

# Modelling and Simulation

- Terminal model
- Abstract of performance data
- Definition of solutions

The design of a new or the extension of an existing container terminal depend on criteria related to productivity and efficiency. The different components of a container yard under operation build up a comprehensive dynamic system continuously changing. Apart from static considerations, it is then vital for the design stage to attach particular importance to these spatiotemporal dynamics. A simulation helps identify possible bottlenecks in terminal operation before the implementation of the aspired changes.

For simulation purposes, we prepare an individual model of your terminal for you. It considers local aspects and, moreover, the best possible optimisation strategies for all simulated parameters. This makes the results of the simulation independent and resilient. You thus obtain an abstract of the performance data you can expect.

Usually, a simulation aims to define the most efficient solution or to identify the limiting factor on the terminal. Thanks to this knowledge, HPC prepares tailor-made solutions that will optimise the terminal's productivity and efficiency.

## Simulation

Yard  
Horizontal transport  
Container gantry cranes  
Railway dispatch  
Gate facilities  
Traffic ways  
Simulation of the whole terminal  
Emulation