

# PhD positions on the topic “Sustainable logistics” (5.0 fte) (214331-35)

## Organisation

Since its foundation in 1614, the University of Groningen has enjoyed an international reputation as a dynamic and innovative center of higher education offering high-quality teaching and research. Belonging to the best research universities of Europe and joining forces with prestigious partner universities and networks, the University of Groningen is truly an international place of knowledge.

The Faculty of Economics and Business has an inspiring study and working environment for students and employees. International accreditation enables the Faculty to assess performance against the highest international standards. It also creates an exciting environment of continuous improvement. FEB's programs, academic staff and research do well on various excellence ranking lists.

SOM, the graduate school and research institute of the Faculty of Economics and Business has available **five PhD positions**.

## Job description

The five positions are part of three large research projects in which the PhD candidates will work together with companies, permanent staff and a number of postdocs. The positions are funded by the NWO programme Sustainable Logistics (see [link](#)). The PhD candidates will work in the Department of Operations, one of Europe's largest research groups in Operations. The department offers a high level research environment along the whole range of Operations, both with respect to content and methodology. The positions are available in the following three projects:

1. Enhancing resilience while maintaining efficiency: planning and human decision-making for the unpredictable (1 PhD Position)
2. Sustainable Logistics in Fresh Food (1 PhD position)
3. Sustainable service logistics for offshore wind farms (3 PhD positions)

Each of the projects combines theoretical challenges with societal relevance, creating high impact research opportunities for excellent young researchers with diverse backgrounds.

The aim of SOM's PhD programme is to turn out highly qualified, independent researchers. The PhD programme is part of the research institute SOM with six excellent research programmes. All PhD candidates are supervised by at least two fellows of SOM. Depending on the background of the candidates the educational part of the programme will be filled in with a combination of methods, profile and content-related courses.

## Qualifications

We are aiming at bringing together five candidates with different backgrounds to address the topic from different perspectives. Candidates with a background in quantitative methods (e.g. Operations Research), empirical methods (e.g. qualitative case studies and surveys), or other (e.g. simulation and experiments) are equally welcome to apply. These candidates should fulfil the following requirements:

- A research master or Master of science degree in a relevant field, and sufficient affinity to the field of operations and logistics
- Fluent in English (and for project 2 fluent in Dutch as well).

- For each of the projects specific requirements apply, please check the information on our website carefully.

## Conditions of employment

The full-time appointment is temporary for a period of four years, under the condition of a positive assessment at the end of the first year. The gross monthly salary is € 2,083 euro, which increases yearly to a maximum of € 2,664. In addition there are a 8% holiday allowance and a 8.3% end of year bonus.

Starting date: as soon as possible, preferably before 16 March 2015.

## Applications

If you are interested, we invite you to apply before 3 November 2014. All applicants are obliged to use the application form and send the application package by e-mail to Mrs. Rina Koning ([a.c.koning@rug.nl](mailto:a.c.koning@rug.nl)).

Please note that only complete (as stated on page 3 of the application form) packages will be taken into account. For more specific information on the five PhD positions, the application procedure or the PhD programme, see our [website](#). Information on the five positions (including contact details of the project leaders) can also be found below.

Unsolicited marketing is not appreciated.

## Information

For information you can contact Mrs. Rina Koning ([a.c.koning@rug.nl](mailto:a.c.koning@rug.nl)).

(please do not use for applications)

## Project information

### **Project 'Enhancing resilience while maintaining efficiency: planning and human decision-making for the unpredictable' (1 PhD position)**

Within this research project one PhD-student and 2 Postdoc researchers will work together to explore, identify and test behaviors as well as decision-making structures and remedial strategies that help organizations to balance resilience with efficiency. Supply chain resilience is of increasing importance to supply chain networks as disruptions are unavoidable events affecting the sustainability of any organization.

#### *PhD Position Empirically exploring supply chain resilience*

The researcher will be part of a multi-disciplinary team working on the intersection of SCM and HRM to explore human behavior and decision making before, during and after supply chain disruptions. Applying empirical research methods vertical, horizontal and diagonal coordination mechanisms in a supply network setting will be explored together with our business partners (i.e. FrieslandCampina, Variass Electronics B.V, Waterbedrijf Groningen, Bosch Thermotechniek B.V and TNO).

Applicants need to have demonstrated competences for empirical research (preferably case studies), with a background in logistics, supply chain management, human resource management or equivalent studies.

