

Labour-intensive Construction Manual

Feedback to APT Steering
Committee meeting
19 February 2008

Background

■ EPWP

- Employment creation
- Application of appropriate labour-intensive methods
- Temporary work opportunities for 1 million in first 5 years
- Target areas
 - Low Volume Roads
 - Pipelines
 - Stormwater drains
 - Urban sidewalks

- ## ■ Extended to integrate labour as a critical & measurable component in all road construction & maintenance projects
- Improved technologies
 - Improved labour optimisation and project management techniques

Purpose of Manual

- Best practice guideline for the formal and emerging sectors
- Promotes sustainable job creation and empowerment
- Recommends appropriate labour-intensive techniques to increase and optimise the labour content of **all** projects
- No adverse effect on cost, time and quality

Purpose continued...

- Guide for Road Authorities and their consultants on:
 - Optimal labour components for specific design elements;
 - Appropriate contract documentation, specifications and tender evaluation procedures to encourage the use of labour;
 - Legal requirements related to the employment of unskilled and semi-skilled labour;
 - Quality and cost of labour related to group tasks and group balancing;
 - Training, mentoring and incubation programmes including the current requirements.

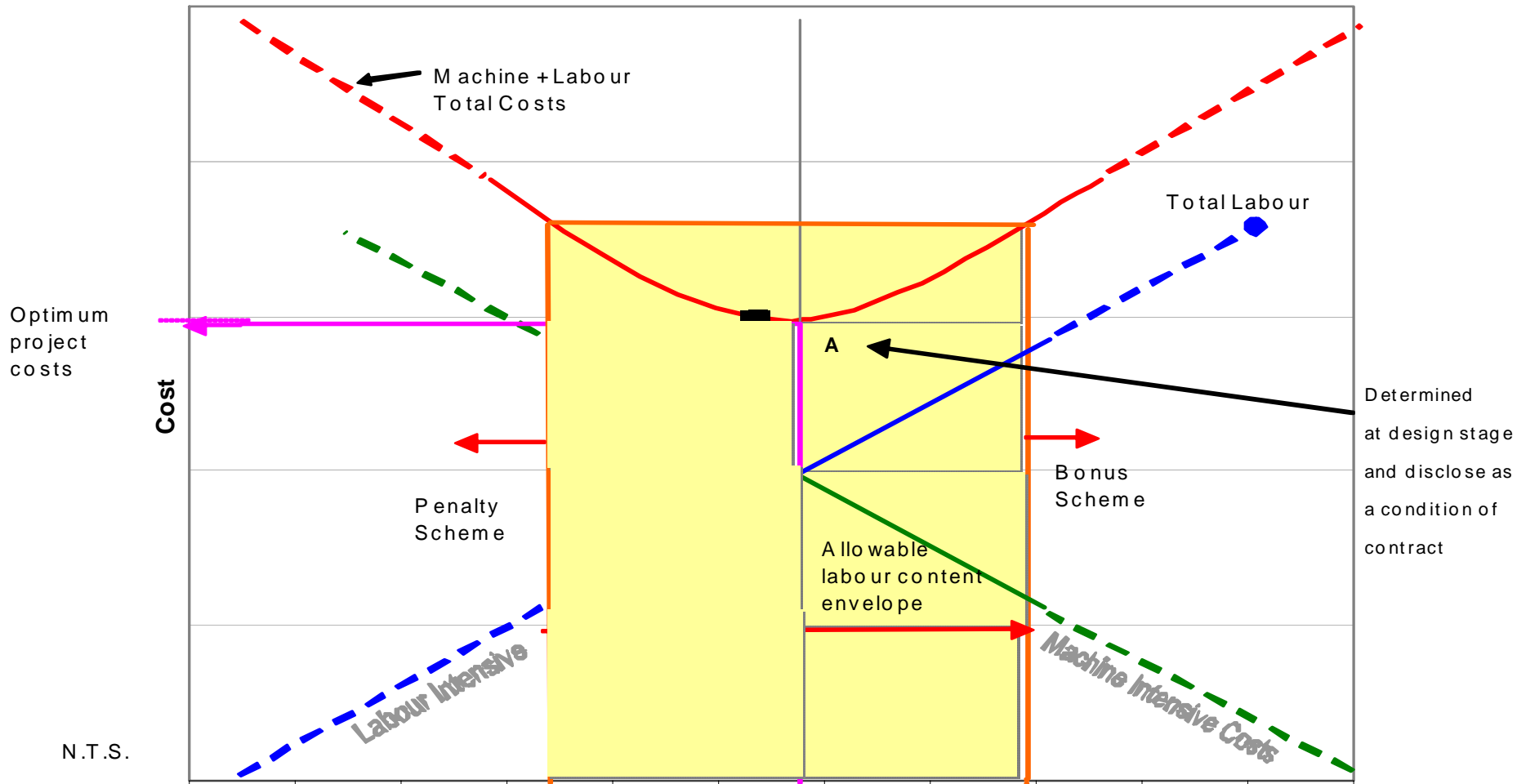
Benefits

- Optimisation of the use of labour on all projects (new construction, rehabilitation and maintenance);
- Increased sustainability of job opportunities through the optimisation of labour on all projects;
- Increased use of appropriate labour -intensive technologies;
- Increased involvement by the formal construction sector in job creation and mentoring of emerging contractors;
- Improvement in performance of the emerging sector through, training, mentoring and incubation

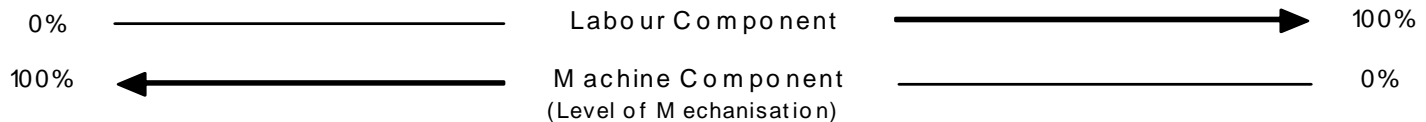
Document Structure

- Introduction to the purpose and philosophy behind labour optimisation
- Project selection criteria highlighting the type of construction activity and its relevance and appropriateness to labour intensive construction
- Indication of the typical employment potential of various road construction activities (details in Appendices 2 to 26)
- Advice on suitable contract documentation, specification and tender evaluation procedures (Standard forms in Appendix 27)
- Guidelines on the legal, labour and training requirements of road construction projects including calculations of the required labour force (Additional information and calculation examples in Appendices 31 to 34);
- References to available maintenance guidelines and manuals. (Details in Appendices 28 to 30).

Principles of Labour Optimisation



Apply team balancing principles intelligent mix of man & machine and the application of appropriate technologies over the total project to determine the optimum labour component



Approach

- Subjective 5 point rating
 - 1 equivalent or better than conventional methods
 - 5 not comparable to conventional methods
- Holistic approach to evaluation ito
 - Cost
 - Time
 - Quality
 - Suitability
 - Labour component
- All project components can be rated

Current Status

- Document has been restructured and partially edited
- Meeting with project team 22 January 08
- Document being checked by the project team for consistency
- Tables being checked
- Comments by 8 February
- Document will be updated and the draft available for comment by mid-March 08