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Analysis of regional spatial planning and decision making strategies and their impact on land use in the urban fringe

Leipzig case study

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Abstract

This report focuses on regional spatial planning and decision-making strategies impacting the land use development in the urban region of Leipzig-Halle with particular focus on the fringe (peri-urban area). Descriptions of the region's development over time and of the German planning system are included in order to contextualise findings.

The research objectives of the report are to assess (1) how regional development is viewed by regional actors/stakeholders, (2) what spatial planning and decision-making strategies impact the urban fringe and (3) why and how strategies are adopted, developed and implemented locally. These objectives were addressed by drawing on qualitative methods, documentary analysis and interviews.

The findings show that stakeholders view urban sprawl, land conversion and uncontrolled spatial development as a problem, though with differing emphases. New development, most of them argue, is to be approached prudently. The urban fringe should primarily be reserved for recreation, leisure, tourism and agriculture instead of further enlarging residential and commercial areas that sprawled around the core cities since 1990. Results of the documentary analysis give an insight into the heterogeneity of spatial planning strategies. They convey that - while the overall number of spatial planning strategies impacting the Leipzig-Halle urban fringe is considerable - there is a gap regarding formal, legally-specified strategies. Instead, informal and governance strategies play a greater role. The adoption and development of strategies is subject to legal obligations, the availability of funding (in particular follow-up financing), and problem perceptions regarding regional development. Diverse spatial planning strategies add up to an overarching strategic approach to deal with the simultaneousness of urban growth and shrinkage in the Leipzig-Halle region. By Carmen Aalbers





Classification of results/outputs:

For the purpose of integrating the results of this deliverable into the PLUREL Explorer dissemination platform as fact sheets and associated documentation please classify the results in relation to spatial scale; DPSIR framework; land use issues; output indicators and knowledge type.

Spatial scale for results: Regional, national, European	regional
DPSIR framework: Driver, Pressure, State, Impact, Response	response
Land use issues covered: Housing, Traffic, Agriculture, Natural area, Water, Tourism/recreation	Housing development, transportation, natural areas, water, tourism/recreation
Scenario sensitivity: Are the products/outputs sensitive to Module 1 scenarios?	Yes Different requirements regarding spatial planning instruments and governance in the respective scenarios
Output indicators: Socio-economic & environmental external constraints; Land Use structure; RUR Metabolism; ECO-system integrity; Ecosystem Services; Socio-economic assessment Criteria; Decisions	-
Knowledge type: Narrative storylines; Response functions; GIS-based maps; Tables or charts; Handbooks	Tables and charts, qualitative (interview- generated) data
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Introduction

Objectives of PLUREL case studies

This report is one of the PLUREL case study reports on 'Governance and Spatial Planning Strategies' in six European urban regions: Warsaw, Montpellier, Manchester, Leipzig, Koper and Haaglanden. An outside comparison is also made to Hangzhou, China. Each of the research teams in cooperation with regional authorities have studied the unique governance and planning strategies in their region. As well as the official policies, their results and outcomes, and the influence of a wider range of actors have been analyzed. This analysis forms the basis for an assessment of the different regional strategies in terms of their physical, political, social and economic structures and dynamics. The case studies are being used by other Modules of the PLUREL project, to inform the modeling and policy analysis. Finally the different strategies and their assessment will be disseminated through good practice guidance handbooks and workshops in 2010.

Urban fringe land use issues

In order to bring in real-world experience to the Module 3 research, the regional stakeholders in each of the case studies identified four major issues related to land use:

- land pressure due to housing and business development in the urban fringe
- agriculture in the urban fringe under pressure
- high value nature areas in the urban fringe at risk
- integration of leisure and tourism activity in the urban fringe

Strategies: about actors and their means of influence

The many actors - policy makers and other stakeholders — respond to these issues not only through formal policies but through coalitions, resources, rules and discourses. The focus on 'strategies' includes this wider view of 'a deliberate course of actions that an actor has made/makes, comprising a succession of decisions and actions to achieve goals, objectives'. The strategies identified in the case study reports concern governance and spatial planning — including for instance the patrimonial structure of farming in France, the experiments in partnerships in the UK, or the re-invention of Warsaw as a global city.

Methodology and content based on a Joint Analytical Framework

The case study work follows a common 'Joint Analytical Framework' (JAF) that was developed on the basis of research proposals from the national research teams and consultations. The report first describes the urban region, following the boundaries of the administrative unit concerned (Stadsgewest, Agglomération, etc.). It summarizes the land use history, the actual land use situation and major strategic issues for each of the case study regions. Second, the official government and spatial planning system is described. A third chapter describes a number of planning and governance strategies in more detail, uncovering the interactions between the different actors involved, what matters to them, and how they influence the urban rural interactions and the fringe. For some strategies this might be done ex-ante, for other ex-post. The effects in terms of sustainable development of the urban fringe is the subject of the second round of case study reports and developed in cooperation with the other PLUREL modules.

Definition of the urban fringe

A central notion to the concept of 'urban fringe' is the location in the periphery of the built-up urban area. The wording 'peri-urban area', of French origin (*peri-urbain*) can also be used. It can be either an area that at the outer limits (seen from the urban perspective, motivating the word 'fringe') extends into larger (open land) arable or green areas, as in Warsaw, Koper and Hangzhou; or it can also expand into the urban fabric of a new city or agglomeration, such as in Haaglanden, Manchester or Leipzig. This definition of the urban fringe is a spatial physical definition that is workable for all case study areas. The functional definition of a 'rural-urban region' can be based on employment patterns or a one-hour journey time from urban centers. For more densely populated areas of Europe the fringe territory can then extend right across larger agglomerations.



There are several dynamics, i.e. developments resulting from the urban influence that especially characterize the urban fringe in economic, social terms but also environmental terms:

- recreational initiatives and land uses by urban dwellers;
- increased traffic flows to and from the urban area:
- overflow of urban uses and infrastructure that are incompatible with high density residence because of air pollution, noise, safety risks, or planned outside the urban area because of lower land prices, such as water storage, car dumpsites, waste disposal, residence of urban workers or urban rich, motor cross sites.

A distinctive feature is that the urban fringe is not considered by its own intrinsic values but merely as a solution to urban problems and as a cheap source of land. At times it is seen as a location of great contrasts, housing both very wealthy and very deprived communities. PLUREL was financed by the European Commission because several FP5 research projects requested attention for the urban fringe as an area with specific qualities and issues and often divided over several administrative areas. The case studies research the attempts of 6 European regions in the sustainable development of their urban fringes and they identify a new kind of policy agenda.

Responses to the urban fringe agenda

Ideally the urban fringe should become an area of high quality with a more independent role then only that of a spill over area. Past attempts to draw a juridical line between the urban areas and their green surroundings - like by the former Dutch Minister for Housing and Spatial Development, Jan Pronk - can be seen as an effort to realize this and to contain for instance the financial pressure of urban land markets. There are various possible approaches: to assign the fringe and green infrastructure the status of a municipality, or to assign land ownership and stewardship to a community land trust. More sustainable development of the urban fringe into an area of high quality environment that serves the residents of both urban, fringe and rural areas is a concern of all regional authorities involved in PLUREL - the governance forms and spatial planning strategies contributing to this are in the focus of the following case study.



Land use and spatial development in the region and turning points

By Dagmar Haase

1.1 Location and geographical conditions

The city region of Leipzig covers a total administrative area of about 4386 km², the city itself about 298 km². Leipzig, the administrative and functional centre of the region comprises a very compact morphological form. It is the centre of the Leipzig-Halle agglomeration, a densely populated urban region of central eastern Germany. The entire region has about 2 million inhabitants, the city today around 500,000 inhabitants at a rate of 1.65 compared to almost 8.5 inhabitants per m² in 1900 with further decreasing tendency (Breuste et al., 1998).

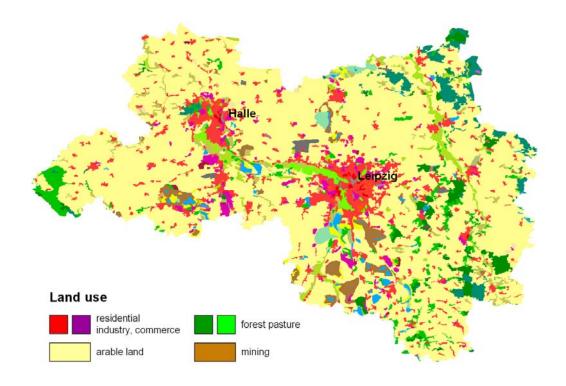


Figure 1. The rural-to-urban region and the city of Leipzig

The city constitutes a polycentric urban area together with the city of Halle situated in the neighbouring state Saxony-Anhalt (Usbeck, 2001). Leipzig is surrounded by two rings of small towns, each constituted by five small cities. The inner ring forms Leipzig's suburbia, whereas the outer one has a rather rural character (Usbeck, 2001). The city area comprises a system of urban neighbourhoods grouped around the historic centre and part of its suburban areas. In 1999 Leipzig has been able to annex most of its suburban surroundings with a change of the municipal boundaries reconfiguring the city's boundaries closer to a functioning unit (City of Leipzig, 2007a). The historic centre is a relatively small area surrounded by a belt of Gründerzeit housing areas and further by housing areas dating back to the inter-war time. The developments of GDR times are standardised prefabricated buildings on the edge of the city, called *Plattenbausiedlungen*.



Only few of these estates have been built in the inner city on sites where older housing had been demolished (Schmidt et al., 2005). As building for owner occupation was inhibited in the GDR era no significant suburbanisation developed. Only 15% of the housing stock has been built since the unification (Schmidt et al., 2005). Most of this building activity was situated on the edges of the city and split into single family housing and apartment blocs (Nuissl and Rink, 2005).

Leipzig is situated in the Leipzig Lowlands characterised by the Pleistocene morphology of loess-covered ground moraine terraces (90-170m a.s.l.) and integrated loamy floodplains. The region is characterised by a great diversity of flora and fauna as well as landscapes in form of floodplain and riparian forests, grassy wetlands or alluvial terraces (Breuste et al., 1998). These forests are of major importance for the ecology of the city, as they remained a kind of 'encapsulated countryside' in the urban agglomeration up to this day (forest stands of *Fraxino-Ulmetum allietosum* and *Querco-Carpinetum*; Müller and Zäumer, 1992).

Leipzig's surroundings belong to the most productive agricultural areas in Germany. Since 1990, they face a fundamental change of the former large-scale industrial agriculture into the market economy and agrarian policy of the EU (Haase and Nuissl, 2007; Haase and Döhler-Behzadi, 2007).

1.2 History of land use

Early times

Leipzig was first mentioned in the 9th century as the settlement of 'Lipsia'. This settlement was favourably situated in the fertile central German loess region and at the crossing point of 2 major commercial and trade ways, the via regia (East - West) and the via imperii (North – South). This place promoted several development pushing phases from the beginning. In 1165, Leipzig acquired the municipal law. In 1409, the absorption of refugees from Prague's Husitian movement led to the foundation in Leipzig of one of Germany's oldest universities. Consequently, Leipzig became an intellectual centre in Saxony and Germany. In 1497, the emperor Maximilian established the Leipzig fair on the basis of the two already existing markets. This privilege was one of the main factors for the medieval development of the city and its rising regional and national importance. In 1700, Leipzig became the trade centre between East and West Europe giving place to a dense over-regional transport network. By that time, in the 18th century, the town was a "big city" in Germany which held about 30,000 inhabitants. Since then commerce and trade became the main driving forces of change and development in Leipzig until the beginning of the industrial phase in the 19th century (Haase & Nuissl, 2007). In this late medieval and renaissance period as well as in the baroque phase most of the compact city centre, the old fair grounds and large gardens around the city had been created which are still today part of the urban greenery (e.g. Rosenthal, the Marian park, the Palm garden area or the green ring around the core city; Grundmann et al., 1996).

Industrialisation phase

At the very beginning of the industrialisation in the middle of the 19th century, Leipzig was the home of 70,000 inhabitants. It was one of the most significant transport nodes in Germany and became the "gateway to the East", a function that Leipzig today still owns. During the late 19th and the early 20th century, big industries developed quickly which were followed by manifold building activities: in the so called "*Wilhelminian era*" about 10,000 houses were built and the city expanded considerably. Large and compact residential housing estates around the core city were built-up that until recently formed the "inner city" (Buzar et al., 2007).

Along with this, mixed zones of industrial and residential use emerged holding simpler flats for craftsmen and workers in the Eastern and Western parts of the city. From the beginning of the so called "*Gründerzeit*" (period of promotorism) in 1871 up to the beginning of the First World War in 1914, the population expanded from 106,000 to



624,000 inhabitants. Most of the industrial outskirts were incorporated at this time which majorly contributed to the growth of the city (Nuissl & Rink, 2005).

During the First World War the population declined and afterwards increased again by 100,000 and reached more than 713,000 inhabitants in 1933. By this time, Leipzig was the fourth biggest German city and very densely populated. Leipzig was famous for its printing industry, publishing and book trade. Most of the world famous German editions such as Reclam, Brockhaus or Meyer had their seat in Leipzig at this time (Grundmann and Tzschaschel, 1996). The university got famous especially in the natural sciences and medicine. In this time, large parts of the urban infrastructure were established: allotments, additional railways and railway stations, gas provision, water supply and waster water channel network, canalisation, hospitals, bridges and bigger roads (Grundmann et al., 1996). After World War I the economic development was dominated by chemical industries and open cast lignite mining south to the city. Thus, Leipzig became a centre of a large industrial agglomeration.

Concerning its land use, in 1870 the city had largely preserved its mediaeval shape, and huge parts of the surrounding region (89%) were covered by arable land and forest. It was primarily the perimeter block development and the increase in industry that contributed to the subsequent growth of the city. Contrary to popular belief among local and regional representatives of nature conservation, the size of forest area in Leipzig (around 20 km²) has not changed much since 1870. On the other hand, the simultaneous decrease in alluvial and riparian wetlands and grassland has been considerable (-6.8 km²).

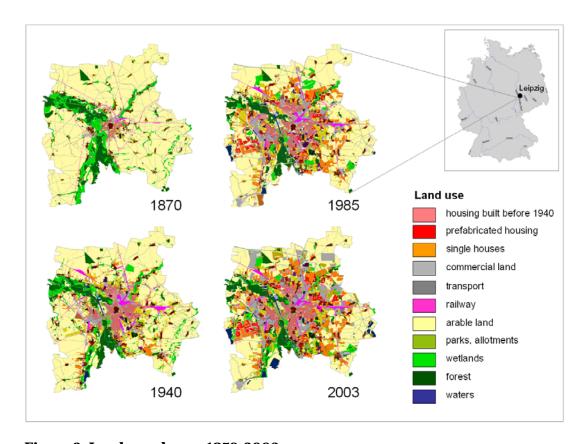


Figure 2. Land use change 1870-2003

Leipzig's development into a compact industrial city between 1870 and 1940 was accompanied by the embankment and canalisation of the rivers, causing the floodplains in the heart of the city to almost entirely disappear. Simultaneously, large allotment sites



(14 km²) emerged and on the former outskirts, the number of detached and semi-detached houses increased considerably in the 1920s and 1930s.

1.3 Recent land use developments

The socialist period after 1945

During World War II half of the historical town centre was destroyed including the oldest trade and industrial sites of Leipzig. Because of this destruction and evacuation measures the population decreased from 702,000 in 1939 to 584,000 in 1945. About 100,000 inhabitants lost their flat. After 1945, refugees from the former eastern territories of Germany entered the city, thus the number of inhabitants again increased up to 617,000 in 1950.

After the war, about 250 larger enterprises were incorporated into Soviet stock companies, among them engineering, mining, power and chemical industries. Later on, the socialist structural policy of the GDR succeeded in re-establishing an industrial agglomeration in and around Leipzig. In 1956, the GDP equalled pre-war amount and starting from this time, the Leipzig-agglomeration became the biggest industrial centre of the GDR except the capital Berlin.

After the war, a planning document of 1946 foresaw a nearly complete reconstruction of the historical city in order to maintain the compact structure of the city. But in the mid-1950s this plan had to give way to large prefabricated housing estates at the cities' periphery (Nuissl & Rink, 2005). Such large housing estates of prefabricated style and indoor bathroom and district heating system attracted above all young families to move in during the 1960-1980s. For example, between 1976 und 1988 one of the largest housing estates of the entire GDR, *Leipzig-Grünau*, was built in the western periphery of the city holding a capacity of 100,000 inhabitants. Simultaneously, the inner-city Wilhelminian era housing estates declined. In the late 1980s two thirds of these 100,000 flats were demolished. Thus, the housing conditions for many residents deteriorated. Due to disinvestment many flats in the inner city became empty since the 1970s, leading to 20,000 empty flats in 1989 (Nuissl & Rink, 2005).

In accordance to the housing sector, the industrial investments decreased since the 1960s. The industrial equipment became obsolete. This was at least one determinant for an increasing environmental pollution that really endangered the residents' health before the political change in 1989. Leipzig was constantly shrinking since 1960, the total population decreased from nearly 600,000 inhabitants in 1965 to 530,000 in 1989. Albeit of this population decline we detect an enormous residential vacancy and housing shortage. The accumulation of such grave political, housing and environmental conditions can be identified as one of the initial moments of the peaceful revolution in 1989 (cf. Nuissl & Rink, 2005).

