

Technical Committee D.2: Road Pavements
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April 2008

Executive Summary:

The first meeting of the D.2 Road Pavements Technical Committee was held in Paris on 1 and 2 April 2008. This Technical Committee is divided into three Sub-Committees, of which I am a member of the D.2a Road Surface Characteristics Sub-Committee. At the first meeting I was appointed to the position of English Speaking Secretary for the D.2a Sub-Committee.

The purpose of the first meeting was for the members to gain an understanding of how PIARC works, its objectives and its strategic plan for the 2008 to 2011 cycle. In addition, the D.2a Sub-Committee commenced development of its work plan. The work plan includes three working groups, tasked with the following issues:

- Prediction of performance in time of interventions for improving surface characteristics
- Noise – as related to material properties and evolution in time
- Maintaining pavements (with an emphasis on innovations in relation to durability, recycling and re-use)

These issues will be addressed in the next four years and are all relevant to Austroads members.

Background:

The Road Pavements Technical Committee is part of PIARC Strategic Theme D – Quality of Road Infrastructure.

The goal of Strategic Theme D is to *improve the quality of road infrastructure through the effective management of assets in accordance with user expectations and managers' requests.*

Technical Committee D.2 encompasses the breadth of pavement-related work, organized in three Sub-Committees: flexible and semi-rigid pavements, concrete pavements, and road surface characteristics. It focuses on innovative approaches to reduce construction time and cost, increase durability and promote recycling and reuse.

The Sub-Committees operate as separate committees with their own executive and work plan. However, the work of each Sub-Committee will be organised such that repetition is avoided, some common activities are undertaken and ultimately the D.2 strategic issues are addressed by at least one of the Sub-Committees, with input from the other two. The D.2 Technical Committee has five key issues to be addressed in the 2008 – 2011 cycle. These are detailed in Table 1.

I am the English Speaking Secretary for Sub-Committee D.2a Road Surface Characteristics. As secretary I am responsible for preparation of the minutes in English and preparation of committee reports, papers, articles and so on in English when necessary.

Work Program:

At the first meeting, members introduced themselves and then there was a brief discussion of the work undertaken during the previous cycle (2004 – 2007).

The strategic plan was then discussed and the draft work plan for the 2008 – 2011 cycle was developed. Group leaders were assigned to the working groups. In addition to its own projects, the D.2a Sub-Committee will make significant contributions to projects led by the other Sub-Committees of Technical Committee D.2. The draft work plan is summarised in Table 1. The draft work plan will be further developed prior to and at the second meeting.

Table 1 Draft Work Plan for Sub-Committee D.2a Road Surface Characteristics

ISSUE	STRATEGY	TOPIC	OUTPUT
Issue D.2.1 Reducing construction time and cost	Identify the methods for reducing the time and costs of construction for different types of road pavements	D2.a to contribute to work of the other Sub-Committees	Produce case studies to illustrate the methods of construction and the cost/ benefit analysis of the different cases
Issue D.2.2 Improved maintenance methods	Undertake an analysis of improved maintenance methods for different types of road pavements Consider the changes to maintenance strategies that have been adopted by road administrations and how these will change future maintenance of road pavements	Prediction of performance in time of interventions for improving surface characteristics (Leader: Johan LANG)	Report on the characteristics of the improvements and their benefits Produce a report outlining the changes and likely impacts
Issue D.2.3 Road noise mitigation	Identify the different legal requirements for reducing the impacts of road noise Identify new techniques for reducing road noise	Noise - as related to material properties and evolution in time (Leader: Fabienne ANFOSSO-LEDEE)	Report on the variety of legal requirements and the technical basis for the legislation Provide a review of the new techniques and how these have helped reduce the impact of road noise
Issue D.2.4 Monitoring of innovations	Review the recent changes in construction and maintenance of road pavements, identifying where innovations have been introduced towards improving durability, recycling and re-use Undertake an assessment of the developments taking place in key road administrations for future innovations on road pavements	D2.a to contribute to work of the other Sub-Committees. (Liaison with D2.b lead by Dimitrios EVAGELLIDIS) There is also some cross-over with Issue D.2.2.	Report on the key innovations that have been introduced in the construction and maintenance of road pavements and the success of the measures Hold a seminar to report on and share the knowledge about the future innovations that are being studied
Issue D.2.5 Adaptation to climate change	Identify aspects of road pavements subject to the impacts of climate change Study evolving adaptation strategies	D2.a to contribute to work of the other Sub-Committees	

Meeting outputs:

The achievements of the first meeting of the D.2 Technical Committee include:

- Introduction to PIARC, aims of the strategic themes and operation of technical committees
- Technical Committee members introduce themselves
- Vacant English Speaking Secretary position assigned to myself
- Preparation of a draft work plan for the 2008 – 2011 cycle
- Formation of Working Groups and group leaders (refer Table 1)
- Identification of meeting locations for next two meetings and technical seminar

Emerging issues:

Issues that were broadly discussed and form the basis for upcoming work of the technical sub-committee are:

- Prediction of performance in time of interventions for improving surface characteristics
- Noise - as related to material properties and evolution in time
- Reducing the time and costs of construction
- Innovations in relation to construction and maintenance of road pavements

More detailed discussion on these will occur at later meetings.

Learnings for Australia and/or New Zealand:

The planned activities of the committee are relevant to the Austroads Strategic Priorities of Technology (*to promote best practice in technology*) and Asset Management (*to minimise the whole of life cost of road and bridge assets to meet the transport task*). The future work of the committee will be of primary interest to the Austroads Technology and Assets Programs.

Dissemination:

Committee reports will be circulated to the Austroads Pavement Technology Review Panel for comment and information. When the opportunity arises, I will brief the review panel in person about committee activities.

Benefits from other associated activities:

The main benefits of involvement with this technical committee include enhanced knowledge of current international pavement technology, and access to information and international expertise which will be invaluable in future developments of Austroads publications and in the delivery of road projects using the best internationally available technology. Membership of PIARC also provides the opportunity to seek answers to technical problems and learn of new technology from pavements practitioners from around the world. Such benefits would not be able to be easily achieved through other means as PIARC brings together technology specialists from many countries.

There were no other associated activities undertaken during attendance at the first meeting. However, the next meeting will be held in conjunction with PIARC's 6th Symposium on Pavement Surface Characteristics. The third meeting will be held in conjunction with the 7th International RILEM Symposium on Advanced Testing and Characterisation of Bituminous Materials. Both will present opportunities to gain knowledge on the latest world-wide developments in these areas.

Conclusions and recommendations:

The first meeting of the technical committee resulted in the drafting of the committee's work plan for the 2008 – 2011 cycle. The topics to be addressed are relevant to Austroads' strategic priorities and are of interest to current activities of all Austroads members.

Continued Austroads representation on this committee is recommended so that the work of the technical committee can benefit Austroads members and so that this highly effective networking opportunity is not lost.