Knowledge alliance Rhine-Waal

Knowledge, the engine of the Euregional

economy



Preface

Dear Readers,

"Cross-border cooperation is becoming increasingly important. The social and economic interdependence between the Netherlands and Germany is more extensive than ever before. Every day, approximately 20,000 people commute between the two countries, to work or study in the neighbouring country. Consumers and business owners are becoming increasingly mobile and sales markets more international. I'm delighted to see that we view each other less as competition, and more frequently as partners.

Thanks to the many different universities, institutes of higher education and research institutions on both sides of the border, the Euregio Rhine-Waal is teeming with scientific knowledge and innovative ideas. Identifying these potential success stories and converting them to innovative, marketable products by means of cooperation and support is a challenge. Sustainable border alliances between the economy and science, such as the Knowledge Alliance Rhine-Waal, make an important contribution to this. As a result of the cooperation between new businesses and partners from the neighbouring country, products are created that can make life more efficient, effective and sustainable. Such product innovations and sustainable applications are necessary in order to remain competitive into the future and



to secure a good position in European and international markets. I hope very much that the economy and science can continue to come together so that already good ideas can be made brilliant."

Hubert Bruls Mayor of Nijmegen and Chairman of Euregio Rhine-Waal



Partner

- 1 Wageningen University
- 2 Hogeschool van Arnhem en Nijmegen
- 3 Kamer van Koophandel
- 4 Radboud University
- 5 Euregio Rhein-Waal
- 6 Hochschule Rhein-Waal
- 7 Technische Universiteit Eindhoven
- 8 Niederrheinische Industrie- und Handelskammer
- 9 Universität Duisburg/Essen

Credits

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Introduction

The Euregio Rhine-Waal is a strong economic region in which entrepreneurs, universities, institutes of higher education and research institutions on both sides of the border work together on numerous innovations. The Knowledge Alliance Rhine-Waal is aiming to further strengthen this potential and to create connections between science and the economy to implement innovations that have an economic advantage. The Alliance comprises six universities and institutes of higher education as well as the regional chambers of commerce and the Euregio Rhine-Waal. The partners wish to contribute to the science-based economy in the region between Wageningen, Duisburg, Emmerich and Eindhoven by means of cooperation and the sharing of know-how.

The Knowledge Alliance is aimed in particular at new, research-intensive companies and entrepreneurial students. Through its activities it supports the development of new technical products, provides assistance to both entrepreneurs and students and simplifies the search for partners, laboratories and research institutions on both sides of the border. Over the past three years, the cooperation of the individual partners has been consolidated. This has led to attractive activities and support measures both for small and medium-sized enterprises and for entrepreneurial students, which complement the existing support for innovation.

Hundreds of students took advantage of the opportunity in 2013, 2014 and 2015 to acquire entrepreneurial skills in an international context. These students were working together with a variety of small and medium-sized enterprises in the Euregio Rhine-Waal. Various events, such as the International Pressure Cookers Day, brought companies and students from Germany and the Netherlands together, during the course of which the students worked on current business cases relating to the companies. A comparative study on entrepreneurship in the education system resulted in the creation of a "toolbox" for lecturers. This served as an aid for lectures and seminars, to impart entrepreneurial thinking and skills.

Related training programmes, such as the Knowledge Alliance iGarage and the entrepreneurship classes offer entrepreneurs support, coaching and guidance in their innovation process. Entrepreneurs receive targeted support through the Knowledge Alliance network from experts such as industrial designers, business developers and professionals from the start-up scene, who can answer their questions in detail.

There are many research institutions and laboratories in the Euregio Rhine-Waal which are also accessible for small and medium-sized enterprises. The relevant information is made accessible by the Knowledge Alliance Rhine-Waal. The Science Compass portal, developed by Hochschule Rhein-Waal, helps users to identify top expertise from the border region in the fields of technology, life sciences, energy and the environment, agrifood, logistics, design and creativity quickly and clearly.

The additional energy required to jump-start cross-border cooperation is worth it in so many respects. The innovative impetus is already clearly detectable and cross-border networks are growing. Internationalisation and innovation go hand in hand. This is what the Knowledge Alliance will continue to aim for in the future. Innovation Promotion

Supporting knowledge-based innovations

During the period 2013-2015, the Knowledge Alliance Rhine-Waal supported fifteen innovative projects from various young organisations by providing innovation funding. A specially convened innovation jury from the Knowledge Alliance decided which of the projects submitted should receive financial support.

"They came from all corners of the Euregio Rhine-Waal."

> Theo Jacobs, Radboudumc Nijmegen

A total of 31 young organisations applied for funding. The entrepreneurs were first assisted by business developers from the Universität Duisburg-Essen, Radboud Universiteit and the Technische Universiteit Eindhoven in further working out their project concepts and fleshing out their business plans.