Seen from a land use perspective, during the socialist period urban growth mainly took place along the transport axes (Motorway A14 and overland national roads, today "Bundesstraßen" such as B2). Apart from the further decrease in arable and open land due to this moderate strip development, land-use change also occurred due to reconstruction work in the inner city areas, where vacant lots and brownfields resulting from the devastations of World War II were partially redeveloped (Haase and Nuissl, 2007). In socialist times Leipzig was characterised by a nearly constantly shrinking population and expanded only moderately in spatial terms, with the major exception of the prefab housing estates. There, mostly population from decayed old-built-up areas and demolished villages in the open-cast lignite mining area south of Leipzig were resettled. Furthermore, in the 1980s we find a hesitant modernisation of the old built-up areas due to now intolerable conditions.



The post-socialist phase since 1989

In 1989/1990 Leipzig, as part of the former GDR, faced a societal and economic transition from socialist dictatorship to democracy and social market economy. Leipzig became part of the European Union and entered the international market without provisional regulations. Completely new structures such as property and rent market and free travel to the rest of Europe were introduced. Most of the large industrial and agricultural enterprises were closed, the soft coal production decreased dramatically and the chemical industry, one of the GDR-signboards, closed down. This industrial collapse led to a nearly complete deindustrialisation of the urban region and to an employees' release of 80-90%. In the first years after the German unification the unemployment rate increased rapidly up to almost 20%. Recently it dropped to 14% (City of Leipzig, 2007).

1.4 The story of growth

After 1989, the post-socialist transformation brought a period of heavy urban sprawl with the creation of several large shopping malls, commercial parks and residential neighbourhoods spreading, in this order, into Leipzig's peri-urban outskirts (suburban towns and villages; according to Nuissl and Rink, 2005; cf. Figure 3a).

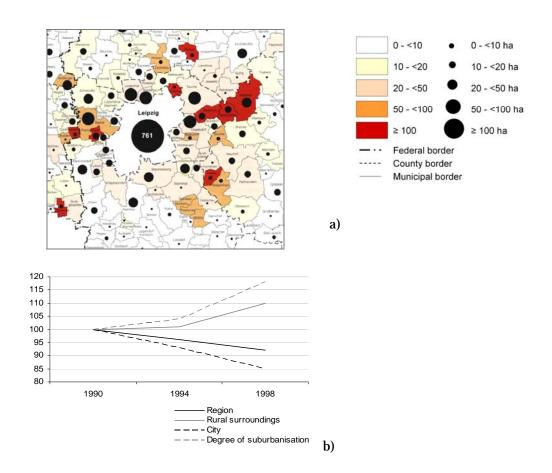


Figure 3a. Residential suburbanisation after 1990: net-migration 1994 (in 1000) and land conversion rates for residential purposes 1990-1995. 3b. Degree of suburbanisation in the region of Leipzig-Halle in the first decade after reunification 1990-1998. Index 1990 = 100.

Source: Herfert, 2001; Berkner et al., 2001



After the German border opened, thousands of investors flocked to the still existing GDR and endeavoured to gain a foothold on the emerging market. As far as the real estate, retail and housing sectors were concerned, their interest was mainly focused on the urban fringes of major urban centres such as Leipzig. After all, nowhere else could they expect not only sufficient demand for their goods and products but also find enough affordable land for immediate development. This influx of 'foreign' capital affected in particular Leipzig's suburbia since it was part of the biggest agglomeration, and thus part of the most promising regional market in eastern Germany (according to Nuissl and Rink, 2005).

The first suburban investments to arrive were shopping malls (Coles, 1997), soon to be followed by the costly but subsidised preparation of countless enterprise zones in almost every municipality, which, in the most fortunate cases, were accompanied by the erection of a few industrial plants. The development of residential areas generally started a little later. However, by the end of the first sprawl phase (and with only a short time-lag), new residential areas began to spread among the commercial sites and retail outlets that had already appeared, leading to a simultaneity of decay in the inner city and 'progress' in the surrounding areas (Doehler and Rink, 1996).

From 1992 onwards Leipzig experienced a period of severe, exponentially increasing residential suburbanisation, which had reached its peak by the end of 1996. This can largely be attributed to two push factors that diminished the quality of life in the inner city during that period. Large parts of the old housing stock remained in a bad condition (particularly due to the problem of restitution). As a result, there was still a lack of acceptable housing in the inner city and hence a considerable difference in rents for decent dwellings between the city and the outskirts. In particular, rents for the few refurbished homes were fairly high. In addition, although rapidly improving, the environmental quality was still low, especially in inner Leipzig.

The enormous residential sprawl between 1990 and 1997, however, was only possible because real estate companies and investment funds provided a growing supply of housing on the urban fringe, making suburbia a place where people could afford to instantly improve their standard of living. Thus it was mainly investors who not only organised but also financed and physically accomplished residential sprawl before the 'suburbanites' moved into the finished dwellings (according to Nuissl and Rink, 2005).

In Leipzig, the suburban dwellings are mostly still possessed by the investors, making home ownership a much rarer phenomenon than is usually the case in suburbia. A further specific was that the medium-sized apartment block became a typical suburban building. Several 'residential parks' characterised by this type of architecture were afflicted by a high rate of vacant housing from the outset. An exogenous driven urban sprawl can be noticed, which is rather different from the idea that the main driving force of urban sprawl is 'suburbanites' autonomously fulfilling their desire to live in detached housing in a non-urban environment. Compared to western Germany, the new eastern German Suburbia gained inhabitants from the urban core in all demographic groups including people who would not normally be thought of as 'typical suburbanites', such as people living alone and the elderly (Herfert, 1996; Nuissl and Rink, 2005). Moreover, the rate of owner occupation is comparatively low in Leipzig's suburbia.

In 1997, for the first time since 1989 the flow of residential suburbanisation no longer increased. Rather than occurring by chance, this development reflects the completion of the first round of transformational dynamics. Most importantly, temporary fiscal instruments and programmes, which had proved tremendously conducive to urban sprawl, were discontinued in the second half of the 1990s. In addition, municipal administrations and regional planning authorities managed to catch up on their planning backlog (according to Nuissl and Rink, 2005).

Hence, the planning regulations concerning the reduction of further land consumptionties became increasingly effective. Furthermore, the ongoing resolution of restitution claims enabled the effective renewal of inner city districts, which as of the mid-1990s greatly improved the inner-city environment as a whole and increased the supply of



refurbished inner-city dwellings (according to Nuissl and Rink, 2005). The successful (re-) establishment of a couple of shopping malls and one big department store (with another one currently under construction) in Leipzig's city centre contributed further to this resurgence of the inner city. Hence, the inner city became both a cheaper and a more attractive place to live and finding a good home there was no longer more difficult or expensive than in suburbia (Lütke-Daldrup, 2001).

Looking at the ratio between sealed and open land since 1870 we find Leipzig in a comfortable situation today compared a density peak of population before World War II. Although the open land is heterogeneously spread over the city area some of the more peripheral districts such as the prefabricated estates of Leipzig-Grünau hold >45m² of urban green per resident (Haase & Nuissl, 2007).

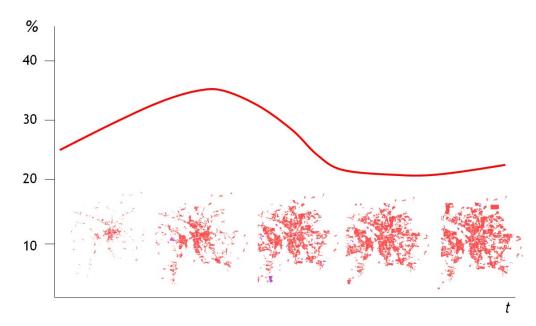


Figure 4. Total growth of settlement 1870–2003: $2818 \Rightarrow 14412$ hectare which means an annual growth rate: 87 hectare year-1

Since the late 1990s urban sprawl around Leipzig has abated considerably (Nuissl and Rink, 2005). After the incorporation of suburban townships in 1999, the administrative territory of Leipzig today covers almost 300 km² and a population of >500,000. Due to the integration of villages and smaller cities in the outskirts the population again increased to a number of 500,000 inhabitants after 2000.

As for other towns and cities in eastern Germany, the speed of urban sprawl in Leipzig after 1990 was almost unparalleled. Moreover, the sequence of different dynamics of urban sprawl regarded as normal was inverted, since commercial development preceded residential. Urban research has emphasised this reversal of 'suburbanisation phases' in eastern Germany (Herfert, 2006) as well as other post-socialist countries. However, seen from today's perspective, urban development and sprawl in eastern Germany after 1990 followed different dynamics in different functional sectors that were largely independent of one another. Today this juxtaposition of trends has developed into a situation where processes of urban sprawl, dissolution of the urban fabric and even reurbanisation are occurring almost simultaneously. Correspondingly, it is so far hardly possible to subsume the Leipzig case of urban sprawl into any of the models describing a generalised sequential pattern of urban development in Europe or the US (cf. Berg et al., 1982).



Policy response to growth and urban sprawl

The German governments' interest in tackling urban sprawl has recently grown. It committed itself to the aim of reducing the rate of conversion of land from natural or rural to urban land by around 75%, from a nationwide 100-120 ha per day today to 30 ha per day by 2020 (The federal government of Germany, 2002). Regarding the actual steps taken to support this idea, federal policy is only in its early stages and is meeting strong resistance from lobby groups and parts of the political system (Haase & Nuissl, 2007).

Planning authorities at the sub-national level have attempted to contain sprawl in the study region with increasing success — with regional planning being particularly important. They undertake their efforts mainly for two reasons. Firstly, urban development has been particularly dispersed and thus — from a planner's point of view — calls for intervention. Secondly, urban sprawl has proven itself to be a waste of economic resources, leading to an oversupply of developed land and housing. This is particularly salient because of a declining population in Eastern Germany (Haase & Nuissl, 2007).

The city of Leipzig is struggling in the existing boards of regional strategy for a limitation of developments in the surrounding municipalities whilst it has recently developed new residential neighbourhoods and industrial areas on its own periphery. Both these activities are prompted by the (fear of) negative impacts of urban sprawl on the city in terms of population loss, declining tax base, and withdrawal of consumer purchasing power (Haase & Nuissl, 2007). Leipzig's land preservation activities are largely focused on the city's floodplain forests which contain only a small share of the region's nondeveloped land. On the other hand, following the United Nations initiative for global sustainability started in Rio de Janeiro in 1992, Leipzig has launched a "local agenda 21" in order to gear its local development to the regulative idea of sustainability. The city established an agency which takes care of the city's compliance with this idea. However, this agency has only restricted financial and human resources at its disposal and has no legal and little political power. Moreover, its orientation to the sparing use of land does not tally with the city's decision-makers preoccupation with the promotion of economic development and growth (Haase & Nuissl, 2007). This creates a latent conflict which most recently became obvious with the establishment of a large car manufacturing plant on a huge greenfield site which should have been preserved according to the regional development plan.

Generally, the most prominent response of civil society to urban sprawl consists in suburban advocacy groups trying to prevent further growth in their locality. Several citizens' initiatives for building new (bypass) roads exist around Leipzig. Furthermore, nature preservation associations and environmentalist groups organise various political and lobbying activities in favour of a limitation of land development. These groups, however, must be seen as part of the broader environmentalist movement. Their existence can at best be partly attributed to particular environmental disturbances in the region. Moreover, when it came to the 'big' decisions, such as the aforementioned establishing of a car-manufacturer or the enlargement of the airport, they were largely unable to influence local policy. Yet, their national umbrella organisations have played a major part in prompting the contemporary debate about urban sprawl in Germany, reflecting the recognition of the environmental impacts of sprawl on a broader, i.e. national, scale.

1.5 Beyond growth: urban shrinkage

Leipzig is one of the cities in east Germany with the longest trajectories of "shrinkage": From the late 1960s, the city has experienced a continuous loss of population which saw an acceleration with the beginning of post-socialist transition in 1989: In a few years (1989-1998), the city lost about 100,000 inhabitants due to out-migration to western Germany and (strongly subsidised and thus "artificially" enforced) suburbanisation. The population decreased from 530,000 (1989) to 437,000 persons (1998). Leipzig belongs to those eastern German cities with the highest population losses. Simultaneously, the



industrial labour force decreased from 100,000 in 1989 to 15,000 persons in late 1994 (Doehler & Rink 1996, p. 267).

Both westward migration (mainly of younger, well-educated people) and the shock of post-transition economic recession led to a sharp decrease of fertility (so-called "lowest of low" birth rates which culminated in 1994 with 0.77 children per woman). As a result and additionally related to rising longevity, the urban population is ageing; this process is presumed to accelerate within the next decades (City of Leipzig 2006, p. 29, 23).

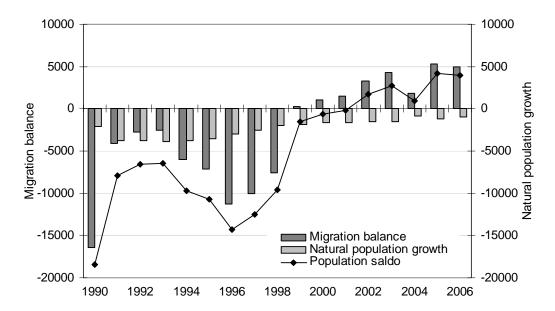


Figure 4. Changes of natural population growth, migration balance and total population balance 1990-2006

Population losses brought about increasing residential vacancies, a phenomenon which was set into the spotlight as a general eastern German challenge (Reference). In Leipzig, the maximum vacancy rate was reached in early 2000 with 62,500 vacant flats (20% of the total stock). In late 2005, vacancies could be reduced to 45,000 flats (14% of the total stock) — due to demolition, a further rise in households and a stabilisation of the population (City of Leipzig 2006, pp. 12-13). While housing vacancies were mostly concentrated in the old housing stock (pre-war or Wilhelminian style with 18% and 1919-1945 housing stock with 19%; City of Leipzig 2006, p. 13), large housing estates from the socialist period are increasingly affected.



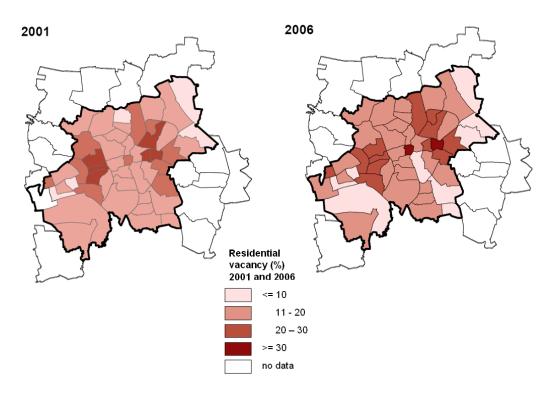


Figure 5. Residential vacancy in Leipzig

Vacancies will be a problem also in the future - even though at present household numbers still continue to rise up to 2015 and further demolition of surplus housing stock is planned. The spatial distribution of vacant housing stock is highly selective and unequal — while some (attractive) residential areas are quite "filled up", less attractive areas show vacancy rates of 30% and beyond. Demolition produces new spatial patterns such as urban structures with decreasing house density, demolished sites along the urban periphery, demolition corridors within a city or, respectively, 'housing islands'. The term "perforation" as a probable future of the city which was introduced by Leipzig urban planers (Lütke-Daldrup 2001) in the heydays of vacancy rates and is discussed since then (Haase, D. et al. 2008).

This has impacts on the technical infrastructure of the city, which was planned for a larger number of inhabitants. Technical infrastructure systems in the case study region were – and still are in some parts of the city – oversized.

The case of drinking water supply exemplifies the past and present developments of infrastructure-related problems. During GDR times drinking water demand increased due to better sanitary equipment of households and decreasing water prices as well as due to an increasing industrial demand. After the political change in 1989 drinking water demand sharply decreased because of (1) lots of industrial activities stopping abruptly and (2) rapidly increasing drinking water prices for households leading to a reduction of domestic drinking water demand. Today, drinking water demand in the city of Leipzig is approx. as high as in 1945 (89 liters per capita and day). Estimations of future trends in drinking water demand suggest that water demand per capita will slightly decrease due to water-saving technologies within households and a rising proportion of elderly people within the population.

After 1989, both residential and commercial areas expanded which led to a huge increase in infrastructure networks for drinking water and waste water. Within only 15 years, both networks were extended by about 50% compared to their length in 1991. Problems in maintaining the overall network occur due to vacancy and the above consumption trends.



