

C1

Surface Characteristics

Committee Session: Tuesday at 8:30

AIMS

To disseminate their expertise worldwide through publications, participation in and organisation of international conferences and by organising comparisons between practices in the different countries and regions of the world.

69 MEMBERS

- ◆ □Members: 46
- ◆ □Corresponding members: 14
- ◆ □Associate members: 9

Representing 39 countries and 3 international organisations.

WORK PROGRAMME 2000-2003

- ◆ □Methods and systems to measure surface characteristics – including using the results from the two international experiments carried out by PIARC on friction, texture and evenness
- ◆ □Noise emission measurement
- ◆ □Pavement/vehicle interaction
- ◆ □Indicators to define pavement quality of use

PRODUCTIONS 2000-2003

- ◆ □International Symposium on Pavement Surface Characteristics
Nantes (France), May 22 - 24, 2000
- ◆ □International Seminar on Surface Characteristics
Havana (Cuba), April 9 - 10, 2002

Publications

- ◆ □Routes/Roads 308 : International Experiment to Harmonise Longitudinal and Transverse Profile Measurements and Reporting Procedures
- ◆ □Routes/Roads 312: PIARC Technical Committee C1 – Surface Characteristics
- ◆ □Routes/Roads 312: Joint Winter Runway Friction Measurement Programme
- ◆ □Routes/Roads 318: Evaluation of investigations into the application of the IFI (International Friction Index),
- ◆ □Routes/Roads 318: Report from C1 International seminar on Cuba
- ◆ □Routes/Roads 320: Automated Pavement Cracking Assessment Equipment - State of the Art
- ◆ □Nordic Road and Transport Research : PIARC Technical Committee C1
- ◆ □RUTAS : Experimento internacional para la armonización de medidas de regularidad superficial – Proyectos EVEN y FILTER.



C2

Community Consultation

Committee Session: Friday at 8:30

AIMS

Provide recommendations pertaining to communication for new infrastructure projects and for the management and adaptation of the existing network. For Durban the method adopted was to draw up a report preceded by a theoretical overview. The demarcation of content was based on the degree of involvement of those concerned with road projects, ranging from simple unilateral information to full participation in the process (Communication – Consultation – Participation).

MEMBERS

- ◆ 17 members (17 countries)
- ◆ 10 correspondent members (9 countries)

WORK PROGRAM

C2 organized its schedule in such a way that, in the period 2000-2003, a PIARC Report was produced, setting out the theoretical bases and placing the emphasis on instrumental possibilities. The period was treated by C2 as a means of laying the foundations for future achievements. The PIARC Report for the Durban Congress was the one concrete product to emerge from this period of work. Steps to achieve it:

- ◆ Initial meeting in Rabat to lay down the outlines of organization and content detailed questionnaire, permitting a comparative analysis of the conditions and instruments applying in the participating countries
- ◆ During the next stage, four members each assumed editorial responsibility for one part of the overall report to provide the basis for the final report presented to the Durban Congress

FUTURE ORIENTATIONS

In a following period, the Committee would like to develop an electronic platform providing a direct opportunity to access the various instruments at the different project and planning stages of road schemes, thus creating a powerful new aid for road authorities and political decision-makers. It was with such a goal in mind that, in tandem with the preparation of the PIARC Report for the Durban Congress, a possible electronic structure was worked out which could be developed during the period 2004-2007, were the Committee to be so instructed.

C3

Technological Exchanges and Development

Committee Session: Friday at 8:30

COMPOSITION

43 members from 19 countries, 12 corresponding members from 10 countries, 15 corresponding members from Other Technical Committees.

BACKGROUND

Technical Committee C3 was established in 1991 to function both as a technology transfer resource to PIARC member countries, particularly developing countries, and to serve as a liaison to other PIARC Committees to identify opportunities for further transfer of technology

WORK PROGRAM 2000-2003

The C3 Technical Committee has followed the orientations and guidelines of the PIARC Strategic Plan for this period. There are:

- ♦ Continue identification / co-ordination with PIARC Technical Committees on advances in the "State of the Art",
- ♦ Continue identification of methods of successful technology transfers,
- ♦ Facilitate identification of needs among developing countries,
- ♦ Supplement the training of road engineers with a human and social facet (sociology and social psychology).

Activities have been organized in the following working groups and projects:

Working Group 1: *Training directed towards social development.*

Aims: the integration of social and environmental aspects into the training of people involved in road construction and maintenance

Working Group 2: *Technology of Technology Transfer.*

Aims: to draw a picture of the transfer of road technological information centered on the following activities: Information and knowledge transfer; technology transfer itself, and tentative recommendations for their best use and Identification of existing technology transfers techniques.

