

Studying the Aviation and Maritime clusters in metropolitan Hamburg

“Getting inspired by confrontation on location”!

In 2010 the Dutch Ministry of Economic Affairs introduced the top-sector policy. Nine top sectors were defined. High Tech Systems & Materials (HTSM) is one of them. Agendas have been developed on main issues like Human Capital, Innovation, Supply Chains and International Exposure. Countries neighbouring the Netherlands in the Northwest European region have similar, but not identical, approaches. And they are experiencing different degrees of success. High Tech NL organizes an international study tour every year. The objective is to discover how our neighbours are doing. What can we learn from them? Can we exchange experiences and reinforce each other? This year a study tour was organized to the federal state of Hamburg, Germany. The Aviation and Maritime clusters located there were analysed in their geographic context. The study tour was titled: “Winnovative” high-tech cluster policy and a transformation from harbour city to an attractive “glocal” city: An impression.



Much in common

After visiting the Rhein-Ruhr knowledge area in 2012 and the North of France in 2013, the choice for an inspiring destination for this year’s study tour was easy. First of all, the federal German state of Hamburg has much in common with the Netherlands. In both places, water has been an opportunity and a challenge at the same time for many centuries. Hamburg’s direct connection to the North Sea through the river Elbe was an important geographical aspect that affected the development of the Hanse trade network. Although it had a relatively safe location on the lateral moraine complex and a central position compared to the Northwest European states and the Baltics, Hamburg had to fight the water which was threatening the city and its harbours, as flooding was common during high tide and storm-surges. Shipyards and harbour activities have dominated the Hamburg skyline for a long time, but in the 1990s the decision had already been made to (re)define activity clusters. Apart from the Maritime cluster – which was established in 2011 – seven other clusters were defined in an earlier stage, among these was Aviation.

Clusters and business growth

Together with Dr Jaap Huisman, a well-known Human Geographer and Germany specialist,

and the NBSO Hamburg (Netherlands Business Support Office) High Tech NL spent several months preparing a balanced program. The challenge was to work out a schedule which allowed the participants to get to know the strategic objectives of both clusters and to find out how they stimulate business growth. As Dr Jaap Huisman so elegantly put it, we asked: *How does the cooperation of companies, knowledge institutes and governmental decision makers – which is called the triple helix – lead to ‘winnovative’ collaboration? Is the city of Hamburg taking advantage of its unique spatial characteristics by stimulating attraction, connectivity and competitiveness? After all, developing business at a high level of knowledge implies attracting young professionals and experts at a masters and PhD level from all over the world, which in itself is an important human capital issue.*



A complete set of documents to study

The setup of the program could be communicated in September. Professionals of

the Dutch Aviation, Maritime and High Tech Systems clusters signed up to participate as well as representatives from the Dutch government and universities. The bus left the High Tech Campus in Eindhoven on Thursday the 27th of November at 6:15 am. Although the first visit in Hamburg was planned for 3 pm, there was no time to sleep. A complete set of study documentation was distributed, which allowed us to study the Rhein-Ruhr region while passing through and to learn more about the German cluster management approach.

Cluster Management Excellence

The bus arrived in Hamburg at around 1:30 pm, which allowed us to get a first impression of the city. Water is an integral part of Hamburg, and this fact is evident all around. Harbour facilities, the river Elbe and huge container ships indicate the connection to a maritime history and today's business world. On Wexstrasse, where most of the cluster organizations are concentrated, we met with Dr Kirschfink, who is in charge of the Aviation cluster called "Hamburg Aviation". Dr Kirschfink presented the highlights of his cluster and emphasised the fact that Hamburg Aviation is a brand. Back in 1909, Hamburg was the first city in Europe to have an airport. Nowadays the Airbus group, Lufthansa Technics and the Hamburg Airport are dominating companies in a cluster of 300 suppliers and knowledge institutes offering jobs to 40,000 employees. The Aviation cluster was established in 2000 and received the Cluster Management Excellence Award in February this year. This is something to be proud of!