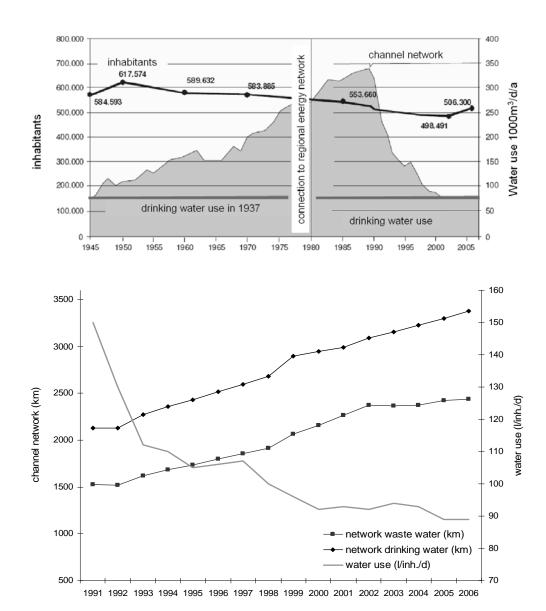


Figure 6. Changes of municipal water use, channel network for drinking and waste water after the political change 1990-2005/6

Source: Municipal Water Supply Company Leipzig, 2007, modified

From the late 1990s onwards, the population decline of Leipzig was stopped. On the one hand, an administrative reform in 1999 "brought back" a part of suburban out-migrants into the boundaries of the city. On the other hand, in-migration gains from adjacent and other eastern German regions led to an increase of population of 17,046 since 1999. Today, Leipzig's number of inhabitants stands at 506,578 (City of Leipzig 2007, p. 19). The suburban areas started to lose population (Herfert, 2006). According to the urban cyclic model of Berg et al. (1982), Leipzig entered the phase of reurbanisation. Mostly affected is the core city with the old built-up areas where the majority of in-migrants are going to (e.g. from 2000 to 2005 88% of all in-migrants). At the same time, out-migration from the city is nearly stopped: reurbanisation, in this sense, refers also to a rising city-mindedness or willingness to stay in the city of people (Haase et al. 2005). Reurbanisation is carried



mainly by younger age groups including students, apprentices but also young professionals (aged 18-35). This also reports of positive trends on the local labour market where in 2006 rose the number of employees liable for social insurance for the first time since 1990 (City of Leipzig 2007, p. 105). However, the "re-compaction" trends described above are still accompanied by on-going processes of western Germany-related out-migration and further suburbanisation (on a very low level). Their long-term stability stands yet out to be proved.

To cut a long story short: Leipzig's land development today provides a paradoxical situation: On the one hand, monitoring data implicate a continuous dynamic of suburban growth on a very low level (single and semi-detached houses, new 'housing parks') with adjacent partly over-dimensional commercial centres at the urban fringe. Simultaneously, Leipzig's suburban hinterland is faced, these days, with a rising loss of population and vacant, 'unsalable' housing stock. On the other hand, the core city shows tendencies of stabilisation and positive migration balances since the late 1990s after a decade of population losses.

Relating to the experiences of severe shrinkage processes and the very recent turnaround onto re-concentration and stabilisation, one of the major questions to be explored for the Leipzig urban region in future is how to steer sustainably land (use) development in both the core city (of Leipzig) and the surrounding municipalities. Furthermore, the social, economic and environmental costs and impacts of a compact city compared to a perforated or dispersed form have to be quantified and assessed in order to qualify and substantiate the strategic concept of the compact city.

Governing urban shrinkage

As consequence of the population decline, first of all the massive out-migration of the 1990s, East German cities are faced with emptying and devastated housing areas, unused infrastructure and patterns of perforation. Urban policy makers needed to find solutions to counteract the decline of the urban fabric and, what is more, to create urban livelihoods that "accept" shrinkage and partial vacancies as long-term phenomena. Thus, in the mid-1990s planners started to talk about urban reconstruction and renewal realizing that prevailing urban structures did not meet the needs of a shrinking development.

In this context, a set of nationally funded regeneration programmes had been developed. Whereas at the beginning of the 1990s "classical" programmes, such as the "Federal programme of urban renewal" (Bund-Länder-Programm Städtebauliche Erneuerung) or "WENG" (a programme dedicated to enhance the development of prefab housing estates) focussing on an encompassing approach of urban regeneration dominated. The situation changed after it became clear that these programmes supported the reconstruction of major parts of the eastern German inner cities. The problem of a simultaneous emptying of the housing stock remained. Thus in the late 1990s reconstructed old built-up housing stock and GDR-time large housing estate were affected by vacancies alike.

In a second phase urban planners initiated several new programmes to find answers on urban decline. Accordingly, "integrated programmes" as new approaches in urban regeneration, focussing not exclusively on the urban fabric but also on social, economic and ecologic aspects, were implemented. A couple of years ago, in 1999, the programme "Social City" (*in German:* Soziale Stadt) came into action which was designed to counteract the increasing social and spatial segregation as well as results of urban shrinkage and abandonment within eastern German cities. Currently, this programme supports 390 initiatives in 260 German cities (www.sozialestadt.de).

Set against this well developed planning background for urban areas in post-reunification Germany, it became however clear that urban shrinkage needs specific interventions such as e.g. the opportunity of massive demolition in order to be regulated or steered (www.exwost.de). Consequently, in particular for the eastern part of Germany the 'Federal Programme of Urban Restructuring and Demolition' had been implemented in 2002. To be primarily a reaction on the enormous vacancy rates the urban renewal programme predominantly focused on the consolidation of the housing market aiming at a balance between housing demand and supply which is nevertheless until recently not



really given: in many districts of Leipzig and other east German cities the supply of dwellings outweighs the demand by far. To support the municipal housing cooperatives as well as the private house owners being economically weakened by such high vacancies is a central goal of Urban Renewal East. In doing so, it focuses on either up-valuation of neighbourhoods or on dilapidation of vacant buildings.

In this vein, 3 different strategies had been implemented in the sample city of Leipzig by urban administration: one to foster urban regeneration, the already mentioned initiative "Social City" based on manifold sceneries of subsidies. Furthermore, the two EU-Programmes "URBAN II" and "EFRE" came to action but these are per se spatially updivided across the urban area of Leipzig. Thus "URBAN II" focuses on the regeneration of the Western part of the city being characterised by large housing estates of the Wilhelminian style, devastated factory buildings and large brownfields. Activities of "EFRE" and the "Social City" support urban regeneration in the Eastern part of the city. In terms of urban environment, ecology and local livelihoods both programmes fund mainly actions to improve the urban quality of life, to assist in cultural and social beliefs and support medium and small enterprises.

According to the individual problems of local districts caused by building structure and demographical composition, basically the two programmes "Neue Gründerzeit" (English: new promotorism) and the urban development strategy for prefab housing areas (e.g. Leipzig-Grünau 2020) focus on the old Wilhelminian housing areas on the one hand and the big prefabricated housing estates of the 70ies and 80ies on the other. These are the two dominant urban structure types of Central European compact cities such as Leipzig.

Since the year 2000 the percentage of empty properties fell and has reached 14% in 2006 (City of Leipzig, 2006). The improvement is partly due to population recovery and partly due to interventions in the stock such as regrouping of units and clearance. In addition the house building rate has declined since the year 1997 from 19 finished dwellings per 1000 inhabitants in 1997 to 1,8 units in 2005 (City of Leipzig, 2006, p.9). However, the housing economy continues to be at its profitability frontier at this quota (City of Leipzig, 2006).



2. Government institutions and –strategies

By Dagmar Haase, Anne Walde

After the re-unification in October 1990, the West German planning system was applied to the East German States with small modifications. Its key features are a strong legal framework and a decentralised decision-making structure. The division of power between the levels of government is set out in the constitutional law of 1949: The states produce their own planning and building laws and the federal government sets out overarching regulations. The full responsibility for development and land use control is at the local level ("kommunale Planungshoheit"), referring to and derived from the established self-government of communities ("kommunale Selbstverwaltung").

In other words, the planning system includes three or more levels of administration at which spatial planning is set out or implemented, though with different responsibilities and obligations. Certain issues, such as nature protection, are considered at all levels.

2.1 The federal level

Spatial planning matters at the federal level are dealt with by the Federal Ministry of Transport, Building and Urban Affairs (BMVBS) since 1973. They are specified in the Regional Comprehensive Planning Act ("Bundesraumordnungsgesetz" — ROG). The BMVBS coordinates planning departments and state-wide planning matters. It has a competence for planning law ("Bauplanungsrecht"), which sets the frame for local planning practice ("Bauleitplanung"). The correspondent, federal law is the "Baugesetzbuch", BauGB, 1987, which defines uniform planning standards throughout the country. The BMVBS does not have any competence of implementation in planning. Since 2007, the Ministry lays special emphasis on the integrated development of urban regions.

Plans and programmes are one instrument of planning which exists on all levels. The first programme on the federal level was the 'Bundesraumordnungsprogramm' (BROP), which was released in 1975. This first programme was a comprehensive evaluation of the spatial development in all German regions including monitoring, a prognosis and an evaluation of deficits. Later, the federal programmes were applied to areas of interest and therefore to specific departments only. Another instrument is the accounting of the government to the parliament via federal planning reports (Bundesraumordnungsberichte).

To improve communication, coordinated planning and the appraisal of work, an additional body was established between the federal level and the state level: the conference of ministers for comprehensive planning ("Ministerkonferenz für Raumordnung" - MKRO). It is composed of representatives of the states, the respective ministers for spatial planning, and the federal minister for planning. The MKRO has an advisory function but can also formulate resolutions. Among its achievements are a common terminology and basic planning concepts across the country. It also contributed to the federal spatial planning programmes and concepts 'Raumordnerisches Konzept für 'Raumordnungspolitischer den Aufbau in den neuen Ländern' (1991),Orientierungsrahmen' (1992) and 'Raumordnungspolitischer Handlungsrahmen' (1995), which were developed against the backdrop of the German unification. With the unification the extent of differences between the German States, especially in terms of economic development, rose sharply. The 1991 concept declares 12 urban regions in Eastern Germany as development zones, Leipzig-Halle being one of them. Development axes and a strong network between them should enable and support activities across the urban cores. Since 2006, a new framework for spatial development is in effect, which complements previous concepts. By focusing on the three topics economic growth and innovation, demographic change and public infrastructure and sustainable management



of resources, the new framework is oriented to putting the sustainability concept into practice (Sinz, 2006, p. 606).

Research is carried out at the national scale mainly in form of the "ExWoSt" – Experimental Housing and Urban Development, and so-called federal competitions (Bundeswettbewerbe; e.g. Bundeswettbewerb Stadtumbau Ost). Both programmes are coordinated by the BBR (Federal Office for Building and Regional Planning).

2.2 The state level ("Länder")

The German states have autonomy in relation to the details of the building policy. They have more of an executive function compared to the federal institutions (Vogt 1999). However, state laws (LPIG) have to conform to the federal framework. The states are obliged to set up state-wide comprehensive plans which contain broad statements on spatial development intentions and refer to population projections, settlement hierarchies and priority areas. Spatial planning at the state level is linked to municipal planning, to different policy fields and works with plans and programmes as their main instruments. These plans are called 'Landesentwickungspläne' or 'Landesentwicklungsprogramme' (state-wide spatial development plans or programmes). They have to be sufficiently detailed to serve as baseline for the lower tier of the planning administration.

In the larger states the implementation of the spatial planning laws is strengthened by an additional level: the planning regions. This extra level is absent in the smaller states. The case study region is situated in Saxony, where such an intermediate level of regions exists. Regional plans are developed at this level by regional planning associations together with the local authorities concerned. Regional plans have to conform to the state-wide spatial development plan and the guidelines of the Regional Comprehensive Planning Act (ROG). In those states without administrative regions, some form of regional planning exists nevertheless. Because regional planning isn't mandatory, there are considerable differences in terms of development and elaboration between the German states.

There are several means for the achievement of the aims specified in plans and programmes. Generally one can distinguish between (1) direct means, e.g. prohibitions, orders and land use dedication and (2) indirect means, e.g. infrastructure investments, general budgets (Allgemeinzuweisung), specific budgets (Zweckzuweisung), regional economic development programmes, etc.. EU funding is mainly distributed at the state level.

Funding programmes are devised and implemented at the state level, such as the FR Regio, the funding guideline for regional development in Saxony, for example.

2.3 The local level

The local authorities have the full responsibility for spatial planning and development control. This regulation is specified in the Planning and Building Code ("Baugesetzbuch"). The central instrument on the local level is the 'Bauleitplanung'. It specifies the use of two types of plans: the preparatory land use plan (FNP) and the development plan (BPlan). The preparatory land use plan is set up for the whole municipality and defines land-uses. The second plan, the development plan, is legally binding, conforms to the preparatory land use plan and determines the land use of plots. There are options for public participation in the final stages of the preparation of plans. Objections can be raised during a period of public inspection of the draft plan.

In urban areas of special interest or with particular needs ('Sanierungsgebiete' or 'Stadtumbaugebiete'), as e.g. deprived neighbourhoods, there is the possibility to set up development concepts for urban renewal ('Stadtsanierung' and/or 'Stadtumbau'). They



refer to guidelines such as the 'perforated city' and allow a planned demolition of buildings or contribute to neighbourhood renewal.

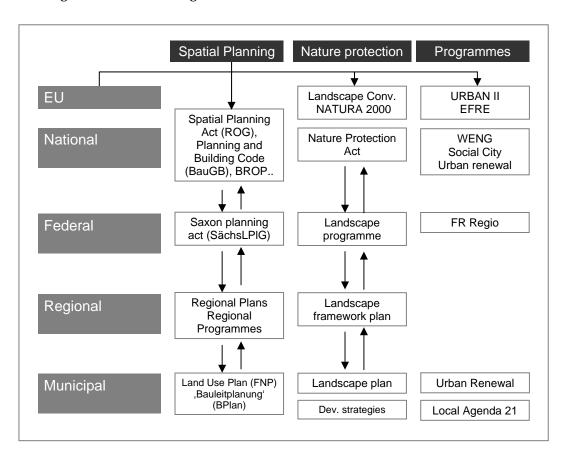


Figure 7. An overview over the planning system in the Leipzig region



3. Methodology

By Annette Sinn

3.1 Research objectives and methods

In order to investigate practitioners' views on land-use in the peri-urban area of Leipzig, as well as on correspondent spatial development aims and strategies, qualitative fieldwork was carried out in spring 2008. The objectives were (1) to provide insight into practitioners' problem perceptions and aims regarding land-use change, (2) to provide an inventory of planning and governance strategies for the urban fringe, and (3) to show how and why planning and governance strategies were adopted and further developed within networks of actors.

The methods used, documentary analysis and semi-standardised interviews, were complementary, to some extent: interview results could be used to complement the inventory of spatial planning strategies and the documentary analysis helped to contextualise interviews. Nevertheless, there are clear methodological focal points for each of the research objectives (see Tab. 2).

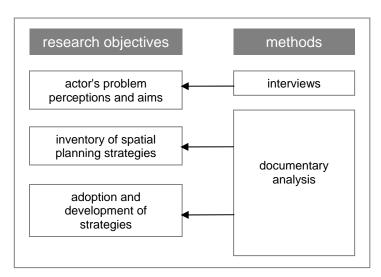


Table 1. Methodology

The research conducted is but one snapshot in time. While the overall spatial planning framework is relatively stable – the West German planning system was applied to East Germany with minor changes – planning strategies are subject to change. This became evident in the interviews, as interviewees referred to revisions of the regional plan, the Leipzig integrated development concept and administrative boundaries.

3. 2 Interviews

Stakeholders and planners were interviewed so as to learn about their perspectives on land-use development in the urban fringe. An interview guide, containing research topics and a set of generic questions (JAF, 2007, pp. 31-33), was used in all interviews (see appendix). Because of the diversity of interviewees with regard to areas of responsibility and focus on spatial planning, the guide was adapted for each interview.



Interviewees were recruited among Leipzig and Saxon planning practitioners and stakeholders. This included the representatives of a private planning agency, of non-profit organisations and civil servants from different levels of the government (JAF, 2007, p. 16). Nine interviews were carried out (see blue marking, table 3). Even though it would have been desirable, it was not possible to conduct an interview with a member of a civil initiative.

Through their profession and/or current occupation, all interviewees possess detailed knowledge of different fields of land-use planning or on spatial development in Saxony. The majority of interviewees were recruited from the team of PLUREL stakeholders, which meant that fieldwork could be started without much delay.

	Leipzig	Peri-urban area	Saxony
Private companies	Agency for Urban Projects Developers Construction firms	Commercial centres Leipzig Airport Leipziger fair Developers (Construction) firms	The Lausitz & Central German Mining Administration Company (LMBV) The Mid-German Lignite Company (MIBRAG)
Non profit	Public housing companies public services, water public services, energy	Aufbauwerk Region Leipzig Tourismus Verein Leipziger Land e.V. Economic Initiative Mid- Germany Metropolitan Region Saxon Triangle	Saxon Regional Conservation Foundation (LANU)
Government	Department of Town Planning Department of Urban Renewal and Housing	Regional Council Leipzig City of Schkeuditz (REK) City of Halle Green Ring Leipzig / Department of Protection of the Environment Regional Planning Association Western Saxony Muldental District (REK) Southern Leipzig Area (REK)	State Chamber of Saxony Saxon State Ministry of Environment and Agriculture (SMUL) Commission for comprehensive planning Saxony/Saxony-Anhalt (ROKO)
Civil initiatives		Farmers association Metropolitan Region Sachsen- dreieck	Wirtschafts-initiative Mittel- deutschland

Table 2. Overview over the interviewees' organisations

The selection of interviewees in Leipzig was aided by a framework for an actor inventory, which provides for a wide range of potential interviewees (JAF, 2007, p. 16). This framework was used to group interviewees (see tab. 3). A distinction between local (Leipzig), peri-urban and state (Saxon) actors was introduced.

Open, semi-standardised interviews were chosen as appropriate interviewing technique, as they allow for a maximum of freedom of the interviewees' responses (Mayring, 1996, p.



49), which would allow them to express their concerns and priorities regarding land-use development in the fringe.