For more information please contact Kirstin Scholten ([k.scholten@rug.nl](mailto:k.scholten@rug.nl) or +31 50 363 3786) or Dirk Pieter van Donk ([d.p.van.donk@rug.nl](mailto:d.p.van.donk@rug.nl) or +31 50 363 7345).

### **Project 'Sustainable Logistics in Fresh Food' (1 PhD position)**

Within this research project (budget: €670.000) two PhD-students and one Postdoc researcher will work together with industry partners in identifying and designing solutions for enhancing the sustainability of fresh food logistics. Specifically, the aim is to improve the utilization of logistics resources while reducing distribution lead times. As a result, the shelf life of fresh foods should be maximized, while supply chain costs and environmental impacts are minimized. The project is a collaboration between the University of Groningen, the Erasmus University Rotterdam and a partner retailer with a contracted logistics service provider. The results should be broadly applicable to players in the fresh foods industry.

#### *PhD Position Organizational design*

Within this multi-disciplinary research project, the researcher will investigate the trade-offs between (1) optimizing local distribution center operations versus network logistics and (2) transport optimization versus inventory optimization. Specifically, the research will primarily address organizational aspects, with a focus on identifying and structuring the relevant areas of decision-making as well as allocating decision responsibilities to the various stakeholders. In addition, the aim is to compare various scenarios in which the responsibility for decision aspects is allocated to different stakeholders. That is, identify the different perspectives of potentially responsible stakeholders regarding the decision aspects, translate those perspectives in expected decision outcomes, and quantitatively and qualitatively assess how different allocations affect overall distribution network performance and sustainability. The research in this position is performed in close collaboration with the partner retailer and its partners in the fresh food distribution network.

Applicants need to have demonstrated competences for junior academic research in the field of logistics, with a background in logistics and operations management (including basic knowledge of organizational theory, information systems and operations research). Moreover, it is strongly preferred if the candidate to be selected is fluent in the Dutch language.

For more information please contact project leader Hans Wortmann ([j.c.wortmann@rug.nl](mailto:j.c.wortmann@rug.nl) or +31 50 363 3438) or Paul Buijs ([p.buijs@rug.nl](mailto:p.buijs@rug.nl) or +31 50 363 8556)

### **Project 'Sustainable service logistics at offshore wind farms' (3 PhD positions)**

Within this research project (budget: 1.25 million euros) three PhD-students and 2 Postdoc researchers will work together to investigate the optimal and sustainable design of service logistics processes needed in the maintenance and operations phase of offshore wind farms. They will do so in a consortium of twelve external partners (i.e. Province of Groningen, DHL, Siemens, Van Oord, Wijnne Barends, Groningen Seaports, Eekels Technology BV, EYEWIND, Oliveira International Group, ECN, Energy Valley, Dutch Institute World Class Maintenance). It is expected that the results will be applicable for other sectors as well.

#### *PhD Position Onshore and offshore network design*

The researcher will study decision making with regard to transshipment locations enabling multi-modal transportation and onshore-offshore switching, storage facilities enabling buffering for each commodity, as well as allowing grouping operations for a specific maintenance activity (i.e., kitting) and repair facilities for repairable items.

Work package leader: [prof.dr. I.F.A. Vis](mailto:prof.dr. I.F.A. Vis)

#### *PhD Position Planning of offshore service policies*

The researcher will evaluate how advanced, opportunistic, condition based maintenance (CBM) strategies can achieve both a high OEE and a high service logistics efficiency, and how they compare with corrective Maintenance (CM) and Preventive Maintenance (PM) strategies. Offshore logistical movements will be

considered, but also the demand for resources (parts, tools, consumables, technicians) that service strategies generate (potentially taking returns into account).

Work package leader: [prof.dr. R.H. Teunter](#)

*PhD Position Collaboration and governance aspects*

The researcher will look at how performance-based contracts align interests between supply chain actors in service settings, and will consider the challenges sustainable logistics pose for incentive alignment, the role of multi-party logistics networks, multiple wind-farm setups, and the role of trust to better understand collaboration and governance aspects of sustainable offshore wind farm service logistics.

Work package leader: [dr. J. Veldman](#)

Applicants need to have demonstrated competences for quantitative methods (i.e. Operations Research), with a background in logistics, supply chain management, industrial engineering, operations research or equivalent fields. Applicants with a background in Economics (e.g. Industrial Organization or related) are also welcome to apply for the PhD position 'Collaboration and governance aspects'.

For more information please contact the work package leaders or the project leader Jasper Veldman ([j.veldman@rug.nl](mailto:j.veldman@rug.nl) or tel. +31 50 363 7490).