The submitted application forms for funding were then reviewed by the Knowledge Alliance jury. Over the course of eight speciallyconvened innovation jury sittings, three to six entrepreneurs were then invited to present their innovative project plans. The panel

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comprised scientists, business developers, investors, entrepreneurs and intellectual property specialists. The jury members evaluated which of the project ideas were to receive funding on the basis of a range of criteria: Is the product new to the market? Does the project description set out coherently how the project will be developed? Is there a worked-out business plan by the participating partners? How is the product to be placed on the market, and what impact will the project have on the region?

The president of the innovation jury was Theo Jacobs. The consultant for external affairs from Radboud UMC Hospital has been active for many years in the field of German-Dutch cooperation. "My jury comprises teams of expert members in an ever-changing lineup," explains Theo Jacobs. "The members of the jury came from all corners of the Euregio Rhine-Waal and further afield. They thought it was fantastic to support new, innovative ideas. Just as I was, the other members of the jury were surprised by the high standard of the plans. Despite this, we were very critical in our evaluation and only supported project ideas



we found convincing. In addition to the risks that always come with innovations, we also evaluated which innovations had a good chance of success. It was important for us that the projects, if successful, would make a contribution to the prosperity of the region." In about half of the cases, the applicants received a positive vote from the Knowledge Alliance jury.

"An application for funding to the Knowledge Alliance Rhine-Waal forces you to make decisions. The application process as part of the Interreg Programme was very feasible," explained

> Egbert Heuvelman from Turpin Vision. "Thanks to the support we received, we were able to get off to a flying start with our German partner." He met his German partner, Georg Strömer from LIMS at work GmbH, during a Knowledge Alliance Business Camp at BioMedica in Aachen.



Business Camps

Through ever more complex connections, it is becoming an increasing challenge to advance innovative ideas and position them for success. Support here comes from the business camps, bootcamps and iGarages of the Knowledge Alliance Rhine-Waal. They launch innovations and build bridges between science and the economy with creative-based methods, visualisations and prototyping.

The events are designed as training programmes for entrepreneurs. This means the themes for the individual camps can vary widely - from the finishing touch for advertising slogans to introducing yourself in just two minutes. Experts from the Knowledge Alliance network, including industrial designers, business developers and professionals from the start-up scene, provide support to the entrepreneurs and are able to answer their questions in great detail.

At the start of the business camps, the start-ups introduce themselves and describe what they expect from the event. They are then provided with further targeted assistance relating to specific subjects in a series of short interviews with the individual specialists. "It was particularly important for us to offer participants a diverse, individually-tailored programme, so that they could move forward as much as possible in their innovation process," explains Dorien Wellen from Radboud



Universiteit in Nijmegen, who is responsible for the organisation of the "Pitching" bootcamp. "One common problem is that many entrepreneurs are too focused on their product. They have to be helped to see the big picture."

The design of all the camps is based on demand. As a result, contact with the entrepreneurs was a particular priority. What do the entrepreneurs really need, and how can they be helped as best as possible in a short period of time? To be able to give an answer to these questions, the events are evaluated and the participants are surveyed on their desired topics. "During the bootcamps we were particularly on the lookout for expertise on how to prepare our product for its market launch," says Thijs Sondag von Caveor about the motiva-



tion for his company. "Our focus was, therefore, primarily on marketing and communication strategies for expressing our unique selling points." Other businesses want to define their target groups accurately or get training in specific soft skills. What emerged from the evaluations was that the entrepreneurs really appreciated being able to communicate with like-minded people and share experiences and knowledge. In addition to the bootcamps, several networking events were organised for entrepreneurs. These included the "Science to Business Café" at Radboud Universiteit in Nijmegen or the "Currywurst and Beer" event at the Universität Duisberg-Essen. Innovative products and services can be analysed and discussed jointly at these events.

Business Camps – Intensive training for

entrepreneurs

"Moving the innovation process forward."

Dorien Wellen, Radboud Universiteit Pressure Cooker Daystudents develop innovative ideas for businesses

Imagine what happens when you take a group of international students, several companies and various business cases and put them in a metaphorical pressure cooker, and you'll get a pretty good picture of what the Knowledge Alliance Rhine-Waal International Pressure Cooker Day is all about.