In the interviews, the sequence of topics of the guide was not followed, so as to enable a fluent conversation and reduce thematic disruptions. Interviews took approx. an hour; they were mainly carried out at the interviewees' workplaces. Interviews were recorded and transcribed or, alternatively, minutes were prepared. The aim of the subsequent analysis was to reproduce the stakeholders' viewpoints in an as unbiased way as possible. The analysis involved the following steps: topics listed in the interview guide were identified in the transcripts/minutes and correspondent sections of text were assigned to them. Selected texts were coded inductively in order to refine topics and to create subcategories. The process was aided by a software tool for qualitative data analysis (MAXQDA). The results of fieldwork are presented in chapter 4.

3.3 Documentary analysis

In order to provide an inventory of planning strategies in the Leipzig peri-urban area, a range of planning and policy documents was consulted: plans, project reports and websites, policy-statements, the planning and building code and maps. The focus was on strategies to control and develop land-uses or to direct regional development. Only current strategies were considered. The inventory was completed via snowballing: strategies and measures mentioned during interviews were added to the overview (see appendix). Approx. 60 measures were compiled in this manner.

The following set of criteria was used to describe planning measures and strategies in more detail: spatial scales, aims, strategy-conception, actors involved, stakeholder and public participation, decision-making, implementation in Leipzig/results and, finally, links to land use change in the urban fringe (see appendix).

Documents referring to selected planning strategies were analysed in greater detail in order to analyse the adoption and implementation of strategies.



Land use in the Leipzig region: problem perceptions and aims

By Annette Sinn

The following sections address problem perceptions and aims of actors regarding land-use in the Leipzig region. Commonalities and differences between their viewpoints will be discussed. The analysis is based on interviews with Leipzig, regional/federal-state civil servants and planners as well as Leipzig public service providers (see chapter 3). It was attempted to represent the range of problem perceptions and aims expressed (see tables 4 and 5). The chronology of the statements does not follow the interviewees' priorities: Statements were grouped by actors and then structured thematically. It was assumed that different groups, planners and civil servants from the city / the urban fringe and public service providers, would have distinct views on land-use developments. The tables do not contain direct citations, but the authors' reduction and translation of the original statements of interviewees. The tables enable the reader to link statements and interviews.

4.1 Problem perceptions

Across all groups, land consumption, conversion or sprawl and uncontrolled development are considered a problem. There are critical voices on past funding schemes in all groups (e.g. home owners grant), which proved to be conducive to sprawl. Concerns about rising infrastructure costs are expressed by public service providers and regional/Saxon civil servants and planners as well. Differences exist with regard to further, related problems addressed as well as with regard to the explanations presented.

Leipzig planners and civil servants stress the following effects of urban sprawl: increased investments in the transportation system, development pressure on floodplains and the reduction of the Leipzig tax base. Furthermore, a coincidence of inner-city vacancy and residential development in the fringe is emphasised and commercial and industrial development in remote, ill-integrated areas is criticised. Explanations for residential sprawl and land consumption, according to interviewees, are inter-municipal competition for residents, insufficient opportunities for property-acquisition in the city, realisation of new residential development without much sense of proportion and decision-making at a time when the new spatial planning system was not yet fully functioning.

Leipzig public service providers address the mismatch between the population distribution and the location of infrastructure networks in particular. The consequences are a decreasing utilisation of existing networks and rising costs. The mismatch is seen to be partly due to unrealistic population scenarios as a baseline for residential development, subsidies for construction and urban renewal in spite of population decline and the rapid pace of land-conversion, which made it particularly difficult for service providers to cope. Furthermore, a sense of powerlessness of service providers regarding decisions of private property owners plays a role. While private property owners impact on the efficiency of service networks through decisions to convert and develop land or to let it go fallow, resultant costs affect all equally.

Civil servants at the regional and federal-state level emphasize the proximity of incompatible land-uses and the negligence of cultural, social and shopping facilities in parts of the new residential areas. Concerns about undesirable land-uses being pushed into the peri-urban region by both Halle and Leipzig are brought forward in one case (Schkeuditz, 43). Furthermore, the difficulties of maintaining public services in remote, rural areas are addressed.



Leipzig planners	- open space treated less carefully than in the city (dep. environmental protection, 60)		
and civil servants	high degrees of land consumption and urban sprawl (dep. town planning, 58)		
	huge potential for further residential development set out in preparatory land-use plans (dep. town planning, 60)		
	- residential development makes investments in transportation system necessary (dep. town planning, 118)		
	- development pressure on floodplain forests (dep. environmental protection, 100)		
	- reduction of the Leipzig tax base (dep. town planning, 68)		
	- development over and above local needs (dep. town planning, 52)		
	- coincidence of development with inner-city residential vacancy (dep. town planning, 104)		
	- development of enterprise and commercial zones in remote, ill-integrated locations (department for town planning, 62, 76, 98)		
	insufficient spatial compensation for commercial, industrial and transport development in the north of Leipzig (dep. environmental protection, 116)		
	relevant decisions taken at a time when regional planning was not yet functioning (bup, 24)		
	- competition between municipalities for residential areas (bup, 15)		
	- suburbanisation spurred by impossibility of acquiring property in the city (bup, 8)		
Public service	- mismatch of location of development and location of infrastructure networks (energy, 25)		
providers	- coincidence of subsidies for construction/renewal and population decline (water, 30)		
	- too little planning reliability due to rapid development (water, 24-30)		
	property owners impact on the efficiency of infrastructure networks, while the public bears the costs (water, 11)		
	- decrease of utilisation of existing pipes and power supply lines because of population decline and sprawl, increasing costs (water, 21, 22)		
	/		



Civil servants region/ state

- unregulated commercial development (regional council, 79)
- development of disproportionately large areas in small municipalities (regional council, 79)
- past coincidence of subsidies for construction and population decline (state chamber, 48-50)
- negligence of development of existing settlement structures (state chamber, 27)
- insufficient consideration of social infrastructure and transportation network in the course of new development (state chamber, 29)
- difficulties to maintain infrastructure under conditions of urban sprawl (regional council, 46, state chamber, 52)
- adjacency of compromising land-uses (regional council, 20)
- negligence of cultural, shopping facilities and social infrastructure in new residential areas (regional council, 56)
- new residential areas are currently becoming less attractive and are vulnerable in the mid-term (regional council, 56)
- settlement cores should be strengthened, as they provide rural areas with infrastructure and services/uncertainty of future service provision in rural areas (regional council, 46, 48)
- noise emission of airport service (Schkeuditz, 73)
- parts of floodplains already messed up through development (Schkeuditz, 35)
- undesired land-uses pushed into the Schkeuditz region (Schkeuditz, 43)
- impact of past, misguided residential development on urban structure up to this day (Schkeuditz, 80)
- suboptimal location decisions due to inter-municipal competition (Schkeuditz, 35)

Table 3. Land-use in the peri-urban area – problem perceptions



4.2 Aims

In the interviews, the description of spatial development aims and objectives for Leipzig was frequently followed by aims for the urban fringe. It makes sense to consider both, as aims for Leipzig and the urban fringe cannot be fully understood in isolation of one another.

Surprisingly perhaps, there is much agreement between interviewees' aims regarding land-use development of the overall Leipzig region. A task sharing between Leipzig and the peri-urban area is discernible: On the whole, housing and, in part, industrial/commercial development should be located in Leipzig, as opposed to the peri-urban area, which is to be retained for recreation, tourism and agriculture. A further commonality among all is the prudency, with which the idea of new industrial/commercial or residential development is addressed. This applies to the peri-urban area in particular - there are very clearly no calls for further, large-scale development here. Instead, the need for development control and the protection of landscapes is expressed. However, housing development in the city is scrutinised as well, as is evident in the statement of one interviewee, who argues in favour of clearer funding priorities in urban renewal.

Notwithstanding the above commonalities, some important differences remain. Firstly, the interviewees' aims differ in the degree of detail provided: While the peri-urban area is referred to an aggregate by some, a space where recreation and agriculture should be maintained and developed, others describe distinct development trajectories for subregions (e.g. commercial, industrial development of the north and recreational development of the south). Secondly, there are differences between interviewees' in the extent to which aims are balanced with additional considerations. The concerns of an interviewee, who aims to consolidate the development of industry and transportation with his notion of a liveable region, i.e. a region with places to live and spend leisure time, which includes protected landscapes, serves as an example (Schkeuditz, 35). Regional and Saxon civil servants and public service providers share concerns about the future financial viability of service provision - energy, water and social services.

Interviewees' aims are least congruent when it comes to the question of further industrial, commercial and residential development in the peri-urban area. Two positions brought forward by the interviewees' are (1) virtually no further residential and industrial/commercial development vs. (2) moderate residential, industrial and commercial development in the peri-urban area. While the first position is expressed by Leipzig civil servants, planners and public service providers, the second position is brought forward by civil servants in the peri-urban area and by regional planners.



	aims and objectives for the peri-urban area	aims and objectives for Leipzig
Leipzig planners and civil servants	 to protect and develop the countryside (dep. environmental protection, 32) to strengthen existing settlement structures (dep. environmental protection, 115-116) to preserve floodplains and water-bodies (dep. environmental protection, 32) to balance construction with actual housing demand, to decrease the designation of building land (dep. town planning, 118) to prevent land consumption and sprawl (dep. town planning, 58, 118) to retain residents through attractive surroundings (dep. environmental protection, 32) to develop recreational and touristic uses (dep. environmental protection, 115-116) to preserve agriculture and high-quality soils (dep. environmental protection, 44, 46) to compensate for the industrialised north (dep. environmental protection, 115-116) 	 to focus development in Leipzig (dep. town planning, 58) to direct commercial investors to central locations (dep. town planning, 98) to concentrate further residential construction in urban areas (dep. environmental protection, 118) to create an awareness of the qualities of urban living (asw, 62) to preserve/improve urban open spaces (dep. environmental protection, 60)
Public service providers	 no further expansion of settlements and industry/constriction of development to size of original settlements (water, 31-44) to increase areas of mixed land-use to allow for a maximum utilisation of infrastructure (energy, 65-67) 	 to define focal points of development in urban renewal, to deploy funds for urban renewal in a more focused way (water, 31-44) to promote the public use of open spaces (water, 31-44) to increase planning reliability (water, 31-44)



Civil servants region / state

- to preserve existent settlements from the core (state chamber, 55-61)
- to restrict the designation of new land for construction (state chamber, 55-61)
- to refrain from further messing with the floodplains (Schkeuditz, 35)
- to encourage economic development by emphasising regional location advantages (state chamber, 62-67)
- to develop airport and industry with a sense of proportion (Schkeuditz, 35)
- to avoid one-way economic development (Schkeuditz, 35)
- to enable residents to build a house (regional council, 54)
- to maintain a liveable region: to provide places to live besides places to work (Schkeuditz, 35)
- to maintain the functionality of settlements (state chamber, 55-61)
- to consolidate rural settlements in order to ensure the provision of public services in rural areas (regional council, 46)
- to keep general public services accessible/reachable for all (state chamber, 28, 55-61)
- to position the north as a recreation area in relation to the south (Schkeuditz,
 27)
- to link northern, city-centre and southern developments in the field of recreation (Schkeuditz, 27)

 to focus residential and industrial development in the metropolis, so that it remains competitive (regional council, 54)

Table 4. Land-use in the peri-urban area - aims



4.3 Conclusions

The interviewees' aims regarding land-use in the Leipzig region fit to the perceived deficiencies, land consumption, sprawl, uncontrolled development and rising infrastructure costs. The main proposals for the future development are increased development control and task sharing between Leipzig and the peri-urban area. This refers to directing commercial, industrial and residential land-uses to the city while reserving the peri-urban area for recreational and agricultural uses. There are differences between the interviewees' with regard to the spatial explicitness of land-use aims. While the peri-urban area is referred to as an aggregate by some, others describe distinct development trajectories for sub-regions. On the whole, the city/the peri-urban area binary may be too broad to define meaningful spatial development aims. Deliberations about balancing different spatial development aims in the fringe and increasing planning reliability in the city point to the complexity of setting and realising spatial development aims.



Regional spatial planning- and decision making strategies and their impact on the urban fringe

By Anne Walde, Dagmar Haase, Annette Sinn

5.1 Introduction

The following chapter offers the background for analysing the impact of different spatial planning and decision making strategies in the urban fringe. With the description of fourteen examples that were implemented in the case study region of Leipzig it shows the wide variety of possible strategies affecting urban growth and shrinkage. They thus contribute to an overarching strategy. For international comparison, planning strategies with various conceptions and of all different levels (European, national, federal, regional and local) and of all different types were chosen. Beyond this overview the chapter provides deeper insight into how strategies work and how they are implemented.

5.2 Strategies to cope with the simultaneous trends of growth and shrinkage

The description of the planning measures contributing to an overarching strategy is structured based on the following criteria:

- Aim/purpose to be able to measure the effectiveness by comparing the aim with the final output
- o Level to gain knowledge about the scale, involved actors and their interests
- Period to combine the strategy with the context (political, social, economic developments)
- Conception to analyse the mechanisms of the strategies
- Actors —to get information about decision making procedures and for the identification of interview partners
- Implementation in Leipzig/results in cases of strategies on a higher level than local
- Link to land use change in the urban fringe to explore connections (direct and indirect) between the strategies and the subject of research

1. URBAN II (Leipzig West)

Aim/purpose

URBAN II aims at sustainable development in troubled urban districts of the European Union.

Level

The programme is an initiative of the European Commission and funded by the European Regional Development Fund (ERDF). It is implemented on local level with special focus on single urban neighbourhoods.

Period

URBAN II started in the year 2000 and ended 2006.

Conception

Urban II programmes are based on the Guidelines drawn up by the Commission. They propose innovative development models for the economic and social regeneration of the areas concerned by financing projects to:



- improve living conditions, for example by renovating buildings and creating green areas;
- create jobs;
- integrate the less-favoured social classes into the education and training systems;
- develop environmentally friendly public transport systems;
- create effective energy management systems and make greater use of renewable energy;
- use of information technologies.

(http://ec.europa.eu/regional_policy/urban2/towns_prog_en.htm)

Actors

The main actor in the implementation of URBAN II was the City of Leipzig, Office for Urban Regeneration and Residential Development. The Saxon State Ministry for Home Affairs has been responsible for the management of the programme. The follow-up committee was composed of representatives of the local, regional and national authorities taking part in the programme, of economic and social partners and of NGOs. The central task of this committee was the selection of projects.

Implementation in Leipzig/results:

The programme has been implemented in the West of Leipzig, a former industrial working class area with high unemployment rate, high proportion of vacancy, industrial waste land and difficult property structures. In regard to the goal of enhancing residential qualities one of the main outputs has been land use change in the neighbourhood: 70,000 m² newly created or restored public green space, 6,600 m of newly built foot and cycle paths, more than 3,000 m² of reconstructed and revitalised area useable for building, 20,100 m² of revitalised or created public space for sports and leisure activities. Moreover, a number of other projects aiming at economic, social and ecological developments have been realised (www.urban-leipzig.de).

Link to land use change in the urban fringe

URBAN II relates to the subject of land use change in the urban fringe because its focus on counter suburbanisation processes by enhancement of the city and improving quality of life to retain residents in the city.

2. "Green Ring of Leipzig"

Aim/purpose

The initiative "Green Ring of Leipzig" wants to demonstrate the attractiveness of the Leipzig region and to redevelop and preserve the cultural landscape to be experienced by its citizens. The project serves as a forum for the coordination of different local actions. Moreover it guarantees the realization of plans that are only possible through the close collaboration of several local authorities. It is an important concern for the participants of the project to keep the identity of each single township (www.gruener-ring-leipzig.de).

Level

The "Green Ring of Leipzig" was established and implemented on the regional level.

Period

The project was initiated in 1996 with no defined time limit.

Conception

The main institution of the "Green Ring" initiative is the "city-surrounding-conference" that is organised twice a year. At the conference, mayors of participating communities coordinate their plans and decide on relevant issues on spatial planning. Beyond the conferences eight working groups focus on different topics such as landscape conservation, local recreation and tourism, management of waste land and compensations, environmental technology, water and agriculture.

Actors



Fourteen municipalities, two rural districts, NGOs, associations, private companies and single citizens are involved.

Implementation in Leipzig /results

The "Green Ring of Leipzig" is organised in 26 key projects. Regarding land use change, project number 8 "inter-communal land balance pool" is the most relevant. The participants in this project want to make use of the legal obligation for compensation in the process of land use change. The actors realise this aim with the regulation of compensation measures and the preference of land belonging to the "Green Ring".

Link to land use change in the urban fringe

Since it is part of project to regulate compensation for land use change in peri-urban regions, the strategy is directly linked to the development of land use in the urban fringe.

3. RE URBAN MOBIL

Aim/purpose

Aim of the project was the discussion of re-urbanisation potentials and obstacles of innercity residential areas. On the basis of this analysis, the participating actors developed instruments, incentives and strategies for an appropriate and long-term use of these areas taking into consideration changing demographic preconditions. Re-urbanisation is defined as a comprehensive, socially integrative strategy aiming at the development of the housing and living conditions in the entire core city, in particular its historical residential areas adjacent the city centres (www.re-urban.com).

Level

The project is supported by the European Commission (5th Framework Programme) while the implementation is coordinated on local level in certain quarters.