Working Group 3: *Evaluation of PIARC Products.*

Aims: to develop methods and processes for PIARC to implement internally, in order to generate more effective products that meet the needs of all its members

World Interchange Network (WIN):

to promote on a global scale the technology transfer of road related information and knowledge. A specific Session is organized for the official inauguration of the new WIN.

Project P3

- ♦ International Seminars
- ♦ Technology Transfers Centres

FUTURE DIRECTIONS

Recommendations to strengthen PIARC's role in developing countries:

- ♦ Create a permanent Commission on Developing Countries and Countries with Economies in Transition;
- ♦ Consolidate each one of the above mentioned projects and programs;
- ♦ Incorporate developing country concerns and active representatives into Technical Committees;
- ♦ Introduce other languages to PIARC's work ;
- ♦ Increase the Association's involvement and support for projects such as HDM-4;
- ♦ Develop initiatives to build and consolidate the own capacities for better managing and expanding the road networks of developing countries

C4

Interurban Roads and Integrated Interurban Transport

Committee Session: Tuesday at 13:30

AIMS

How to cope with future demand for interurban transport (passenger and goods). The development of Interurban road transport/transport networks as part of the overall transport networks

MEMBERS

TC 4 has 34 members coming from 28 different countries. Geographical distribution:

17 from Western Europe, 4 from Eastern Europe, 3 from North America, 1 from Latin America, 3 from Africa, 3 from Asia and 1 from Australia

There are further 12 Corresponding members.

WORK PROGRAMME

(1) *Multimodal organisation and global impacts of the interurban transport system.*

- ◆ Social economical and environmental impacts of (road) transport policies, focusing on relations between mobility, economic growth and social development (including accessibility and regional development).
- ◆ Developing a multimodal approach of the transport system, including comparisons between modes (competition and/or complementarity), foreseen scenarios (tendencies) for different types of countries and factors influencing the modal split.

(2) *Optimise the existing road network*

- ◆ Examination and assessment of techniques for optimising the service quality of inter-urban road networks. The relative performance of all known optimisation techniques will be assessed and balanced across the service quality areas of safety, congestion and mobility.

(3) *Achieving Social Acceptance of Transportation Projects*

- ◆ Project development/decision process, team composition and skills to help road authorities evaluate projects and communication with the public to help decision-making process.

PRODUCTIONS

- ◆ Reports: One report presented for each of the three main topics.
- ◆ Seminar participation (preparations and presentations)
 - meeting with the Latin American Road Directors Association (Cuba 2000)
 - "Sustainable Development in Road Transport" (New Delhi 2001)
 - "Roads and Integrated transport" (Senegal 2002)

C5

Road Tunnel Operation

Committee Session: Thursday at 8:30

SCOPE AND ORGANISATION

- Technical field:** All aspects related to the road use and the management of tunnels: geometry, equipment, safety, operation, environment.
- Membership:** 44 members from 26 countries, plus 19 corresponding members.
- Working groups:** meet independently, twice a year; include C5 members and other experts.
⇒ **a total of 120 experts are involved.**
- Co-operations:** ITA, OECD, UN ECE, European Projects, etc.

WORK PROGRAMME

Based on the 6 working groups:

1. Operation.
2. Pollution, ventilation, environment.
3. Human factors of safety.
4. Communication systems and geometry.
5. Dangerous goods.
6. Fire and smoke control.

PRODUCTIONS

International Seminars:

- Viña del Mar (Chile) – april 2002.
- Beijing (China) – november 2002.

Reports published: - Pollution by nitrogen dioxide in road tunnels.
- Cross-section geometry in unidirectional road tunnels.
- Traffic Incident Management Systems used in road tunnels.

Reports to be published 2004:

- Vehicle emissions and air demand for road tunnels.
- Cross-section geometry in bi-directional road tunnels.
- Systems and equipment for fire and smoke control in road tunnels.
- Good practices for the operation and maintenance of road tunnels.

4 TUNNEL SESSIONS AT THE CONGRESS!

- ◆ Main session 13: "Safety in road tunnels"
Tuesday 21st, 8:30 - 30 (co-organised with UNO, European Commission and ITA)
- ◆ Main session 21: "C5 - Operation of road tunnels"
Thursday 23rd, 8:30
- ◆ Additional session 30: "Fire safety and ventilation of road tunnels"
Thursday 23rd, 13:30
- ◆ Additional session 33: "Road tunnel operation and transport of dangerous goods"
Friday 24th, 8:30

C6

Road Management

Committee Session: Thursday at 13:30

AIMS

To examine methods of road asset management taking into account the terms of reference of Strategic Theme 4 "Management and Administration of the Road System" including :

- ♦ Transport management.
- ♦ Levels of service.
- ♦ Management and maintenance quality.
- ♦ Economic management/prediction models.

