

# PRODUCTS

### FRAUNHOFER CENTER FOR MARITIME LOGISTICS AND SERVICES CML



## **BUILDING MARITIME LOGISTICS COMPETENCE THROUGH SIMULATION MANAGEMENT GAMES**

## Challanges in education and training in maritime logistics

Companies that are involved in transportation and handling of goods in the maritime environment are parts of complex supply chains. Effective handling of business and logistics processes is an important competitive factor for these companies. The usual way of process-related knowledge transfer using documented process descriptions has its limitations when applied to complex processes in maritime logistics. For the stakeholders, it is not always easy to know and evaluate the effects of their actions. A complete overview of process run is difficult to model and hence the optimization potential remains hidden.

## Use of management games to build process and method competence

To improve the understanding of the interdependencies between the processes and their effects, CML uses management games as tools. Management games make it possible to experience the processes and their relationships in real time. The participants can see the influence that their actions and decisions have on their supply chains and so are stimulated and encouraged to optimize the existing processes. Management games promote creative ideas; they are motivating and are readily acceptable among the participants. In addition, management games support learning and facilitate experiencing practical

applications of methods. The haptic management game MARITIME developed by CML for optimization of processes is employed on a regular basis in the framework of project and training programs.

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## Implementation of the simulation management game MARITIME

For a better understanding of the processes and their resulting effects in maritime logistics chain, we offer the use of the management game MARITIME. In MARITIME, the material and information flow in the maritime logistics chain are simulated through Lego bricks and specific forms that need to be filled. The participants are put in the situation where they would experience the process intensity, can recognize the process optimization potential and implement the requisite measures. In the course of the game, the results of the process optimization can be seen in terms of key indicators. In addition to the fundamental understanding of maritime logistics chain, MARITIME also imparts method competency in process management and process modeling. MARITIME is portable, multilingual (German, English) and is suitable for groups of 8-16 people. The management game seminar can be customized to last for one or two days.

#### Customized development of management simulation games

For imparting individual training contents, we offer the development of tailormade management games. We take into account company specific issues and model the typical challenges existent in a company's logistic processes and structures. For that, we identify the training requirements in your company and lay fix a rough plan for the gameplay as well as the focus of the game content. Afterwards, we develop the model and the rules for the game. Based on this, the complete game would be built and tested. At the end, you receive the functional management game and also the training for the moderators. We also offer our support in the introductory phase in your company.

#### **Application areas and benefits**

Our offer for management game addresses all the players acting in the area of maritime logistics. The game is suitable for companies, public authorities; and academic and training institutions. Typical areas of application of management game are staff training, preparation of projects and team training programs. The management game content is ascertained for experts, management staff and project teams. After a management game workshop, the participants have a clear understanding of the processes simulated and discussed. In an illustrative way, they train methods and tools which can be applied to real life activities. Our management game encourages the introduction of creative ideas in the group and gives both systematic and target oriented approach to problem analysis and optimization of systems.

