eSCHWECHAT.AT: from Transport Hub to Knowledge Hub

1 Schwechat: A unique city in a unique position

Schwechat is a small city in Eastern Austria, directly adjoined to Vienna, Austria's capitol city. Only about 16.000 people are living within the city limits, but more then 18.000 work there – both numbers are rapidly increasing. The city is a "4-modal international transport hub" and it's outstanding location factors make Schwechat unique and promise good perspectives for the future.

The major assets are:

- Schwechat is Vienna's Airport City and an important transport hub in Austria and Central Europe, and the transport-infrastructure is still expanded,
- a rich industrial tradition and presence, as well as extensive service-oriented activities
- high quality of life in garden-city-like neighbourhoods,
- good primary and secondary schools, modern administration,
- extensive sports and leisure facilities and green areas, including a national park,
- local taxes make it one of Austria's wealthiest communities,
- there is political willingness to lay the foundation for a successful future development

An important measure in the strategy for the future is "eSchwechat.at – Schwechats Municipial Information Society Initiative (IST)" with the aim to develop the City "from transport hub to knowledge hub".

1.1 Geographic and geopolitical position

No matter from which scale you look at it, Schwechat is in a "central strategic position", situated

- geographically in the "Center of Central Europe",
- very close to the borderline between "old" and "new" European-Union-member-countries, the former line of the "iron curtain" 'that divided Europe into "West" and "East" and now opens new perspectives and opportunities,
- in the "Center of Centrope", a "Europaen Cross-Border-Region" that consists of parts of Austria, Hungary, Czechia and Slovakia
- between Vienna and Bratislava, the capital cities of Austria and Slovakia, that are only 60 km apart from each other,
- connecting Vienna and Vienna International Airport,
- being a regional center for the surrounding communities.

Vienna International Airport makes Schwechat "Austrias Gateway to the World".





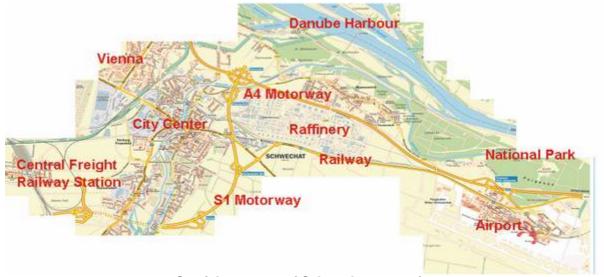


1.2 Spatial structure of the City of Schwechat

From an urban planning point of view there is an amazingly rich mixture of activities on an area of only 44 km², and even more amazing is that "it works" and high-quality-housing areas are just side-by-side with economic activities and transport infrastructures.

Just to mention some of the major spatial structures:

- City center with shops, schools and administrative buildings
- Housing areas with "garden-city-like" structures
- Vienna International Airport (about 17 million passengers / year)
- Motorways A4 (from Vienna to Bratislava and Budapest) and S1 (part of "Vienna motorway ring), being part of major Trans-European-Infrastructure-networks
- Commuter railway line S7 as well as CAT City Airport-Train
- Central Freight Railyard
- OMV oil-refinery and Borealis plastic production
- Schwechat Brewery
- Several mills
- Danube harbour (on Vienna territory, but immediately at the city limits)
- Danube wetlands National Park
- Rivers Schwechat and Liesing as core elements of a system of green and park areas



Spatial structure of Schwechat - overview

Most of the elements have as well local as regional, some also international importance – the following sketch of the structure was created by the team of an ISOCARP-Urban-Task-Force:

Spatial levels of importance: International importance

- Airport, Refinery
- TEN road network

Regional importance

- Airport, refinery, harbour
- A4, S1, B10, B9

Local importance

- Airport, refinery, harbour
- A4, S1, B10, B9
- railway station
- city centre
- national park, golf course



Sketch of Structure as seen by UTF-Team

1.3 Planned expansions of Infrastructure

Even if Schwechat already is THE transport hub in Central Europe, there are some infrastructure-projects that will even improve it's position.

The most important projects are:

- "Skylink" and Office-Park at Vienna International Airport (steps towards "Airport City", under construction)
- 3rd runway at Vienna International Airport (EIA going on)
- Motorway S1 extension northward across the River Danube
- direct connection of the airport to the international / high-speed-rail-network (in context with Vienna central railway station)
- Austria's largest motorway service area in Rannersdorf (under construction)
- B 14 new road by-pass in the western part of the town



"Sky-Link" and Officepark at Vienna International Airport (currently under construction)

2 eSchwechat.at – Schwechats Municipial Information Society Initiative (IST)

2.1 Everything is great! Why act?

Looking at the situation Schwechat is in one could ask:

Why not just continue with "business as usual"?

