



INTERNATIONAL SEMINAR:

Improvement of Road Network Resilience

“Strategies for Cost-Effective Climate Change Adaptation and Sustainable Development”

12 – 14 November 2025

Maputo – Mozambique

Second Announcement



Co-Organized by:

- ☐ **PIARC**
- ☐ **The World Bank**
- ☐ **Ministry of Transport and Logistic**
- ☐ **National Roads Administration**
- ☐ **Road Fund**



Introduction

PIARC (the World Road Association) is a non-profit, non-political organization whose mission includes organizing forums, disseminating good practices, and promoting efficient road and road transport decision support tools.

Since 1909, the Association has been organizing a program of international seminars as part of its work, strengthening its presence in the world, and contributing for improvement of the transport services around the world.

The Technical Committee 1.4 "Planning the Resilience of Road Networks - Climate change and other hazards" in the 2024-2027 cycle focuses on strategic, tactical, and applied planning aspects of enhancing resilience. It covers methodologies and approaches for more resilient network planning and road infrastructure designs which reduce risk, are better prepared, more robust, and are able to respond and recover other hazard events.

In joint collaboration, PIARC Technical Committee 1.4, the World Bank and Mozambique's Ministry of Transport and Logistic, invite you to participate in an upcoming International Seminar on "Improvement of Road Network Resilience: Strategies for Cost-Effective Climate Change Adaptation and Sustainable Development Climate Resilient Pavements" to be held in Maputo, Mozambique from 12th to 14th November 2025.

Objectives of the Seminar

This Seminar's main objective is to share knowledge and experience aiming at making road networks more resilient to climate change. It will discuss the benefits of investments in resilience such as enhanced safety, reduced risk of traffic disruption and economic losses, cost savings over time, improved environmental sustainability, enhanced mobility and connectivity, and better preparedness for impacts of climate change.

Cost-effective strategies are important to achieve these benefits while and overcoming barriers such as higher initial construction costs and complex design processes, as well as other financial and political barriers.



Target Audience

The PIARC seminar is intended for:

- Road sector professionals (road administrations/agencies and public services, project managers, public works institutions, engineering works and consulting firms, road laboratories, etc.);
- Expert members of PIARC (World Road Association)
- Development partners and other entities involved in financing of road infrastructure;
- Experts in climate change and weather hazards;
- Suppliers of the materials for road construction and maintenance;
- Academia and researchers;
- Engineering students; and
- All interested stakeholders

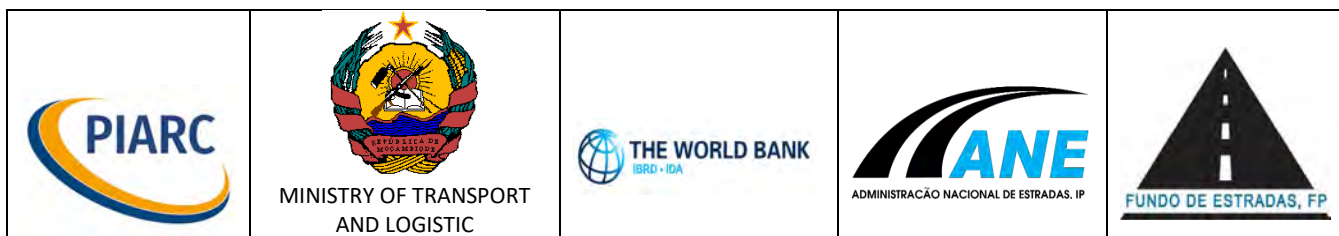
Information about Mozambique

Mozambique borders Tanzania, Malawi, Zambia, Zimbabwe, South Africa, and Eswatini. Its long Indian Ocean coastline of 2,700 kilometers faces east to Madagascar. About two-thirds of its estimated 33 million people (2022) live and work in rural areas. The country has ample resources, including arable land, abundant water sources, energy, mineral resources, and newly discovered natural gas deposits off its coast. The country has three deep seaports and a relatively large potential labour force. It is also strategically located: four of the six countries it borders are landlocked, hence dependent on Mozambique as a gateway to global markets. Mozambique's strong ties to the region's economic

engine, South Africa, underscore the importance of its economic, political, and social development to the stability and growth of Southern Africa as a whole.

Weather

November is a summer season in Mozambique. Daytime temperatures vary between 25°C and 35°C.