Student teams have just one day to come up with solutions for current questions posed by businesses in the German-Dutch border region. The international student teams must overcome not only the language barrier and their differing specialist backgrounds, but are also put under very intense time pressure. After a short session to get to know each other in the morning, each team is instructed on the relevant question by a business. That same evening, the students must present their idea to the client and a four-person jury in a short pitch. The idea is that the managers of tomorrow should learn how to efficiently organise their work and complete it to a high standard under difficult conditions and time constraints. The aim of the event is, on the one hand, to intensify cooperation between students and businesses from the region and, on the other hand, to support student exchanges between the partner institutes of higher education in the Knowledge Alliance Rhine-Waal. The first International Pressure Cooker Day took place in November 2013 in Eindhoven. It was won by a team of students who developed an intelligent diving suit for Elitac BV. The suit warns the diver by vibration if, for example, the diving partner is too far away or the diver's own position in the water changes. The following year an award was given to a group of students who developed a concept for reducing the build-up of odour and smoke during the coffee roasting process - a concept that impressed the jury and client so much that the students received an innovation cheque. Entrepreneur Pieter Heersink, founder of the start-up company Kudoos, reports on his own experiences during the second Pressure Cooker Day: "When I was still a student, I always wondered what I as a student could contribute to these kinds of events with these kinds of companies. What can I offer them at this point? Nothing." But today, Heersink sees things from a very different perspective: "Now I have my own company and I'm convinced that students can be very helpful and know much more than they realise themselves "

THE PARTICIPATING COMPANIES

2013

- > Waterschap de Dommel, Boxtel, NL
- > Airport Weeze, Weeze, D
- > Bodec BV, Helmond, NL
- > Elitac BV, Amsterdam, NL
- > Hautec, Bedburg-Hau, D

2014

- > RWE Deutschland AG,
 3malE Bildung mit Energie, Essen, D
- > PROBAT-Werke von Gimborn Maschinenfabrik GmbH, Emmerich, D
- > Nähr-Engel GmbH, Goch, D
- > Kersten Retail, Elst, NL
- > Kudoos, Velp, NL
- > VirtualMedSchool, Rotterdam, NL

"Students can be very helpful"

Pieter Heersink, Kudoos





Important know-how for entrepreneurs and students from the region was the focus of three master classes jointly organised by Knowledge Alliance partners the Hogeschool Arnhem en Nijmegen and the Universität Duisburg-Essen in 2014. Participants at the three events were provided with target expertise on topics such as law and taxes, personal branding and social media. The meetings are also a platform for entrepreneurs and students from both countries at which they can exchange knowledge and which consequently assist in the creation of new contacts in science and the economy.

"Innovation through sustainable and entrepreneurial behaviour" is the motto of the first Master Class which took place on 22 March at Burgers' Zoo in Arnhem. As the title suggests, the focus was on the skills or mentality that go into making a successful entrepreneur. How does one recognise entrepreneurship in daily life? Are specific personal attributes, such as proactive, risk-seeking behaviour and willpower crucial, or can anyone turn themselves into an entrepreneur? These and similar exciting questions were discussed and analysed in several workshops. In addition, entrepreneurial skills were considered in the intercultural context - a subject that is of huge importance, especially for entrepreneurs in the border region. The focus of the second master class on 17 May at the Universität Duisburg-Essen was practical and theoretical knowledge on legal and fiscal issues. Using several examples, the participants were shown how to apply for funding opportunities and turn them to their advantage, among other things. During the third master class on 15 November in Inspyrium Cuijk, the entrepreneurs and students dealt with marketing, communications and public image. Together with the participants, ideas were exchanged on how to present yourself as a brand and how to best communicate with your target group. One of the workshops dealt with social media, which plays such an important role in today's digitally-connected world, particularly for entrepreneurs. This involved lively exchanges, such as on the issue of how to deal with the pressure to share information and whether entrepreneurs can afford not to use social media.

"A broad mix of entrepreneurs and students."

Sylvia Bronkhorst, Hogeschool Arnhem en Nijmegen

Master Classes: Training and inspiring entrepreneurs

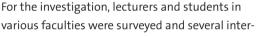
There was a total of around 130 German and Dutch participants in the master classes. "We are particularly proud that the master classes reached a broad mix of entrepreneurs and students. This allowed an exciting and varied dynamic to be created," states Sylvia Bronkhorst from the Hogeschool Arnhem en Nijmegen. "The events are a great opportunity to inspire and guide entrepreneurs and to ensure that entrepreneurship in the region is strengthened."

Benchmark

Benchmark study and "toolbox" - analysing and stimulating entrepreneurship in education

The Knowledge Alliance Rhine-Waal wants to make a contribution to strengthening entrepreneurship in the region. As potential future entrepreneurs, students are an important target group here. Through the Knowledge Alliance network, students get the opportunity to work on their entrepreneurial skills in an international context. One channel through which students can be reached is the communication between lecturers and students. Workshops and training courses at universities and specialised institutes of higher education are a good opportunity to motivate, inspire and support students. To investigate the extent to which students have received training in entrepreneurial skills and what parallels can be drawn between the individual academic institutions in Germany and the Netherlands, the Knowledge Alliance partners of Wageningen Universiteit, Hogeschool Arnhem en Nijmegen, Hochschule Rhein-Waal and the Universität Duisburg-Essen conducted a comparative study.