Project P1: PIARC/HDM4 is related to this Technical Committee.

MEMBERSHIP OF THE COMMITTEE

70 members representing 43 countries.

WORK PROGRAMME (2000 – 2003)

The activities of the Technical Committee on Road Management were divided into four working groups as follows:

- ♦ **Asset Management** – "To improve the performance of road administrations in the provision, operation and management of road infrastructure and its use in accordance with international best practice".
- ♦ **Framework of Performance Indicators** – "Road quality service levels and innovations to meet user expectations" made to offer the best service quality to users. In order to evaluate the satisfaction level of users with regard to that objective, it is necessary to establish a set of Service Quality Indicators connected to Performance Indicators.
- ♦ **The Role of Economic and Socio-Economic Prediction Models in Road Management** – The actions conducted in the sub-committee 3 contributed to issues such as the development improvement and implementation of asset management processes and the marking of more efficient use of the road budget.
- ♦ **Maintenance Programming and Budgeting** – Practical analysis of the various alternatives for road administrations (or offices or agencies) to present maintenance budgets to decision-makers with a view to convincing them to allocate the necessary sums to adequate maintenance.

PRODUCTIONS

- ♦ Seminar "Priority Issues in Road Management" Tallinn (Estonia), May 17-18, 2001.
- ♦ Seminar Information Exchange San Jose (Costa Rica), May 7, 2003.
- ♦ Report "The Role of Economic and Socio-Economic Prediction Models in Road Management" submitted for publishing.
- ♦ Three other reports are being completed.

C7/8

Road Pavements

Committee Session: Tuesday at 13:30

BACKGROUND

This Technical Committee was created for the PIARC Congress held in Rome in 1962. It was then called "Technical Committee on Pavement Design" and subsequently split into C7 Concrete Roads and C8 Flexible Roads in 1965. In 2000, those two Committees merged into one single Technical Committee: C7/8 Road Pavements, with 68 members and 19 corresponding members from 38 countries.

WORK CYCLE

Over the past four years, the committee sub-groups have studied the following topics on which reports and guides are to be delivered:

- ♦ Decision making methodology and criteria for the selection of pavement type,
- ♦ Technical recommendations on recycling and re-treatment of pavements,
- ♦ Innovative pavements design,
- ♦ Andunctional pavement specifications, working towards performance-based technical specifications,
- ♦ Rehabilitation and strengthening of pavements: inventory of available techniques.

MAIN PRODUCTS

In addition to these reports and guides, the main products of the committee include:

- ♦ Seminars on pavement recycling and innovation, held in Warsaw and Paris, and
- ♦ A special edition of Routes Roads on Performance Specifications.

C 7/8 CONGRESS SESSION

The main session of this committee will present the sub-group reports and stimulate discussion on new ways to foster innovations and improve road pavement performance, including developing and implementing innovations, and the use of performance specifications. Further details are contained in the C7/8 activities.



C9

Economic and Financial Evaluation

Committee Session: Friday at 8:30

AIMS

- ♦ Compare economic appraisal methods for road construction/maintenance.
- ♦ Enhance evaluation tools to include social and environmental benefits.
- ♦ Identify means for efficiently implementing road programs and the impact of road investment on the economy.
- ♦ Identify the application and benefits of different forms of financing.
- ♦ Investigate sustainable funding for rural road construction/maintenance.
- ♦ Evaluate road pricing systems and their impact on the existing network.

MEMBERSHIP OF COMMITTEE

- ♦ 60 members representing 45 countries

WORK PROGRAMME (2000-2003)

1. Economics of road assets
 - a. Update work on economic evaluation for capital infrastructure projects.
 - b. Identify economic evaluation methods for road maintenance projects.
 - c. Identify economic benefits of ITS projects to provide road information.
2. Pricing and Costing
 - a. Survey terminology, concepts and principles of costing and pricing.
 - b. Methods of estimating, measuring and allocating transport costs.
 - c. Review full range of pricing instruments and regulations.
3. Financing, public-private partnerships (PPP)
 - a. Identify different forms of financing.
 - b. Review best practices, with special consideration of developing countries and countries in transition.
 - c. Review methods to evaluate public private partnerships and identify elements of successful partnerships.

