr>
<td>Advancement of Inspection Techniques / Technologies as a Part of Bridge Management Systems - Collection of Study Cases</td>
<td>149</td>
</tr>
<tr>
<td>Electric Road Systems - Collection of Case Studies</td>
<td>149</td>
</tr>
<tr>
<td>Road Bridges - New Rehabilitation Materials and Technologies - Technical Report</td>
<td>139</td>
</tr>
<tr>
<td>Resilience of Earth Structures - Collection of Case Studies</td>
<td>134</td>
</tr>
<tr>
<td>Impact of New Propulsion Technologies on Road Tunnel Operations and Safety - Literature review</td>
<td>123</td>
</tr>
<tr>
<td>Road tunnels: vehicle emissions and air demand for ventilation</td>
<td>115</td>
</tr>
<tr>
<td>International climate change adaptation framework for road infrastructure</td>
<td>115</td>
</tr>
<tr>
<td>Medidas para mejorar la resiliencia de los pavimentos - Colección de estudios de casos</td>
<td>109</td>
</tr>
<tr>
<td>Systems and equipment for fire and smoke control in road tunnels</td>
<td>109</td>
</tr>
<tr>
<td>Improving Road Tunnel Resilience, Considering Safety and Availability - Literature Review</td>
<td>109</td>
</tr>
<tr>
<td>Overweight Vehicles: Impact On Road Infrastructure And Safety</td>
<td>108</td>
</tr>
<tr>
<td>Multimodal Solutions for Optimizing Road Networks in Urban and Peri-Urban Areas - Case Studies</td>
<td>107</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
</tbody>
</table>
| **Total:** 729 different Technical Reports for **14,886** downloads  
**Total Top 25 4,147** is **27.8 %** of Total downloads                              | 4,147 |