EUniverCities

Local Action Plan Magdeburg













Local Action Plan Magdeburg

1 City of Magdeburg

1.1 Short description of the city

Magdeburg is the capital of the Federal State of Saxony-Anhalt, one of the 16 German Laender. The city has 230,000 inhabitants with a tendency to increase in recent years.

Magdeburg is located on the central stretch of the Elbe River. The German capital Berlin is situated about 150 km away in northeastern direction. Due to its favourable geographical location at the crossroads of important motorways, railway lines and waterways, Magdeburg is an industrial and trade centre and boasts a large inland port as an important logistical turnover point in the hinterland of the German North Sea ports.





Magdeburg can look back on 1200 years of history. In the 10th century, when the Holy Roman Empire of the German Nation was founded by Emperor Otto, the city of Magdeburg was of central significance. In the following centuries, Magdeburg developed into one of the leading European metropolises of the Middle Ages.

The city was comprehensively destroyed twice in its history and thus suffered severe setbacks in its development. After the destruction in the Thirty Years' War, Magdeburg lost its dominant role in Central Europe. Thanks to its good geographical location, the city started to develop as a major place of industry from the middle of the 19th century onwards. Magdeburg was destroyed for the second time shortly before the end of World War II.

After the difficult years of rebuilding the city and complicated structural adjustments after the European unification, Magdeburg has developed as a renowned location for business and service industry. As the capital of the Federal State of Saxony-Anhalt it is also the administrative centre. Science and research have been playing an essential role as influencing factors for the positive development of the city in the last two decades.

1.2 Initial situation of the city

In 1990, the year of the German reunification, Magdeburg was dominated by huge heavy mechanical engineering companies. At that time there were as many as 45,000 local jobs in this branch of industry. As a consequence of the new market situation after 1990, the number of jobs went down to 3,500 only five years later with an unemployment rate reaching almost 30 per cent.

One of the most important decisions for a positive development in this crisis was to set up and develop scientific institutions. These activities also helped to reorganise traditional companies and promoted the settlement of new enterprises. The unemployment rate is currently at about 10 per cent.





In 1993 three smaller institutions were merged and the Otto von Guericke University was founded. As early as in 1991 the University of Applied Sciences had been founded. As of now, there are about 18,500 students in Magdeburg. All major German research organisations such as Max Planck Society or Leibniz Association have established their research institutes, where a total of 750 scientists from all over the world work and research.

Within the framework of the transformation process from a predominantly industrial site to a place characterized by business and science, a considerable shift of awareness was required from the citizens of Magdeburg. In order to achieve this goal, the universities and the scientific institutions as well as the city administration jointly developed a solid basis for cooperation. The target of EUniverCities was to enhance cooperation, particularly between the University and the University of Applied Sciences and to focus on specific action areas.

2 Structure of the working process for EUniverCities

2.1 Steering Group

The city administration of Magdeburg, the Otto von Guericke University and the University of Applied Sciences Magdeburg-Stendal were involved in this process. As a first step, a Steering Group was formed that included the following members:

Otto von Guericke University

- Prof. Volkmar Lessmann, Vice President for Research, Technology and Equal Opportunities
- Dr. Wolfgang Ortlepp, Assistant to the Vice President for Research

University of Applied Sciences Magdeburg – Stendal

- Prof. Jan Mugele (until 2013), Prof. Harald Goldau (from 2014), Vice President for Research, Development and Technology Transfer
- Norbert Doktor, Press relations officer

City of Magdeburg

- Janine Lehmann, Science Team
- Dr. Klaus Puchta, Science Team

2.2 Work topics

In a first meeting on 26 August 2013 the Steering Group established the basis for cooperation between the Otto von Guericke University (OVGU), the University of Applied Sciences Magdeburg-Stendal (HS) and the city of Magdeburg within the framework of the EUniverCities project. At the same time a list of the tasks that will have to be solved in the next years within the framework of the cooperation project was prepared.

