Master thesis assignment at TNO on optimization of seaport logistics

Background
Seaports provide a range of services that together support the turnaround process of ships, including positioning, piloting, mooring and bunkering or fuelling. As a short turnaround time is one of the key factors determining the competitiveness of ports, a well-organized chain of nautical services is essential. The performance of this service chain will depend on the dynamic nature of the demand for services (volume and size of ships), on external circumstances (e.g. weather), the capabilities of individual agents within the chain as well as on the collaboration between them.

Assignment
The master assignment focuses on the development of quantitative models and methods for evaluating and optimizing strategies for ship handling at seaports. Regarding the evaluation/optimization approaches we are thinking of combining model-based (OR) and data-driven methods.

Working context
The work will be carried out at TNO in the context of the SwarmPort project in which TNO works together with several universities and business parties. The candidate will work closely together with the TNO project team.

What do we require of you?
We are looking for master students in (Stochastic) Operations Research, Business Analytics or Econometrics, who have finished their master courses.

What can TNO offer you?
You want to work on the precursor of your career; a work placement gives you an opportunity to take a good look at your prospective future employer. TNO goes a step further. It’s not just looking that interests us; you and your knowledge are essential to our innovation. That’s why we attach a great deal of value to your personal and professional development. You will, of course, be properly supervised during your work placement and be given the scope for you to get the best out of yourself.

Naturally, we provide suitable work placement compensation.

Further information and contact
Starting date: From 15 April 2018
Duration: 6-9 months
Location: TNO office at The Hague (Anna van Buerenplein 1, near CS)
Contact: Hans van den Berg (email: J.L.vandenBerg@tno.nl)