The airport is expanding continuously and creates more jobs, this brings more local taxes to the municipality, and the other projects bring some challenges to deal with it in terms of environmental impacts and noise, but also strengthen the strategic position of Schwechat. So at the moment it looks like that even without too much activity by the municipality itself the development is very favourably for Schwechat.

The political leaders as well as the administration of the municipality see the current position much more as a chance and challenge for the future then as a "soft pillow to rest on", and so the City of Schwechat with it's "4-modal-transport hub" lauched a municipial Information-Society-Technology-Intiative (IST): eSchwechat.at is a five year (2005 – 2009) municipial Information Society Initiative with the goal to develop the City of Schwechat, Vienna's Airport City, from a transport hub to a knowledge hub.

As Hannes Fazekas, the mayor of Schwechat and Member of Austrian parliament says: "Even a town so well economically provided for as Schwechat has to think about its future. Of course, an airport, a refinery or a brewery are in no way blessings that every municipal administration can boast – Schwechat then is not at all badly off. Nevertheless, time cannot pass without us having to adapt, and the age of the Information Society has long been a reality: on the small scale – mobile phones, PCs and digital television – as on the large scale, with digital airport communication systems, electronic industrial management systems or virtual town administration.

And out of this grow new forms of competition. In future, to set up businesses, one will not only require land and financial backing, but also broadband access, wireless networks, detailed transport information and much more. New enterprises will be established where there are optimised basic conditions for development, such as technology centres, first rate research and training institutions and access to business capital. Families will also want to settle where, alongside attractive apartments and sufficient employment opportunities, there is, for example, the infrastructure for computer supported teleworking, places where it is possible to look after the elderly and ill with the help of developments of remote medical treatment, that taxis ordered by mobile phone automatically know where to go and there where modern training and development facilities for children and adults is a reality, and much more besides."

2.2 eSchwechat.at – idea and aims

eSchwechat.at is a **five year programme (2005-2009)** established by the <u>Municipality of Schwechat</u> to build up a communal Information Society with the following **aims**:



- Integrating Information and Communication Technology (ICT) as a means of supporting every area of life in which it seems possible and worthwhile: education and training, work and economy, leisure, public administration, health and care facilities, to name but a few examples.
- The establishment of an internationally recognised High-Tech Location Schwechat in the field of ICT focussing on eHealthcare / eHomecare.
- Development and testing of innovative ICT systems on location with emphasis on eHealthcare / eHomecare.
- Improving the numbers of ICT firms settling in Schwechat, improved stimulation for the establishment of business as well as targeted growth support for ready established ICT firms, coupled to strengthened internationalisation.
- Creation of new, well paid jobs.
- Influx of people.
- Improved education and training of the Schwechat population.
- The **integration of** otherwise **disadvantaged people** (such as the elderly and those with disabilities).
- The **democratisation of ICT** and equal opportunities: Everyone should have access to all the important information they need for work and education.

2.3 Background

Work has been done to turn Schwechat into a High-Tech ICT location since as far back as 2002.

At that time, there were plans by the municipality to establish a technically oriented university of applied sciences. At the same time, a consortium was set up to find an optimal location for a technology centre within the ICT branch. In summer 2002, all those involved decided to combine these two projects. After the negative decision of the FH (University of Applied sciences) council for Schwechat in late 2002, the municipality charged the company "Innovation Consultancy" with establishing an institute of the Vienna University of Technology in Schwechat.

Summer 2003 saw a partnership sealed between the Schwechat municipality, Innovation Consultancy and Raiffeisen evolution project development to inaugurate a new building in the Concorde Business Park as concorde technology center schwechat (concorde.tcs). After the installation of danubetec.net system by Innovation Consultancy (who run the technology centre) and the arrival of the RISE (Research Industrial Software Engineering) research group, a spin-off of the Vienna University of Technology, concorde.tcs was officially opened in November 2003. As part of this event, there was also the first presentation of the eSchwechat.at idea. The main idea behind this presentation was the creation of an "external town system" around the "internal technology centre system".