Student life

How can we enhance the visibility of both the University and the University for Applied Sciences? Can a central place for students be created within the city? What can the city do for its students?

- Internationalisation

What can the city and OVGU/HS do to be perceived as an attractive cosmopolitan location? When is a city attractive for scientists and students? What offers are required for that? How can a welcoming culture be developed?

- Development of local economy / technology transfer

Projects like STIMULATE give an impetus to the economic development of the city. How can this development be promoted?

A joint centre for advanced training could provide tailor-made training courses for local companies. How and where can such a centre be set up?

- Strategy for the Port of Science

A strategic approach is required for the Port of Science. What can be developed there? Is there a need for a second Think Factory (incubator)?

- (City) marketing

How can the attractiveness of the location be increased? All the aforementioned topics influence marketing. How can various local actors such as Pro M and MMKT be involved? What is the general target of the city marketing?

After being discussed intensively by all partners in their institutions, the meeting of the Steering Group on 14 November 2013 fixed the goals within the framework of the project EUniverCities and the working structure for the ULSG.

Two topic areas were identified as particularly significant. The following action areas have been dealt with within the framework of the project EUniverCities:

Internationalisation and student life

The topics to be dealt with include issues such as:

- Establishing a welcoming culture
- Removing bureaucratic barriers for foreign students/scientists ("One Stop Agency")
- Cultural offers that allow citizens and students to "mix"
- Integrating students into municipal decision processes

Development of Magdeburg as a centre of medical technology

"STIMULATE" is an interdisciplinary research project of the Otto von Guericke University for image-controlled minimally invasive diagnostic and therapeutic strategies. This project is of high practical relevance and a lot of small and medium-sized companies and Siemens AG Healthcare as an industry partner have been involved. This project was awarded a prize as an excellent research and technology transfer initiative by the German Federal Ministry of Education and Research.

The strategic objective of STIMULATE for the coming years is very ambitious and can be summarised as the vision to become the "German Centre of Medical Image Computing" and to establish itself as an international reference centre.

By converting an old industrial area into the Port Science, Magdeburg has created a science quarter in immediate vicinity to the university campus. This is where scientific institutions and technology-oriented companies are to be established in future. The basis for the development of this science quarter was created by the successful URBACT project REDIS. The Port of Science is still lacking a thematic focus. Medical technology could be such a core area.

This topic should find an answer to the following questions:

- How can Magdeburg be developed as an international centre for medical image computing?
- What support does the STIMULATE project require and what actors need to be involved?
- What framework conditions need to be created in order to make sure that the partners involved are pooled in the Port of Science?

2.3 Local Support Groups

In view of the different assignments it was agreed to set up two Local Support Groups. The ULSG members were named by the three cooperation partners: University, University of Applied Sciences and city administration. In spring 2014 the two Local Support Groups started their work.

ULSG 1 Internationalisation and student life

University of Applied Sciences Magdeburg	Jessica Gründel	International Office
University of Applied Sciences Magdeburg	Julia Krumm	International Office
University of Applied Sciences Magdeburg	Norbert Doktor	Press relations officer
Otto von Guericke University	Prof. Lessmann	Vice President for Research
Otto von Guericke University	Dr. Wolfgang Ortlepp	Assistant to the Vice President for Research
Otto von Guericke University	Prof. Sadrieh	Commissioner for Foreigners
Otto von Guericke University	Johannes Filter	Student's union
Otto von Guericke University	Lisa Schwarz	Student's union
Otto von Guericke University	Martina Hagen	Technology transfer
City of Magdeburg	Janine Lehmann	Science Team
City of Magdeburg	Dr. Klaus Puchta	Science Team
City of Magdeburg	Frank Ehlenberger	Foreigners' Office
City of Magdeburg	Susanne Schweidler	Department of Culture
City Marketing Pro Magdeburg	Georg Banderau	Managing Director