Hamburg Aviation, facts & figures

Dr Kirschfink then gave the floor to Dipl.-Phys. Jörg Polzer, General Manager of the Maritime Clusters of Northern Germany. Mr Pölzer explained that the Maritime cluster is focussing on federal cooperation in the field of innovation

and business development with four other northern German states in order to be able to face today's challenges. This sector has suffered from the worldwide economic crisis and faces tough competition from low-cost countries with regard to ship building.



Operational area Maritime Cluster Northern Germany

To complete this interesting afternoon, a presentation of the overall cluster management was given by Mr Hintze, who is responsible for Economy and Innovation as well as for the cluster policy. He convinced his visitors of the fact that cluster policy is not a separate process for each of the clusters. To guarantee success, cross-overs should be made leading to new combinations which will benefit the companies, knowledge institutes (e.g. universities) and the location, metropolitan Hamburg.



Dr Kirschfink: "Branding Hamburg Aviation"

To conclude the program on Thursday the study group was invited by High Tech NL to have dinner together in restaurant Eisenstein. This restaurant is located in a former boat propeller factory in Hamburg-Altona, perfectly bridging the past and today's reality.

Clusters and company growth

After a good night's rest, Friday's program started at Sevencs, a relatively small company

that is part of the Maritime cluster. This company specializes in developing mapping and geographical positioning software for offshore applications. Mr Röhlich is the company's Sales Director. He described the history of the company which started about 20 years ago as a university spin off. The seven founders all had a "c" in their family name, which resulted in the company's name. Sevencs now employs 70 people, of whom 40 are in Hamburg. Dutch companies like Thales Nederland and Imtech are supplied by Sevencs. Sevencs experiences the benefits of being part of the Maritime Cluster by participating in all kinds of network activities like knowledge sharing, joint innovation programs and international delegation visits. Mr Röhlich is convinced of the added value of organizing clusters and being part of a cluster. Active networks provide easy access to resources like skilled people and funding and contribute to the acceleration of innovation, which is necessary to survive.



A group of enthusiastic people studying cluster policy in a unique metropolitan environment

After saying goodbye to Mr Röhlich, we were taken by bus to the shipyard of Blohm-Voss where the delegation was welcomed by Mr Sievers. Once this yard employed over 15,000 people, but now times have changed and Blohm-Voss is focusing on a new future. Blohm-Voss is still active in the field of frigate building and complex vessel modifications and constructing complete luxury yachts. However, nowadays the emphasis will be more and more on high-tech engineering, overhaul and maintenance and consultancy. For Blohm-Voss, being part of a cluster doesn't seem to be the most important lifeline to the future although the joint activities of five federal states should bring economies of scale.

Impressive

The final visit on Friday was paid to the Airbus plant. The Hamburg site is the third largest

aircraft construction location in the world after Toulouse (France) and Seattle (US). After having lunch together with our host, Dipl. Ing Roland Baehr, who is in charge of Business Development, Research and Technology, he shared his view on the future of aircraft technology with us. It is clear that the Airbus Group and Boeing are very strong competitors in the field of civil aviation. Everybody is familiar with the market position of the Boeing 737 and Airbus 320 family, which both have an installed base of around 6400 units. However, taking into consideration the fact that



Our hosting companies

the Boeing program started in the late sixties and Airbus just entered this market segment in 1987, it becomes clear that we have witnessed an amazing achievement. Not only is the Hamburg plant assembling complete Airbus 320 aircrafts – over 3,000 units of the improved version Airbus 320 neo are already ordered to be produced over the next six years – but you will also find hangers where the body of the immense Airbus 380 is being constructed. Although, being part of the Aviation cluster doesn't seem to have a direct influence on the company's sales performance Airbus is now internationally reorganizing its supply chain. The company no longer wants to control more than 3,000 suppliers. The future model of collaborating innovation will be similar to that of Brainport Industries; only a small number of first-tier suppliers will share innovation and investment risks with Airbus.



