The Single And Multi Project Approach To Planning And Scheduling: Contractors VS. Subcontractors

The fragmentation of the construction industry in Denmark is reflected in the organisation of construction projects, which typically involves a large number of subcontractors. The main contractor, being responsible for the planning and scheduling of construction work, is thus faced with the challenging coordination of the work of several actors. The project planning and scheduling should, from the subcontractor’s perspective, allow for scope and flexibility so that the subcontractor can reallocate its resources at will between its ongoing projects and thereby optimise its own production. However, reallocations of subcontracting resources lead to project interruptions which counteract on the overall productivity of the single construction project. Thus, there is a planning and scheduling conflict between the operational multi project management of the subcontracting firm and the management of single projects carried out by the management on site. This paper explains the single and multi project perspective on construction planning and scheduling represented by the main and the subcontractors and further, it describes how the prevailing scheduling method of today, i.e. the critical path method, conduce to insufficient management of construction resources. The method of location-based scheduling is presented as an alternative approach to scheduling which better supports management of subcontracted work.