"According to the investigation, the motivation of students to become an entrepreneur is closely linked to their trust in their own ability to successfully influence their surroundings," explains Dr Loredana Orhei from Knowledge Center Business Development and Co-creation at HAN. "These abilities must be stimulated and trained in order to encourage students to choose a career as an entrepreneur."



views were conducted with experts. The students completed questionnaires in which they stated which entrepreneurial ambitions they were pursuing and whether their parents were entrepreneurs. The students then participated in six months of various workshops and training courses. They then completed a further questionnaire. The various outcomes clearly showed the effect that the workshops and training programmes had. The final report explained how a synergy between the academic institutions could be achieved and how entrepreneurship can be promoted in education. The individual reports describing the proceedings and the results of the study can be viewed on the Knowledge Alliance website.

On the basis of the results of the benchmark study, a user-friendly, practical "toolbox" was developed. "The toolbox is a good instrument which assists in communicating entrepreneurship in teaching," explains Lisa Ploum from Wageningen Universiteit. "It can be used in particular by lecturers who wish to further strengthen entrepreneurial skills in their lectures and lessons. The results of the benchmark study investigation are first presented, and the lecturers then receive a range of ,tools' which they can use in practice. In addition, some ,best practices' from the Netherlands and Germany are set out. The toolbox for lecturers is published in the form of a practical A4 binder and is available in German, Dutch and English.

"A toolbox for lecturers"

Lisa Ploum, Wageningen Universiteit



Science Compass – Knowledge Platform Rhine-Waal

"Find the right scientist"

Dr. Gerhard Heusipp, Hochschule Rhein-Waal The Science Compass is a web-based database with an intelligent search function which enables entrepreneurs, scientists and students to carry out a targeted search for a contact partner. The website is a joint project of the various Knowledge Alliance partners which the Hochschule Rhein-Waal has successfully developed and mapped out. The Science Compass went live in April 2015. What it exactly offers the user can be broken down into three categories: discover, connect and innovate.

DISCOVER

Science Compass makes the research and education landscape in the German-Dutch knowledge region of Rhine-Waal transparent. Using keywords, the search engine can be used to conduct research into institutes of higher education, research institutions, courses of study and research services from the regional sciences, while also providing an overview of the possible cooperation partners.

WWW.SCIENCECOMPASS.DE WWW.SCIENCECOMPASS.NL

Science Compass, therefore, helps users find partners quickly and easily, for example for research projects or the development of a product. Small and medium-sized enterprises that wish to assign a research task to an institute of higher education or research institution can easily get their bearings and find out more about the institutions in the region and the expertise each institute has.

CONNECT

With Science Compass, the right contact partner from the field of science can be found in a targeted manner. Contact persons are specified for each institution and each course, and these can be contacted directly and without obligation. This makes the path to scientific cooperation partners from the region significantly shorter, and research projects can be implemented more quickly.

INNOVATE

Science Compass paves the way for innovative cooperation between institutes of higher education, companies and research institutions. New contacts can be created with the aid of the network and ideas put into action. These new cooperation projects and the sharing of knowledge advance the development of research-intensive, innovative products which are important for the future prosperity of the region. Science Compass is, therefore, an excellent tool that helps the Knowledge Alliance to realise its aims: economic growth through innovative work and cross-border cooperation.

FUNCTIONS OF SCIENCE COMPASS

> Targeted search for information on institutes
 of higher education, research institutions, courses
 and research services (Labstores) in the Euregio
 Rhine-Waal and bordering regions
 > Bundling of the know-how of all institutes

of higher education and research institutions in the region

> Clear clustering in seven fields of innovation, which reflect the economic focus of each of the border regions:

- Energy and the environment
- Technology
- Agrobusiness and nutrition
- Logistics
- Culture and creativity
- Society
- Health and life sciences
- Promoting the innovation of regional institutes of higher education and companies
- Current events and news on topics from the sciences and teaching



Cross-border cooperation

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The Euregio Rhine-Waal is an administrative association in which German and Dutch communities as well as local authorities and institutions have joined to promote cross-border cooperation. The working area on the Dutch side encompasses most of the province of Gelderland along with the Arnhem-Nimwegen region, West Veluwe, Southwest Gelderland, parts of Northeast Brabant and the northern part of the province of Limburg. On the German side, the working area encompasses the Kleve region, the Wesel region and the cities of Duisburg and Düsseldorf. This region has approximately 4.2 million inhabitants. The Euregio Rhine-Waal promotes cross-border cooperation in various areas, including the economy, innovation, knowledge, education, labour market, energy, nature, culture and nursing. Under the motto of cross-border cooperation, the association encourages contact between citizens as well as between authorities and the various institutions in the Netherlands and Germany. The Euregio Rhine-Waal, where necessary, also takes on the role of initiator, such as in the Knowledge Alliance Rhine-Waal. "Compared to other German-Dutch border regions, the working area of the Euregio Rhine-Waal encompasses a large number of institutions of higher education and universities. These educational facilities offer great economic potential for the border region. It is, therefore, particularly important that the strengths of the knowledge infrastructure in our Euregio are used as best possible. We have, therefore, decided to combine the expertise of the various educational facilities," says Sjaak Kamps, managing director of the Euregio Rhine-Waal.

