The PhD Thesis of the IGS Alumnus and CRC 637 Scientist Arne Schuldt Awarded with Logistics Science Award

## **Software-Agents Control Containers**

This is what the future might look like. Containers are being operated autonomously by so-called software-agents. Concerning the choice of warehouses where goods need to be unloaded or even the means of transportation for the way there. By rail, truck or inland vessel, whatever is minimizing costs. While doing so, the software-agents on the containers are able to communicate with each other, therefore being able to avoid idle capacities. Utilizing methods of the artificial intelligence, Arne Schuldt of the Technology-Centre Informatics und Information Technology (TZI) of the University of Bremen, in collaboration with Tchibo, developed a solution that automates standard cases. His dissertation "Multiagent Coordination Enabling Autonomous Logistics", based on this practical example, has now been awarded with the renowned Logistics Science Award. The conferment took place in the course of the German Logistics Congress of the German Logistics Association (BVL) in Berlin. Sponsored by Oskar Schunck AG & Co. KG of Munich in 2010, the award includes prize money of 10.000€ for both the recipient and his institute.

As an example for the advantages pointed out by the system, it might be reasonable for the containers to stay by the terminal some days longer. This would save large amounts of pallet storage capacity and therefore reduce costs immensely. Additionally, this would enable expeditors to look after special cases like if a container is stuck in customs. Arne Schuldt prepared his work at the International Graduate School for Dynamics in Logistics (IGS) and the collaborative research centre "Autonomous Cooperating Logistic Processes" (CRC 637) of the University of Bremen. The supervisor of the PhD thesis was Prof. Otthein Herzog of the TZI.

## Further Information:

www.tzi.de www.sfb637.uni-bremen.de www.logistics-gs.uni-bremen.de Dr.-Ing. Ingrid Rügge (Geschäftsführerin IGS) Phone: +49 (0) 421 218-56 39 E-Mail: logistics-gs@biba.uni-bremen.de