Period

Re Urban Mobil was realised between November 2002 and October 2005.

Conception

The research project involved thirteen partners from eight countries who developed reurbanisation strategies for four European cities (Léon, Leipzig, Ljubljana, Bologna). The project combined research and practice in an interdisciplinary team (with urban planners, architects, sociologists, economists, lawyers, researchers of environmental and demography studies). The general research question was evolved with the discussion of two case studies. The aim was to explore how existing conditions create the base for fulfilling the needs of changing user groups and their preferences. Moreover, the actors elaborated the necessary changes for the use of existing resources for reurbanisation. The researchers organised statistical data through a Geo-information System (GIS) as an "objective" background of knowledge. Another method was the qualitative interpretation of interviews with residents about their needs and preferences as well as with local experts. Finally, young architects worked on concrete project ideas for the creation of living places and neighbourhood areas in inner city areas.

Actors

Re Urban Mobil has been organised by scientists, local administration, NGOs and citizens

Implementation in Leipzig/results

For the case study two traditional workers' housing areas (Altlinendau and Neustadt-Neuschönefeld) have been analysed. The researchers developed a sustainable monitoring concept on the basis of the results and compiled a specific set of indicators for detailed description of reurbanisation.

Link to land use change in the urban fringe

Re Urban Mobil explored potentials for living in the inner city. Since the aim is to encounter urban sprawl in the urban fringe, it has a direct link to land use change in this area



4. Leipziger Selbstnutzer Programm: "city house project" (Leipzig programme for self use of houses)

Aim/purpose

The project aims at the creation of property in inner cities to encounter suburbanisation processes. The main idea is to settle down inhabitants in the long term. This strategy shall serve as a contribution to the restoration of the inner city to strengthen its position in the competition for residents against suburbs and surrounding areas (www.leipzig.de/imperia/md/content/64_stadterneuerung/Selbstnutzer_brosch_leb_st adt_web.pdf).

Level

"Stadthäuser" is a city-wide programme on local level.

Period

The project was launched in 2001 and is still ongoing.

Conception

The applied method of the project is the offer of advisory and organisational services to residents who are interested in the creation of property for their own use (one- or more-family houses). This includes marketing, networking, group moderation and consulting tasks, but no funding. The final realization of "self using" projects has to be organised by the participants themselves. The city of Leipzig is responsible for the organisation of public bus tours, exhibitions and meetings on the subject as well as giving information about possible funding and coordination of group processes.

Actors

Key actors in the project are the "Selbstnutzer association", the city of Leipzig who supports the programme in the organisation and citizens as the target group.

Implementation in Leipzig/results

Until the end of the year 2006, 274 households were supported in creation of own property to live in (www.leipzig.de/de/buerger/stadtentw/projekte/erneuerung/selbst).

Link to land use change in the urban fringe

The programme can be described as a direct strategy against suburbanisation because the aim is to retain residents, especially the most important target group - middle class families interested in building one-family houses.

5. LHASA (Large Housing Areas Stabilisation Action)

Aim/purpose

Central goal of LHASA is the evolution of stabilisation strategies for large housing areas. The project developed new interpretations and proposals for innovative procedures and significant project ideas for the low-cost management of demolition areas. Those areas constitute a new type of open land, including large housing area. (www.berlin.de/imperia/md/content/bamarzahnhellersdorf/wirtschaftsfoerderung/lhas a/en_post_housing_landscapes.pdf)

Level

LHASA was conceived as an INTERREG III B Project within the CADSES cooperation framework. It was implemented on local level with special focus on large housing areas.

Period

LHASA was enforced from 2004 until March 2006.

Conception

Seven partners from five countries worked on solutions for problems in large housing areas. The project considered not only housing aspects, it also paid attention to general social, economic and employment market concerns raised by such large housing areas. It was coordinated by the Regional Office Marzahn-Hellersdorf, Berlin (Bezirksamt



Marzahn-Hellersdorf) and combined research and practice (www.berlin.de/ba-marzahn-hellersdorf/wirtschaftsfoerderung/aktuell/lhasa_ ergebnisse.html).

Actors

Several scientists, local authorities and NGOs were involved in the project.

Implementation in Leipzig/results

The case study area in Leipzig was a large housing area at the urban fringe (Grünau). The study focused on the detailed examination of the consequences of the demolition of buildings and the shaping of the "post-housing landscapes" as a result of demolition. Furthermore the participants compiled a comprehensive analysis of the situation of the city district and organised the project section "post-housing landscape". Part of this section was an international workshop of an interdisciplinary team on collecting ideas and testing different methods on improving the quality of life in the area. The implementation phase was embedded in an accompanying programme with various activities organised in the city district. The results of the project have been presented at a final symposium.

Link to land use change in the urban fringe

The programme can be described as a direct strategy against suburbanisation. The aim is to retain residents, especially the most important target group - middle class families.

6. Social City Programme

Aim/purpose

The "Social city programme" shall counteract the widening socio-spatial rifts in the cities, to improve and stabilise living conditions and the economic background in the districts and to enhance living opportunities by imparting qualities, skills and knowledge. Moreover the project aims at strengthening the image of the area and the identification of residents with their quarter.

Level

The project is a federal-state-programme, co-funded by the EU and implemented on the local level. The main activities focus on certain districts.

Period

The programme started in 1999 and has no specified time limit.

Conception

The "Social City Programme" is an integrated project that combines urban planning with social aspects. Specific fields of activity are: employment, qualification and training, sports, education, housing market, integration of diverse social and ethnic groups, living environment and public space. For the management of coordination, cooperation and participation, different strategic activities facilitate the substantive fields of activities such as neighbourhood management, monitoring and evaluation.

Actors

The Programme integrates many different actors: authorities on national, federal and local level, NGOs and citizens.

Implementation in Leipzig/results

Project area is the East of Leipzig. The project is subdivided into "core projects" comprising several individual measures to give initial impetus in the "core zone" and to remedy the most serious deficiencies in the district. The main focus is on economic development to create jobs, e.g. the core project "Eisenbahnstraße Centre Development" that was organised by the chamber of industry and commerce to upgrade the traditional shopping street into a multi-functional area. Training courses for local business people and the development and implementation of revitalisation concepts were part of the project.

Link to land use change in the urban fringe



With the programme, the city of Leipzig wants to improve living conditions and quality of life in the district. Considering the fact that the strategy aims at encountering suburbanisation there is an indirect link to land use change in the urban fringe.

7. "Wasserstadt Leipzig" (Leipzig - City of Water)

Aim/purpose

The initiative "Wasserstadt Leipzig" was primarily launched to realise the connection between two canals (Elster-Saale and Karl-Heine). Besides this original aim the actors are involved with improving quality of life near urban water bodies.

Level

"Wasserstadt Leipzig" is a local initiative.

Period

The project officially started in 1999 with the foundation of the association "Wasser Stadt Leipzig".

Conception

Main activities within the project are the organisation of events (water festival, "city of water conference"), the cleaning of urban water bodies and the signage of water trails with school children.

Actors

"Wasser Stadt Leipzig" is a NGO. The members of the organisation are single citizens. The association is supported by several partners, e.g. the City of Leipzig, the "Green Ring of Leipzig", British Waterways and other organisations.

Link to land use change in the urban fringe

Enhance the landscape and environmental potential of the urban-rural region, improvement of the connectivity within the region and all related environmental flows, improvement of recreation function.

8. Landesentwicklungsplan Sachsen (State-wide development plan of Saxonia)

Aim/purpose

In general, state-wide development plans serve as frameworks to define development goals for the state area, to coordinate spatial planning and to find consensual regulations for diverging claims on land use. Furthermore, the state-wide development plan guarantees planning reliability and accelerates planning procedures. With the development plan of 2003 the Saxonian government wants to strengthen the state as an attractive place for living and for economic growth.

(www.sachsen.de/de/bf/staatsregierung/ministerien/smi/smi/1181.htm)

Level

The state-wide development plan is a federal (Länder) spatial planning instrument. The focus is on regional development.

Period

The first state-wide development plan of Saxonia came into force in 1994. Its latest modification took place in 2003.

Conception

The state-wide development plan is formulated by federal state authorities. In preparation for the planning process, the actors coordinate their interests in the Ministerial Conference on Regional Planning (nation state level). On federal level different actors participate in the process: all Saxonian ministries, regional planning associations and the public. Finally, the development plan is enacted by the state government after the adoption of the Saxonian parliament.

Actors



The main actors in the development of the plan are state authorities (Agency of Spatial Planning as part of the Saxonian Ministry of Home Affairs and subordinated: Regional Administrative Authority). Other associations are also integrated in the processes.

Implementation in Leipzig/results

The Saxonian development plan of 2003 identifies a number of goals:

- to overcome the process of declining population,
- to understand and form shrinkage as a process of qualitative change,
- to strengthen central places as economic locations and decrease their number by net optimisation,
- to improve the traffic infrastructure standards and the integration into transeuropean networks,
- to promote climate protection and preventative flood protection,
- to reduce land consumption by concentration of housing in central places,
- to create stable partnerships between urban and rural areas,
- to support regional initiatives for development and upgrade the region as a level of action on the basis of inter-communal cooperation.

Link to land use change in the urban fringe

Regional plans and land use plans have to be developed on the basis of the state development plan. Therefore, they must consider the formulated goals such as reduction of land consumption by concentration of housing in central places. Therefore the state-wide development plan is linked to the process of land use change.

9. Regionalplan Westsachsen (Regional plan of West Saxonia)

Aim/purpose

Regional plans formulate the policy and objectives of land use planning and the development of different regions. Their main issues are ecology, economy, infrastructure and housing estate. The plans have to be developed on the basis of state-wide development plans and with the analysis of current nature and landscape conditions. The regional plan aims at sustainable development of the region by coordination and governance of regional processes. Besides, this planning instrument provides the background for the management of competing interests on land use (economic, ecological, social).

(http://www.rpv-westsachsen.de)

I.evel

The plan is concerned with regional areas.

Period

Regional plans are conceived for a ten years time period. The regional plan of Western Saxonia came into effect in the year 2001.

Conception

The regional plan is compiled by the regional planning association represented by mayors, district administrators and other authorities. An elected planning board prepares the meetings and decisions for the assembly, discusses ideas and problems of the regional plan and assures the cooperation with other actors of regional planning.

Actors

The City of Leipzig and five rural districts are responsible for the regional plan of West Saxonia.

Implementation in Leipzig/Results

Improvement of quality of life of residents through increased accessibility and attractiveness of the Parthe floodplain.

Link to land use change in the urban fringe



The regional plan of West Saxonia is the central framework for the development of land use in the research region and is therefore to be considered with the urban fringe of Leipzig.

10. Flächennutzungsplan (Preparatory land use plan of Leipzig)

Aim/purpose

The preparatory land use plan is the general development plan for the whole community area on the subject of land use. It defines objectives for spatial planning in near and long term future. The plan refers to the superordinated development goals that are specified in planning strategies of the whole region and state. Moreover, the strategy serves as a medium between different planning levels to discover and overcome contradictions in planning on an early stage.

Level

The plan is implemented on local level.

Period

In Leipzig, the land use plan came into force in 1994.

Conception

The composition of the preparatory land use plan is a complex process. It includes the participation of different interest groups and institutions as well as neighbour communities and single citizens to guarantee an integrated and balanced result. Furthermore, the plan has to consider ecological impacts and must finally be approved by the higher authority.

Actors

The City of Leipzig has the responsibility to develop the preparatory land use plan. In the process, other institutions such as NGOs, associations with a special purpose, neighbour communities, the regional administrative authority (Regierungspräsidium) and the public have to be consulted.

Implementation in Leipzig/Results

The preparatory land use plan for Leipzig sets out desired and existent land-uses in the city of Leipzig.

Link to land use change in the urban fringe

With the FNP the city of Leipzig has the opportunity to define certain areas in the city as building site. By defining places that are attractive for investors who build one-family houses or shopping centres in the inner city instead of in the urban fringe the plan can influence processes of urban sprawl.

11. STEP Commerce and Trade – Stadtentwicklungsplan gewerbliche Bauflächen und Einzelhandel

Aim/purpose

STEP was launched to enhance economic development of the inner city, focusing retail trade. The goal of the strategy is to counteract the loss of purchasing power.

Level

STEP is a local project.

Period

The programme was developed in 1999 and is ongoing.

Conception

STEP classifies the city area in different categories according to demand of supply (A,B and C-centre and local supply centres). The plan formulates specified objectives for the development of inner city districts. Therefore the future potentials are assessed on the



basis of status analysis. The illustration in "centre passes" for each area serves as the background for concrete actions.

Actors

The main actors being involved in the project are the City of Leipzig and private companies.

Implementation in Leipzig/ Results

The STEP strengthens the inner city as a centre for commerce and trade.

Link to land use change in the urban fringe

SPEP can be described as a strategy against land use change in the urban fringe for economic reasons.

12. Regional Development Concept (REK) Schkeuditzer Kreuz

Aim/purpose

The REK aims to strengthen cross-border cooperation in regional planning between municipalities in the "Saalekreis" (in Saxony-Anhalt) and the city of Schkeuditz (in Saxony). It sets out development trajectories for the economy, transportation, public services & infrastructure and housing in a context of demographic change.

Level

The REK is a regional project.

Period

The concept was devised throughout 2006-2007 and is to be implemented.

Conception

The concept was devised by civil servants from both Saxony and Saxony-Anhalt, a planning agency, representatives of firms and enterprises, commercial chambers and civil society associations. The decision-making and work process is to be bottom-up. Decisions were made by a steering committee of civil servants from the adjoining municipalities.

Actors

Representatives of municipalities in Saxony and Saxony-Anhalt, private actors.

Implementation in Leipzig/ Results

The REK should currently be in its implementation phase. The realisation of projects is up to now impeded because of a lack of follow-up-financing.

Link to land use change in the urban fringe

The REK is located between Leipzig and Halle. It covers an area concerned with land-use change, in part. considerable transportation and housing development. It is a regional strategy which can contribute to urban growth as well as to the steering of urban growth.

13. Inter-municipal cooperation Parthenaue ("Parthe floodplain")

Aim/purpose

To protect the Parthe floodplain from development and to develop recreational uses.

Level

The inter-municipal cooperation is a regional strategy.

Period

The cooperation was established in 1992 and is ongoing.

Conception

The Parthenaue cooperation is a voluntary collaboration between three municipalities to protect and develop the floodplain area. It devises landscape plans for the floodplains, which are incorporated into the preparatory land use plans of the municipalities involved.

Actors



The municipalities Leipzig, Taucha and Borsdorf as formal members and the municipalities Brandis and Großpösna as loosely associated informal members. Further partners include farmers, tourism associations and the German association for environmental protection (Naturschutzbund Deutschland e.V.).

Implementation in Leipzig/ Results

The Parthenaue cooperation contributes to quality of life through increasing the attractiveness and accessibility of the floodplains for residents.

Link to land use change in the urban fringe

Strategy against urban growth in an sensitive natural landscape.

14. FR Regio – funding guideline for regional development

Aim/purpose

FR Regio funds can be used for (economic, housing, transportation...) development of functional regions.

Level

Regional strategy, devised at the level of the federal state.

Period

First round 1997-2005, second round 2006- ongoing.

Conception

The FR Regio provides funds for regional development with a focus on functional regions, inter-disciplinary approaches to regional development and strategies to cope with demographic change.

Actors

The FR Regio is on of the several funding schemes by the federal state. It is managed by the Saxon Ministry of the Interior, which decides about funding bids. Prior to that, bids are assorted and prioritised by the regional planning associatios. Networks of municipalities and/districts are eligible for funding.

Implementation in Leipzig/ Results

FR Regio funding is "behind" the regional development concepts in the Leipzig case study area – the REKs Schkeuditzer Kreuz, Muldentalkreis, Southern Leipzig area, the Green Ring.

Link to land use change in the urban fringe

Strategy with to steer and direct developments in the urban fringe and to constructively deal with inter-municipal competition for investments and residents.

5.3 Conclusions

The overview shows that heterogeneous strategies can be complementary and add up to an overall strategic approach to influence urban growth and shrinkage. The described strategies lay a focus on enhancing the quality of life in the city on the one hand and on steering or controlling developments in the urban fringe on the other. This includes protecting certain areas from development. While strategies are set out at the European, national, regional or local level, they are implemented regionally or locally.



A classification of spatial planning strategies in the Leipzig region

By Annette Sinn

In the following sections, spatial planning strategies in the Leipzig case study area will be classified and described. This helps to better understand which strategies are governance strategies and which are not and shows their legal commitment as well as their thematic and spatial focus. The focus is on current or currently completed strategies to control or develop land-uses (see appendix).

The four types of strategies prevalent in the case study area are formal and informal planning strategies, inter-municipal cooperation ("Zweckverbände") and funding. These differ in their legal commitment (see table 1). "Formal strategy" is used to describe legally specified planning procedures, such as spatial development and land-use plans. Formal strategies, as opposed to informal ones, may simply be an enactment of the law. They are obligatory, i.e. have to be put to practice and can be legally enforced. Informal strategies, in contrast, are largely voluntary. Inter-municipal cooperation, as a voluntary, contractual agreement, ranges in-between¹. Funding cuts across all other types of measures by creating incentives for collaboration in planning.

strategy-type	adoption is optional	implementation is optional / no legal enforcement
formal strategy		
informal strategy	X	X
inter-municipal cooperation	Х	
funding	X	X

Table 5. Legal commitment of strategies

In order to address the report's research objectives (i.e. What strategies are there and how are they adopted – see chapter 3), three additional criteria were used to describe spatial planning strategies: their spatial and thematic focus as well as the type of decision-making entailed.