Another area in which the Euregio Rhine-Waal is active is that of cross-border labour mobility. Kamps explains: "In the Euregio Rhine-Waal, there are approximately 20,000 cross-border commuters. They experience the effects of the differing legislative regulations and provisions on a daily basis. On the other hand, they can also benefit



from the differences in supply and demand in the respective labour market. We have set up a monthly consultation hour just for these cross-border commuters. During this consultation they can come to us with their questions on tax, benefits, health and long-term care insurance as well as financial assistance. With the establishment of a



new border information point, this service will be expanded in the coming year. At www.euregiojobroboter.com, jobseekers can easily find suitable job offers in the neighbouring country."

This initiative is made possible through funding from the EU's INTERRAG A Germany-Netherlands programme. "Through this programme, the European Union is providing more than €220 m between 2014 and 2020 for cross-border cooperation along the German-Dutch border. The focus is on strengthening innovation in the region. Another focus is supporting sociocultural activities. We'd be happy to provide more information on the opportunities for developing a cross-border INTERREG project," says Kamps.

Wageningen University

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WAGENINGEN UNIVERSITY WAGENINGEN UR

From startup idea to self-sufficiency

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StartLife promotes entrepreneurship and supports young entrepreneurs in the fields of agriculture, food and the environment. The cooperation initiative between various companies, research and educational institutes, experts and (state) authorities offers an extensive range of educational activities, networks and financing and coaching opportunities for startup companies. "We offer all the tools required to set up a company," says Gitte Schober, coordinator of the Centre of Entrepreneurship from StartLife. "We promote and support newly-established companies in the biobased economy. We also provide contact between startup companies and major operations in order to enable them to work together on the realisation of innovative ideas."

StartLife offers intensive guidance from the first planning phase for students up to individual coaching projects for start-up companies. This continual feedback is highly appreciated. After all, it is typical of startup companies that developments proceed at a rapid pace and goals require constant adjustment and expansion. In addition, the initiators of these projects are often managing a company themselves for the first time. "Therefore,



we organise training courses in the field of finance and marketing, and help with questions and issues relating to intellectual property," explains Schober.

StartLife is a cooperation initiative with Universiteit Wageningen, the Research Ontwikkelingsmaatschappij Oost NV and Kadans Science Partners as the driving forces. The initiative is funded from the public finances. Half of the budget of €5.5 m is financed by the state, 35% is contributed by the Gelderland province and 15% comes from European Union funding programmes. The co-financing of innovative projects, frequently in the form of so-called subordinated loans, is an important part of StartLife. This means that SMEs and start-ups benefit from tax advantages. "What it actually means is quick and easy loans for risky ideas," says Schober.

To ensure technical and operational feasibility, StartLife continues to build on the existing consortium of public partners and to enter into strategic alliances with regional partners with specific expertise in various fields. One example is the startup company Sigrow, for which a club of international master's degree students from Universiteit Wageningen developed advisory models for horticultural businesses. For example, one model consists of a tomato grower with a greenhouse where the conditions are suboptimal. Using an app on his smartphone, the grower can see what's going on around his tomato plants. This project unites several areas of expertise: telemetry, sensor technology and the development of models and apps.

That's just an example of one of the many projects realised. The forerunner of the cooperation initiative in the field of biobased economy existed as far back as 2000. Since 2010, the initiative has existed in its current form as an independent foundation with the name StartLife. "We are trailblazers and hope to remain so for a long time," says Schober.



Hogeschool van Arnhem en Nijmegen

Helping

with

companies

innovations

Hogeschool van Arnhem en Nijmegen Centrum voor Valorisatie en Ondernemerschap Contact person: Loes Kater

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Hogeschool

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van Arnhem en Nijmegen

Companies that are members of an innovation centre give students the opportunity to complete an internship or write their thesis. As part of an initiative of the Hogeschool Arnhem en Nijmegen and Saxion, there are now nine of these innovation centres to which one or more companies in Gelderland are linked. Without exception, the companies are small and medium-sized enterprises with innovative ideas - but that's where the similarity ends. From commercial enterprises to a powder filling plant and cattle breeding operations to printing works - all are linked to one of the innovation centres.