PRODUCTIONS

- ♦ R/R No. 310 – April 2001. Transport Costing and Pricing – A Guide to the Concepts, Objectives and Terminology
- ♦ R/R No. 311 – July 2001. Private Sector Financing for Federal Trunk Roads in Germany.
- ♦ R/R No. 317 – January 2003. Unsolicited Proposals in South Africa
- ♦ R/R No. 319 – July 2003. Road Pricing – Objectives, Instruments and Outcomes
- ♦ PIARC/Austrroads Seminar – PIARC C9 Work Program. Cooloom (Australia), November 2001.
- ♦ PIARC International Seminar – Institutional Strengthening and Financing for Road Administrations – Development Opportunities. Havana (Cuba), September 2002

PIARC Reports

*Costing and Pricing of Road Use
Public/Private and Other Innovative Partnerships in Financing Infrastructure*

C10

Urban Areas and Integrated Urban Transport

Committee Session: Friday at 13:30

AIMS

Consideration of the:

- relationship between transport and urbanism
- improvement of the road network
- integration with public transport system
- sharing of the urban roadways
- emerging transport modes
- integrated payment systems
- public consultation methods

MEMBERSHIP

There were 34 members from 21 countries who made a contribution:

- 12 members from 8 countries for Sub-Group 1
- 7 members from 7 countries for Sub-Group 2
- 6 members from 5 countries for Sub-Group 3
- 9 members from 9 countries for Sub-Group 4

WORK PROGRAMME 2000-2003

In order to undertake the assigned tasks, C10 organised itself into 4 Sub-Groups:

1. "Sharing the Main Street" : how to resolve the competing claims for space in the Main Street;
2. "Land Use and Transport Policies in Urban Areas" : examination of the relationship;
3. "Transport Interchanges (passengers and freight) and Urban Development" : identification of the best practices and examination of the land use impact and finances;
4. "Evaluation of Transport Performance Measures for Cities": evaluation of the measures taken and how they contribute to city's goals and objectives.

These 4 Sub-groups were largely free standing, albeit regular report on progress was given to the other C10 members who in turn provided feedback and assistance.

CONGRESS SESSION

- Hold a special session;
- Participate in the Strategic Theme 2 Session;
- Participate in a joint PIARC/ITE Session.

PRODUCTION

- ♦ Four technical reports summarising the work of each of the four Sub-Groups in C10;
- ♦ an Activity Report;
- ♦ an Introductory Report;
- ♦ a Future Work Themes Report;
- ♦ 2 articles for "Routes/Roads" magazine (Sub-Groups 2 and 4).

C11

Road Bridges and other Structures

Committee Session: Thursday at 13:30

The Committee C11 is currently a privileged leading international forum for analysis and discussion of the issue on road bridges for engineers, operators and owners of road bridges.

MEMBERS

- ◆ 41 full members representing 32 countries.
- ◆ 16 corresponding members, 3 associate members.
Australia, Austria, Belgium, Canada, Croatia, Cuba, Czech Republic, Denmark, Egypt, France, Greece, Hungary, India, Iran, Italy, Japan, Morocco, Mexico, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Tanzania, UK, USA, Zimbabwe.

CURRENT ACTIVITIES 2000-2003

Asset management

- ◆ Asset management in relation to bridge management
- ◆ Comparison study on bridge management activity
- ◆ Repair of bridges under traffic. *Article "Routes/Roads" n° 317 (I-2003)*

Performance management

- ◆ Towards performance management
- ◆ Management of bridges in Australasian and in African countries

Bridge and structure condition

- ◆ Indicators for bridge performance and prioritization of bridge actions
- ◆ A survey on rehabilitation actions of concrete bridges

Seminar Management of bridges in Asian countries (Bangkok, 12-14 June 2003)

Exchange of information

Inside C11: 28 presentations during meetings on technical or management topics
Outside C11: with other PIARC Committees, joint session with TRB

FUTURE ORIENTATIONS

1. Management of bridges and other structures for safety and durability

Durability

- ◆ bridge pathologies
- ◆ design and detailing for durability (including materials)
- ◆ low and easy maintenance of bridges (including equipment)
- ◆ technology to extend lifetime of existing bridges and new structures

Safety

- ◆ How to prevent accident ; accepted risk ; required degree of protection
- ◆ Risk management under severe conditions
- ◆ Probability based management
- ◆ Modeling of future performance

2. Financial planning of bridge maintenance

- ◆ Experience from concession contracts
- ◆ Toll pricing in relation to maintenance



C12

Earthworks, Drainage and Subgrade

Committee Session: Tuesday at 8:30

MEMBERSHIP

36 members and 17 corresponding members from 40 countries.

