

Asphalt Quality Initiatives by Sabita

RPF May 2011



Asphalt Quality



Performance requirements



Mix design procedure



National specification



Laboratory accuracy and precision

Four pillars expanded

1. Pertinent structural performance characteristics (response and damage models) in the pavement design procedures
2. Up-to-date (multilevel) mix design procedure
3. Up-to date national specifications
 - In terms of mix requirements
 - Sound handling and construction techniques
4. National laboratory precision scheme

Presentation

- Focus on **Mix Design Procedure**
- While noting that:
 - Linkages of procedure with revision of COLTO spec has been discussed with SANRAL
 - Contact with SAPDM is ongoing (CSIR)
 - National laboratory proficiency scheme has been reported on
 - Quality control process need still to be addressed.

Design method objectives

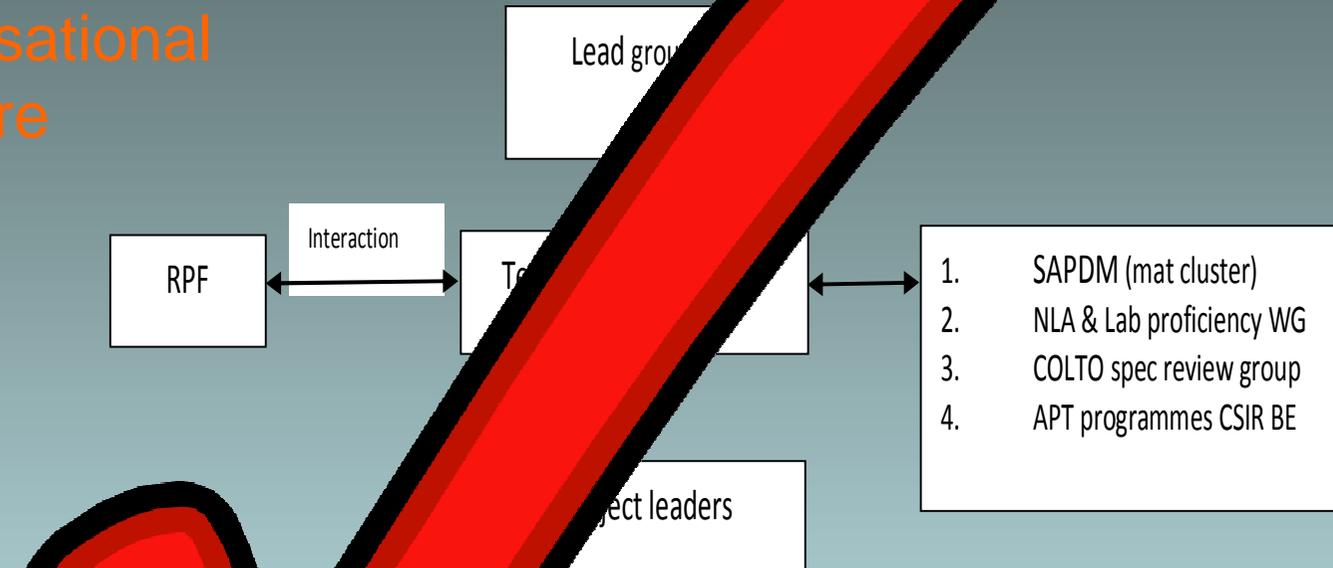
- Update procedures incorporating international and local advances,
- Include new mix types (e.g. HiMA, WMA, RA content), and
- Develop linkages with the structural design methods of SAPDM
- Identify specific specification requirements

Project Proposal Number: CSIR/BE/IE/EP/2010/0001/B

- **Phase I:** Establishment of a project management structure & Inception Report
- **Phase II:** State-of-the-art review, development of experimental programme
- **Phase III:** Experimental work and manual development and
- **Phase IV:** Dissemination and entrenchment into practice.

Phase 1

Organisational structure



Inception

- Split project components to be managed by the various groups.
- Detail the objectives, scope, challenges and proposed methodology in the various technical fields.

Phase II

- Literature study:
 - Current practice in South Africa,
 - Local trends,
 - International trends
- Interviews with stakeholders:
 - Producers (and other mix designers),
 - Consultants,
 - Clients,
 - Academics
- Development of experimental programme

Progress

- Phase II currently underway,
 - Interviews in progress,
 - Literature study in progress,
 - To be completed 31 July 2011
- Experimental work
 - Completion date 31 March 2012
- Draft manual to be complete 31 March 2012