Cees de Jong is the knowledge broker of the "Innovation Centre" project and in this role he establishes contact between institutions and companies. He ensures that students and companies find the

right contact partner and that connections are made that are beneficial to both sides. "The companies are happy to work with students," explains de Jong, "and certainly not just because they represent

cheap labour. A student observes the latest developments in a company from a completely different perspective and brings along current knowledge from his or her studies. In turn, the student gains professional experience in an innovative environment and can apply existing knowledge in a concrete manner. In addition, during the application process, the intern learns how to present themselves to a company. That's an experience from which they will benefit later."



In each innovation centre, a project manager follows the process intensively. The managers are in contact with the institutes of higher education, carry out the preselection of the candidates, take care of the daily coordination of students and assist them in the mandatory documentation for their course. This relieves the burden on companies to a great extent. The project manager approaches students, as demand exceeds those available. This means that students can often choose their internship.

Despite this, the project manager carefully examines which student or students from institutes of higher education, universities or other educational facilities best suit the particular SME. Depending on the requirements of the company, students are sought from various courses of study, including chemical technology, communications, social work and marketing. The project is very interdisciplinary in nature and every year it helps almost 200 students to find an internship or company to write their thesis on for approximately five months. A majority remain with the company or return later. "The innovation centres have been around for three years now," says de Jong. "We want to expand our area of work into Germany, in particular. We think that we can also get German companies and institutes of higher education to set up a similar innovation centre. The goal is to have 15 innovation centres in Gelderland and five of the bordering regions in five years."

Kamer van Koophandel

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How to expand in the German market

For the Dutch economy, the Kamer van Koophandel (KvK) is an institution to which many companies turn when they have specific questions, need tips or are searching for good contacts. Companies that want to expand their business activities abroad can also turn to the KvK. Be they retailers, an online shop or a construction company, all looking to generate additional sales for Dutch companies that want to see the big picture, expansion into the German market is often a logical step. The KvK takes on a range of tasks in support of companies that want to set up in Germany. First and foremost they provide information on import and export regulations. In addition, the KvK can also submit so-called EU declarations. This is a permit based on Dutch certificates and professional experience. This declaration is required for some sectors in Germany, such as construction, as well as certain trades. However, there is more that a company needs to watch out for. Chief advisor André Rutten explains how he and his colleagues help companies of various sizes fulfil specific requirements that apply to their situation. "We provide information about fiscal and legal provisions as well as on-site conditions and can help to find a good accountant. 80% of queries we can answer immediately. With the other 20%, we refer them to a person or institution that can answer the question with certainty. We function as a first point of contact and advice. You could see us as a kind of general practitioner."

Contrary to the widely-held belief, Germany does not have more regulations than in the Netherlands, just different ones. So, for example, not all certificates will be automatically recognised. The KvK naturally maintains close links with its German counterparts, the German Chamber of Skilled Crafts and the Chamber of Commerce and Industry. According to Rutten, it is an advantage if Dutch companies contact one of these two institutions through the KvK.





For example, the KvK provides information to the cheese dealer who wants to offer his products on the German market, including that he must register with the local tax office in order to offset VAT. And what should people watch out for if they want to open an online shop? "In this case, we tell the business owner that consumers in the Netherlands can send back a product within seven days free of charge, while the corresponding period in Germany is 14 days. It's useful to know something like that in advance," says Rutten.

Many startup companies, for whom internationalisation is often a given, get in touch with the KvK. But in recent years Rutter has noted an increase in the numbers of self-employed seeking help, for example, those with a small repair or construction company, who previously worked for a construction firm. "We welcome everybody." **Radboud Universiteit**

Experimental innovations

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Radboud Universiteit Nijmegen

The Radboud Research Facilities (RRF) research centre in the Dutch city of Nimwegen provides companies, research institutions and startups from the Netherlands and Germany with ultramodern laboratories and high-quality equipment. It has a range of facilities and experts in five very different research areas. For example, there is the option of analysing molecules for nanomedicine. High-tech operation theatres are also made available, and companies can use an ultramodern transmission electron microscope.

"With all of these research options, the RRF wants to enable coming generations to innovate," says coordinator Ed Koster. "The field of neurology and motor function, for example, is creating the conditions for the research of sensorimotor integration in top athletes, healthy people and people with neurological disease. For this we're using a balance simulator, among other things. This is a special seat that can steer the person in any direction. With this device we can research balance and spatial orientation not just in healthy people, but also in patients with balance problems, patients with Parkinson's disease and, of course, in top athletes.



Another example is how the manufacturers of hearing implants can test the way in which the brain of deaf people reacts to the signals from their device with the aid of an NIRS-EEG scanner."

As well as the infrastructure, companies can also make use of the existing expertise and services provided by experts. The RRF also has an explicit advisory role. If the research centre can't help a startup directly, the RRF staff members investigate on their own as to whether an academic centre or university in the wider area can offer specific help.

