

ISAP TECHNICAL COMMITTEES DAY

Annual meeting (2014) of

Technical Committee on Asphalt Pavements and Environment (APE)



*Washington DC, OMNI Shoreham Hotel – Council Room.
January 12th, 2014*

ISAP WG6 By-products and Secondary Materials Recycling in Asphalt Pavements

Secretary, Zhanping You

Chairman, Marco Pasetto

Objectives of ISAP TC/APE WG6 (1)

➤ **Promotion of use of alternative materials in road pavements construction:**

- ✓ Reduction of the consumption of natural aggregates (scarcity, quality, etc.)
- ✓ Reduction of the impact of excavation on the environment and the landscape
- ✓ Reduction of wastes to be discharged on landfills (environmental impact, transportation and disposal costs, taxes, public opinion aversion, etc.)
- ✓ Need of new materials and technologies for road construction (wider applications and uses)
- ✓ Compliance with recent Standards (e.g. EN 13043, etc.)



Objectives of ISAP TC/APE WG6 (2)

➤ **Analysis of potentialities of By-products and Secondary Material Recycling in asphalt pavements, with regard to environmental and technical aspects:**

- ✓ The evaluation of impact on environment (visual, leaching, etc.)
- ✓ The mechanical properties, related to natural materials' ones
- ✓ Specific tests and requirements
- ✓ Functional, performance based test methods, for a more objective evaluation in comparison with natural material

➤ **Promotion of By-products and Secondary Material for:**

- ✓ The enhancement of road
- ✓ A worldwide eco-sustainability (for developing and technologically advanced countries)



Basis of work

- **Literature review and characterization of the “state of the art”**
- **Attention to International collaborative projects completed:**
 - ✓ PIARC (1989), Marginal materials. State of the Art report
 - ✓ OECD (1997), Recycling strategies for road works
 - ✓ ALT-MAT (1998-1999), Fourth Framework Programme research project, partly funded by the European Commission
 - ✓ SAMARIS (Sustainable and Advanced MAterials for Road InfraStructure) (2003-2007), Fifth Framework Programme research project, funded by the European Commission
- **Monitoring of the development in Technical Standards, Specifications, Guidelines, and Law Regulations**

Main goals, already scheduled

- **Up-to-date literature review, including development in standards and law regulations, based on international inquiry**
- **Conferences and Workshops on by-products and secondary materials in asphalt pavements**



**2nd International Workshop on
THE USE OF MARGINAL MATERIALS IN ROAD CONSTRUCTION**
Montegrotto Terme (Padua, Italy) – September 13th, 2013



Present+Future activities (1)

- Call for participation (August 2013, **limited attention**)
- Kick-off meeting (September 2013, Padua, IT)
- WG6 meeting (June 2014, Raleigh, NC, USA)
- Organization of the WG (TGs are needed? **early option**)
- State of the art, concerning:
 - ✓ Literature (articles from journals, papers from proceedings);
 - ✓ Research projects (completed, in progress and starting);
 - ✓ Applications
- State of the Art Report on “The use of marginal (by-products and secondary) materials in asphalt pavements”. Call for Contributions (January to May 2014)



Present+Future activities (2)

- **Evaluation of possible participation to collaborative projects (funding resources to be found): EU Horizon 2020, etc.**
- **Organization of a Cycle of Seminars, Workshops, Conferences on “the use of By-products and Secondary Materials Recycling in Asphalt Pavements”**



Thank You,



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