PIARC Committee

C 3.3

“Road tunnel Operation”
The sphere of activity of the PIARC C3.3 committee

- PIARC deals with the aspects:
  - Equipment
  - Geometry
  - Environment
  - Exploitation
  - Safety

- ITA deals with the aspects:
  - Geology
  - Civil engineering
Technical committees distributed among 4 strategic themes (TS).

**TS3** : Safety and Road operations

- C 3.1 Road safety
- C 3.2 Risk management for roads
- **C 3.3 Road tunnels operation**
- C 3.4 Winter maintenance
Birth of the committee …

The technical committee in charge of road tunnels within PIARC was created in 1957 under name “Committee of Road Tunnels”
The founder members

The 6 founder countries were:

1. Belgium
2. France
3. Italy
4. Netherlands
5. Switzerland
6. The United Kingdom
Presidents of the committee

The successive presidents were:

- **1957-1979**
  Mr. J. Rérolle (France)

- **1980-1991**
  Sir Alan Muir Wood (U.K)

- **1992-1995**
  Mr. E Scotto (Italy)

- **1996-1999**
  Mr. M Marec (France)

- **2000-2007**
  Mr. D. Lacroix (France)
The situation in Latin America

1 country
1977
Argentina

2 countries
1997
Argentina
Cuba
Mexico

4 countries
2002
Argentina
Chile
Cuba
Mexico

3 countries
2006
Argentina
Chile
Cuba
The geographical distribution of the 34 current committee’s Member States
Operating mode of the committee

- It meets twice a year
- It organizes 2 seminars per cycle
- It sets up the working groups
- It validates the products of the working groups
- It represents the AIPCR in working groups / conferences
Members of the committee

- 1 President + 3 Secretaries
- Official 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

- 26-27/05/2004 : Paris
- 02-03/12/2004 : Rome
- 24-27/05/2005 : Sydney
- 06-07/10/2005 : Dubrovnik
- 27-28/03/2006 : San Juan
- October 2006 : Chongqing
- Spring 2007 : Tokyo
- 16-21/09/2007 : Paris
2 seminars co-organized by the committee in 2004-2007

- 29-31/03/2006
  San Juan
  (Argentina)

- October 2006
  Chongqing
  (China)
Reports of the committee

- 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 Uni-directional 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 and Experiences, Recommendations
- The First Road Tunnel - A Planner Guide for Countries Without Previous Experience of New Road Tunnels
The most known report!
Quantitative risk assessment model for dangerous goods (OECD/AIPCR)

See PIARC site – C3.3 : www.piarc.org
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

6 - Ventilation and fire control
   30 members
Documents in preparation

GT1: animator: Jean-Claude Martin (France)

1. Guide for organising, recruiting and training tunnel operating staff.

2. Recommendations for high trafficked urban tunnels
Documents in preparation

GT2 : animator : Rudolf Hoërhan (Austria)

1. Integrated approach for road tunnel safety
2. Risk analysis for road tunnels
3. Responsibilities in road tunnel safety management
4. Tools for road tunnel safety management
Documents in preparation

GT3 : animator : Evert Worm (Netherlands)

1. Human factors and tunnel safety

2. Guideline for organizing education and information activities on road tunnel safety

3. Mutual expectations for road tunnel operators and emergency services
Documents in preparation

**GT4 : animator : Urs Welte (Switzerland)**

1. Installation of road signage on a route incorporating a tunnel
2. Laybys and S.O.S stations in road tunnels
3. Video detection in road tunnels: benefits and limitations
Documents in preparation

**GT6**: animator: Art Bendelius (USA)

1. Guide to optimizing of the air quality impact upon the environment
2. Operation strategies for tunnel ventilation
3. Assessment of fixed fire suppression systems
4. Update of design fires
5. Impact of Pavement on Fires
El seminario tendrá lugar del 29 al 31 de marzo de 2006 en el Centro de Congresos Intendente Berreta a Guzmán de San Juan a San Juan, en Argentina, exactamente después de la reunión del Comité que tendrá lugar al mismo lugar 27 y 28 de marzo.

Se organizará una visita técnica del túnel internacional Chile-Argentina a Mendoza el jueves 30 de marzo.

Sitio Web del seminario


Información general

- Información general sobre los vuelos hacia San Juan (en In)
- La Argentina vista del cielo
- Sitio oficial del turismo en Argentina (en Es, In, P)
- Welcome to Argentina (en Es, In)
- Sitio oficial de San Juan (en Es)
- Universidad nacional del San Juan (en Es)
- Qué Ver en a San Juan

Programa del seminario

- Invitación (en inglés)
- Comité organizar del seminario (en inglés)
- Programa del seminario (en inglés)
- Horarios (en inglés)
- Formulario de inscripción que debe llenar (en Es, In)
- Lista de los participantes potenciales del C3.3 (en inglés)

Documentos de trabajo
Participation of the committee in international projects/networks

- International Associations/Networks:
  - AITES/ITA
  - COSUF

- European projects R & D:
  - UPTUN
  - SafeT

- European committee of the safety of road tunnels (*Directive 2004/54/EC*)
C 3.3 committee is also…

… more than 130 experts at your disposal to share experiments in the field of road tunnels!
In the name of the C 3.3 committee

Thank you for your attention!