Theme 4: Road Finances & Management

Workshop 4.5: Road Maintenance Management
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• Theme 4: Road Finances & Management

• President: Max von Devivere (German Asphalt Institute)

• Moderator: Maria de Lurdes Antunes (Portuguese Laboratory of Civil Engineering)
## Workshop 4.5: Selected papers

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129: Pavement Management System

• Authors: Armando Santos & Dora Batista

• Summary:
  – PMS used by BRISA, a portuguese concessionaire (2400 km concession)
  – Based on detailed periodic assessment of the pavements condition (surface defects, FWD deflections, rut depth, IRI, CAT and MPD)
  – Different levels of quality and associated thresholds
  – Different investment strategies
  – Discussion of the main advantages and drawbacks of the system

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129: Pavement Management System

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www.irf2010.com
• Authors: Horácio Sá

• Summary:
  – Development of a web based platform for aggregation of information concerning all relevant aspects of the infrastructure under concession (1300 km), in Portugal
  – Data from different phases in the infrastructure’s life cycle: Design and construction; Operation and maintenance
  – Identification of main difficulties and outlines next steps

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182: Road visual Inspections for the identification of maintenance requirements

• Authors: Jacobo Diaz & Elena de la Pena

• Summary:
  – Methodology used in Spain for visual inspection of road infrastructures aiming at the identification of maintenance requirements.
  – Addresses road surface, traffic signs, road markings, road restraints, guidance equipment.
Introduction of Performance Based Maintenance Contract in Expressways in Japan

• **Authors:** Hidekatsu Fujimoto, Takatoshi Tomita & Masato Mastsumoto

• **Summary:**
  - Presents an overview of performance based maintenance contracts, and highlights its benefits, in comparison with traditional forms of contracting maintenance works.
  - Describes the implementation of performance based maintenance contracts in different assets of the intercity expressway concession in Japan, presents indicators used and acceptance criteria.
  - Discusses the lessons learned from a pilot project.
467: Design and maintenance of rural roads, and their management and costs of production

- **Authors:** Nacira Sauodia and S. Haddadia

- **Summary:**
  - Describes the main issues associated with the design and maintenance management of rural roads in Algeria
  - Presents a case study from a road in the vicinity of Bouira, on a mountaneous region
  - Describes the main difficulties associated with the maintenance of the road and presents some recommendations.

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• **Authors:** Jamal Beitelmal and Hamida Orafy

• **Summary:**
  – Describes the development of a Pavement Maintenance Management System (PMMS) for the city of Benghazi in Libya
  – The PMMS is based on the Pavement Condition Index (PCI) derived from visual assessment of pavement condition
  – Presents an application of the PMMS to arterial roads in the city of Benghazi
  – Presents some recommendations for the implementation of the PMMS.

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