Practical Implications of

Location-based Scheduling

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What is Location-based Scheduling?

Repetitive – Linear methods:
Why Location-based Scheduling?

Criticism of CPM in the case of construction:

- Main focus on activities and their logical connections
- Minor attention on resources (assumes unlimited resources available)
- Gantt Charts - Difficult to manage and monitor resource usage
- Discontinuous resource usage – interrupted production flow
The Critical Path Method (CPM)

Criticism of CPM in the case of construction:
• Repetitive activities - characterised by imbalanced production rates

• Work stoppages and, consequently, inefficient resource usage.
Method: 3 case studies

Starting point: The Original Schedules CPM/Gantt

Step 1: LBS-copies of the original schedules

Step 2: Improved LBS schedules
Conclusions from the case studies

The three most valuable implications of LBS:

- Production work-flow
- Improved schedule overview
- Improved project control (progress tracking)
LBS copy of original schedule
- discontinuous activities
- overlapping activities
LBS copy of original schedule
- “unused” locations
The original CPM schedules

- A vast number of activities (25 A3-pages)
- A vast number of logical links

Overview?
Project control?
Improved LBS-version:
- Paced activities (continuous)
- Synchronised activities (balanced)
Conclusions from the case studies

Production Flow (balanced/continuous):
- Avoid conflicting work
- Avoid unused locations

Improved overview (reduced no. of act.):
- Schedule understanding
- Communication
- Implementation

Improved project control:
- Reduced no. of activities
- Locations – where and when