At the beginning of 2004 a new department of RISE was founded, Innovating Towns (INTO), which deals with the development of Information Society Technologies in Schwechat. In addition, as part of the brief from the municipality to develop new economic incentives for ICT businesses looking to move to Schwechat, they came up with much valuable input for the later eSchwechat.at programme.

In April 2004, there followed the first ICT location marketing activities with the start of a series of events, match.IT! (Matchmaking Austrian and international ICT companies), and talk.IT! (Information and discussion events on the latest ICT themes). Their professed aim: to position Schwechat as a meeting point for international ICT companies with special focus on

Central and Eastern Europe. Due to the success of the initial event match.IT! "Austria/Slovakia", there were further events until the end of 2004 - match.IT! "IT-Security" and "Automotive IT / Traffic Telematics" as well as talk.IT! "Software Patent Guidelines". 2004 also saw partnerships sealed between concorde.tcs and technology centres in Sweden (ComSoft International, Haninge and Solna), Italy (BIC – Sviluppo Italia Friuli Venezia Giulia, Trieste) and Slovenia (Tehnološki park Ljubljana and Štajerski tehnološki park, Maribor) as well as with the university of applied sciences FH campus Vienna. Alongside expansion of the RISE R&D group, several new firms moved to concorde.tcs. The first half of 2005 was used for broad preparation work for eSchwechat.at, which was officially kicked off in August with the project management being handed over to Innovation Consultancy.

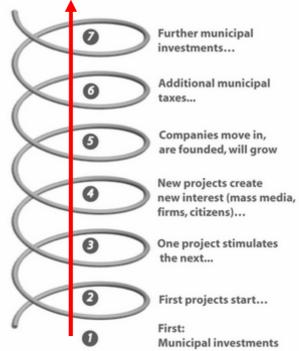
The emphasis here was on planning for the creation of an Early Stage Investment Company for founding ICT companies in Schwechat, preparation work for the airNET Schwechat project as well as starting a collaboration between Schwechat and the city of Vantaa (Finland) and between the two technology centres Technopolis Vantaa and concorde.tcs. For marketing Schwechat as an ICT location, the following events were put with great success: match.IT! "Equity", "Open Source" and "Wireless" as well as talk.IT! "ICT Location Austria" and "Hotspots in IT – Finland, Canada, Sweden". In addition, IT Forum Schwechat was brought into being as a think tank and marketing platform for the Austrian ICT economy.

2.4 Win-Win-Strategy, creating an "upwind spiral"

eSchwechat.at is a programme which – analogous with the model projects eTampere (Finland) und Ronneby 2003 (Sweden) – is conceived as a win-win situation, that is advantageous for all.

The idea behind this is to achieve a snow-ball effect:

- We start off with communal investment, used to launch the first projects, which one would be unable to realise with purely private financial sources. With this, a primary aim is to create attractive basic conditions for both the population and for businesses at the location, for example in education and training, research and development or a physical data network.
- These initial projects bring about public interest, with the regional and national media as with businesses and the population of Schwechat and its surroundings. The expanded basic conditions smooth the way for further successful projects, which grow to incorporate the establishment of new businesses and to make existing companies from outside move to Schwechat. "One project stimulates the next..."
- When the new businesses move to Schwechat and create new jobs, this brings more people to live there. The municipality will now, with greater tax income, be in a position to invest in further in improving the basic conditions. And so the snow-ball picks up momentum, an "upwind spiral" can be generated.



Win-Win-strategy creating and "upwind spiral"



2.5 Budget

The Municipality of Schwechat envisages a communal investment of an average of around EUR 1 million per year over five years for the realisation of eSchwechat.at. This sum will be used to implement the important, impulse giving measures and projects.

eSchwechat.at is also negotiating private investment from local business (Industry, service providers, banks etc) as well as national and international (EU) funding.

2.6 Projects

eSchwechat.at launched several projects and initiatives, most of them are still on the way, i.e.

- airNET Schwecaht
- Early Stage investment company to support founding businesses
- Several school-projects (co-operations, new Technical High School, ...)
- Vocational Training
- Town Twinning to strengthen internationalisation

One of the major activities was the foundation of a non-university research institute called CEIT – Central European Institute of Technology:

2.7 Key project CEIT – Central European Institute of Technology

The CEIT project aims at building up a **top quality research facility in Schwechat** which focuses on Central Europe with different education possibilities in ICT and management.