The budget of the RRF is €12.4 m, of which half is financed by the province of Gelderland and the other half from Radboud Universiteit and the Radboud UMC itself. The RRF is also the result of the fact that cooperation between the economy and universities has become ever more intensive. Koster: "Society likes to see financial support from universities leading to practical outcomes."

"The infrastructure is there. Now we just have to find more startups to use our services. We also want to refer more companies in Germany to the opportunities provided by the RRF."



Hochschule Rhein-Waal

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Young, innovative and research-oriented

) Hochschule Rhein-Waal

The Hochschule Rhein-Waal (HSRW) is a young, innovative education facility specialising mainly in interdisciplinary and applied research. While the institute of higher education, located in Kleve and Kamp-Lintfort, does indeed act as a research partner for national and international companies, it is primarily interested in cooperation with regional companies on both sides of the border. The Centre for Research, Innovation and Transfer (ZFIT) is the contact point for both large and small companies that want to innovate or research a product, service or idea. In this way, the economy is actively linked to science, and vice versa.



The ZFIT holds a competition every year in which students are encouraged to convert their innovative ideas into business plans. The three best ideas are awarded a prize sponsored by regional businesses. The ZFIT CareerService helps students looking for suitable and challenging intern placements. While studying, students com-

Dr Gerhard Heusipp, director of the ZFIT, emphasises that the relationship between the economy and science is by no means a one-way street. He explains that science is often on the lookout for possible applications for an innovative idea. Companies in turn can contact the ZFIT to make use of the knowledge of researchers and students for themselves. In addition, the university infrastructure is available to companies. Various faculties regularly pool their resources to find answers to the questions posed by companies.

A German institute of higher education does not correspond exactly to a Dutch one, Heusipp stresses. As a result, the institutes of higher education in general, and in particular the institutes of higher education in Kleve and Kamp-Lintfort, are very focused on applied research. However, the Hochschule Rhein-Waal offers more than assistance in the form of research. The university also supports so-called external funding, and brings scientists and companies together so that they can use patents from research in practice. In addition, the ZFIT organises events at which lecturers, students and companies can share their knowledge with each other. plete several internships at various companies. In this way, they often get a first look at company life and can apply their knowledge in a practical manner.

Heusipp believes: "Companies acquire up-to-date knowledge this way and can investigate whether the student might work for them in the future. We also help lecturers with grant applications, PhD scholarship fairs for students and provide practical tips and support to enable them to concentrate on their strengths.

"As well as German, there are also quite a few Dutch companies who avail of our help, but we still have a lot of work ahead of us. Since it was set up in 2009, our university is becoming more well known, particularly in the Netherlands. I'm convinced that it's just a matter of time."



Technische Universiteit Eindhoven

Masterminds support SMEs

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TU/e Technische Universiteit Eindhoven University of Technology

> TU/e SURE Innovation is a group of 150 to 200 highly-skilled master's degree students from the Technische Universiteit Eindhoven (TU/e). The students, who must undergo a strict selection procedure, receive offers for student-related projects from the business world.

Project manager Hans van Dinteren describes the SURE project as the "added commercial value" of the TU/e. "We are a sort of broker between universities and companies. We also provide help during the entire process, from the idea to execution. The companies make use of our gifted hands, so to speak. The students are supported during the preparation and completion of the project by the employees and academic staff of the TU/e and can use existing facilities such as laboratories, simulation programs and databases. Alongside this, the SURE participants and their guides can assist the entrepreneurs in writing up business plans and advice on issues of financing, funding rules and investigating distribution channels.

Van Dinteren receives queries every day from small and medium companies, from "crazy inventor questions" to "we have an idea; we want to put a product or service on the market and need help with the business plan." "We match the students to projects that have a relevant study background. In doing so, we also make sure that it is a challenging task. There has to be something in it for the student too! The students are sometimes paid for their work too. If we can't help the companies ourselves, I forward the query to another faculty within the TU/e that is the right contact partner."

Recently, SURE students were responsible for the development of a high-quality, remote-controlled agri-robot that picks fruit or vegetables in greenhouses. Students from faculties such as the natural sciences and informatics, electrical engineering, mechanical engineering and industrial engineering and the innovation sciences were involved in this project. Through their participation in the projects, students can work on their personal development and gain their first experiences in the economy.



"TU/e SURE Innovation is by no means an elite club, but the students must undergo a strict selection process," says van Dinteren. "During the application process we want to find out whether the student in question has sufficient technical knowledge and if they are socially responsible, determined and intrinsically motivated."

"We are now actually in talks about specific projects by former SURE members who are now active in business," explains van Dinteren. "So we've come full circle, even if there is still a lot to do after three years. In particular, we want to strengthen the cross-border nature of the project because the manufacturing industry in Germany offers our students a lot of opportunities."



