2nd Announcement
INTERNATIONAL SEMINAR

CLIMATE CHANGE, RESILIENCE, AND DISASTER MANAGEMENT FOR ROADS

• Seminar:
  🌐 Yogyakarta Marriott Hotel,
  Yogyakarta - Indonesia
  🗓️ November 22 - 23, 2022
  🕒 08.30-17.00 Western Indonesia Time (UTC +7)
  Online via: zoom
  For more information: linktree/piarcyogyakartaseminar

• Technical visit:
  🌐 Kretek Bridge, Yogyakarta
  🗓️ November 24, 2022
  🕒 08.30-15.30 Western Indonesia Time (UTC +7)
1- Seminar Overview

PIARC (World Road Association) is a nonpolitical, non-profit organization whose goal consists of organizing knowledge exchange on all matters related to roads and road transport. Four key missions of PIARC stand on:

- Being a leading international forum for analysis and discussion;
- Identifying, developing, and disseminating best practice and give better access to international information;
- Considering within its activities the needs of developing countries and countries in transition fully;
- Designing, producing, and promoting efficient tools for decision making on matters related to roads and related transport.

Since 1909, the Association has held international seminars to expand its global presence, provide the concerns of developing countries and those in transition, and promote the Association's work more globally.

2- Objective of Seminar

Climate change and other hazards have a wide range of implications on the performance of road infrastructure, and can cause disruptions to road network operations. For example, extreme rainfall influences the intensity beyond the drainage capacity of roadways resulting in slope collapses and landslides as well as traffic disruption. The traffic disruption will lead to an increase in traffic accidents and restrictions. On the other hand, disasters cause significant loss of life each year throughout the world, as well as significant material and intangible damage. Damage to hundreds of kilometers of road and bridge infrastructure once occurred across Indonesia during the previous 20 years. The rising prevalence of traffic disruptions, as well as the severely damaged road and bridge infrastructure, will stifle economic activity and cause further accidents.

Disaster mitigation is needed to lessen the impact disasters have on people and property, particularly on the road infrastructure. The development of uniform and holistic methodologies, and adaptation frameworks to address climate change and other hazards plays a significant role in making road transport infrastructure more resilient.

Hence, the Seminar will be held to share expertise and offer relevant recommendations so that effective solutions and counter measures may be proposed, taking into consideration the unique characteristics of each city: financial, logistic, existing networks, strategies currently in place, and so on. The Seminar also seeks to provide an overview of the challenges to managing climatic impacts and road resilience by presenting approaches and case studies from different countries.

3- Seminar Attendee

The Climate Change, Resilience, and Disaster Management for Roads seminar is intended for local authorities, administrators, the private sector, and those responsible for road traffic and safety, design engineers, design consultants, road network administrators, contractors, control and technical assistance consultants, academics, researchers, engineering students interested in the subject, and experts in other domains of expertise related to Climate Change, Resilience, and Disaster Management for Roads.

4- Seminar Technical

Due to the differences in COVID-19 restrictions between countries, the seminar will be organized to allow for both face-to-face (on-site) and virtual (off-site) events. The seminar will cover a variety of topics, as detailed in the second announcement later. The panels will be held over the two days of the seminar, with each session featuring several presentations from members of the technical committee as well as Indonesian and international experts. Attendees at the seminar may participate in the Technical Visit to Pansela Road and Kretek Bridge.

5- Language

The official language of this seminar will be English, and Indonesian speaking co-moderator will be available on every session of the seminar.
6- Location and Dates of the Seminar and Technical Visit

The seminar will be held on 22nd and 23rd November 2022, followed by a Technical Visit on 24th November 2022 in Yogyakarta, Indonesia. As the world's largest archipelago country, Indonesia has an abundance of mesmerizing natural scenery and cultures such as Javanese, Sundanese, Bataknese, and so on. As the only royal city in Indonesia still ruled by a monarchy, Yogyakarta is well-known as the heart of the classical Javanese culture of Indonesia including Batik textiles, Wayang puppetry, drama, literature, music, poetry, and silversmithing. It is also known as the city of tolerance and the city of students, and it serves as a melting pot where people from various backgrounds meet and interact in harmony.

Jogja, also the name of Yogyakarta, is a potential city of development of the road and bridge infrastructure with Yogyakarta – Surakarta Toll Road, newly built Kretek Bridge, Yogyakarta – Bawen Toll Road, Yogyakarta – Cilacap Toll Road. Yogyakarta has a pleasant climate, with daytime temperatures ranging from 24°C to 31°C.

