

CONSTRUCTION LOGISTICS@WORK

'BOUWLOGISTIEK@WORK'

TNO innovation
for life



FEATURES

TYPE: DIGITAL SIMULATION
DURATION: 2 – 3 HOURS
PARTICIPANTS: 1 TO 8 TEAMS OF 2 PLAYERS

TARGET AUDIENCE



Logistics
(market) parties



Educational
institutes

OBJECTIVES



Raise
awareness



Stimulate
collaboration



Education
& training

GAMEPLAY

The game consists of two rounds. In the first round, the team plays the role of contractor of a construction project. The players must sign contracts, plan construction materials and respond to events. In the second round, the team plays the role of logistics chain director. The players experience the advantages and disadvantages of logistics chain management and what preconditions must be met in order to successfully apply construction logistics innovations. The effects are measured on four aspects: lead time, costs, number of trips and workload.

DESCRIPTION:

Optimising logistic processes has become increasingly important in the construction sector. Moreover, stakeholders often see the benefits of coordination and collaboration throughout the logistics chain. In addition, all kinds of initiatives are being launched to put this into practice. For example, in the concept of logistics chain management, suppliers, transporters and contractors work together in order to manage the planning and execution of a construction project. The serious game Construction logistics@Work allows participants to experience the effects of innovations in the construction logistics chain.

SHORT- & LONG-TERM BENEFITS:

- The serious game is used in education and training of both employees and students in order to increase awareness and knowledge about logistics chain management and other construction logistics innovations.
- (Construction) logistics parties are stimulated to collaborate in the logistics chain of one or more construction projects.
- Participants can experience the effects of innovations in the construction logistics chain in a safe environment and discuss the practical details of these innovations with other parties involved.

TESTIMONIALS:

"THIS SERIOUS GAME REVEALS THE CRITICAL ELEMENTS OF THE ENTIRE CONSTRUCTION PROCESS. ONLY THROUGH EXTENSIVE COLLABORATION BETWEEN ALL STAKEHOLDERS THESE CAN BE CONTROLLED AND FAILURE COSTS CAN BE REDUCED"

Paul van der Linde, Transport Logistiek Nederland

"IN CONSTRUCTION LOGISTICS@WORK THE PARTICIPANTS EXPERIENCE WHAT YOU HAVE TO TAKE INTO ACCOUNT WHEN YOU INCORPORATE LOGISTICS IN THE CONSTRUCTION PLANNING PROCESS AS WELL AS THE IMPACT OF THIS. THIS AWARENESS HELPS US TO INNOVATE"

Bouwe van der Tuuk, Dura Vermeer Bouw & Vastgoed

"IN THIS GAME YOU CAN EXPERIMENT WITH DIFFERENT STRATEGIES FOR CONSTRUCTION AND TRANSPORT PLANNING. THUS MAKING THE GAME IDEAL FOR SHAPING AND EXPERIENCING THE CONSTRUCTION LOGISTICS OF THE FUTURE"

Marco Winder, COMBEX Bouwlogistiek

"CONSTRUCTION LOGISTICS@WORK REALISTICALLY SHOWS THE CONSTRUCTION LOGISTICS PROCESSES IN PRACTICE. BY USING THE GAME STUDENTS CAN EXPERIENCE THE POSITIVE EFFECTS OF MORE PROCESS CONTROL AND COLLABORATION BETWEEN COMPANIES AND THE MUNICIPALITY"

Ruben Vrijhoef, Hogeschool Utrecht