Supporting companies

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Niederrheinische Industrie- und Handelskammer Duisburg · Wesel · Kleve zu Duisburg

The North Rhine Chamber of Industry and Commerce (IHK) represents approximately 61,000 companies from the industrial, trade and services sector in Duisburg and the surrounding areas, as well as in the regions of Wesel and Kleve. In this region of almost 1.3 million inhabitants, the institution supports numerous large and small companies. Apart from farmers, tradespeople, the self-employed and other freelance workers, these include almost every type of company. Stefan Finke, who is the contact person for the education and technology sector, among others, explains that the North Rhine Chamber of Industry and Commerce has three main aims. First, the IHK acts as a stakeholder in companies from the region. This means that he and his colleagues attempt, by putting forward good arguments and through lobbying work, to ensure that political decisions do not negatively affect the companies they represent.

Secondly, the North Rhine Chamber of Industry and Commerce performs a number of state tasks at a local level. One of these, for example, is the organisation of the education system, which



serves as a model for many other countries. It offers school leavers the opportunity to receive an additional three-year education and at the same time to gain practical work experience in the context of a comprehensive learning/work process. In addition, the IHK issues documents that business owners need for their commercial activities abroad.

The third main aim is to provide services and advice. Finke: "We are the first point of contact for people who want to set up a company. Every year we have thousands of these advisory meetings. It's a free meeting, where we can answer questions such as: ,How exactly do I set up a company? How do I write a business plan? How do I carry out marketing? Can I get a loan?' If there are unanswered questions



during this advisory meeting, we can refer the would-be entrepreneur to our internal or external experts. They are well-versed in many areas such as patents, taxes and financing. We can also help companies with specific problems. In these cases, we offer an individual consultation."

The relationship between science and industry is not a oneway street. The lecturer who wants to establish a startup can contact the IHK. The North Rhine IHK, together with the Hochschule Rhein-Waal and the Universität Duisburg-Essen, also organises events at which companies can present the latest technical developments. Finke: "The cross-border nature needs to be improved because Dutch educational institutions also have a lot of specific knowhow. For an entrepreneur from Emmerich, for example, the Netherlands is right on their doorstep. In the future, we hope to make better use of the potential on both sides of the border."

From vision to reality

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Open-Minded

The Innovation Factory is a platform that supports and promotes the entire process, from scientific research to the realisation of a product or service. Undergraduates and master's degree students, graduates, lecturers and staff from the various faculties of Universität Duisburg-Essen are actively assisted in the realisation of their innovative ideas. The Innovation Factory was the brainchild of the university and is a cooperation between Universiteit Wageningen, Technische Universiteit Eindhoven and Radboud Universiteit in Nimwegen.

Specifically, the Innovation Factory supports new startup companies in applying for funding and in the search for financing opportunities and suitable partners. An important part of this help is preparing for the presentation of the business concept. To ensure the presentation goes as smoothly as possible, so-called development groups are formed from various faculties, and interdisciplinary workshops are organised at which the participants can exchange knowledge. In this way, the Innovation Factory helps to develop and shape the business plan as best as possible. This phase lasts until the product or service is ready to be launched onto the market.



Simon Hombücher is a trained industrial designer and works as a project manager in the Innovation Factory. "We're trying to put ideas from entrepreneurs into practice and provide knowledge to society and the economy. From the universities to the economy, that's what it's all about. We give startup companies an overview of the current state of the economy and help them in their search for specific areas of application. For financing and production, the startup companies are referred to bigger companies. It is only then that they can be sure that the innovation is actually



suitable for the market. For this we use things like mind maps and 3D models to visualise the idea. We perfect a business case in the context of a mutual dialogue."

One example is the "Mineralsigns" project, in which high-quality sign boards are created that are digitally readable and can be adapted using the latest technology. The Innovation Factory helped in the application for funding and in the search for business partners. The platform also organised brainstorming sessions on how this kind of material can be printed and where the potential sales markets are.

"As well as concrete help, it's about creating a secure environment in which people from different areas of specialisation can work together," says Hombücher. "You can imagine regarding sensitive things such as inventions that it's important for people to be able to trust those around them. After all, you don't want an innovative idea to appear on the Internet beforehand."

Knowledge alliance Rhine-Waal

"Find the right scientist"

Dr. Gerhard Heusipp, Hochschule Rhein-Waal

"They came from all corners of the Euregio Rhine-Waal."

> Theo Jacobs, Radboudumc Nijmegen

"A toolbox for lecturers"

Lisa Ploum, Wageningen Universiteit

"A broad mix of entrepreneurs and students."

Sylvia Bronkhorst, Hogeschool Arnhem en Nijmegen