Airbus 380 –the big one- can carry 800 passengers!

The first-tier suppliers will be responsible for managing their processes and second- and third-tier suppliers. This transformation process will take some time. Could the Aviation cluster accelerate this? Taking pictures is prohibited at the production sites but it every member of the group clearly enjoyed the visit to the huge assembly hangers of the 320 and 380 families.

You never go alone!

Saturday morning we learned all about the city's urban geography with Dr Jaap Huisman. He showed us how the city of Hamburg is managing continuous transformation with a vision for the future. Elements like connectivity, attraction and competitiveness go hand in hand with functions like working, living and recreation. A walk from the old city centre, through the Speicherviertel to Hafan City revealed the secrets of Hamburg's urban development. We, as a Dutch delegation, were surprised to find the largest site of "Joop van den Ende Theatre group" is in Hamburg, instead of Amsterdam. Hafan City combines the headquarters of world-famous companies like Kuehne and Nagel and Unilever with the humble activities of kindergartens and shops. Just like centuries ago, water plays a dominant role. Solutions are found and reinvented together, or, as Mr Baehr noted, "You never go alone!"

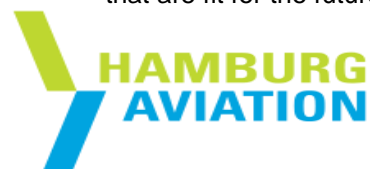
What did we learn?

After having a memorable lunch together at the famous Wandrahm restaurant in the centre of Hafan City, the bus headed back in the direction of Eindhoven. This trip allowed us to individually prepare our evaluations. What could we conclude? The following is a list of just a few of our findings:

- Hamburg's citizens and decision makers seem to be proud of their city, its culture, history and activities.
- Decisions are made with a long-term perspective. Projects like Hafan City and the Airbus programs have a 25-year character
- Decisions that are made show courage. Even if cluster policy does not immediately lead to new business, developing a brand strengthens the exposure and position of the companies and institutes that are part of it.
- Economy and regional comparative advantages change continuously. This

demands the ability to adapt, to change and to innovate. This goes for cluster policy and city development

- Both the Aviation cluster as well as the Maritime cluster demonstrate that collaborative innovation – winnovation – can be managed and accelerate economic growth.
- The German approach is bottom up whereas the Dutch approach is top down. In a bottom-up approach more actors feel responsible for the success of projects.
- A strong activity like Aviation will survive without a cluster policy. Nevertheless, joint branding makes the sector even stronger.
- The Maritime cluster suffers from the worldwide economic crisis and might have waited too long to innovate with regard to ship construction. The overall knowledge level though, offers opportunities to redevelop the sector.
- The city of Hamburg has an open structure which is inviting for inhabitants, visitors, companies and international knowledge workers.
- The next step to success is to develop cross-overs and define new combinations, both in cluster policy and in city development.
- The key word is "Vernetzung", which means stimulating interaction, both in business and from a spatial point of view. This leads to new combinations that are fit for the future.



Overall we believe we have experienced a unique, interesting and enriching program. It gives a new dimension to our Dutch top-sector policy. Next year's destination will be the French-speaking part of Belgium, Wallonia. Smaller and different. But it will certainly once again be surprising! See you next year!

Jos van Erp
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Clusters and cross-overs. Source: Innovationspolitik Hamburg. November 2014

Found on the internet:

Germany's 16 federal states have launched numerous measures to support the development of efficient clusters. These measures take into account the individual strengths of the regions – with regard to technology, business and innovation – and are also designed around present structures and other features specific to the region.

The individual measures at the federal level provide financial support for areas ranging from cluster management, to innovation projects, to educational activities and joint public relations initiatives, right across the federal state.

NB: The delegation from High Tech NL Young Professionals would like to thank the people in Hamburg for preparing and coordinating the program. Special thanks for our hosts, NBSO Hamburg and Huisman Kennistransfer, for all of their efforts to find the right balance in topics, organizations and enthusiastic people who offered us a warm welcome!