



# A.1 Preserving the Environment

## MEMBERS

Total membership: 72 (40 countries)  
Members: 46 / Active members: 29  
Corresponding members: 21  
Associate members: 5

## ISSUES AND STRATEGIES

### A.1.1 - National policies and strategies for reducing the impacts of road transport systems on climate change and policies and strategies for the adaption of transport systems to climate change

- Climate change mitigation and adaptation are integral dimensions of managing climate change in transportation.

### A.1.2 Monitoring of Environmental Impacts

- Issue 2 had a strategic evaluation focus, looking at how the environmental impacts of road transport are measured and how that informs subsequent actions. It was decided to focus on the following issues: air and climate, noise, hazardous substances and major accidents, waste management, soil, water resources, biodiversity, landscape.

### A.1.3 Monitoring Alternative Solutions for Fossil Fuels for the Road System

- The focus of Issue 3 was on using renewable energy sources to generate energy for highway infrastructure.

## PRODUCTIONS

### PIARC International Seminars;

- 'Environment and Sustainable Transport' held in conjunction with TC B.4 (Timisoara, Romania 16 – 18 September 2009)
- Reducing the Carbon Footprint in the Road Construction (New Dehli, India 17-19 February 2011)

### Papers in Routes/Roads;

- **No. 344:** Roads and Wildlife – E18 motorway building and planning projects from an ecological perspective
- **No. 344:** The Swiss Defragmentation Program – a global approach
- **No. 343:** "Transport solutions that support community outcomes in New Zealand"
- **No. 350:** "A comparison of environmental impacts of hot and half-warm mix asphalt"

## TECHNICAL COMMITTEE REPORTS;

1. Climate change adaptation and mitigation policies and approaches
2. Monitoring environmental impacts of road transport
3. Monitoring alternative solutions for fossil fuels for the road system



Photovoltaic panels on noise barriers to use renewable energy sources (PV-Soundless, Noise Barrier, EU-Project)



Climate change adaptation is essential for transport authorities (Strensham flood UK: The motorway running near to the services was completely cut off in two locations during the July 2007 floods.)





# A.2 Financing, Managing and Contracting of Road System Investment

## ISSUES AND STRATEGIES

### A.2.1 Review of Public and Private Sector Roles in Sustainable Road Systems

- Focus on the provision of sustainable road systems and the levels of private sector participations in management, maintenance, operations, funding and financing.

### A.2.2 Exploring Funding and Financing Strategies for Sustainable Road Systems

### A.2.3 Investigations of New Forms of Procurement of Private Sector Participations in Sustainable Road Maintenance and Operations

- Explore the different approaches to the procurement of services to provide levels of service consistent with user expectations and road hierarchies.

## PRODUCTIONS

### INTERNATIONAL SEMINARS AND WORKSHOPS

- International Seminar on Road Maintenance Management Techniques and Financing Methods ( Ouagadougou, Burkina Faso, 2-3 December 2008)
- International workshop; Public-Private Partnerships in the Road Sector (Osaka, Japan, 13-14 October 2009)
- Workshop on Financing of Road Infrastructures (Rabat, Morocco, 14 April 2009)
- Workshop on Public Private Partnerships and Alternative Financing in Canada (Toronto, Canada, 17 June 2010)
- Workshop on Road PPP Experience in South Africa (Johannesburg, South Africa, 4 November 2010)

## MEMBERS

Total membership: 70 (39 countries)  
Members: 46  
Corresponding members: 17  
Associate members: 7

## PAPERS IN ROUTES/ROADS

- **R/R 339: Mexico:** Future Directions for Road Maintenance Financing "User Services, Safe Circulation and Accurate Signage". Amado Athié Rubio
- **R/R 339: Mexico:** Experience Gained In Public-Private Partnerships. Amado Athié Rubio
- **R/R 342: PPP Projects In Greece:** The Case of Attica Tollway. Bill Halkias and Helen Tyrogianni
- **R/R 342:** The Economic Advantages of Public-Private Partnerships. Caroline Visser
- **R/R 342:** Successfully Applying PPP for Sustainable Road Systems. Henri Chua, Richard Deslauriers and Koos Smit
- **No. 344:** Update: Burkina Faso - International Seminar on Technical Management of Road Maintenance, 2-3 December 2008, Ouagadougou. Samira Irsane
- **No. 344:** Provision of Road Infrastructure in Mexico facing up to the Financial Crisis. Amado Athié Rubio

## TECHNICAL REPORT

- TC A.2 Final Report

## OTHERS

TC A.2 members also presented numerous papers at the above seminar and workshops.







# A.3 Road System Economics and Social Development

## ISSUES AND STRATEGIES

### A.3.1 Economic Aspects of Road Pricing

- Investigate approaches to the economic evaluation of road pricing effects, including impacts on mobility patterns, the environment, the economy, accessibility or equity, and attitudes towards pricing.

### A.3.2 New Approaches to Appraisal of Social Impacts

- Study the changes in approaches to methods of assessment of social impacts resulting from road development and usage. Special attention to existing advanced systematic approaches, specific efforts that international funding institutions are doing in developing countries and the contribution of ex-post evaluation.

## OUTPUTS

### International Seminars

- Implemented and Envisaged Road Toll Policies in Central and Eastern European Countries (Budapest, Hungary, 6-7 May 2009)

### Papers in Routes/Roads

- No. 347: "Toll road policies in Central and Eastern European countries". Friedrich Schwarz-Herda, Arpad G. Siposs, Adam Torok

## MEMBERS

Total membership: 34 (23 countries)

Members: 29

Corresponding members: 5

Associate members: -

## Technical Reports

- Worldwide situation of road pricing and assessment of its impacts
- Approaches to evaluation of social impacts of road projects

## Events organized in coordination with the Technical Committee meetings

- Seminar on "Innovover pour mieux financer les transports urbains", Association québécoise du transport et des routes (Montreal, Québec, Canada, 11 November 2008)
- Special Session on "Approaches to appraisal to social impacts: Practices followed by International Funding Institutions", Ministry of Economic Infrastructure (Abidjan, Côte d'Ivoire, 14 September 2009)
- Round Table on "Improving the practice of cost-benefit analysis in transport" and "Road pricing policy", ITF/OECD and Instituto Mexicano del Transporte (Querétaro, México, 21-22 October 2010)







# A.4 Rural Road Systems and Accessibility to Rural Areas

## ISSUES AND STRATEGIES

### A.4.1 Accessibility and planning of the development of the rural roads system

- Investigate how the needs for accessibility and mobility in rural areas are being assessed and taken into consideration in planning the development of the rural roads system at national and /or regional levels.

### A.4.2 Sustainability of maintenance

- Review of planning, financing and management of sustainable maintenance methods and approaches.

### A.4.3 Involvement of local communities

- Consider how local communities should be involved in education, planning, financing, managing and implementation of development and maintenance schemes.

## MEMBERS

- Total membership: 23 (17 countries)
- Members: 17
- Corresponding members: 4
- Associate members: 2

## OUTPUTS

### PIARC International Seminars

- Sustainable Maintenance of Rural Roads (Hyderabad, India, 21-23 January 2010)
- Sustainability of the rural roads networks (Santa Cruz, Bolivia, 10-12 March 2011)

### Papers in Routes/Roads

- No. 346: "Providing Connectivity to Rural India", Prabha Kant Katare

### Technical Committee Reports

- Planning & Development of New Rural Roads.
- Sustainable Maintenance of Rural Roads.
- Involvement of Local Community in Rural Roads.