7- Registration

The PIARC International Climate Change, Resilience, and Disaster Management for Roads will be charged a fee.

1. On-site attendees will pay EUR 150
2. Off-site (online) attendees will pay EUR 100

If you are interested in attending the PIARC International Seminar: Climate Change, Resilience, and Disaster Management for Roads, please fill out the pre-registration form here: linktr.ee/piarcyogyakartaseminar no later than 12th November 2022.

Payment for the registration fee through below bank account:
Account Name : HIMPUNAN PENGEMBANGAN JALAN INDONESIA
Account Number : 0017366467
Swift Code : BNINIDJA
Bank : BNI Cabang Melawai Raya (BNI Melawai Raya Branch)

8- Seminar Venue

The seminar will be held on Yogyakarta Marriott Hotel, Jl. Ring Road Utara, Kaliwaru, Condongcatur, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55283. www.marriott.com/en-us/hotels/jogmc-yogyakarta-mariott-hotel/
9- Seminar Committee

1. Organizing Committee

<table>
<thead>
<tr>
<th>Delegates</th>
<th>Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Triono Junoasmono</td>
<td>Seminar Secretary - Indonesian Representative</td>
</tr>
<tr>
<td>Dr. Yukio Adachi</td>
<td>Chair TC 1.5 Disaster Management</td>
</tr>
<tr>
<td>Caroline Evans</td>
<td>Chair TC 1.4 Climate Change and Resilience of Road Networks and Co-Chair REAAA CCREM</td>
</tr>
<tr>
<td>Marcelo Medina Santibanez</td>
<td>TC 1.5 Spanish Speaking Secretary</td>
</tr>
<tr>
<td>Louis Bettini</td>
<td>TC 1.4 English Speaking Secretary</td>
</tr>
<tr>
<td>Jorge Monforte</td>
<td>PIARC Technical Advisor ST 1 – Road Administration</td>
</tr>
<tr>
<td>Dr. Herry Vaza</td>
<td>TC 1.5 Member – Indonesian Representative</td>
</tr>
</tbody>
</table>

2. Advisory Committee

<table>
<thead>
<tr>
<th>Delegates</th>
<th>Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Hedy Rahadian</td>
<td>Indonesia First Delegate – Director General of Highways</td>
</tr>
<tr>
<td>Patrick Mallejacq</td>
<td>PIARC General Secretary</td>
</tr>
<tr>
<td>Kieran Sharp</td>
<td>Chair REAAA Technical Committee</td>
</tr>
<tr>
<td>Miguel Caso Florez</td>
<td>PIARC Technical Director</td>
</tr>
</tbody>
</table>

10- Seminar Contact Person

Ms. Della
Directorate of Road and Bridge Engineering Development
Directorate General of Highways
Ministry of Public Works and Housing, Republic of Indonesia

Telephone Number: +6281213686882 / +6285171600264.
E-mail: subditjfjj@pu.go.id
# AGENDA OF PIARC INTERNATIONAL SEMINAR

**CLIMATE CHANGE, RESILIENCE, AND DISASTER MANAGEMENT FOR ROADS**

Yogyakarta Marriott Hotel, Yogyakarta, Indonesia  
November 21 - 24, 2022

Organized by:

<table>
<thead>
<tr>
<th>Delegates</th>
<th>Time (GMT+7)</th>
<th>Sessions</th>
<th>Moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, 21st November 2022</td>
<td>16.30 - 18.00</td>
<td>Registration and Swab Antigen</td>
<td>-</td>
</tr>
</tbody>
</table>
|  | 18.00 - Finish | Gala Dinner  
1. Committee Report by **Dr. Triono Junaasmono** (Chief of Committee)  
2. Welcoming Speech by **Dr. Mochamad Basuki Hadimuljono**: Indonesia’s Minister of Public Works and Housing or **Dr. Hedy Rahadian** (Indonesia’s First Delegate of PIARC and Director General For Highways) | **MC** |
| Tuesday, 22nd November 2022 | 07.30 - 09.00 | Registrations and Swab Antigen | - |
|  | 09.00 - 09.30 | Opening Session by:  
1. **Dr. Mochamad Basuki Hadimuljono**: Indonesia’s Minister of Public Works and Housing  
2. **Patrick Mallejacq**: PIARC Secretary General  
3. **Dr. Sung-Hwan Kim**: President of REAAA | **MC** |
|  | 09.30 - 09.40 | Photo session | **MC** |
|  | 09.40 - 10.20 | Session 1: Adapting to Climate Change Risks and Disaster Management (1):  
1. **Measuring Progress Towards a More Resilient Transportation System** by **Tim Sexton** (Minnesota Department of Transportation, USA, Member of PIARC TC 1.4)  
2. **Policy for Mitigation and Disaster Adaptation, Study Case: Earthquake, Tsunami, and Liquefaction in Palu, Central Sulawesi** by **Arie Setiadi Moerwanto** (Head of Disaster Management Task Force in Palu, Ministry of Public Works and Housing) | **Caroline Evans** (Chair of PIARC TC 1.4 & Co-Chair REAAA Climate Change, Resilience and Disaster Management Working Committee, Australia) |
|  | 10.20 - 10.40 | Coffee Break | **MC** |
|  | 10.40 - 11.20 | Session 1: Adapting to Climate Change Risks and Disaster Management (1):  
1. **Road Bridge Scour Damage due to Climate Change in Japan and Disaster Management Strategies** by **Tomohiro Fujita** (Public Works Research Institute, Japan, Member of PIARC TC 1.5)  
2. **Policy Development for Zero Emission Transportation Mode** by **Suharto** (Director of Road Transport, Ministry of Transportation) and **Handiyana** (Ministry of Public Works and Housing) | **Tim Sexton** (Minnesota Department of Transportation, USA, Member of PIARC TC 1.4) |
|  | 11.20 - 12.00 | Keynote Speech Session 1 by:  
**Supporting Adaptation for Transport Resilience** by **Prof. Andrew Quinn** (Professor of Climate Adaptation, University of Birmingham) | **Yusuf Adinegoro** (Ministry of Public Works and Housing) |
|  | 12.00 - 13.00 | Lunch | - |
|  | 13.00 - 14.20 | Session 1: Adapting to Climate Change Risks and Disaster Management (2):  
1. **Adapting to Growing Natural Hazard Risks: Reflections on the New Zealand Transport System Story** by **Stuart Woods** (New Zealand Waka Kotahi Transport Agency, Working Group 2 Co-Leader PIARC TC 1.4)  
2. **Policy Development for Sustainable Constructions in Indonesia** by **Brawijaya** (Ministry of Public Works and Housing)  
3. **Applications of Information Intelligence for Better Disaster Management** by **Wei-Sen Li** (Secretary General, National Science & Technology Centre for Disaster Reduction) | **Jongwook Jo** (Korea Expressway Corporation, Korea, Member of PIARC TC 1.5) |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.20 - 14.40</td>
<td>Coffee Break</td>
<td></td>
</tr>
</tbody>
</table>
| 14.40 - 16.00 | Session 2: Building Capacity for Adaptation and Resilience (Economic, Social, and Environmental) (1):  
  1. *Approaches that Governments/Road Agencies in LMICs Can Adopt to Enhance Adaptive Capacity* by Nkululeko Leta (Independent Expert, South Africa, Member of PIARC TC 1.4)  
  2. *Gathering, Managing Information in Terms of Crisis Management in Administering Road Infrastructure in Poland* by Piotr Chalka (Ministry of Transportation, Poland, Member of PIARC TC 1.5)  
  3. *Slope Management System for Preventive Solution of Slope Failure* by Imam Aschuri (Institut Teknologi Nasional) and Dinny Kus Andiany (Ministry of Public Works and Housing) | Hendarto  
  (Ministry of Public Works and Housing) |
| 16.00 - 17.00 | Roundtable Discussion 1: Priorities for Increasing Climate Change Resilient and Disaster Management by:  
  1. **Mark Henry Rubarenzya** (Uganda National Roads Authority, Vice-President of PIARC, First Delegate of Uganda, and Member of TC1.4)  
  2. **Marcelo Medina** (Ministry of Public Works, Chile, Spanish Speaking Secretary of PIARC TC1.5)  
  3. **Fahmi Aldiamar** (Ministry of Public Works and Housing) - *Overview of Conventional Bridge Health Monitoring System*  
  4. **Dato’ Ir. Dr. Dennis Ganendra** (Minconsult SDN BHD, Malaysia) - *Recent Initiatives To Combat Climate Change in Road Transport Design* | Patrick Mallejacq  
  (PIARC Secretary General) |
| Wednesday, 23rd November 2022 | 09.00 - 09.40 | PIARC Activity Report on the Resilience and Disaster Management for Roads by:  
