Formalizing a Procedure for Generating Uncertain Resource Availability Assumptions Based on Real Time Logistic Data Capturing with Auto-ID Systems for Reactive Scheduling

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Abstract : As one result of the project "Reactive Construction Project Scheduling using Real Time Construction Logistic Data and Simulation", a procedure for using data about uncertain resource availability assumptions in reactive scheduling processes has been developed. Prediction data about resource availability is generated in a formalized way using real-time monitoring data e.g. from auto-ID systems on the construction site and in the supply chains. The paper focuses on the formalization of the procedure for monitoring construction logistic processes, for the detection of disturbance and for generating of new and uncertain scheduling assumptions for the reactive resource constrained simulation procedure that is and will be further described in other papers.

Keywords : auto-ID, construction logistic, fuzzy, monitoring, RFID, scheduling
Conference Title : ICCE 2014 : International Conference on Civil Engineering
Conference Location : Venice, Italy
Conference Dates : November 13-14, 2014