WORKPLAN FOR THE PERIOD 2000 - 2003

1. Natural materials not compliant with specifications and relevance of earthworks control.
2. Column supported embankments.
3. Slope risk guidance for roads.

OUTPUT

- ♦ P.I.A.R.C. reports;
- ♦ Papers published in "ROUTES / ROADS";
- ♦ International Seminar in Ulaanbaatar (Mongolia) 18-21 June, 2002 "APPROPRIATE USE OF NATURAL MATERIALS IN ROADS";
- ♦ International Seminar in Kathmandu (Nepal) 26-28 March, 2003 "SUSTAINABLE SLOPE RISK MANAGEMENT FOR ROADS".

C-12 WEB SITE

<http://matrix.vtrc.virginia.edu/piarc/>



C13

Road Safety

Committee Session: Thursday at 8:30

Many chances of participating in discussions or getting information on road safety will be offered to the Congress delegates by Technical Committee C13.

A Plenary Session

C13 will present the following topic groups achievements:

- ◆ Road Safety Audits
- ◆ Accident databases and evaluation
- ◆ User behaviour
- ◆ Road safety manual
- ◆ Summary of special sessions; innovations, emerging countries

With the participation of representatives of Public Health Administrations, Police Forces and International Road Safety.

Two Special Sessions

- ◆ Monday October 20, at 13:30: "Innovations for road safety"
Four communications by experts, followed by a discussion on: "Should we change the road user behaviour or should we adapt the road system to their habits?"
- ◆ Tuesday October 21, at 8:30: Special Session dedicated to emerging countries
Six communications by experts on the following topics: two-wheeled vehicles user safety, training of very young users, safety and large urbanization, partnerships, World Bank future directions, PIARC possible future directions.

Committee C13 go and meet the Congress delegates

- ◆ Further to the call for individual communications, Committee C13 invited the authors to participate in the Committee meeting to be held on Sunday October 19, at 13:30.
- ◆ A poster session is organised for the authors of individual communications. The poster display timetable will be provided in the Congress daily programme.

Would you like to contact C13 during the Congress, you should use one of the following mailboxes:

- Peter Elsenaar, Committee Chair.
- Michel Labrousse, French speaking Secretary.
- Malcolm Read, English speaking Secretary.

C14

Sustainable Development and Road Transport

Committee Session: Thursday at 8:30

AIMS AND MEMBERSHIP

To encourage the development of road transport policies and programmes that support integration with other transport modes and result in beneficiary community outcomes:

- ◆ evaluates the consequences and implications of climate change policies
- ◆ evaluates the impacts of transport policies on employment, health and biological diversity
- ◆ studies limitation of noise and exhaust emissions in urban areas
- ◆ develops consultation and decision-making practices.

In addition to 34 members and 12 correspondents, representing 36 countries, the committee has relationships with other international organisations, such as OECD, ECMT (European Conference of Ministers of Transport) and IENE (Infra Eco Network Europe).

COMMITTEE WORK PROGRAMME

Work period 2000-2003 is based on two main actions:

Decision-making process in the implementation of road transport policies.

- ◆ Studies decision-making processes considering climate change, mobility and motorisation, and how global issues are translated at national, regional and local level.
- ◆ Aims at presenting a guide to good decision-making, based on the studies and documentation presented to the congress as well as the discussions and conclusions of the congress.

Evaluation and limitation of impacts of road networks and transport policies

- ◆ Deals with issues related to the impact of road networks and transport policies on health, local pollution, biological diversity, landscapes, vehicle regulation and promotion of less polluting vehicles.
- ◆ Produced a report on the statement of skills and best practise from the results of a survey.

ACTIVITIES OF THE COMMITTEE

Seminars:

- ◆ Nov 2001, New Delhi, India: "Sustainable Development in Road Transport".
- ◆ Nov 2002, Buenos Aires, Argentina "Pan-American Seminar Roads and Environment".
- ◆ May 2003 in Bucharest, Romania, "Rehabilitation of rail, road and river transport networks in Central and Eastern Europe". Presentations published on CD-ROM.

Articles published in Routes / Roads:

- ◆ "Greenhouse gas policy and the transport sector" n° 308
- ◆ "European Union policy on transport emissions and greenhouse gas " n° 308
- ◆ "Conducting sustainable regional development projects" n° 311
- ◆ "Strategies for sustainable road development" n° 314
- ◆ "Measures to protect sensitive environments" n° 314

C15

Performance of Road Administrations

Committee Session: Thursday at 13:30

AIMS

Improve the performance of Roads Administrations in the provision, operation and management of road infrastructure in accordance with best practice.