Under the auspices of an operational company offering initial financial support, nowadays owned by the Municipality of Schwechat for 100 %, new research institutes with the best prospects for the future will be brought in.

Things were kicked off in April 2006 with two R&D groups: **CEIT RALTEC** and **CEIT ALANOVA**.

CEIT RALTEC deals with the themes of *eHealthcare* and **eHomecare**, **rehabilitation and Assited Living Technologies**.

Part of CEIT ALANOVA's work is the development of modern planning technologies for towns and regions linked with Information Society Technologies with emphasis on sustainability and protection of the environment.

The research themes are on the one hand visionary and oriented towards the basics, on the other set up in such a way as to be practical and conform to the market.

Alongside its work in research, CEIT is also active in the fields of education and further training.

CEIT is establishing an integrated education system within ICT including business management and entrepreneurship (setting up and running businesses).

The first step was done by the creation of an extra occupational technical highschool for Information Technology (Höhere Technische Lehranstalt für Berufstätige für Informationstechnologie) in form of evening classes.

Next step is the establishment of the CEIT University of Cooperative Education for Business Informatics and Logistics (starting in October 2007), Informatics, Systems Engineering and Business Administration (starting in October 2008) enabling the students to graduate with a Bachelor degree.

Parallel postgraduate single seminars as well as courses for PhD students and others from the world of science and business who are interested are offered.

Within the Research & Development field of CEIT diploma theses and dissertations are possible and – in cooperation with national and international universities – finally lead to MSc and Dr (PhD) accreditation.

CEIT is designed for Central Europe and appeals particularly researchers and students from this part of Europe. There are also actions, however, for links with experts from other ICT centres, such as those in Finland, Sweden, Canada, the USA or India.

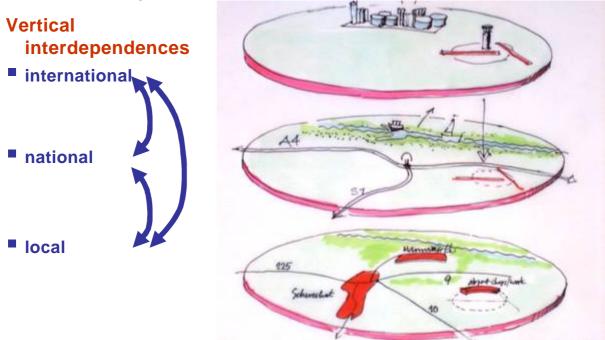
Through being coupled to the Early Stage Holding Company project as well to concorde technology center schwechat (concorde.tcs), CEIT will bring about spin-off foundations and require further new businesses at the location.

3 Challenges from a planners point of view

Schwechat like every other municipality has a wide range of tasks to fulfil and the interests of people living and working here are widespread.

Of course there are a lot of other activities going on in Schwechat, not only eSchwechat.at, but as an integrated strategy it as a very important initiative for the municipality.

The special challenge in Schwechat due to it's special situation is that all projects and activities touch all spatial levels – all local activities play a role in the international connection, almost all efforts on international level influence the national, regional and local level and vice versa, as the following sketch from ISOCARP Urban Task Force in June 2007 shows:



All spatial levels are interlinked and interdependent in Schwechat (Source: ISOCARP UTF 2007)

4 Resumé and Perspectives

Although eSchwechat.at is only one project amongst others, it is a key initiative for the future of Schwechat, and it is an amazing initiative of a small city with only 16.000 inhabitants.

Hannes Fazekas, Mayor of Schwechat, sums up:

"Implementing projects in Information and Communication Technology makes demands for training, research and the transfer of technologies, that means communication between those who develop the technology and those who make that technology implementable and economically worthwhile. Projects like these require getting those who live in the town on board – the people of all age groups and economic means, those representing all interests, the educational establishments, health facilities and administration.

This was why the five year eSchwechat.at programme was conceived.

eSchwechat.at is a strategy that embraces all areas one might think of. eSchwechat.at is a concept for the present and the future that will guarantee the ability to remain economically competitive and increase in value going forward – with it guaranteeing the quality of life of people living here.

Let's work together for our future, it's what we all want.

5 Sources and Links

Municipality of Schwechat: www.schwechat.gv.at eSchwechat.at: http://www.eschwechat.at/

CEIT - Central European Institute of Technology: www.ceit.at

eTampere (Finland): http://www.etampere.fi

Ronneby 2003 (Sweden): http://www.ronneby.se/projekt/default.asp?page=73