

Press release



January 2011

German research project develops cross-company risk management for supply chains

Industry practitioners and researchers collaborate on robust integrated planning for production and transportation

A systematic risk management plan for the integrated planning of production and transportation exists today only to a limited degree. For this reason, the potentials of shifting shipments from road carriers to rail carriers made possible through integration could not be utilized entirely to date. As a result, a high percentage of standard shipments are handled by trucks, a flexible means of transportation. Therefore, a more professional handling of risks in the supply chain and the development of appropriate measures for supply chain oriented risk assessment are essential in order to leverage the potentials of an integrated planning of production and transportation. The members of the InKoRISK project, under the consortium leadership of Volkswagen AG, include the Fraunhofer Institute for Material Flow and Logistics, 4flow AG, Schenker AG and Continental. The participants are working together to create risk transparency as well as suitable proactive and reactive measures to minimize risk occurrence or risk implications.

The goal of the project team is to enhance the processes and prototypes developed for InTerTrans, a previous project for the integration of planning for production and transportation, which was sponsored by the German Federal Ministry of Economics and Technology. The companies and organizations taking part in the project hope to increase transportation utilization, reduce inventory, shorten throughput time, and reduce the number of unscheduled shipments in addition to shifting standard shipments from road transportation to rail transportation. A shifting of shipments to the railway, however, is associated with certain risks, for example disturbances in the production sequence. "With distribution-oriented production planning and sequencing, the processes of production and shipping are interlinked so closely that we hardly have a buffer left at all. When an unforeseeable event does occur, the entire process can be disrupted. In order to avoid such a situation, the implementation of an intelligent risk management plan is necessary," explained Distribution Project Manager at Volkswagen Logistics, Dr. Ansgar Hermes.

The research project, which will last three years, is sponsored by the German Federal Ministry of Economics and Technology as a part of the "Mobility and Transportation Technology" research program. The project plan includes the initial identification, assessment and categorization of risks. Risk management measures will then be developed and incorporated into the overall process. The latter step will be supported by custom software prototypes. The software solutions to be employed are 4flow vista, the standard software for supply chain planning from 4flow, and the Fraunhofer IML simulation tool OTD-NET in connection with OTD-Assist, the framework for logistics assistance systems, which has already been tested in the automotive industry. The entire project will be accompanied by a case studies in the Continental and Volkswagen plants in cooperation with Schenker AG in order to ensure that the approach is suitable for practical applications.

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Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages

About InKoRISK

Among the participants in the research project InKoRISK (Collaborative Risk Management for Integrated Planning of Production and Transportation in the Automotive Industry) are Volkswagen AG as the consortium leader, Fraunhofer-Institute for Material Flow and Logistics (IML), 4flow AG, Schenker AG and Continental. The consortium is sponsored by the German Federal Ministry of Economics and Technology. The project will run from August 2011 until July 2014. For more information, please visit www.inkorisk.de

About InTerTrans

The research project InTerTrans (Integrated Planning of Production and Transportation for Complex Value Networks) ran from 2007 until 2010. The members of the consortium included 4flow AG as consortium leader, the Fraunhofer Institute for Material Flow and Logistics, Schenker AG, the Vienna University of Technology as well as Volkswagen AG. The goal was to develop and implement new approaches to increase transportation efficiency in the automotive industry. The main focus was developing concepts, which would optimize production and transportation planning at the same time. Significant potential for increases in utilization, the reduction of the truck kilometers driven as well as shifting shipments to the railway were demonstrated in simulation-based case studies. The research project was sponsored by the German Federal Ministry of Economics and Technology. For more information, please visit www.in-ter-trans.eu