MEMBERSHIP OF THE COMMITTEE

30 active members representing 26 different countries.

WORK PROGRAM 2000-2003

1. Positioning of Roads Administrations

- Trends impacting RA's
- Trends in organisational modes
- Interactions with central Government and other network providers

2. Internal Performance

- Management framework for RA's
- Case Studies on Procurement, Quality/Benchmarking and building capability to meet future needs
- Developing country seminar on Institutional Strengthening

3. Performance Management

- Matching requirements to road user and stakeholder needs
- Performance indicators for developing and developed countries
- Private/public partnerships

PRODUCTIONS

- ♦ **Articles in Routes/Roads (World Road Association – PIARC)**
 - "The Economic, Social and Technological Forces Shaping Road Administrations"
 - "Internal Performance Improvement"
 - Some Typical Problems and Solutions of Outsourcing in Developing Countries
- ♦ **Article in Transport Research Record (Transport Research Board - TRB)**
 - "The Economic, Social and Technological Forces Shaping RA's"
- ♦ **PIARC Reports 2003**
 - "The Economic, Social and Technological Forces Shaping RA's"
 - "Role and position of Road Administrations in a Changing Environment"
 - "Defining the Birth, Growth, Upgrading and Mature Phases in Road Transport Infrastructure Development"
 - "Internal Performance Improvement for Road Administrations"
 - "Improving the Performance of Road Administrations - Best Practice Case Studies"
 - "A Conceptual Framework for Road System and Road Agency Performance Indicators"
 - "Comparative Road Sector Performance in Developing and Developed Countries Phase One"

- ♦ **Event**
Developing Country Seminar (held with C9), "Institutional Strengthening and Financing for RA's – Development Opportunities" Cuba, September 2002

C16

Network Operations

Committee Session : Friday at 8:30

AIMS

In the period of 1996 to 1999, Technical Committee 16 (C16) was named Intelligent Transport and focused on ITS (Intelligent Transportation Systems) publishing the "ITS Handbook 2000".

In the current period, 2000 to 2003, Technical Committee 16 was renamed Network Operations and with this, expanded its focus towards operating the road network.

MEMBERS

66 members in 36 countries

WORK PROGRAMME

C16 is organized according to four main work areas:

1. Network Operations: definition, missions, fields, tasks and measures
2. ITS Solutions
3. Institutional and Organisational Issues
4. Performance Assessment

PRODUCTIONS

"Road Network Operations Handbook 2003". Discusses the "soft" engineering approaches/tools available to network operators and covers five main fields:

- ◆ Network monitoring
- ◆ Viability and safety maintenance
- ◆ Traffic control
- ◆ Travel aid and user information
- ◆ Demand management

The handbook discusses the following issues:

- ◆ Shift from traditional building and maintaining of the road network to a service-oriented policy
- ◆ The road network operators missions and user services
- ◆ ITS solutions for network monitoring, maintaining road serviceability, safety, traffic control, user information and demand management
- ◆ The institutional and organisational aspects of network operations
- ◆ Performance indicators for network operational performance

C16 is also updating the ITS Handbook. Published version will be available in 2004.

Papers in Routes/Roads:

No. 308: "Network Operations – Issues and Tasks for the Technical Committee on Network Operations"

No. 314: "ITS-based Transport Management Strategies in Switzerland"

No. 317: "Network Operations and Telematics Activities in Central and Eastern Europe"

Seminars and Conferences

- ◆ International Seminar in Prague, 2001.
- ◆ Presentations at ITS World Congresses (Sydney 2001, Chicago 2002)
- ◆ Workshop on ITS in Mexico City held jointly with the AMVITAC/ITE/Intertraffic Congress, 2003



C17

Winter Maintenance

Next Congress: 27-30 March 2006

40 MEMBERS FROM 28 COUNTRIES

Committee C17 was created in early 2000 from the G1 group whose mission was to prepare PIARC congresses on Winter Maintenance. C17 deals with the full gamut of questions relating to winter road maintenance and trafficability. The group maintains close ties with SIRWEC (Standing International Road Weather Committee) and with COST activities.

C17 WORK COMPLETED AND FUTURE PLANS

Snow and Ice Data Book

This publication, released during the Sapporo congress, presents in similar formats, detailed information on winter road maintenance from 15 countries. Basic geographical and climatological data is presented followed by winter road maintenance organization, management, levels of service and techniques. Planned future editions will present data from other countries and cover additional topics such as cost control measures, environmental considerations, public-private partnerships and emerging technologies.

