AIPCR / PIARC
Since 1909

World Road Association

Technical Committee
on Road Tunnel Operation (C3.3)

First International Seminar
‘Road Tunnel Operations Management and Safety’
Chongqing, 18-19 October 2006

PIARC: A non-profit association
to promote international cooperation
in issues related to roads and road transport

Founded in 1909 in Paris (France)
PIARC Member Countries

Members

National Governments
Regional Authorities
Collective Members
Individual Members

in about 130 Countries

Vision

PIARC to be the World leading forum in exchange of knowledge on roads and road transport policy and practices within an integrated sustainable transport context

Mission

To serve all members
- by being a leading international forum
- by disseminating best practice
- by promoting efficient tools for decision making

with special emphasis for developing countries and countries in transition
Structure

COUNCIL
representation of all member countries
EXECUTIVE COMMITTEE
elected by the Council every four years
GENERAL SECRETARIAT
NATIONAL COMMITTEES

On-going Projects

- World Interchange Network
- Seminars in Developing Countries and Countries in Transition
- Technology Transfer Centres in Developing Countries
- HDM-4 (software for the management of highways investments and projects)
- Terminology
For each 4 year-cycle, in-between two World Road Congresses, a Strategic Plan guides PIARC activities.

For the 2004-2007 period, 4 strategic themes cover the work of 18 Technical Committees + Committee on Terminology.

ST1: Governance and Management of the Road System (K. Inoue – Japan)
ST2: Sustainable Mobility (G. Clarke – UK)
ST3: Safety and Road operations (C. Nottingham – USA)
ST4: Quality of road infrastructures (A.-M. Leclerc – Canada-Québec)
ST3: Safety and Road Operations

3.1 Road Safety
3.2 Risk Management for Roads
3.3 Road Tunnels Operation
3.4 Winter Maintenance

Birth of the committee …

The PIARC technical committee in charge of road tunnels was created in

1957

under the name

“Committee of Road Tunnels”
The sphere of activity of the PIARC C3.3 committee

- PIARC C3.3 deals with:
  - Equipment
  - Geometry
  - Environment
  - Operation
  - Safety
- and not with:
  - Geology
  - Civil engineering

Members of the committee

- 1 Chairman + 3 Secretaries
- Members:
  - 38 members of 29 different countries
- Corresponding members:
  - 15 members of 13 different countries
- Associate members:
  - 8 members of 8 different countries

Meetings of the committee

- 26-27 May 2004: Paris
- 02-03 Dec 2004: Rome
- 24-27 May 2005: Sydney
- 06-07 Oct. 2005: Dubrovnik
- 27-28 Mar. 2006: San Juan
- 16-17 Oct. 2006: Chongqing
- 4-5 June 2007: Kyoto
- 16-21 Sept 2007: Paris

2 seminars co-organized by the committee during 2004-2007 cycle

- 29-31 Mar 2006
  - San Juan
  - (Argentina)
- 18-19 Oct 2006
  - Chongqing
  - (China)
Working groups of the committee

1 - Tunnel operation
   25 members
2 - Management of tunnel safety
   37 members
3 - Human factors for tunnel safety
   16 members
4 - Detection, communication, safety equipment
   18 members
5 - Ventilation and fire control
   30 members

Reports of the committee

- Road Tunnels: Systems and Equipment for Fire and Smoke Control
- Good Practice for the Operation and Maintenance of Road Tunnels
- Traffic Incident Management Systems used in Road Tunnels
- Road Tunnels: Vehicle Emissions and Air Demand for Ventilation
- Cross Section Design of Bidirectional Road Tunnels
- Cross Section Geometry in Unidirectional Tunnels
- Pollution by Nitrogen Dioxide in Road Tunnels
- Road Tunnels: reduction of Operating Costs
- Fire and Smoke Control in Road Tunnels
- Road Safety in Tunnels
- Road Tunnels: Emissions, Environment, Ventilation
- Classification of Tunnels, Existing Guidelines, Recommendations
- The First Road Tunnel - A Planner Guide for Countries Without Previous Experience of New Road Tunnels
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+ 12 new reports under preparation

Cooperations

Joint OECD/PIARC project
Transport of dangerous goods through road tunnels

From 1995 to 2001:
- Harmonisation of tunnel regulations
- Rational decision process including: Quantitative Risk Assessment model
- Assessment of risk reduction methods

Quantitative Risk Assessment model for dangerous goods (OECD/PIARC)

See PIARC site: www.piarc.org

Cooperations

Multidisciplinary Group of Experts on Safety in Road Tunnels

EU Regulatory Committee on Road Tunnels Safety
Cooperations

European research projects and thematic networks

IT (International Tunnelling Association)

Complementary scopes of work

- New ITA Committee on Operational Safety of Underground Facilities (COSUF)
  - Networking activities
  - Improve / foster tunnel safety worldwide
  - Jointly supported by ITA and PIARC

Articles in Routes/Roads

Routes/Roads
n° 324
October 2004

C 3.3 committee is also...

... more than 130 experts at your disposal to share experience in the field of road tunnels!
Visit PIARC website http://www.piarc.org

Thank you for your attention!