ULSG 2 Development of Magdeburg as a centre of medical technology

Otto von Guericke University	Prof. Lessmann	Vice President for Research
Otto von Guericke University	Dr. Wolfgang Ortlepp	Assistant to the Vice President for Research
University of Applied Sciences Magdeburg	Prof. Goldau	Vice President for Research
"Stimulate" project	Prof. Rose	Project Manager
"Stimulate" project	Axel Boese	Project team member
City of Magdeburg	Thomas Hartig	Person in charge of the Port of Science

City of Magdeburg	Jörg Böttcher	Business promoter
City of Magdeburg	Janine Lehmann	Science Team
City of Magdeburg	Dr. Klaus Puchta	Science Team
Company METOP	Dr. Sonja Schmicker	Managing Director
Company metraTec	Klaas Dannen	Managing Director
Company Strehlow	Uwe Strehlow	Managing Director
Company EKF-diagnostics	Steffen Borlich	Managing Director
GENES GmbH Venture Services	Prof. Nathusius	Consultant
Dr. Thielbeer Consulting	Dr. Markus Thielbeer	Consultant

The work process included four ULSG meetings in the form of workshops lasting several hours. External consultants were involved in some of the meetings. The results were recorded and made available to the ULSG members.

3 Action area "Internationalisation and student life"

3.1 Initial situation

The Otto von Guericke University and the University of Applied Sciences are relatively new institutions. The University was founded in 1993. In the first year there were about 5,000 students. This figure has risen to 14,200 students at present. The Otto von Guericke University is nowadays a place for students from all over Germany. More than 50% of the students come from other Federal States.

At the same time the University has progressed into an international centre of learning. With more than 1,800 students from more than 90 nations, the proportion of foreigners amounts to 13%. The number of students at the University of Applied Sciences in Magdeburg has gone up to 4,400 at present. That is to say that the total number of students in both Universities is about 18,600.

Apart from the University and the University of Applied Sciences, five large research institutions with more than 100 employees each were established in the last 20 years. These are the Max Planck Institute for Dynamics of Complex Technical Systems (MPI), the Helmholtz Centre for Environmental Research (UFZ), the Fraunhofer Institute for Factory Operation and Automation (IFF), the Leibniz Institute for Neurobiology (LIN) and the German Center for Neurodegenerative Diseases (DZNE).

The institutes are attractive places of work for scientists from all over the world. Thus, for instance the MPI employs 140 scientists out of a total of 240 employees. Foreigners account for more than 40 per cent of the workforce. At the LIN, an institute of

comparable size, the foreigner ratio amounts to 34 per cent which includes scientists from 23 different countries.

As a result of low birth rates and the drain of young employees, there is a general population decrease in many East German regions. The development of Magdeburg as a science location has been resulting in a reverse trend. As of now, the city has 231,000 inhabitants with an annual population increase. This has shown positive effects for all areas of municipal life. It is important to maintain this positive trend.

It is of utmost importance for the two universities to attract more and more students from other Federal States. For the city of Magdeburg, the number of students plays a significant role, particularly in view of the demographic development. Moreover, students make a considerable contribution to the local economy and improve the social and cultural climate of the city.

3.2 Assignment

The topics to be dealt with include issues such as:

- Establishing a welcoming culture
- Removing bureaucratic barriers for foreign students/scientists ("One Stop Agency")
- Cultural offers that allow citizens and students to "mix"
- Integrating students into municipal decision processes

3.3 Projects and objectives of the LAP for the action area "Internationalisation and student life"

Improving registration processes

Students have to register in the city at the beginning of their course at the local registration office. As a result, there are peak times at the offices at the beginning of each semester which in turn leads to longer waiting times for the students. In view of that, non-bureaucratic solutions are required to show the students that they are welcome in this city.

Implementation:

The Magdeburg Resident Registration Office opens a subsidiary at the start of the semester for five weeks at the campus of the Otto von Guericke University where all necessary formalities can be completed. For the University of Applied Sciences there is an extra counter for students in the registration office which is located near the campus at the start of the semester.

