

Beyond ERTMS: Swarm Technology for Rail Traffic Control

Location	Arnhem HQ and Utrecht office
Level	Master graduation (final year)
Hours	full-time (40 hours weekly)
Contract	5 - 6 months
Salary	350 euros monthly (gross) + NS Business Card



Working at Mott MacDonald

Mott MacDonald is a global multidisciplinary engineering, management and development consultancy, with over 16,000 employees active in 140 countries. Our employees are inspiring, highly-motivated and quality-driven people that collaborate closely with our clients to develop the best possible solutions. Mott MacDonald provides excellent opportunities for cutting edge and out-of-the-box research in combination with personal development while working in an international context.

Project Description

In railway signalling, the concept of route setting from one signal to another has been applied for many years. For this purpose, the railway tracks are divided into segments ('blocks') and a signal guards the entrance of each segment for safety purposes. This principle has been used for Rail Traffic Control under conventional signalling systems. From ERTMS (European Rail Traffic Management System) Level 3 and beyond, the traditional block division of railway tracks is abandoned in favour of the advanced concept of 'moving blocks' which are directly associated to moving trains. Which advanced route setting approach would fit with the dynamics of moving blocks to guide and optimize the traffic flow? Your assignment is to go beyond ERTMS and investigate whether swarm technology can be applied for this purpose.

What we offer you

- Work at the cutting edge of ERTMS development and innovation, investigating unexplored concepts;
- Gain wider knowledge and experience from experts nationally and internationally;
- Visit, and learn from, our many projects in the field, whether they are ERTMS related or not;
- Work within a dynamic and inspiring team eager to teach, develop and collaborate.

Interested?

For more information please contact Dr. Eelco Schrik at eelco.schrik@mottmac.com or 06 12 50 08 43.

A selection procedure applies for this challenging graduation project / internship. If you wish to apply, please submit your résumé and motivation. An application interview will be part of the procedure.