Intermodal Traffic Management – A Qualification Demand Analysis

Objective
The overall aim of the holistic analysis is to identify the qualification demand in the field of intermodal traffic management (ITM) at the Hamburg Port. The ITM is an example to exploit the results to forecast future demand of qualification for an Internet of Everything (IoE) environment at the Hamburg Port. The study will define the framework to develop skills based learning material for initial training and further education.

Innovations
The integration of „Internet of Everything“ (IoE) into skill sets of intermodal traffic management is a big challenge. The results of this study will show the demand of qualification integrating smart technologies in this area of work and it will be possible to transfer these results to forecast future demand for traffic management in smart cities in Germany, Europe and worldwide.

Project Partners involved
- Hamburg Port Authority
- ComNets and iTAB, two Institutes at the Hamburg University of Technology
- Cisco Systems

Head of Project
Prof. Dr. Timm-Giel

Project Operation
Henning Klaffke (iTAB)
h.klaffke@tuhh.de
Maciej Mühleisen (ComNets)
maciej.muehleisen@tuhh.de
Methods

- **Occupational research methods:**
  - Work Process Analysis
  - Clustering of fields of actions

- **Quantitative comparison** with statistics of job market and international skills and competence-frameworks

- **Analysis** of job advertisements to identify national demand

Research Design

An empirical study combining expert interviews and data analysis

Field of Action: Clustering of Fields of Actions: Skills and Competence

Structure Field of Action:
- Work Tasks
- Work Methodes
- Tools
- Skills
- Future Trends

Occupational description

ITM Connected Operation Areas:

Relation of Companies

Overview have the impact smart technologies has on occupations and jobs of the Hamburg Port

Exploitation of Results

- **Basis** for skills based learning material for initial training and further education

- **Extrapolation** to define future demand in smart cities traffic management in Germany, Europe and worldwide