  1. **Caroline Evans** (Chair of PIARC TC 1.4 & Co-Chair REAAA Climate Change, Resilience and Disaster Management Working Committee, Australia)  
  2. **Yukio Adachi** (Hanshin Expressway Research Institute for Advanced Technology, Japan, Chair of PIARC TC1.5)  
  3. **Ernesto Barrera Gajardo** (Ministry of Public Works of Chile, ST 1 Coordinator) | Patrick Mallejacq  
  (PIARC Secretary General) |
| 09.40 - 10.20 | Keynote Speech Session 2 by:  
  **Floodcast - A Framework for Enhanced Flood Event Decision Making for Transportation Resilience** by Saul A. Nuccitelli (Director, Flood Science and Community Assistance at the Texas Water Development Board, USA) | Hiroaki Miyatake  
  (Public Works Research Institute of Japan, Member of PIARC TC 1.5, Member of PIARC TC 1.5) |
| 10.20 - 10.40 | Coffee Break                                                                                  |                                                                               |
| 10.40 - 12.00 | Session 2: Building Capacity for Adaptation and Resilience (Economic, Social, and Environmental) (2):  
  1. *Understanding Road Network Vulnerability to Climate Change in Western Australia* by Louis Bettini (Main Roads Western Australia, PIARC English-Speaking Secretary for TC 1.4)  
  2. *Slope Erosion Prevention and Vegetation Recovery by Using Soil Algae* by Takaaki Tanaka (Nippon Koei Co., Ltd - a member of Japan Bosai Platform, Japan: Member of supporting organization for PIARC TC 1.5)  
  3. *Bridge Management System for Preventive Solution of Bridge Deterioration* by Redrik Irawan and Elis Kurniawati (Ministry of Public Works and Housing)  
  4. *Climate Change, Resilience and Rainfall-Induced Slope Monitoring and Management System for Roads in Thailand* by Auckpath Sawangsuriya (Bureau of Road Research and Development, Department of Highways, Bangkok, Thailand) & *Apiniti Jotisankasa* (Associate Professor at Department of Civil Engineering, Kasetsart University Bangkok, Thailand) | Yusuf Adinegoro  
  (Ministry of Public Works and Housing) |
<p>| 12.00 - 13.00 | Lunch                                                                                         |                                                                               |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 13.00 - 14.20| Session 3: Best Practices on Climate Change Resiliency and Disaster Management (1):  
1. Updating the Climate Change Adaptation Framework for Road Infrastructure by Gordana Petkovic (Norwegian Public Roads Administration, Working Group 2 Leader, Member of PIARC TC1.4) and Stuart Woods (New Zealand Waka Kotahi Transport Agency, Working Group 2 Co-Leader PIARC TC 1.4)  
2. Uniform and Holistic Methodological Approaches to Climate Change and All-Hazards Resilience by Thomas Bles (Delares, Netherlands, Co-Leader of WG1, Member of PIARC TC1.4)  
3. Minimize Expressway Closure Time in Natural Disaster by Yuji Nishigaki and Hiroyuki Kato (West Nippon Expressway Co., Ltd., Japan)  
4. Updating of Seismic Design National Standard for Conventional Bridge by Desyanti (Ministry of Public Works and Housing)  
5. Evaluation of Post Flood Damage to Lower Structure of Conventional Bridge in Indonesia by Imam Murtonsidi and Elis Kurniawati (Ministry of Public Works and Housing) |
| 14.20 - 14.40| Coffee Break                                                          |
| 14.40 - 16.00| Session 3: Best Practices on Climate Change Resiliency and Disaster Management (2):  
1. Renovation of the Traffic Management System of the Hanshin Expressway: Strengthening of Measures and Implementation of New Functions Against Large-Scale Disasters by Yoshitaka Higuchi and Risa Mukai (Hanshin Expressway Co., Ltd., Japan)  
2. Warm Mix and Cold Mix Asphalt to Reduce Carbon Emission by Prof. Bambang Sugeng Subagio (Institut Teknologi Bandung), Yohanès Ronny and Neni Kusniantsi (Ministry of Public Works and Housing)  
3. Industrial Waste for Low Emission Road Materials by Prof. Ria Asih Aryani Soemitro (Institut Teknologi Sepuluh Nopember) and Rulli Ranastra (Ministry of Public Works and Housing)  
4. Disaster Management in KEC, S. Korea by Jongwook JO (Korea Expressway Corporation, Korea, Member of PIARC TC1.5) |
| 16.00 - 16.50| Roundtable Discussion 2: Identifying The Benefits of Network Resilient and Disaster Management Practices and Applications:  
1. Christopher Engelbrecht (Missouri Department of Transportation, USA, Member of PIARC TC 1.5)  
2. Dr. Herry Vaza (Expert Engineer in Roads and Bridges the Ministry of Public Works and Housing, PIARC TC 1.5 Member, IRDA)  
3. Keiichi Tamura (Chodai Co., Ltd., Japan, Member of REAAA Resilient Committee) |
| 16.50 - 17.00| Closing Ceremony Speech by Dr. Hedy Rahadian (Indonesia's First Delegate of PIARC and Director General For Highways) or Dr. Triono Junoasmono (Chief of Committee) |