Posters inform the students about this procedure.

These special registration offices have turned out to be very successful. This offer was used by 2614 students of the University and more than 400 students

form the University of Applied Sciences at the start of the winter semester 2014. This scheme will be continued in the coming years.

Independently from the start of the semester, the Registration Office provides an additional consultation day once a month at the campus.

Expanding the services of the Foreigners' Office

One of the targets is to increase the number of foreign students and scientists in the city. This is of paramount importance for increasing the quality of the scientific institutions. At the same time it is supposed to enrich the cultural variety of the city. Quite a few formalities need to be tackled, before a foreigner can live in Magdeburg. An important contribution to the welcoming culture is to reduce the bureaucratic burdens for citizens from other countries wherever possible.

Implementation

The Foreigners' Office offers five extra consultation days for foreign students. A total of 1,455 residence titles for foreign students were awarded and about 510 new students were granted visas in the months from January to November.

Apart from that, the Foreigners' Office and the Federal Agency for Employment informed the students about residence law regulations and job opportunities after finishing their study course.

During the semester kick-off event the representatives of the Foreigners' Office gave a warm welcome to the new international students and informed them about the first administrative formalities to be dealt with after their arrival. This information meeting was celebrated on 7 October 2014 for the first time and will be repeated in the next years.

The local Foreigners' Office organises an annual information and qualification meeting on legal issues concerning foreign students the staff human resources staff of the University, the University of Applied Sciences and all research institutions. This is to make sure that foreign scientists get the best possible support. The event on 22 October was successful and it will be continued in 2015.

Improving the work of the Foreigners' Office

The ongoing internationalisation of the city places higher demands on the employees of the Foreigners' Office. The working procedures need to be qualified and adapted to the new challenges.

<u>Implementation</u>

The city of Magdeburg has successfully applied to participate in the project of the Federal Office for Migration and Refugees "Foreigners' Office - Welcoming Office" which is being implemented in 10 German cities. Within the course of this two-year project, the employees will be trained and organisational procedures will be improved.

Die ULSG will accompany this process as an advisory board.

Survey on the situation of students in the city

In order to improve the work of the Otto von Guericke University, the University of Applied Sciences Magdeburg and the city administration, it is necessary to have a close insight into the living situation of the students and their expectations of the study site. After evaluating the last survey from the year 2005, the ULSG concluded that this was not a good basis on which to work.

<u>Implementation</u>

A new survey among students is being prepared in cooperation with the Faculty of Economics. It is to address both the economic situation as well as the satisfaction of the students with their social and cultural framework conditions. Particular emphasis is to be placed on collecting proposals for improving the situation.

Integration of students in city life

Students and foreign scientists live in Magdeburg for several years. So far their creative potential and their commitment has not been adequately tapped and used to give the city a distinctive profile. They are not sufficiently represented in municipal decision-making either. By resolving these issues, Magdeburg could enhance its attractiveness as a place of study.

Implementation

The ULSG noticed that there has been little experience for integrating students successfully into urban life. Cities in other European countries have made much more progress in this respect. In order to produce positive results in the short term, an international exchange of ideas on this subject should be initiated. The city administration has been mandated to organise an exchange of ideas with suitable European cities, possibly within the framework of a new EU project.

Future cooperation

The ULSG noticed that the discussion brought forward a large number of proposals and ideas for which no concrete implementation steps could be fixed within the timeframe of the EUniverCities project. This led to the conclusion that the cooperation needs to be continued after the end of the project by establishing a permanent working group. This group is to be coordinated by the Science Team of the city administration.