Assistance to developing and emerging countries

A particular focus of C17 is to assist emerging countries and countries in transition. C17 and C3 held a joint meeting during the Sapporo Congress to share knowledge and experiences on technology transfer and to better understand the expectations of prospective target nations. C17 is making arrangements to organize a winter maintenance workshop in Romania and host one of its future meetings in Latvia in the coming years.

Preparation of a technical glossary

Winterterm, a winter road maintenance glossary, was developed together with the COST 344 group. It contains 172 terms fully cross-referenced in 11 languages. Working with the future COST 353, C17 plans to add more terms and introduce other languages.

Evolution of winter road maintenance C17 promotes international technological cooperation and exchange through the sharing of information between members on client-centered services, environmental impacts and new techniques and technologies

International Winter Road Congresses (Sapporo 2002, Turin-Sestriere 2006)

C17 leads the development of the technical programs including identification of themes and topics, organisation of sessions, selection of papers, publications etc.



C18

Risk Management for Roads

Committee Session: Friday at 13:30

BACKGROUND

After 10 years of activity by Group G2 (Working Group on Natural Disaster Reduction) and within the perspective of the recent natural disasters affecting roads and road transportation, such as the damage caused to roads by earthquakes and hurricanes, the PIARC Executive Committee has emphasized the importance of natural disasters and recommended that risk management dealing not only natural but also man-made should be one of the subjects covered by the new strategic plan. Thus the C18 Committee "Risk Management for Roads" was created under Strategic Theme 3 "Road & Road Transport Operations". The C18 Committee deals with risks for roads caused by natural hazards and the results of human, social, and industrial activities. The C18 Committee began its activities in 2000 at the meeting in Paris chaired by the Strategic Theme Coordinator.

C18 MEMBERS

The number of members in the committee is 25 full members and 9 corresponding members from 23 countries. There are 3 former members from three countries. The C18 member countries are, Algeria, Australia, Austria, Canada, Canada-Quebec, Chile, Cuba, Spain, USA, France, Hungary, India, Iran, Italy, Japan, Mexico, New Zealand, Norway, Poland, Portugal, Czech Republic, Romania, UK, Switzerland.

MAIN PRODUCTS

Over the past four years, the committee conducted two international surveys, organised two seminars, and published the committee report entitled "Risk and Crisis Management for Roads".

- ♦ Seminars : The 1st seminar was held in Temuco, Chile in October 2001 and the 2nd seminar was in Budapest, Hungary in November 2002.
- ♦ Article on " Strategic Sites in a Motorway Network " Routes/Roads, January 2003.
- ♦ C18 Committee Report contains risk management, crisis management, the survey report, road disaster information and related organizations, and examples of major disasters.

WORK PROGRAMS

- ♦ Organizing seminars for exchange of experience and transfer of technologies.
- ♦ International survey on risks on roadways to identify and classify risks. This is a two-stage international survey conducted for the purpose of identifying and classifying risks for roads.
- ♦ Study on risk prevention methods and crisis management. This is a study based on experiences and practices in risk and crisis management in most C18 member countries.

C18 CONGRESS SESSION

The C18 session will have two parts. In the first period discussion mainly focus on the past activities and the results of the study on risk and crisis management. There will be three presentations based on the study and current conditions of the countries of each presenter. In the second period there will be a workshop type of discussions mainly focused on the African experiences of risk and risk management. Two speakers from African countries will induce the discussion from panelists and participants on the floor. The future outlook of the committee will be discussed and proposed.



C19

Freight Transport

OBJECTIVE

To draw the attention of the road federations on aspects influencing road freight traffic, in order to be able to contribute to a sustainable development (environmental, social and economic aspects).

MEMBERS

Committee C19 counts 15 effective members and 11 corresponding members in 21 countries.

WORK PACKAGES 2000-2003 AND RESULTS

Themes of the work packages	Method used	Countries covered	Results
Evolution of the freight modal split (Gail MOODY)	Statistics analysis Bibliographic research Research	European Union, Japan, USA, Australia, Canada, Mexico, Central and Eastern European Countries, China	Current situation and tendencies, factors influencing future tendencies
Role of regulation and deregulation (Jean-Pierre ORUS)	Bibliographic research Research	European Union, Japan, Western European Countries, Eastern European Countries, Australia, Canada, USA	Historic overview and current situation. Contribution by the modal split.
Emerging problems and potential answers offered by logistical platforms (Wanda DEBAUCHE)	Bibliographic research Research	European Union, Central and Eastern European Countries, Japan, Australia	Different types of logistical platforms Identification of the effects Work conditions and recommendations
Experience in the field of follow-up and control of weights and dimensions (Mircea NICOLAU)	Questionnaire Statistics analysis Bibliographic research	All continents	Current situation and tendencies Recommendations
Control and enforcement in the field of road freight transport (Jozsef PALFALVI)	Bibliographic research Research	European Union, Eastern European Countries, Asia, USA, Canada	Current situation
Safety of heavy vehicles, analysis of the risks and the statistics of accidents implicating heavy vehicles (Eichi TANIGUSHI, Joshi IMANISHI)	Statistics analysis Questionnaire	Japan, European Union, Australia	Comparison of available statistics
Measures in order to reduce the impact of heavy vehicles on sensitive environments (Werner JEGER)	Bibliographic research Questionnaire	Japan, European Union,	Overview of existing measures and the difficulties to establish them. Recommendations