6.1 Spatial focus

This section focuses on where strategies are implemented and how this relates to administrative boundaries.

Formal strategies

-

¹ There are voluntary and obligatory forms of inter-municipal cooperation for certain tasks, which are set out in state laws. For the examples discussed here, voluntary cooperation prevails.



The most important formal strategies are a hierarchic set of land-use and development plans, starting with the Spatial Development Plan at the federal state-level, plans for subregions, such as the Regional Plan Western Saxony and lignite plans, which are part of the latter, and finally, at the municipal level, Preparatory Land Use Plans and Master Plans. Plans are set up by the correspondent planning authorities and implemented in administrative areas: the federal state, the planning region and the local authority, respectively.

In some cases, land-use developments exceeding municipal boundaries are controlled by the Regional Council Leipzig via the regional planning procedure (ROV), the procedure concerning deviation from aims and the interdiction of plans and proposed developments. Spatial monitoring and the land register provide a baseline for development control at the supra-local level.

A minority of formal planning strategies is not implemented within administrative boundaries: the European Water Framework Directive, inter-municipal, spatial compensation and lignite plans. Here, strategy-implementation is organised along river catchment areas, municipal aggregates and post-mining landscapes or areas with specific requirements for spatial planning (LEP, 2003, p. G-5), respectively.

Informal Strategies

By their conception, planning strategies are organised around common land-use problems and/or funding opportunities. They either cut across administrative boundaries or apply to municipal aggregates. The REK (integrated regional development concepts) and ILEK (integrated rural development concepts) areas, for instance, should or do reflect spatial functional interrelations instead of administrative territories (Freistaat a, 2004, p. 21; Sächs. Umweltministerium, 2007). They, metaphorically speaking, fill the gap between regional and municipal plans.

Exceptions are strategies at the municipal level, such as integrated urban development concepts or the Leipzig based strategies Re-Urban, Water City Leipzig and the self-use programme for property owners, which are implemented within municipal boundaries.

Inter-municipal cooperation

Inter-municipal cooperation is a contractual agreement between two or more municipalities to collaboratively tackle land-use problems. The area covered by intermunicipal cooperation depends on the scope of land-use problems or shared development aims, such as the redevelopment of former mining areas or the establishment of enterprise zones. Generally, inter-municipal cooperation-areas are larger than municipalities and smaller than planning regions.

6.2 Thematic focus

Formal strategies

The majority of formal strategies - land-use plans, the land registry and spatial monitoring in particular — cover a broad range of themes and topics. The fact that landscape and nature conservation plans are incorporated into land-use plans at all levels further adds to this (Freistaat c, 2004, p. 12).

The Spatial Development Plan Saxony (LEP) coordinates land-use claims between the three lower administrative levels (federal state – administrative region – local authority) and between policy sectors (Freistaat c, 2004, p. 14). It addresses both planning procedures and outcomes, e.g. the improvement of quality of life and the natural environment, landscape conservation, settlement development, industry and business,



resource management, recreation and tourism, agriculture, among other issues (Freistaat b, 2003, p. I).

Regional plans aim to regulate land-use claims with regard to the built environment and open spaces (Freistaat Sachsen, 2004, p. 15). As opposed to the spatial development plan Saxony, which offers general planning guidance and development aims, the regional plan is spatially explicit, i.e. assigns land-uses to specific areas. It addresses population development, labour-market and settlement-development, open space, economic structure, technical infrastructure and protection of the environment (Reg. Planungsverband, 2001). The regional plan sets the frame for municipal planning, which 'translates' its aims into local land-uses and development aims (Freistaat c, 2004, p. 15).

Exceptions, informal strategies with a relatively narrow thematic focus, are the lignite plans (focus on specific – post-mining – areas), the European Water Framework Directive (focus on protection and improvement of water-bodies) and inter-municipal spatial compensation (focus on a procedure).

Instruments to ensure plan-implementation, by definition, do not have an original thematic focus (Freistaat c, 2004, pp. 31-35).

Informal strategies

The majority of spatial planning strategies relevant for the Leipzig peri-urban area, the integrated spatial development concepts, address diverse themes. By their conception, integrated concepts provide a holistic perspective on spatial development and link diverse policy sectors (www.landesentwicklung.sachsen.de, ILE. Htm). Integrated concepts exist for rural areas (ILEK), regions (REK) as well as for urban areas (SEKo, "städtebauliche Entwicklungskonzepte").

There are commonalities between the thematic focal points of REK and ILEK: Both typically focus on the (rural) economy, on issues such as environmental protection, leisure and quality of life, demographic change and settlements. The integrated *urban* development concepts address urban renewal as well as the development of centres and public spaces (e.g. INSEK Schkeuditz, STEP Leipzig).

A limited number of strategies have a more narrowly defined thematic conception. Examples are the Green Ring regional development concept, the Water City Leipzig, the self-use programme for property owners and the New Lakeland strategy.

Inter-municipal cooperation

As inter-municipal cooperation ("Zweckverbände") is based on shared land-use problems or spatial development aims, the thematic focus is fairly narrow. Inter-municipal cooperation organisations in the Leipzig region include "Neue Harth", the collaborative development of post-mining landscapes, "Parthenaue", "Kulkwitzer See" and "Witznitzer Seen" with an emphasis on tourism and recreation and "Böhlen-Lippendorf", the joint development and development of an enterprise zone.

6.3 Decision-making

Governance, a collaborative form of political decision-making, is increasingly linked to place. This is expressed by the terms *territorial* or *good urban governance*, for example (Le Galès, 1998; Sinning, 2006). Characteristics of governance are the cooperation of hierarchical, governmental and non-hierarchical, extra governmental institutions and organisations for political decision-making and the comparably weak role of the state in the process (Jessop, 1995, as cited in Le Galès, 1998, p. 495).



The three criteria to assess governance thus are (1) the inclusion of diverse local actors in political decision-making, (2) the integration of different, hierarchic (state) levels for decision-making and (3) the relatively weak role of state actors in the process.

Formal strategies

Decision-making for the two municipal land-use plans (preparatory land use plan and master plan) includes public and so called stakeholder participation, i.e. participation by authorities as well as other organisations with a public mandate (§ 4 BauGB). This includes adjacent local authorities (Eggers/Schüttelohr, 2005, p. 37); plans are finalised by planning departments and authorised by the city council. Members of the public and stakeholders then have a second option to comment on plans (Eggers/Schüttelohr, 2005, pp. 37-39). While the input of stakeholders is obligatory (Eggers/Schüttelohr, 2005, p. 37), public input is comparatively arbitrary and depends on the presence of informed residents with extra time on their hands.

Participation in decision-making for regional plans is similar: stakeholders and organisations with a public mandate comment on the plan, comments are considered, the plan is made available to the public and public statements can be issued within a certain period (Freistaat c, 2004, p. 16). A relevant stakeholder is the neighbouring federal state, Saxony-Anhalt. The Regional Development Plan is finalised by the Regional Planning Association Western Saxony and authorised by the regional council.

The Saxon government takes decisions on the spatial development plan Saxony. Since 2003, public participation in its preparation is realised through public events and options for statements (Freistaat a, 2007, p. 33).

Decision-making at the municipal level doesn't take place independently from what is happening at higher tiers of the planning administration. While local authorities take planning decisions concerning the municipal level, their scope of decision-making is limited by the spatial planning aims and principles set out in higher-tier plans (e.g. regional plan) (Freistaat b, 2003, p. 2) — i.e. lower-tier plans conform to higher-tier plans.

Decision-making for the other planning instruments – such as the regional planning procedure or the procedure concerning the deviation from aims or inter-municipal spatial compensation, for example – lies in the responsibility of the regional council or the planning authorities concerned; there is usually an element of public or stakeholder participation.

Informal strategies

Integrated concepts for regional and rural development (REKs, ILEKs) are set up by local authorities, districts and representatives of the economy, civil society and others. Decisions are made by committees composed of governmental and extra governmental actors. While authorities play a role in decision-making, it is less dominant than in the case of the preparation of land-use plans (see above). A similar procedure is followed by the "Water City Leipzig" association; decisions are taken by the association's managerial board.

Integrated urban development concepts are an exception, as they address areas within municipal boundaries and 'classic' avenues of decision-making remain important; i.e. the city councils decide.

Inter-municipal cooperation

Decisions are made by the participating local authorities; other stakeholders and members of the public may have a say.



Summary

Are the above planning strategies examples of territorial governance? In order to assess the question, it will be considered whether policy-making includes diverse local actors, integrates different, hierarchic levels of the state for decision-making and whether state actors have a comparatively weak role in the process.

While showing some characteristics of multi-level territorial governance, formal planning strategies, because of the dominant role of the state in decision-making and because of selective opportunities for participation, are no governance strategies. The same is true for inter-municipal cooperation, because ultimately state actors — the local authorities involved — take decisions.

The judgement is different for the majority of informal spatial planning strategies: Diverse extra governmental actors 'behind' integrated spatial development concepts (e.g. representatives of businesses and enterprises, civil and social initiatives, associations and others) are, to some extent at least, involved in decision-making in steering committees alongside governmental actors. Coordination between different levels of government for strategy formulation and implementation exists, but is less pronounced than is the case for planning instruments: Spatial planning strategies are not binding for municipal planning. Generally, their role is more that of a guiding framework. However, spatial planning strategies, generally, conform to the regional and Saxon spatial development plans. In short, spatial planning strategies are an example of multi-level, territorial governance because of collaborative decision-making procedures and integration with decision-making at lower and higher tiers of the planning administration; the question which actors get to participate in concept-preparation and implementation on which grounds remains open.

	particiaption of gov./extra-gov. actors	weak role of state actors	integration of different levels of the state	multi-level governance?
formal strategies	X		X	No
informal strategies	X	X (?)	X	(yes)
inter-municipal cooperation ("Zweckverbände")				no

Table 6. Decision-making and governance

6.4 Conclusions

Spatial planning strategies in the Leipzig peri-urban area differ with regard to implementaion areas, thematic focus and decision-making processes that led to their adoption. The broad conception of the majority of planning strategies — both formal and informal strategies - is noticeable. This can be explained by the fact that certain strategies play a role for negotiating land-use claims emanating from other policy sectors and that their purpose is to coordinate diverse interests.

Exceptions, i.e. strategies with a narrower thematic conception, include all forms of intermunicipal cooperation ("Zweckverbände"), which is based on common land-use problems



and development aims. Formal and informal strategies with a narrow thematic conception focus on the development of a specific type of area (e.g. post-mining landscape), topic (e.g. management of water-bodies) or procedure (e.g. spatial compensation), respectively.

Strategies are implemented within administrative boundaries or in areas reflecting common development aims or funding opportunities. There are differences between the strategy types in this respect: Most formal strategies are put into practice in administrative areas. Informal strategies are either implemented in municipalities or at an 'in-between'-level - above municipalities and below administrative regions. Intermunicipal cooperation, by definition, refers to municipal aggregates.

Does multi-level governance play a role in the urban fringe? The analysis shows that formal strategies and inter-municipal cooperation are based on traditional ("non-governance") forms of decision-making. Informal strategies, on the other hand, are prepared and implemented through multi-level governance or similar forms of decision-making. The actual degree of "governance" behind informal strategies cannot be assessed here. Further research on decision-making bodies is necessary in order to answer the question.



Adoption, development and impact of strategies

By Annette Sinn

This chapter is to set out the following aspects in greater detail: problem perceptions behind strategies, the circumstances and interactions in networks that led to their adoption and further development and the reaction of local authorities and others to them (JAF, 2007, p. 6). While it wasn't possible to resolve the last question, it is approached by discussing the judicial, thematic or financial impacts of strategies.

All of the above issues are described for one exemplary strategy for each of the four strategy-types: the Regional Plan Western Saxony as a formal strategy, the Regional Development Concept Schkeuditzer Kreuz as an informal strategy, the inter-municipal cooperation Parthenaue as an example of inter-municipal cooperation and the funding guideline for regional development (FR Regio) as an example of funding (see chapter 5).

7.1 Regional Plan Western Saxony

Problem perceptions

The Regional Plan Western Saxony aims to contribute to sustainable spatial development and to balance competing land-uses. Demographic change, the decline and ageing of the population are considered as major challenges because of resultant changes of the public infrastructure and decreasing efficiency of public services. Further problems include a one-sided economic structure and a lack of transportation infrastructure in the more remote, rural districts. Past ecological damage has an impact up to this day through the contamination of water-bodies and soils. Past and present land consumption led to a decrease of natural landscapes in Western Saxony (Reg. Planungsverband, 2008, p. 12).

Networks and interactions

Regional plans are prepared by regional planning associations and local authorities for each of the five Saxon planning regions (as specified in § 4, No. 1 SächsLPlG and §1, No. 2 ROG). Regional plans conform to the Saxon spatial development plan. The regional plan was last adjusted to the Saxon development plan in 2008.

The plan is prepared by the planning association's board and then authorised by the association's general assembly and by the upper planning department, Saxon Ministry of the Interior. Plan-preparation involves (1) comments by the public and by stakeholders on the draft plan, (2) a consideration of comments by the plan-making body and a revision of the plan, (3) another option for members of the public and stakeholders to comment and (4) consideration of the second round of input and completion of the plan (Freistaat c, 2004, p. 16).

The planning association's decision-making board is comprised of civil servants from Leipzig and the three² Western Saxon districts. Lignite plans, which form part of the regional plan, are devised by a special committee, - basically an extension of the planning association's board (Stadt Leipzig, 2008).

Stakeholders include (local) authorities, inter-municipal cooperation organisations affected by the plan, nature conversation associations and the neighbouring federal state Saxony-Anhalt (§ 6, No. 1 SächsLPlG).

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² Due to the current (2008) reform of districts in Saxony, the previous six Western Saxon districts were subsumed into three districts (Leipzig, Leipziger Land, Nordsachsen).



Impact on others

The regional development plan Western Saxony sets the frame for regional and local planning, including municipal plans and all kinds of informal strategies and intermunicipal cooperation. Municipal plans - preparatory land-use and development plans - conform to its broad aims and principles (Freistaat c, 2004, p. 15).

An evaluation of regional funding and development in Saxony proposes an improvement of links between the regional plan and regional development concepts as well as other regional planning strategies (Regioplan, 2005, p. 6).

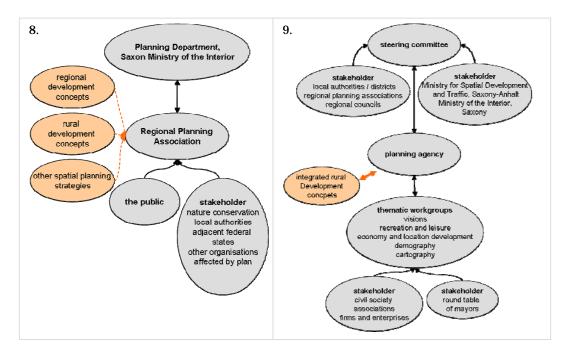


Figure 8. Network of actors, regional plan Western Saxony

Figure 9. Network of actors, regional development concept Schkeuditzer Kreuz

7.2 REK Schkeuditzer Kreuz

The regional development concept (REK) Schkeuditzer Kreuz covers an area of 514 km² west of Leipzig and south-east of Halle and traverses the border of the two federal states Saxony and Saxony-Anhalt (Usbeck/Landmann, 2007, p. 7). It was set up in the years 2006 - 2007.

Problem perceptions

A major problem identified in the REK is the inadequacy of regional development strategies between Saxony and Saxony-Anhalt. The challenges of planning for a region in two states with different judicial and funding regimes are emphasised. A further problem lies in the inequality of REK partners with regard to size and means of influence, which inhibits collaboration (Usbeck/Landmann, 2007, p. 11).



The Schkeuditz region promotes its image as a traffic hub. The decrease of the labour force and human resources leads to competitive disadvantages and threatens this image. The absence of a regional approach to the management of industrial and commercial sites is pointed out. Inter-municipal competition is a further problem in this respect. Finally, the fact that Schkeuditz isn't included in an influential strategy for regional economic development ("Metropolregion Sachsendreieck") is considered a drawback (Usbeck/Landmann, 2007, p. 12).

While the region gained from suburbanisation in the past, population decline and ageing as well as out-migration of women is increasingly becoming a problem. This threatens the efficiency of public infrastructure provision. Further problems are air and water pollution and contamination of soils, past, disproportionate residential development and a limitation of land for development because of protected areas (Usbeck/Landmann, 2007, p. 13).

The problems addressed further include environmental strains through intensive landuse, the insufficiency of tourism & recreation infrastructure and the lack of a market for regional products (Usbeck/Landmann, 2007, p. 14).

Networks and interactions

REKs are set out in the national and Saxon planning and building code as optional spatial development strategies (§ 13 ROG and § 19 SächsLPlG). By their conception, they are based on bottom-up decision-making processes (Freistaat c, 2004, p. 21). Regional development concepts are a prerequisite for funding from Saxon, national and European programmes.