The following objectives have been established for the future cooperation:

Internationalisation of public life
Improving foreign language skills of administrative staff
Foreign language information at public transport facilities

Multilingual information brochures in administration offices and at cultural and social facilities

Welcoming meetings for foreign students

Integrating students into urban culture

Integrating students into application process for "European Capital of Culture"

Promoting small cultural projects developed by students Developing and promoting student meeting places in the city

4 Field of action "Development of Magdeburg as a centre of medical technology"

4.1 Initial situation

4.1.1 Medical technology in Magdeburg

As a result of close cooperation of various faculties of the Otto von Guericke universities, the "STIMULATE" project has been initiated where new methods for image-controlled minimally invasive diagnostic and therapeutic strategies are developed. The company Siemens Healthcare AG has been recruited as a renowned industrial partner for this project. Apart from that, a consortium of small and medium sized companies is involved.





In view of the enormous significance for future developments in medicine, STIMULATE has been named by the Federal Ministry of Education and Research as one of the few "Research campuses" in Germany and provided with long-term funding.

4.1.2 Port of Science

A former part of the inland port of Magdeburg which is no longer used commercially is being converted into a science quarter. The objective is to develop an area in the immediate vicinity to the campus of the Otto von Guericke University where scientific institutions and technology-oriented companies are established that cooperate with the University. The URBACT project REDIS has already prepared the fundamental basis for this development.





The settlement of the "Virtual Development and Training Center" (VDTC) of the Fraunhofer Association, the Max Planck Institute for Dynamics of Complex Technical Systems (MPI) and the "Think Factory" incubator constitute first successful steps in this process. Meanwhile some private technology companies have been established in the Port.

4.2 Assignment

4.2.1 Medical technology in Magdeburg

With the successful establishment of STIMULATE, Magdeburg can continue to distinguish itself as a science location. This is why all local administration units are urged to support the STIMULATE project. Among many other problems we need to address the question where the project is to be implemented and established together with the cooperating companies.

4.2.2 Port of Science

A very important issue for the development of the Science quarter has not yet been resolved. Between the parties involved (Otto von Guericke University, University of Applied Sciences and City of Magdeburg) no thematic focus has been identified for the Port of Science. At the same time all partners are aware that this definition is of paramount importance for the success of this science quarter.

4.3 Projects and objectives of the LAP for the action area "Development of Magdeburg as a centre of medical technology"

Evaluation of the STIMULATE research campus

The STIMULATE research campus was officially opened by the Federal Ministry of Education and Research on 30 January 2013. This was the confirmation of the project idea to develop image-controlled minimally invasive diagnostic and therapeutic strategies in Magdeburg. Only ten research projects of this type have been approved in Germany. If the project runs successfully, it can be funded with a total of €15m over a period of 15 years.

The priority now was to develop the project further within the first 12 months and to qualify for the next phase. Apart from the task to qualify the internal structure between the direct project partners, it was necessary to embed STIMULATE in the regional science and business system.

Implementation

The networking process has been significantly supported by the ULSG. A steering committee has been established that promotes the implementation. For this it was important to involve the Minister of Science and Economic Affairs of the Federal State of Saxony-Anhalt, the Director of the regional Investment Bank and particularly the Mayor of Magdeburg.

On 28 October 2013 the STIMULATE project was presented to a wide local audience within the framework of the presentation series "Science in the City Hall". During the "Long Night of Science" in 2013 and 2014 organised by the city administration, the STIMULATE labs were open to the public. At an exposition within the framework of the congress "Wissenswerte" (Knowledge value) in November 2014 in Magdeburg with 400 science journalists, STIMULATE was presented as one of the most important research topics.

This project part has been successfully completed. STIMULATE was successfully evaluated in a multi-stage process as an eligible research campus and funding was confirmed for four years.

Research buildings

In the first project phase, STIMULATE is run and located in the incubator "Experimental Factory" which is jointly run by the Otto von Guericke University and the city of Magdeburg. After the successful evaluation this project is going to grow in the next years. That means that the facilities will be too small in the long run.

Another aspect is that the target to develop Magdeburg as a centre of image-controlled medicine can only be attained if further companies and research institutions are set up around the STIMULATE project. For this, a specific area needs to be earmarked.