Dates and Venue of the Seminar

The Seminar will take place from 12th to 14th November 2025 at:

Centro Internacional de Conferências Joaquim Chissano (Joaquim Chissano International Conference Center). <https://cicjc.co.mz/>

Maputo, Av. da Marginal

Mozambique

GPS coordinates: -25.9541682, 326088247

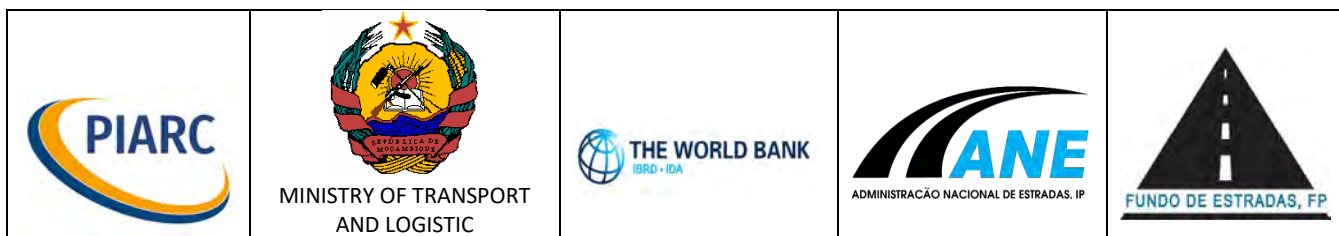
Proceedings and languages of the seminar

The Seminar will last for 02 days of technical sessions and one extra day for the technical visit. The first day, **November 12th**, will be marked by the official opening ceremony of the Seminar with the presence of Members of the Government of Mozambique, PIARC, the World Bank, other development partners and stakeholders.

The Seminar will be divided into topic sessions, and several themes will be integrated into the program (see preliminary program below). Each session will consist of several presentations by the PIARC Technical Committee members, World Bank, Mozambique, and Association of Southern Africa Road Agencies (ASANRA) experts. At the end of each session, a debate will be organized to discuss the various aspects covered in the presentations with the audience.

On the 3rd day there will be a site visit to the Moamba bridge project located about 60 km of Maputo (one hour travelling distance), where some works were done recently to improve its resilience.

The languages used in the seminar will be **Portuguese and English with simultaneous translation.**



Themes

The Seminar provides an opportunity for speakers to address policy, technical and operational issues and will focus on the following major themes:

- Enlarge resilience to all hazards on top of climate change.
- Organizational resilience.
- Resilience to prevent damage of road infrastructure (past years impacts).
- Resilience of unpaved roads (rural accessibility).
- Policy framework for resilient infrastructure in Africa.
- PIARC work on resilience.
- Importance of road maintenance to achieve resilience
- Resilience / adaptation to climate change.
- Cost & benefits of resilience,
- Funding of resilience.
- Use of data (including new data sources) for road resilience, prioritization of risks, programs and interventions.
- Uncertainty and decisions (forecast of future climate).

Program of the Seminar

The following sessions are included for the Seminar:

Session 1: Policy framework for resilient **road infrastructure** in Africa and beyond

Session 2: Resilience and adaption of **road infrastructure** to climate change and other hazards

Session 3: Approaches to cost and benefits of resilience for roads

Session 4: Practical case studies and lessons learned on strategies for cost-effective climate change adaptation and sustainable development

Session 5: Planning, asset management and funding for road resilience

The following Panel discussions will also be part of the Seminar:

Panel discussion 1: Post disaster recovery and building back better

Panel discussion 2: Future for resilience new data and future climate



Preliminary Program

Day 1:

8:00 - 9:00	Day 1 Registration	
9:00 - 9:55	Opening session	
9:00 - 9:10	Welcoming words	Miguel Coanai, Deputy Director General of ANE, First Delegate of Mozambique in PIARC
9:10 - 9:25	Welcoming words	Fily Sissoko, Division Director, World Bank
9:25 - 9:35	PIARC Institutional Presentation	Miguel Caso Florez, elected Secretary General, PIARC
9:35 - 9:45	PIARC Technical Committee 1.4	Marie Colin, Chair of PIARC Technical Committee 1.4 Road Resilience, Cerema, France
9:45 - 9:55	Official opening	H.E. João Matlombe - Minister of Transport and Logistics, Mozambique
9:55 - 10:30	Keynote session	
9:50 - 10:05	Challenges for climate resilience of roads	Ângelo Macuácuá, Chairman of the Road Fund, Mozambique
10:05 - 10:15	Resilience-oriented development: the 5Is policy framework	Cecilia Briceno-Garmendia, Lead Economist, World Bank
10:15 - 10:25	Adaptation of infrastructure to climate change	Gordana Petkovic, PIARC TC 1.4, Norway Public Roads Administration, Norway
10:30 - 11:00	Coffee break	
11:00 - 13:00	Session 1: Policy framework for roads and road networks resilient infrastructure in Africa and beyond	
11:00 - 11:05	Introduction	Session Chair from PIARC
11:05 - 11:25	Impact of Climate change in the Hydrology	Agostinho Vilanculos, National Director of Water Resources, Mozambique
11:25 - 11:45	Continental climate resilience and smart infrastructure policy framework	Nkululeko Leta, PIARC TC 1.4, South Africa
11:45 - 12:05	World Bank's 5-pillar lifecycle approach for resilient infrastructure development in Africa	Oceane Keou, Senior Transport Specialist and SSATP Resilient Road Asset Management Pillar Lead, World Bank
12:05 - 12:25	TBC	(PIARC) Caroline Evans, PIARC Strategic Theme Coordinator, Australia
12:25 - 12:55	Q&A and debate	All
12:55 - 13:00	Session conclusions	Session Chair
13:00 - 14:00	Lunch	
14:00 - 16:00	Session 2: Resilience and adaption of road infrastructure to climate change and other hazards	
14:00 - 14:05	Introduction	Session Chair
14:05 - 14:25	Stabilization of rural roads using Claycrete and Earthzyme for improvement of Resilience	Moises Dzimba, Engineer from ANE, Mozambique
14:20 - 14:45	Criticality, Vulnerability and Road Networks	Cecilia Briceno-Garmendia, Lead Economist, World Bank
14:45 - 15:05	Our response to climate change must be action	Krishna Naidoo, PIARC TC 1.4, SANRAL, South Africa



15:05 - 15:25	The Road Asset Vulnerability Assessment Saga	Frederico Pedroso, Transport Specialist, World Bank
15:25 - 15:55	Q&A and debate	All
15:55 - 16:00	Session conclusions	Session Chair
16:00 - 16:30	Coffee break	
16:30 - 18:00	Panel discussion 1: Post disaster recovery and building back better	
	Introduction	Moderator
	Panellist 1	Vincent Vesin, Senior Transport Specialist, World Bank
	Panellist 2	Nkululeko Leta, PIARC TC 1.4, South Africa
	Panellist 3	Suranga Kahandawa, Senior Disaster Risk Management Specialist, World Bank
	Panellist 4	Eva Van Den Bossche, PIARC TC 1.4, Belgian Road Research Center, Belgium
18:00	Closing Day1	

Day 2:

8:30 - 09:00	Day 2 Registration	
9:00 - 11:00	Session 3: Cost and benefits of resilience for roads	
9:00 - 09:05	Introduction	Session Chair
9:05 - 09:25	Climate Informed Safe System: A cost-effective path for Road network resilience in Mozambique	Belzenia Matsinhe, ISUTC, Mozambique
9:25 - 09:45	TBC	Marine Lericolais, PIARC TC 1.4, SETEC, France
9:45 - 10:05	Asset Management for proper analysis of Cost and benefits of road resilience	Calado Ouana, Engineer, ANE, Mozambique
10:05 - 10:25	Action with purpose: Identifying and prioritizing actions to strengthen the resilience of transport networks and people	Jun Rentschler, Senior Economist, World Bank
10:25 - 10:55	Q&A and debate	All
10:55 - 11:00	Session conclusions	Session Chair
11:00 - 11:20	Coffee break	
11:20 - 13:00	Session 4: Practical case studies and lessons learned on strategies for cost-effective climate change adaptation and sustainable development	
11:20 - 11:25	Introduction	Session Chair
11:25 - 11:45	Evaluation of the performance of Armoured base approach for low volume roads	Cedrik Namburete, Engineer from ANE, Mozambique
11:45 - 12:05	Integrating infrastructure & community resilience – a case study from India	Arnab Bandyopadhyay, Lead Transport Specialist, World Bank
12:05 - 12:25	Key take way on road resilience approaches from different French case studies	Marie Colin, Chair of TC 1.4, Cerema, France
12:25 – 12:45	From Risk to Resilience: Rwanda's Journey Toward a Climate-Proof Road Network	Solange Mizero, Transport Specialist, World Bank
12:45 – 13:05	Q&A and debate	All
13:05 - 13:10	Session conclusions	Session Chair
13:10 - 14:00	Lunch	