**Dr. Herry Vaza**  
(Expert Engineer in Roads and Bridges the Ministry of Public Works and Housing, PIARC TC 1.5 Member, IRDA)  

**Neil Fisher**  
(New Zealand Transport Authority, New Zealand, English Speaking Secretary of PIARC TC 1.5)  

**MC**
GENERAL INFORMATION

Location of The Seminar
Yogyakarta Marriott Hotel

Accommodation
The following hotels are nearby to the event

Registration Fees
The PIARC International Seminar: Climate Change, Resilience, and Disaster Management for Roads will be charged a fee. On-site attendees will pay EUR 150 in registration fees, while off-site (online) attendees will pay EUR 100.

Registration
If you are interested in attending the PIARC International Seminar: Climate Change, Resilience, and Disaster Management for Roads, please fill out the pre-registration form here: https://linktr.ee/piarcyogyakartaseminar

Travel & Transportation
There are many airlines that can take you to Yogyakarta, nevertheless during the pandemic, non-stop flights from Malaysia or Singapore are limited. Most of them require passengers to have a stop in Jakarta. From Jakarta, seminar attendees can continue their travel to Yogyakarta by another airplane or train. The city's cab service is very affordable, and online cab service is also popular.

For more information regarding entry regulations to Indonesia during the COVID-19 pandemic, please see the following links:

VoA:

Visa Application:

Restrictions during Covid-19:
## Hotel at Yogyakarta

The following hotels are nearby to the event for attendees:

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Hotel Stars</th>
<th>Estimate Distance from Seminar Location (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yogyakarta Marriott Hotel</td>
<td>🌟🌟🌟🌟🌟</td>
<td>0.0</td>
</tr>
<tr>
<td>Royal Ambarrukmo</td>
<td>🌟🌟🌟🌟🌟</td>
<td>2.9</td>
</tr>
<tr>
<td>The Manohara Hotel</td>
<td>🌟🌟🌟🌟🌟</td>
<td>1.7</td>
</tr>
<tr>
<td>Eastparc Hotel Yogyakarta</td>
<td>🌟🌟🌟🌟🌟</td>
<td>2.7</td>
</tr>
<tr>
<td>ARTOTEL Suites Bianti - Yogyakarta</td>
<td>🌟🌟🌟🌟🌟</td>
<td>3.2</td>
</tr>
<tr>
<td>Grand Mercure Yogyakarta</td>
<td>🌟🌟🌟🌟🌟</td>
<td>2.7</td>
</tr>
<tr>
<td>Prime Plaza Hotel Yogyakarta</td>
<td>🌟🌟🌟🌟🌟</td>
<td>2.2</td>
</tr>
<tr>
<td>Grand Ambarukmo</td>
<td>🌟🌟🌟🌟🌟</td>
<td>2.7</td>
</tr>
<tr>
<td>Grand Tjokro Yogyakarta</td>
<td>🌟🌟🌟🌟</td>
<td>1.1</td>
</tr>
<tr>
<td>Hotel New Saphir Yogyakarta</td>
<td>🌟🌟🌟🌟</td>
<td>2.7</td>
</tr>
<tr>
<td>Kimaya Sudirman Yogyakarta by Harris</td>
<td>🌟🌟🌟🌟</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Yogyakarta Tourist Destinations

- Seribu songgo, langit
- Prambanan temple
- Breksi cliff
- Alun-alun Kidul
- Heha Ocean View
- Beringharjo market