

SEACAP 003

Mainstreaming Appropriate Local Standards and Specifications & Developing a Strategy for MCTPC Research Capacity

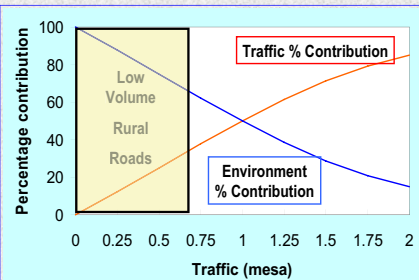
TRL Ltd

In Association with

LTEC and Intech Associates



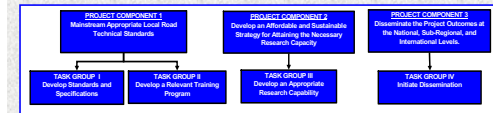
Contributions to Road Deterioration



SEACAP 3 Structure

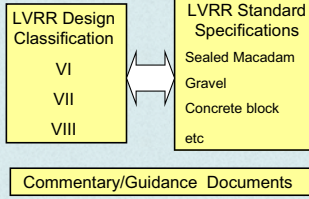
3 Components comprising:

11 modules organised into 4 Work Groups



SEACAP 3 : Key Outputs

LVRR STANDARDS

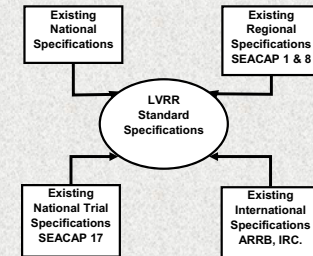


Appropriate Standards

Variety of pavement or surface options depending on particular road environment requirements



LVRR Specifications



SEACAP 1, 8 and 17 Trials

Sustainable Options Potentially Available



Option	Description	Typical Thicknesses (mm)
OPTION B	Steel reinforced 20MPa concrete Bedded on compacted sand Lime/cement stabilised soil, CBR >20%	Steel: 120, 150, 200 Concrete: 50, 50, 50 Soil: 100, 150, 150
OPTION C	Reinforced 20MPa concrete Bedded on compacted sand Natural gravel base, CBR >30%	Reinforced concrete: 120, 150, 200 Concrete: 50, 50, 50 Gravel: 100, 150, 200
OPTION D	Reinforced 20MPa concrete Bedded on compacted sand Compacted sand base, CBR >30%	Reinforced concrete: 120, 150, 200 Concrete: 50, 50, 50 Sand: 100, 150, 150
OPTION E	Steel reinforced concrete 15cm Compacted sand base, CBR >30%	Steel: 120, 150, 200 Concrete: 50, 50, 50 Sand: 100, 150, 150
OPTION F	Emulsion sand & stone chip seals Dry bound macadam Compacted sand with base, CBR >20%	Emulsion sand: 120, 150, 200 Macadam: 50, 50, 50 Sand: 100, 150, 150
OPTION G	Emulsion sand & stone chip seals Emulsion stabilised soil, CBR 45%	Emulsion sand: 120, 150, 200 Soil: 50, 50, 50 Soil: 100, 150, 150
OPTION H	Emulsion sand seal Concrete bricks Compacted sand Natural gravel, CBR >30% Natural gravel, CBR >30%	Emulsion sand: 120, 150, 200 Concrete: 50, 50, 50 Sand: 100, 150, 150 Gravel: 100, 150, 150
OPTION I	Emulsion sand seal Concrete bricks Dry bound macadam Dry bound macadam	Emulsion sand: 120, 150, 200 Concrete: 50, 50, 50 Macadam: 100, 150, 150 Macadam: 100, 150, 150
OPTION J	Emulsion sand seal Crushed stone covering, CBR 50% Natural gravel, CBR >20% Natural gravel, CBR >20%	Emulsion sand: 120, 150, 200 Stone: 50, 50, 50 Gravel: 100, 150, 150 Gravel: 100, 150, 150

SEACAP 3 : Status

- Inception Report – Submitted
- Task Group I Standards**
 - Module 1: 80% complete
 - Module 2: 50% complete
- Task Group II Research Capacity**
 - Module 8: 50% complete
 - Module 9: 50% complete



SEACAP 3 : Key Points

Standards

No established system - gaps
Need a pragmatic approach to overloading
Matrix approach; (environments-options)

Research

MCTPC managed – NUoL run
SEACAP Research Studies (SRSs)



Multi-Option (Spot) Construction

Alternative pavement options may be best suited to selected sections of a project road to ensure all weather access.