Committee Session: Tuesday at 13:30

PRODUCTION

Technical Report for each work package (available in English)
Articles in Routes/Roads

C20

Appropriate Development

Committee Session: Friday at 13:30

Appropriate Development was one of the key themes at the XXIst 1999 World Road Congress. C20 is a new committee which started operation under PIARC Strategic Theme 5 during the 2000-2003 work cycle.

AIMS

Contribute to PIARC's goal of fostering the development of road transport policies and programmes, in particular, the needs of developing nations, countries in transition and of rural and remote areas.

WORK PROGRAMME

Implemented under two working groups:

- ◆ Review and issue best practice recommendations on methodologies for identifying and measuring non-economic needs and benefits of road transport infrastructure in poor countries, such as basic accessibility to educational and social services.
- ◆ Review successful practices for providing appropriate access within resource constraints, and establishing appropriate standards taking into account local resources, delivery options, adaptability and evolution of needs over time, and traffic characteristics.

18 members representing 15 countries.

PRODUCTIONS

- ◆ Draft technical guidelines on rural roads surface options
- ◆ Draft bibliography of valuable maintenance documentation
- ◆ Suggestions for Work Programme of next cycle
- ◆ Seminar "Rural Road Transport" May 2002, Siem Reap (Cambodia)
- ◆ HDM-4 seminar, "Road Maintenance and Pavement Maintenance Technology" November 2002, Heredia (Costa Rica)
- ◆ IFG meeting "Rural Roads Engineering" June 2003, Colombo (Sri Lanka)

COOPERATION WITH THE INTERNATIONAL FOCUS GROUP (IFG)

The Committee initiated collaboration arrangements with the International Focus Group (IFG), a partnership of countries, institutions, and practitioners committed to the provision of sustainable transport access for the poor.

C20 SESSION AT THE CONGRESS

Overview of work programme and products

Proposals on the future work programme

Discussion theme: "the state of the art on rural transport planning, development and management" (basic access needs, appropriate rural planning for road development and management, standards and specifications for rural accessibility, economics and financing of basic access needs, effective maintenance, research and innovation needs, institutional capacity building for rural roads development and management).

The Committee received 20 papers. Some of them will be presented during the Session and others will be a subject of the poster session.



Terminology Committee

Committee Session: Monday at 13:30



AIMS

For more than 75 years PIARC have published the "PIARC Technical Dictionary of Road Terms". The aim of the Terminology Committee is to provide regular updates to this technical dictionary, as well publishing the "PIARC Lexicon of Road and Traffic Engineering".

The Committee actively explores the possibilities offered by computer-assisted translation and the use of modern information transfer techniques, notably the Internet. It encourages and supports the publication of road terminology works in many specialised domains and in numerous languages.

MEMBERSHIP

14 members from 10 different countries have actively prepared the Committee's participation in the XXII World Road Congress. 18 correspondent members (from 15 different countries) have ensured active links with PIARC's 20 Technical Committees.

WORK PROGRAM AND PRODUCTIONS 2000-2003

- ♦ "PIARC Technical Dictionary of Road Terms" updated (number of definitions increased from 1300 to 1550)
- ♦ "PIARC Lexicon of Road and Traffic Engineering" updated (number of expressions increased from 12000 to 17 000)
- ♦ Completed a feasibility study into computer-assisted translation in the roads domain (article published in "Routes/Roads", January 2003).
- ♦ "PIARC Terminology" CD-ROM published in November 2000 (Internet updates available in 2002 and 2003)
- Besides the official PIARC languages of French and English, the "PIARC Technical Dictionary of Road Terms" has been published in the following languages: Arabic, Chinese, Czech, Danish, Dutch, Finnish, German, Greek, Hungarian, Italian, Japanese, Khmer, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Slovakian, Spanish, Swedish and Vietnamese.