The REK Schkeuditzer Kreuz aims to define regional perspectives shared by diverse actors (Usbeck/Landmann, 2007, p. 4). The concept was devised by civil servants from both Saxony and Saxony-Anhalt, a planning agency, representatives of firms and enterprises, commercial chambers and civil society associations in 2006-2007. A steering committee responsible for decision-making was composed mainly of civil servants from the diverse local and regional authorities (Usbeck/Landmann, 2007, p. 4).

The REK Schkeuditzer Kreuz was synchronised with integrated rural development concepts (ILEK) in the adjoining Saxony and Saxony-Anhalt: Delitzscher Land, Merseburg-Querfurt and Saalkreis (Usbeck/Landmann, 2007, p. 6).

Impact on others

As opposed to spatial development plans, the REKs' aren't mandatory for local authorities (Freistaat c, 2004, p. 21). Their impact on practice depends on the commitment of the participating parties and on the availability of follow-up financing: While REKs are a prerequisite for applying for regional funding (see chapter 6.4), there is no funding guarantee. The realisation of projects proposed in the REK Schkeuditzer Kreuz has so far been prevented by a lack of follow-up financing. Funding is particularly hard to obtain due to the Schkeuditz region's location in two states. The REK Schkeuditzer Kreuz thus seems to be an exception, as it is generally argued that REKs have an increasing practical impact because they are a prerequisite for funding (IÖR, 2008).



7.3 Inter-municipal cooperation ('Zweckverband') Parthenaue

The Parthenaue (= Parthe floodplain) cooperation includes the local authorities Leipzig, Taucha and Borsdorf as formal members. All are traversed by the Parthe river. Taucha and Borsdorf, two medium-sized municipalities, are located in the peri-urban area north and north-east of Leipzig.

Problem perceptions

The Parthenaue cooperation was established in 1992 as a way to protect the floodplain against development and to develop eco tourism.

Interactions and networks

The formal members, Leipzig, Taucha and Borsdorf, make decisions at the cooperation's general assembly. There is a loose cooperation with the nearby municipalities Brandis and Großpösna for the protection and management of water bodies. Other local and supra-local cooperation partners are farmers, tourism associations and the German association for environmental protection (Naturschutzbund Deutschland e.V.).

The Parthenaue cooperation's work is synchronised with the Green Ring, a strategy to develop green spaces in and around Leipzig. In 2008, the Parthenaue cooperation was actively involved in the project 'Zwischengrün' by Leipzig artists. Permanent and temporary art exhibitions were organised along the river to link existing parks and green spaces and to make them more attractive and accessible for residents (Zweckverband b, 2008).

Impact on others

The Parthenaue cooperation devises landscape plans for the floodplain area. These are incorporated into the preparatory land use plans of the local authorities involved.

It is attempted to draw residents to the area by a network of cycling paths and walking trails. The perhaps less tangible and long-term impacts of the Parthenaue cooperation are the preservation of landscapes and habitats. (Zweckverband a, 2008)



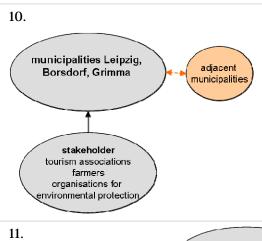
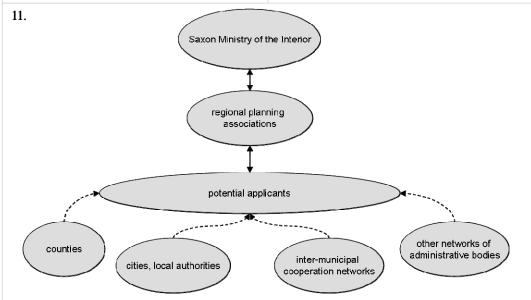


Figure 10. Network of actors, intermunicipal cooperation Parthenaue

Figure 11. Network of actors, funding guideline for regional development



7.4 FR Regio – funding guideline for regional development

Problem perceptions

The Saxon funding guideline for regional development (FR Regio), a tool to finance spatial planning strategies, lays an emphasis on an inter-disciplinary approaches to the development of functional regions (RL, p. 1). In the course of its last revision, inter-disciplinary approaches to spatial development were strengthened. The revised FR Regio targets pilot projects, also in cooperation with the national government (http://www.landesentwicklung.sachsen.de/903.htm, 13.08.08).

Interactions and networks

The recently revised FR Regio targets pilot projects and new, inter-municipal cooperation. It is managed by the Saxon Ministry of the Interior, which takes funding decisions (Richtlinie, 2006, p. 4), and by the regional planning associations, which



receive and prioritise bids. FR Regio funding can be complemented project-wise with other state, national or European programmes (Richtlinie, 2006, p. 4). Funding bids are brought forward by groups of municipalities agreeing to collaborate in regional development and/or by districts.

An evaluation of the FR Regio organisation and management suggests the following improvements: (1) development of links to other funding programmes and increased coordination between the three Saxon Ministries responsible for the management of (European) funding programmes (Ministries of the Interior, Economy and Labour, Environment and Agriculture), (2) strengthening of the role of regional planning associations, (3) development of "implementation areas" or "activity areas" which are to benefit from FR Regio funding (Richtlinie, 2006, p. 7).

Impact on others

The FR Regio impacts on local planning practice by directing spatial planning towards functional regions. Regional development restricted to administrative boundaries should remain the exception (evaluation, p. 14). FR Regio funding facilitates REK work processes and other forms of inter-municipal cooperation. Crucially, there is no guarantee for follow-up funding through FR Regio after REKs and other forms of inter-municipal cooperation have been set up (Richtlinie, 2006, pp. 1- 4).

7.5 Conclusions

The detailed description of exemplary strategies sheds some light on why and how (i.e. through which networks and interactions) strategies are adopted as well as on their impact on others. One assumption of the case study research was that there is a link between problem perceptions [of regional actors] and the adoption of regional planning strategies (JAF, 2007, p. 6). The above examples suggest a tentative relation: Formal spatial planning strategies, such as the Regional Plan Western Saxony, are adopted no matter what the scope of/perception of regional problems because it is a requirement by law to do so. Furthermore the availability of funding plays a role. The example of the REK Schkeuditzer Kreuz shows that the existence of FR Regio and other funding guidelines played a catalytic role in the process of concept preparation.

This chapter's results on how strategies are adopted fit to research findings discussed in the previous chapter: The regional plan Western Saxony, the inter-municipal cooperation Parthenaue and the FR Regio are no governance-strategies, as they are authorised solely by governmental actors/civil servants. REKs, by their conception, should be based on a bottom-up decision-making process by regional stakeholders and do, in principle, qualify as governance strategies. The example of the REK Schkeuditzer Kreuz shows that the actual degree of bottom-up very much depends on the organisation of REK partnerships and on the composition of decision-making committees in particular.

A communality of the four above strategies is their cross-linkage with other, similar strategies: While the regional plan links to upper- and lower-tier spatial plans, the Schkeuditz regional development concept is synchronised with the ILEKs in the adjoining Saxon and Saxon-Anhalt regions. The inter-municipal cooperation Parthenaue links to the overarching Green Ring strategy and funding programmes are, to some extent, combined project-wise.

The impact of the above strategies on municipalities and others varies. There is a difference with regard to legal commitment. The Regional Development plan has to be considered in municipal planning by law, regional development concepts don't. The practical relevance of REKs depends on follow-up financing and the commitment of the REK partnerships. The Parthenaue cooperation's agreements are binding for the formal



members. The FR Regio impacts on municipalities by providing incentives for innovative forms of inter-municipal cooperation. It affects regional planning associations by making it necessary to develop organisational structures for the management of funding bids.



8. Summary and outlook

Focusing on one of the seven PLUREL case-study regions, the Leipzig-Halle rural-tourban region (RUR), this report provides **contextual knowledge** on land-use and spatial planning by addressing the land-use history and the overall spatial planning system. Furthermore, a set of **research objectives** listed in the PLUREL Module 3 Analysis Framework are covered (JAF, 2007, p. 6):

What are the main planning and governance strategies influencing the urban fringe? How is the region's development perceived by different stakeholders? How and why are spatial planning strategies adopted and developed further, and what is their impact on other stakeholders?

The report aims to provide a basis for the next step in the Module's workflow, a sustainability assessment of planning and governance strategies.

The land-use history of Leipzig is closely linked to the economic development of the city. Large parts of the city's infrastructure were constructed in the 19th century, when industrialisation was increasing rapidly. The industrial base of Leipzig diversified through the establishment of chemical industries and opencast lignite mining in the urban fringe. Industrialisation was accompanied by population and urban growth in the form of block development, the establishment of industrial plants and enterprises and the embankment and canalisation of the rivers. The number of inhabitants reached its historical peak in 1939 with 702.000 persons. The Second World War led to a severe decrease of the Leipzig population. Parts of the city were destroyed. The socialist period following saw a further, continuous shrinkage of Leipzig's population. Leipzig, nevertheless, was re-established as one of the major industrial agglomerations within the GDR. Urban development during the socialist period concentrated on the development of transport axes and the establishment of pre-fabricated housing estates in the fringe. Intolerable housing conditions in the inner-city led to inert attempts to modernise the existing housing stock. This period was characterised by residential vacancy and, simultaneously, housing shortages due to the condition of parts of the housing stock. The political transition in 1989 was followed by a period of heavy urban sprawl, which manifested itself in the commercial, industrial and residential development, in this order, of the urban fringe. Paradoxically, sprawl was accompanied by a decrease of the population due to outmigration and a drop of birth rates. This contributed to a high level of residential vacancy in Leipzig. After 1997, residential suburbanisation abated, and since 2002, the population development of Leipzig is slightly positive due to in-migration. The present is characterised by the simultaneousness of urban sprawl, dissolution of the urban fabric and even re-urbanisation. Political attempts to contain urban sprawl are somewhat compromised by inter-municipal competition for residents, tax payers and consumers' purchasing power.

Policy responses to urban **shrinkage** have focused on urban regeneration at first, providing support for the reconstruction of major parts of inner cities in eastern Germany. These were superseded by the "integrated programmes", which aim to address social, economic and ecologic reasons for urban decline in addition to the amelioration of the built environment. Finally, the recognition that shrinkage needed specific forms of intervention led to programmes with a focus on urban renewal *and* the "directed" demolition of vacant buildings.

Urban sprawl, residential vacancy and population shrinkage can be seen as **main strategic issues** and thus challenges for spatial planning in the Leipzig-Halle case study area. Population shrinkage will remain on the agenda due to the ageing of the population. The same applies to **residential vacancy**, which is unevenly distributed within the existing housing stock and ranges at an average of 14% of the total stock. Leipzig's



suburban hinterland is increasingly affected by population losses and a partly vacant, unsalable housing stock.

The former west German **spatial planning system** was applied to the east German states with minor modifications. Institutions at the national level have a legislative and advisory function; they set out planning standards, guidelines and procedures nationally. The federal states have a legislative function with regard to details of building and construction and they prepare state spatial development plans which provide a baseline for regional and local planning. The federal states further manage or establish funding programmes. The larger federal states, such as Saxony, are further divided into planning regions. Regional plans are prepared by regional planning associations. Ultimately, the local authorities have a responsibility for spatial planning and development control. This includes the translation of national, state and regional planning principles and guidelines into local plans and concepts for urban renewal.

Two main research **methods** used were semi-standardised interviews and documentary analysis. Interviews with planners and stakeholders were used to generate data on problem perceptions and aims regarding regional development. The inventory of spatial planning strategies and the investigation of strategy-adoption were based on an analysis of plans, laws and project reports. The methods applied were complementary, as interview results could be used to complete the strategy-inventory and the documentary analysis provided necessary background information to clarify interview-statements. In the course of fieldwork it became evident that this report is simply one snapshot in time. While the overall planning system is relatively stable, individual planning strategies are subject to change and repeal.

The **theoretical framework** used is the concept of territorial, multi-level governance. As a type of political decision-making, it meets the following criteria: governmental and diverse, extra-governmental actors are included in decision-making, different levels of the state are involved and state actors/civil sevants do not dominate the decision-making process. The governance concept helps to meet two of the above research objectives which have thematic overlap: to find out what governance strategies there are for the Leipzig-Halle peri-urban area, and how — by which decision-making processes — they are adopted.

The research **results** refer to stakeholders' problem perceptions and aims regarding land-use in the urban fringe, correspondent planning and governance strategies, a classification and description of strategies and the rationales and procedures of strategy-adoption.

Land-use problems mentioned by stakeholders are urban sprawl, land conversion and the fact that not all development was coordinated at the regional level. Past funding schemes conducive to sprawl are generally criticised. The commonalities between interviewees end here and distinct perspectives emerge: Leipzig public service providers point out the mismatch of the location of new development and the location of infrastructural networks and stress the resultant increase of infrastructure costs. Planners from Leipzig address economic and ecological disadvantages of sprawl by referring to the coincidence of inner-city vacancy and residential development in the peri-urban area and development pressure on floodplains. The adjacency of incompatible land-uses in the fringe is brought forward by regional planners and civil servants of the federal-state. Regional planners further express concerns about undesirable land-uses being "pushed" into the fringe, the disregard for public infrastructure and services in the new residential areas and the difficulties of maintaining the current level of service-provision for the more remote, rural areas.

The broad spatial development **aims** for the peri-urban area on the one hand and for the city on the other hand match. While residential, commercial and industrial development should be directed towards the city, the peri-urban countryside should be reserved



primarily for recreation, leisure, tourism and agriculture. New development is to be realised prudently, if at all. A contested issue is the scope of further development of the built environment in the peri-urban area. The two positions brought forward are (1) virtually no further residential, commercial and industrial development and (2) moderate development so as to retain residents. The interviewees' aims also differ in the degree of their explicitness: While the urban fringe is referred to as an aggregate by some, others describe distinct development trajectories for sub-regions as well as interrelations between them. Finally, the degree to which spatial development aims are balanced with other, potentially conflicting considerations differs between the interviewees.

Spatial planning strategies to deal with the simultaneousness of urban growth and shrinkage, on the one hand, lay a focus on enhancing the quality of life in the city as a way to retain residents and to prevent suburbanisation. On the other hand, they control developments in the urban fringe. Diverse strategies add up to an overall strategic approach to deal with urban growth and shrinkage.

Spatial planning strategies in the Leipzig-Halle peri-urban area can be **classified** as formal, legally specified strategies, informal strategies, inter-municipal cooperation and funding. The degree of legal commitment differs between the strategy-types.

The broad **thematic focus** of the majority of formal and informal strategies is palpable. This is true for both land-use plans and spatial development concepts; the inclusion of landscape and nature conservation plans into land-use plans contributes to this fact. Further explanations are that the plans are to manage land-use claims between different policy sectors and that spatial development concepts aim to contribute to holistic spatial development. Exceptions include strategies with a focus on the development of a specific type of area (usually contaminated brownfields or other brownfields), a specific topic or specific planning procedure.

The **spatial focus** of planning strategies for the urban fringe is diverse. Formal strategies are implemented at different administrative levels, i.e. municipalities, regions and the federal state. Informal strategies are frequently implemented at an intermediate level, larger than municipalities and smaller than regions. The same applies to inter-municipal cooperation, which, by definition, refers to aggregates of municipalities. There is a "gap" regarding formal planning strategies at an intermediate, sub-regional level, which implies that well-rehearsed forms of decision-making by state actors are not prevalent here.

Governance plays a role for informal spatial planning strategies, as opposed to other strategy-types. Informal strategies probably are an example of multi-level, territorial governance because of, in principle, equal voice for all participants in **decision-making** and some synchronisation with decision-making at lower and higher tiers of the planning administration; however, it wasn't possible to answer the question of which actors get to participate in decision-making on which grounds. Formal spatial planning strategies, because of the dominant role of the state in decision-making and because of unequal opportunities for participation, are not governance strategies. The same applies to intermunicipal cooperation, because ultimately state actors, i.e. the local authorities involved, take decisions.

An in-depth analysis of four typical strategies shows that the **adoption** and **further development of strategies** is subject to legal obligations, availability of funding (in particular follow-up financing), and problem perceptions regarding regional development. It has already been observed that the decision-making processes leading to strategy adoption and development differ between the distinct strategy types. While governance is relevant for the adoption of informal strategies, the actual degree of "bottom-up decision-making", so one result of the in-depth analysis of strategies depends on the composition of decision-making bodies, in particular on the proportion of civil society and other extra-governmental actors within them. In many cases, strategies are further developed in synchronisation with other similar or related strategies.



The **impact** of strategies on others depends on the degree of legal commitment and the availability of funding.

Two research findings seem particularly relevant for an **outlook**: There is an abundance of spatial planning strategies for the Leipzig peri-urban area. Furthermore, the strategies differ in their legal commitment, address different spatial scales, vary in the way they address diverse policy-sectors and are adopted and developed by distinct forms of decision-making, to name the most obvious distinctions. However, there is a necessity for further research on their effectiveness in reaching their aims. The above classification of planning strategies thus suggests the following additional perspectives for research: Are governance/informal strategies more effective than formal strategies, with well-rehearsed, hierarchic forms of decision-making? How much governance is really involved in decision-making for informal strategies? Which role does funding play for the development and impact of informal strategies? Finally, the comparison to other national planning systems and cultures for the questions raised above could also be fruitful.



