



12TH Conference on Asphalt Pavements for southern Africa

13 -16 October 2019 | Sun City | South Africa

38th Road Pavement Forum

CAPSA 2019 - Workshop Feedback

13 November 2019, Pretoria
Philip Joubert

Overview of subjects covered in 9 workshops

1. Research:

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2. Low volume roads:

3. Seals:

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4. Asphalt:

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-
-

5. Binders:

-
-

6. Road Maintenance:

-

Overview of subjects covered in 9 workshops

1. **Research, Human Capital Challenges & Industry documentation:**
 - Leadership, cooperation and program development
2. **Low volume roads:**
 - Outcomes for cost-effective provision of low volume sealed roads
3. **Seals:**
 - Selection of appropriate seal types and binder combinations
4. **Asphalt:**
 - Design and performance: Testing and designing for asphalt fatigue
 - Optimal design of asphalt
 - Asphalt process control – digital construction technologies
5. **Binders:**
 - Bituminous binder testing and standard
 - Recent advancements in innovative bituminous materials
6. **Road Maintenance:**
 - Innovation in road maintenance techniques and procedures

Overview of subjects covered in 9 workshops (66% of Del.)

1. Research:

- Leadership, cooperation and program development ±40

2. Low volume roads:

- Outcomes for cost-effective provision of low volume sealed roads ±40

3. Seals:

- Selection of appropriate **seal types** and binder combinations ±140

4. Asphalt:

- Design and performance: Testing and designing for **asphalt fatigue** ±140
- Optimal design of asphalt ±70
- Asphalt process control – digital construction technologies ±40

5. Binders:

- Bituminous binder testing and standard ±40
- Recent advancements in innovative bituminous materials ±70

6. Road Maintenance:

- Innovation in **road maintenance** techniques and procedures ±140

Workshop Overview – Workshop or Talk Shop

1. **Research:**
2. **Low volume roads:**
3. **Seals:**
4. **Asphalt:**
5. **Binders:**
6. **Road Maintenance:**

Workshop Overview – Resolutions

1. **Research, Human Capital Challenges & Industry documentation :**
 - Leadership, cooperation and program development
2. **Low volume roads:**
3. **Seals:**
4. **Asphalt:**
5. **Binders:**
6. **Road Maintenance:**

Resolutions:

1. That the CSIR engages with National DoT to explore ways to establish a **South African Roads Research Coordinating Committee:**
 - to plan, oversee, guide & manage roads and transport research for **all** roads in South Africa, and
 - to take into account activities of the SANRAL Roads Research Coordinating Committee
2. That the RPF continues the support of its Working Group on **Technical Manuals and Guidelines,**
 - led by the Western Cape Provincial Government and the DoT
 - the focus includes the implementation of a **Secure Central Space** required for approved/supported **documentation**

1. Research:

- Leadership, cooperation and program development

2. Low volume roads:

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Resolution:

- That the RPF establishes a **Working Group on Low Volume Roads** to **support and guide activities** towards the **implementation and promotion** of more appropriate low volume surfaced roads in South Africa.
- Included in the activities would be items such as:
 - Development of a South African LVR **Guideline** Document
 - Research on **unconventional** materials
 - Prepare **communication** package of benefits for decision makers
 - **Upgrading** of gravel roads to surfaced roads
 - Liaison with **CSIR** and **ReCAP**
 - Etc.

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Resolutions:

- That RPF support the **TRH3 committee** to implement the aspects emanating from the workshop:
 - **Update TRH3** (Sabita Manual 40) by addressing list of aspects that need clarification
 - Urgent **research** needed on seal work based on list of aspects recorded at the workshop

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Resolutions:

- That the **SABITA Manual 35 Working Group** explore and provide guidelines on the implementation of:
 1. A system of **pre-approved/pre-certified mixes** in SA
 - To reduce testing and eliminate delays in construction projects.
 - Aimed at Level 2 projects
 2. A **simple process of material designs** based mainly on volumetric properties of mix to demonstrate that pre-approved mix is delivered.
 3. More industry workshops (SAT) to drive **implementation of Manual 35**

Resolution:

- Establish a RPF technical committee, to review / implement **Digital Technologies (DT) in Road Construction**. Aspects to be considered:
 - a) Role-players: clients, consultants, contractors, academics, etc.
 - b) Take note of **SANRAL Research Panel** on future transport and technology innovation
 - c) **Terms of reference** to be compiled by committee:
 - CAPSA Workshop was only related to construction
 - DT scope is actually much wider – ring fence for committee?
 - d) SABITA technology visit to Europe in March 2020

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Resolutions:

1. That through the existing **RPF Binders Working Committee**:
 - a) Develop an implementation strategy for the rollout of **SATS 3208 (PG Specifications)**, including protocol development & training
 - b) Implement a research strategy on the **ageing** and **recovery** methodology

2. That RPF establish **two new Working Groups**:
 - a) To research **“nano”-technology applications** in roads including laboratory testing, field construction & monitoring
 - b) To develop / update guidelines for **Bond/Tack Coat** applications

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- Innovation in road maintenance **techniques and procedures**

Resolutions:

1. That an expanded CAPSA Task Group:
 - a) Interact with the National Treasury Government Technical Advisory Committee (GTAC) to allow **longer term contracts in maintenance**
 - b) Address the National DoT on the current limitations/conditions of **Provincial Road Maintenance Grant (PRMG)**
 - c) Keep RPF informed of **developments**
2. That the topic of road maintenance be part of future CAPSA - Papers

Questions?