<u>Implementation</u>

The former storage building B in the Port of Science would be a suitable facility that could be developed for the needs of STIMULATE. At the same time there is sufficient space for setting up cooperating companies and research institutions.

The storage building B is owned by a private investor. After intensive discussions, the owner has agreed to convert the building to meet the needs of STIMULATE and to rent it out. Currently discussions are under way with a local investment bank to provide project funding. At the same time the city administration is preparing the conditions required by planning and building law. The target is to open the STIMULATE building by the middle of 2016.



Setting up a centre for advanced training

Apart from the research and development tasks, STIMULATE also focuses on the further qualification of employees of medical technology companies. This is in the interest of the companies involved in the project. At the same time, training and qualification activities are to be developed as an important financing module for STIMULATE.

<u>Implementation</u>

It is mandatory to locate the centre for advanced training in the immediate vicinity to the research building. After intensive discussions, "House 1", a former administration building in the Port of Science, was selected as a suitable location. The building is located adjacent to the proposed STIMULATE research building (storage building B).

A public private partnership model has been agreed on for funding the redevelopment of the building. At the same time, the Otto von Guericke University and the University of Applied Sciences have agreed to use the building for other training and qualification activities in the interest of an efficient use.

Meanwhile the building has been sold by the city administration to a private investor subject to the clear condition to set up a centre for advanced training. There are discussions under way between the University, the University of Applied Sciences and the city administration with the investor in order to prepare a detailed utilisation concept. A private training company has been integrated into the utilisation concept in order to guarantee the overall funding.



The target is to finish the building by the beginning of 2016. At that time it would be available as the new research building for STIMULATE.

Earmarking areas for the further development of the Port of Science

The perspective to develop medical technology as one of the focal points of the Port of Science has resulted in intensive activities to reserve areas for future expansion. We have already received declarations of interest from parties that want to set up business in the immediate vicinity of STIMULATE.

In view of this situation, ULSG has initiated and accompanied the process of reserving and developing buildings and areas.

Implementation

In close vicinity to storage building B, the future research building for STIMULATE, there is storage building A, another currently unused building which was owned by a utility company.

There were very complicated negotiations with a private investor who undertook to reserve the northern part of storage building A for future cooperation partners of STIMULATE and to prepare the building as required. At the same time this use was incorporated in the development plan by the city administration.



Apart from that, in the year 2014 the city administration bought the plots directly adjacent with an area of 11,000 m² for setting up scientific institutions. This area is located next to the university campus. Thus the city succeeded in creating an integrated area for developing medical technology.

Future cooperation

Within the course of EUniverCities, the ULSG has very successfully promoted the creation of the required (material) conditions to establish Magdeburg as a medical technology location. However, the ULSG members agree that this process will also have to be accompanied in future. There was a workshop on this subject.

The following objectives have been established for the future cooperation:

Attracting companies / setting up new companies

- Attracting a large medical technology company or its subsidiary to the Port of Science.
- Attracting ten small or medium sized companies during the current STIMULATE approval period.
- Setting up a centre for startup companies with the objective to promote 20 spin-offs from the University and the University of Applied Sciences.
- Perform a survey at medical technology companies to find out which conditions need to be fulfilled in order to set up an institution in Magdeburg.

Marketing / Branding / Image

- Development of a medical technology label for Magdeburg
- Raising international profile ("Medical Valley")

Support in attracting international research specialists

Infrastructure

- Create framework condition in Port of Science (Research Work Life)
- Service infrastructure (restaurants, cafés)
- Attractive working environment

5 Summary

Within the framework of the URBACT project EUniverCities, the cooperation between the Otto von Guericke University and the University of Applied Sciences has been significantly improved. Other stakeholders were successfully integrated into the process.

The cooperation will be continued in this intensive form after the project has been finished. This does not only apply to the assignments described in the LAP. The Steering Group has identified further tasks the solution of which requires cooperative working.



