#### V39.3702

Eindhoven University of Technology has a vacancy for

#### 1 PhD student on

### Data-Driven Maintenance and Service Logistics for Maritime Assets (1.0 fte)

within the Operations, Planning, Accounting and Control (OPAC) group of the School of Industrial Engineering.

**The School of Industrial Engineering** is one of the longest-established IE Schools in Europe, with a strong presence in the international research and education community, especially in the field of Operations Management (OM) and Operations Research (OR). OM and OR are part of the core of the undergraduate IE program. The graduate programs (MSc and PhD) in Operations Management & Logistics attract top-level students from all over the world.

The Operations, Planning, Accounting and Control group teaches and conducts research in the area of operations planning and control in manufacturing, services, logistics, reliability and maintenance, and supply chains. Research is generally quantitative in nature, while many of the researchers also engage in empirical research. The OPAC group is responsible within the university for all teaching in the areas of operations management, transportation, manufacturing operations, reliability and maintenance, and accounting and finance, both at undergraduate and graduate level. All research is embedded in Beta, the research school for Operations Management & Logistics.

## PhD project

The PhD position is part of the NWO funded project "MARCONI: Maritime Remote Control Tower for Service Logistics Innovation." In this project, we aim to develop and demonstrate innovative service logistics concepts that exploit actual data on the state of maritime assets and the availability of the relevant maintenance resources. These concepts are aimed at (1) reducing maintenance costs, (2) increasing safety, by lowering the probability of unplanned system downtime and (3) reducing the number of unnecessary sailing movements (emissions) through smarter planning and/or clustering of maintenance activities. The ambition is to demonstrate the actual functioning of a remote service logistic control tower, with the long-term goal of developing and exploiting a scalable supply chain function in the maritime world. The PhD student will be a part of the research work-package on 'Developing Service Logistics Decision Models' led by TU/e. In the PhD project, there will be a close collaboration with the other partners of the MARCONI project: Boskalis, Damen, Gordian, Maastricht University, NLDA, Thales, RH Marine, Royal Netherlands Navy, and University of Twente.

#### **Tasks & Requirements**

The PhD candidate is expected to do scientific research in the domain described, write a PhD thesis and publish research results in scientific journals. The research is executed under the supervision of dr. Alp Akcay (OPAC group), dr. Yingqian Zhang (Information Systems group), and prof.dr.ir Geert-Jan van Houtum (OPAC group). The candidate also participates in the PhD education program. A small part of the position involves teaching in courses offered by the OPAC group.

Applicants should have completed (or be close to completion of) a Master's degree in operations management, industrial engineering, operations research, econometrics, statistics, computer science, data science, or a comparable domain with a solid background in quantitative research methods. Fluency in English is required.

## **Conditions of employment**

## We offer

 a challenging job in a dynamic and ambitious university, and you will be part of the MARCONI team;

- an appointment as a PhD student for a period of 4 years with intended starting date of 1 April 2019; the gross salary is in the range of €2325 €2972 per month (on a full-time basis); in addition, 8% holiday allowance and 8.3% end of year allowance;
- a broad package of fringe benefits (including an excellent technical infrastructure, moving expenses, savings schemes, coverage of costs of publishing the dissertation/scientific papers and excellent sports facilities).

#### Information

More information about this position and the research programs should be addressed to: dr. Alp Akcay, phone +31 40 247 2216, e-mail: <a href="mailto:a.e.akcay@tue.nl">a.e.akcay@tue.nl</a>. Information about terms of employment can be obtained from the personnel office (<a href="mailto:pz.ieis@tue.nl">pz.ieis@tue.nl</a>), phone: +31 402475204. Further information about Eindhoven University of Technology can be found at <a href="mailto:http://www.tue.nl">http://www.tue.nl</a>.

# **Application**

Your application must contain the following documents (all in English):

- Cover letter (2 page max), which includes a motivation of your interest in the vacancy and an explanation of why you are a good fit for the project;
- A detailed curriculum vitae;
- Course list of your graduate and bachelor programs (including grades);
- Proof of fluency in English (TOEFL, IELTS, etc.);
- Name and contact information of two references.
- Results of a GRE/GMAT test if available;

If you are interested, we invite you to apply as soon as possible. Applications will be reviewed on a rolling basis. You can send us your application through the online job portal of the TU/e or click <u>HERE</u>. Applications per email are not accepted. Please note that a maximum of 5 documents of 2 MB each can be uploaded.