#### **SPM VIENTIANE - 2008**

# Rural Road Surfacing Trials -III SEACAP 30: Co-operation with RT3 Provinces



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#### Introduction

Following success of the previous RRST trials programmes and the requirements of RT3 provinces, MoT has proposed that the donors (WB & DFID) support Surfacing Trials (RRST-III) for an initial 10 provinces under RT3

- This presentation will present some aims, and proposals of the 10 provinces and initial solutions of MoT, WB and SEACAP and some comments on technical issues.





#### RT3

**The Rural Transport Project** for Vietnam will reduce travel costs and improve access to markets, off-farm economic opportunities, and social services for poor rural communities in the 33 participating provinces in **Northern and Central Vietnam. Total project cost is** USD173,270,000.



#### **Province Proposals**

- Trial roads: Each province intially proposed from 3 to 8 roads with the length from 1 to 15km.
   Following discussion one road from each province has been selected from this long list.
- Pavement Options:
   <u>Control</u>: Hot bitumen seal, WBM, natural river gravel, hill gravel.
  - <u>Trial:</u> Bitumen emulsion seal, Otta seal, cement concrete brick, DBM, quarry-run sub-base/ shoulder, unreinforced cement concrete.





#### **Province Proposals**

- Local consultants:
- Almost allconsultants have RT3 road design, except Thai Binh province. Last year, this consultant was State Of Enterprise, this year it is Joint stock consultant.
- Laboratories: All provinces have LAS certificates (by MoT or MoC).
- Sub-grade strength: E modulus following Vietnamese standards (rigid compression plate).





#### **Province Proposals**

- All provinces are interested in the Rural Road Surfacing Trial and appreciate the Surfacing Trial Research.
- All provinces suggest an allocated separate fund for trial construction (Not under RT3 budget).
- There is a clear mechanism for local consultant funding of survey & design.





### **Programme Objectives - MoT**

-The MoT objective of the RRST-III program is to extend the Surfacing Trials for more typical regions in Viet Nam.





#### **Programme Objectives - Provinces**

 Province can apply the research results of other provinces in their own region. But it is better if they can apply directly the results of trial in their province

Local contractors can achieve benefit from training in new techniques

Local people also can receive the benefits of road rehabilitation.





#### Initial Decisions by MoT, WB and SEACAP

By discussion with WB, SEACAP and MoT, some initial solutions are proposed (Because of budget limit):

- ▶ 6 provinces are proposed for RRST III (SEACAP 30).
- ➤ A single road will be selected for trial of each province.
- ➤ DFID will consider to support the additional fund of Trial survey (Separate from the RT3 survey).





#### Comments on Technical Issues

- At present, the labour cost is increased, some labour based options should be considered carefully. For example, RRST II: 20cm handpack stone cement mortar joint/ 5cm sand/ 10cm natural gravel: USD34,800/km. 15cm bamboo cement concrete/ 5cm sand/ 10cm natural gravel: USD29,787/km ~ USD32,967/ km.
- RRSTII: The option 'Emulsion sand seal/ sand joint clay brick 10cm/ 5cm sand': the emulsion sand seal layer is easy peeled off. Do not use emulsion sand seal on brick layer!
- Almost RRST III provinces have proposed Otta Seal: this option is quite new in Viet Nam.



#### Progress to date

- RRST III 6 provinces & 6 trial roads are determined.
- Initial Trial options are agreed with provinces.
- WB & DFID (SEACAP) are considering support for the additional budgets for trial construction & data collection.





|                      | Dien<br>Bien | Cao<br>Bang | Thai<br>Nguyen | Thai<br>Binh | Thanh<br>Hoa | Phu<br>Yen |
|----------------------|--------------|-------------|----------------|--------------|--------------|------------|
| DBST                 |              |             |                |              |              |            |
| OTTA Seal            | PTR          | PTR         |                |              | PTR          | PTR        |
|                      |              |             |                |              |              |            |
| DBM/River Gravel S-B |              |             |                |              |              |            |
| DBM Base/S-B         |              |             |                |              |              |            |
| Stabilised Gravel    |              | L           |                |              |              |            |
| Stabilsed Sand       |              |             |                | С            |              | С          |
| Natural Gravel       |              |             |                |              |              |            |
| Quarry run           | S            | S           |                |              | S            |            |
| Concrete brick       |              |             |                |              |              |            |
| Clay Brick           |              |             |                | M            |              | М          |
| Hand Packed Stone    |              |             |                |              |              |            |
| Mortared Macadam     |              |             |                |              |              |            |
| Non-reinforced Conc  | CSA+R        |             | CSA+R          |              | CSA+R        |            |
|                      |              |             |                |              |              |            |
| Sealed shoulders     |              |             |                |              |              |            |
|                      |              |             |                |              |              |            |
| Gravel               |              |             |                |              |              |            |
| WBM                  |              |             |                |              |              |            |

### **Project Completion**

SEACAP 30 is due to complete by the end of January 2009 and will by then have produced designs and appropriate costs and specifications for the proposed trial pavements.

The next phases of trial construction and supervision and monitoring are ESSENTIAL if this project is to have research usefulness





## TRL - OtB look forward to continuing the RRSR research with the other countries

### Thank you