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14:00 - 16:00	Session 5: Planning, asset management and funding for road resilience	
14:00 - 14:05	Introduction	Session Chair
14:05 - 14:25	Governance and sustainable financing for road resilience in Southern Africa: Challenges and opportunities for Mozambique	Hermen Dabo, ISUTC, Mozambique
14:25 - 14:45	Performance Based Contracts in the management of the road sector	Eric Lancelot, Lead Transport Specialist, World Bank
14:45 - 15:05	Examples of best practices in improving road resilience in Belgium	Eva Van Den Bossche, PIARC TC 1.4, Belgian Road Research Center, Belgium
15:05 - 15:25	Resilient Road Asset Management	Mustapha Benmaamar, Program Manager of SSATP, World Bank
15:25 - 15:55	Q&A and debate	All
15:55 - 16:00	Session conclusions	Session Chair
16:00-16:30	Coffee break	
16:30-17:40	Panel discussion 2: Future for resilience new data and future climate	
	Introduction	Moderator
	Panellist 1	Emmanuel Taban, Senior Transport specialist, World Bank
	Panellist 2	Calado Ouana, Engineer, ANE, Mozambique
	Panellist 3	Marie Colin, Chair of TC 1.4, Cerema, France
	Panellist 4	Krishna Naidoo, PIARC TC 1.4, South Africa
17:40-18:00	Closing Session	
17:40 - 17:50	Technical conclusions	
17:50 - 18:00	Closing remarks	

Day 3:

8:30 - 09:00	Arrival of the Delegates at the Seminar Venue
9:00	Bus Departure to site visit
09:40-12:00	Site visit to Moamba Bridge
12:00	Bus Departure to Seminar venue
13:00 - 14:00	Lunch

Accommodation

The list of recommended hotels and prices for overnight stays near the conference centre is presented below.



Name of the hotel Polana Serena Hotel
Hotel Star Rating 5*
Website <https://www.serenahotels.com/polana/reservations.polana@serenahotels.com>
Email Address reservations.polana@serenahotels.com
Contact 21 241700
Rate From 195US\$ per Nigth

Name of the hotel Radisson Blu Hotel & Residence, Maputo
Hotel Star Rating 5*
Website <https://www.radissonhotels.com/en-us/hotels/radisson-blu-maputo>
Email Address reservations.maputo@radissonblu.com
Contact 21242400/85 010 27 28
Rate From EUR 130 Per Night

Name of the hotel City Lodge Hotel-Maputo
Hotel Star Rating 4*
Website <https://citylodgehotels.com/contact-us>
Email Address clmaputo.resv@citylodgehotels.com
Contact +258 83 301 3652
Rate From US\$ 105 Per Night

Name of the hotel Southern Sun-Maputo
Hotel Star Rating 4*
Website <https://www.southernsun.com/southern-sun-maputo>
Email Address ssmaputo.reservations@southernsun.com
Contact 21495921/+258844244279
Rate From US\$ 179 Per Night

Name of the hotel StayEasy Maputo
Hotel Star Rating 3*
Website <https://www.stayeasymaputo.com>
Email Address semaputo.reservations@southernsun.com
Contact +258 20 607030
Rate From US\$ 95 Per Night



Travel and transport

The capital, Maputo, is well linked to the rest of the world through Maputo international airport. Taxi services are available from the airport. Some Hotels provide shuttle services from the airport to the hotel.

Visa procedures

Some countries are visa exempted to enter in Mozambique. However, the documents required to apply for a visa to Mozambique are standard, and procedures, applications, and deadlines may vary depending on nationality of traveler. For full information, please contact the Mozambique embassy or consulate in your country. Details can be obtained from the link below.

<https://www.evisa.gov.mz>

Organising Committee

Name	Institution
Miguel Coanai	ANE, Chair of the Organizing committee
Irene Langa Simões	Road Fund, Mozambique
Cilésia Chipepo	Road Fund, Mozambique
Calado Ouana	ANE, Mozambique
Carla Mangane	ANE, Mozambique
Marie Colin	TC 1.4 Chair TC1.4, France
Juan Fernando Mendoza	TC 1.4 Spanish-Speaking Secretary, Mexico
Stuart Woods	TC 1.4 English-Speaking Secretary, New Zealand
Nkululeko Leta	TC 1.4 Member, South Africa
Miguel Caso Florez	PIARC Technical Director
Kaouther Matcha/Hyunji Kim	PIARC Technical Advisor
Vincent Vesin	World Bank
Emmanuel Taban	World Bank



Form of participation and registration

The seminar will be in person or virtual participation and you are kindly requested to register as soon as possible as the seats are limited.

Registration Category for 2 days Seminar:

- ☐ Upper middle- and High-Income Countries - (100 US\$)
- ☐ Low- and Middle-Income Countries - (50 US\$)
- ☐ Students - (30 US\$)

Registration for Site visit:

- ☐ All participants - (30 US\$)

Please register now through the link below

<https://www.piarcseminar-mozambique.com/>

Seminar Contact Person

For any further information or clarification that you may require, please contact Mr. Calado Ouana: caladoouana@yahoo.com.br