9. Appendix

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Glossary

BauGB	Baugesetzbuch	Planning and building code
BBR	Bundesamt für Bauwesen und	Federal Office for Building and
	Raumordnung	Regional Planning
BMVBS	Bundesministerium für Verkehr, Bau-	Federal Ministry of Transport,
	und Stadtentwicklung	Building and Urban Affairs
BPlan	Bebauungsplan	(Municipal) development plan
BROP	Bundesraumordnungsprogramm	Federal spatial planning
		programme
ExWoSt	Experimenteller Wohnungs- und	Experimental Housing and Urban
	Städtebau	Development
FNP	Flächennutzungsplan	(Municipal) preparatory land use
		plan
FR Regio	Förderrichtlinie Regionalentwicklung	Funding guideline for regional
		development
INSEK	Integriertes Städtisches	Integrated urban development
	Entwicklungskonzept	concept
ILEK	Integriertes ländliches	Integrated concept for rural
	Entwicklungskonzept	development
LEP	Landesentwicklungsplan	Spatial development plan for the
		federal state
LPIG	Landesplanungsgesetz	State spatial planning law
MKRO	Ministerkonferenz für Raumordnung	Conference of ministers for
		comprehensive planning
REK	Regionales Entwicklungskonzept	Regional Development Concept
ROG	Bundesraumordnungsgesetz	Regional Comprehensive
		Planning Act
SächsLPlG	Sächsisches Landesplanungsgesetz	Saxon state planning law
SEKO	Stadtentwicklungskonzept	Urban development concept
STEP	Stadtentwicklungsplan	Urban development plan

Development plan ("Bebauungsplan")

The development plan specifies the form and extent of buildings and settlements; it has legal commitment with regard to individual citizens (Schüttelohr, 2005).

County ("Landkreis")

Saxony is made up of 12 counties and three unitary authorities, Chemnitz, Dresden and Leipzig. The counties form an administrative level between the local authorities and the region.

Federal state ("Land")

One of the sixteen German federal states; the states have political sovereignty in certain fields.

Inter-municipal cooperation ("Kommunaler Zweckverband")

A contractually set collaboration of municipalities in order to reach (spatial planning or other) objectives.

Local authority ("Kommune")

The local authorities form the lowest level of the planning administration and have the full responsibility of development control.

Preparatory land use plan ("Flächennutzungsplan")



The preparatory land use plan covers the whole municipal area and is the basis for the development plan. It has no legal commitment for individual citizens (Schüttelohr, 2005).

Regional council ("Landesdirektion")

The regional councils link the Saxon state administration with districts and municipalities. The regional council Leipzig area covers the city of Leipzig and two adjacent districts (northern Saxony and Leipzig). It sees to the implementation of spatial planning aims and principles as set out elsewhere, i.e. in the Saxon spatial development plan and in the regional plan. It has no original competence in the plan making.

Region of western Saxony ("Region Westsachsen")

One of the five planning regions in Saxony; it is comprised of the city of Leipzig and the districts Leipzig and northern Saxony. A correspondent regional plan is prepared by the regional planning association.

Regional Plan ("Regionalplan")

Regional plans specify the aims and principles of the spatial development plan Saxony for each of the five Saxon planning regions (here: Region of Western Saxony). They are prepared by the respective regional planning associations.

Regional Planning Association Western Saxony ("Regionaler Planungsverband Westsachsen")

The regional planning association is a public corporation responsible for comprehensive regional planning. It is overseen by the Saxon planning department, Saxon Ministry of the Interior.

Spatial development plan Saxony ("Landesentwicklungsplan Sachsen")

The plan sets out thematically comprehensive as well as specific aims for the spatial development of Saxony.

State-wide spatial development plan ("Landesentwicklungsplan") See above



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Formal spatial pl	anning strat	egies						
	level	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
EU Water Framework Directive (2000- 2027)	directive, implementat ion at national- /	protection of bodies of water, improvement of water-quality until 2015, development of plans and strategies for rivers and floodplains irrespective of administrative boundaries (here: Elbe and Oder)	legal implementation: Saxon Water laws and regulations (Sächsisches Wassergesetz) adjusted to Euopean law by 2004 (Wasserrahmenrichtlinien- Verordnung); further activities: survey of quality of groundwater and surface water, continuous monitoring of condition of ground and surface water, activities to enhance the passability of streams and rivers	Saxon Ministry for the Environment and Agriculture, survey of	residents/stakeholders in plan- making and implemtation, dialogue-oriented and open process, participation through regional water associations (general public) and advisory	Saxon Ministry for the Environment and Agriculture together with advisory board composed of interest groups and associations	re-creation and protection of continuous bodies of water in and around Leipzig, the Weiße Elster, Pleiße and Parthe (category I - lower priority - and II waterbodies)	preservation of rivers and flood-plains around
Coalition Agreement (2004- 2009)		The coalition agreement sets out aims and strategies for the federal state of Saxony in the current election period. For spatial development - i.e. urban development and housing, conservation, traffic and infrastructure - this is, among other things: - to develop Halle/Leipzig, Dresden and Chemnitz/Zwickau as European metropolitan areas - to further develop links to European transportation networks - to demolish vacant flats and houses - to prioritise renewal and renovation of houses above new construction - to attempt to realise the exculpation of housing associations of pre-GDR debts - to preserve old towns.	ruling parties, the Christian Democrats and the Social Democrats.	Government of Federal State of Saxony			Aims and objectives of coalition agreement feed into Regional Development Plans, related programmes and funding schemes	focus on containing new development and on prioritising renovation activities above new development & construction
Staatsvertrag Sa/Sah über die Zusammenarbei t auf dem Gebiet der Raumordnung (ROKO) (1993- ongoing)	region	to synchronise spatial planning aims and requirements and to devise policy recommendations and baselines for decision-making	Spatial planners from the Saxony and Saxony-Anhalt planning administration meet in a yearly cylcle to set out spatial development trajectories	Saxon and Saxon Anhalt planning departments, regional planning associations, represe ntatives of cities and districts	experts can be consulted optionally	representatives of the federal planning departments of both states decide with one consent		

	level	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
Spatial Development Plan Saxony (LEP) (2003-2013)		plans serve as frameworks to define development goals for the state area, to coordinate spatial planning and find consensual regulations for diverging claims on land use, furthermore it guarantees planning reliability and accelerates planning procedures, with the development plan of 2003 the Saxonian government wants to strengthen the state as a attractive place for living and for economic growth	the state-wide development plan is formulated by federal state authorities, in preparation for the planning the actors coordinate their interests in the Ministerial Conference on Regional Planning (nation state level), on federal level different actors participate in the process: all saxonian ministries, regional planning associations, the public, finally the development plan is enacted by the state government after the adoption of the Saxonian parliament; the state-wide development plan is to contain an environmental impact assessment	planning as part of the Saxonian Ministry of Home Affairs and subordinated: Regional Administrative Authority (Regierungsbehörde)) , further administrative	further administrative bodies, associations for the protection of the environment and others) and public participation in a series of steps consideration of statements of members of public if put forward within a certain time-	authorisation by Saxon government	understand and form shrinking as a process of qualitative change, strengthen central places as economic locations and decrease their number by net optimisation, improve the traffic infrastructure standards and the integration into transeuropean networks, promote climate protection and preventative flood protection, reduce of land consumption by concentration of	regional plans and land use plans have to be developed on the basis of the state development plan and therefore
Functional Development Plan Traffic (1999- 2009)		sound and economically viable transportation system in Saxony in order to:	The Development Plan Traffic equals a specification of the Spatial Development Plan Saxony; its aims and principles have the same significance as those set out in the Spatial Development Plan.	Federal State of Saxony		authorisation by the Saxon government		consolidation and further development of existing spatial structure (settlements and economy), extension of transportation system
Regional Plan Western Saxony (RP) (2001- approx. 2011, amendment in 2005, revision in 2008)		and objectives of land use planning and the development of different regions, main issues are ecology, economy, infrastructure and housing estate the plans have to be developed on the basis of state-wide development plans and with the analysis of current nature and landscape conditions, it aims at the sustainable development of the	elaborates its aims and objectives it is compiled by the regional planning association represented by mayors, district administrators and other authorities, an elected planning board prepares the meetings and decisions for the assembly, discusses ideas and problems of the regional plan and assures the cooperation with other actors of regional planning	Association Western Saxony, city of Leipzig, five rural districts	stakeholder participation in plan- preparation phase (local authorities affected by plan, further administrative bodies, associations for the protection of the environment and others) and public participation in a series of steps consideration of statements of members of public if put forward within a certain time- frame, public events, statements and enquiries	Interior	local (municipal) development and master plans have to conform to aims and objectives of regional development plans	through promotion of

	level	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
Lignite plans (1998-ongoing)	regional	regional plans for current or former open-pit mines, they contain a delineation of mining areas, specifics about impact on groundwater, changes of	plan-making involves mining companies and organisations in charge of restoration of area - this means that companies are obliged to provide plan-makers with information relevant to assess environmental and social impacts -, an environmental impact assessment and a public hearing	Regional Planning Association Western Saxony, mining companies or organisation responsible for restoration of areas	lignite plans have to conform to operating plans of mining companies and vice versa stakeholder participation in planpreparation phase and public participation in a series of steps, i.e. consideration of statements of members of public if put forward within a certain time-frame, public events, statements and enquiries	Interior	if relevant: adjustment of local development and master plans to lignite plans	strategy for restoration of and land-use change on former open-pit areas
Preparatory land use plan	local	planning in near and remote future, refers to the superordinated development goals that are specified in planning strategies of the whole region and state, serves	interest groups and institutions as well as neighbour communities and single citizens to guarantee an integrated and balanced result, furthermore the plan has to consider ecological impacts and must finally be approved by the higher authority	NGOs, certain associations, neighbour communities, regional council (Regierungspräsidium	Public participation includes (1) an early option for the public to voice concerns and interests (during preparation phase) and (2) a public display of plans. Concerns can be put forward within a certain time-frame. Additionally, other stakeholders/state authorities and adjacent local authorities put forward written comments.	Preparatory development plans are authorised by superior authority, here by the Regional Council Leipzig	e.g. Leipzig preparatory land-use plan, Schkeuditz preparatory land-use plan	with the FNP the city of Leipzig and other cities in the peri-urban area have the opportunity to define certain areas as building sites and thus to control commercial, industrial and residential development, e.g. to channel development to urban centres instead of to the fringe
Development Plan (B-Plan)	Local, e.g. district or neighbourh ood	To prepare and guide land-use development	The preparation of a Development Plan follows a series of steps including the preparation of a draft version, public and stakeholder participation, assessment and desicion making. A Development Plan may be set up by a local authority to prepare and guide land-use development in greater detail; it is legally binding and must conform to both preparatory land use plans and to planning principles as described in planning laws and regulations; the Development Plan process includes an environmental impact assessment	department, city council, diverse stakeholders, adjacent local authorities, the public	public services, postal services and infrastructure, (2) adjacent local authorities and (3) the	Inital decision to prepare a Development Plan is usually taken by municipal planning department; final authorisation of Development Plan by the city council		To channel land-use development within Leipzig and other cities in the Leipzig peri-urban area according to aims and objectives for urban development

	level	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
Regional Planning Procedure (ROV)	regional	to determine whether a proposed development with an impact that exceeds a particular location fits to regional planning principles, i.e. implementation of Saxon spatial development plan and regional plan for specific project	steps, including environmental impact assessment, public participation, participation of stakeholders and authorities, consideration and	Regional Council Leipzig, members of the public, other authorities		and stakeholder input and subsequent decision-making by Regional Council	e.g. assessment of relocation of a motorway around a Leipzig suburb	measure to adjust large- scale land use developments in the urban fringe to the LEP and the Regionalplan Westsachsen
Procedure concerning deviation from aims	regional	to allow for deviations from regional planning objectives, if overall planning principles aren't breached	The deviation procedure can follow - or be combined with - a regional planning procedure (ROV) if a proposed development does not conform to regional planning principles	Regional Council Leipzig	stakeholder participation (regional planning bodies)	decision-making by Federal State of Saxony		
Interdiction of plans and proposed developments	regional	Interdiction of plans and propsed developments that do not conform to regional development principles	proposed plans and developments can be interdicted for a maximum of two years if they impede or prevent the realisation of aims and objectives of regional planning	Regional Council Leipzig		decision-making by regional council Leipzig		
Spatial Monitoring (Raumbeobachtu ng)	federal state	to monitor long-term spatial, economic and environmental developments in Saxony and to provide information for decision- makers	Data analysis and -aggregation at the regional and Federal State level at diverse points in time; visual and textual presentation of results, appraisal of overall spatial development; preparation of spatial development reports for the Saxon government	Saxon Ministry of the Interior, Regional Planning Associations, Regional Council	collaboration with Saxon Office for Statistics (data provision)			indirect effect, information source for decision-makers in planning
Land register	federal state	Uni-scale cartographic depiction of plans and projects in Saxony, source of information for spatial planning	The land register is used to coordinate and assess plans and projects, to discern land-use conflicts, to prepare decision-making, to consult planners and to monitor the practical relevance of aims and principles of spatial development.	Regional Councils	the land register is available for public and private planners as well as members of the public			indirect effect, information source for decision-makers in planning

	level	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
Inter-municipal pool of compensation areas (1996- ongoing)	regional	compensation measures towards Green Ring areas to create favourable conditions for plants and species, to manage and further develop an inter-municipal approach to spatial compensation measures, to incorporate derelict	the Green Ring team "Management of compensation areas" collaborates with partner municipalities, property owners and developers. It is organisationally linked to the Department for the Environment of the City of Leipzig. It represents an interface to the Saxon Department for the Environment, which decides about the appropriateness of particular compensation measures.	Department for Environmental Protection (Naturschutzbehörde), 12 adjacent municipalities, two districts	Collaboration with property owners and users	makes a proposal for		managing spatial compensation measures so that agricultural land and forest is affected as little as possible; compensation in inner- city for developments in the fringe

Informal spatial	 							4
	scale	aims	conception	actors	stakeholder/public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
New Leipzig Lakeland 1994- ongoing)	regional	development of interconnected lakeland on former mining areas in the North, South and West of Leipzig	informal collaboration of mayors, developers and mining companies	22 local authorities, district Leipzig, regional council Leipzig, Federal State of Saxony		by the 22 local authorities involved	e.g. completion of lake Cospuden in the South of Leipzig, begin of flooding of lake Zwenkau	strategy for the development of recreational land-uses and habitats for plants and species in the urban fringe
Regional Strategic Concept "Green Ring Leipzig" (1996-ongoing)	regional	Improvement and protection of the cultivated, man-made landscape in the Leipzig region, development of recreational uses	the main forum of the Green Ring are regular conferences (Stadt-Umland-Konferenz) with all participants of six thematic workgroups. Groups meet more frequently and work on landscape conservation, local recreation and tourism, environmental technology, water, management of waste land, compensation and agriculture	14 local authorities, 2 districts, NGOs, associations (e.g. special purpose associations), private companies, citizens		The Stadt-Umland conference is the decision-making body of the Green Ring	An overview over projects is available at http://www.gruener-ring-leipzig.de/neu/projekte/index.asp	Conservation of natural habitats, agriculture and farming, development of recreational land-uses
Regional Development Concept Muldentalkreis (REK) (2003- ongoing)	regional	development of shared objectives, plans and projects for economy/technical infrastructure, landscape, recreation and tourism, settlement and social infrastructure	The REK was devised by a project team (private planning agency) in collaboration with a steering committee, thematic work groups and a series of small-scale project groups.	23 cities and municipalities in the Muldental district, commercial chambers, firms and enterprises, associations and adjacent local authorities, regional planning bodies and ministries	and project groups, surveys, workshops and consultation interviews,	Decision-making by a steering committee composed of three mayors, representatives of district, regional counicil and regional planning organisation Western Saxony, commercial chambers, firms, the REK project team and of the Saxon Ministry for the Interior	among other things: cooperation network with local housing industry, exchange of information about planning strategies, programmes and funding schemes, e.g. Stadtumbau Ost. For more information see http://www.rek-muldentalkreis.de/muldentalkreis.html.	strategy for the development of the Muldental district in the east of Leipzig
Regional Development Concept Schkeuditzer Kreuz (REK) (2006-2007)	regional	Development of a shared strategy to improve the regional economy, stabilisation of settlement pattern, improvement of related social infrastructure, promotion of soft location factors and strengthening of collaboration with local authorities in Saxony-Anhalt	The REK was developed by a steering committee composed of governmental actors and five thematic workgroups (aims and visions, economy and location development, population/infrastructure and settlement, recreation and leisure and cartography) as well as a team of mayors	representatives of municipalities, districts, regional planning , regional council and the Federal State of Saxony and Saxony-Anhalt		Steering committee as advisory and decision-making body for the preparation of the REK; the committee consists of mayors of participating local authorities, represenatives of districts, regional planning, regional council as well as of the Federal States of Saxony and Saxony-Anhalt (guests)		strategy for the development of the Schkeuditz region in the North of Leipzig
Regional Development Concept Southern Leipzig Area (REK) (1999- 2001, revision 2008)	regional	Currently: definition of visions and aims for the topics "economy", "central places" and "demographic change" in teams of regional stakeholders	the REK for the spatial development of the Southern Leipzig Area was devised by rep. of 15 local authorities; public and stakeholder input primarily via thematic work groups; further than that a bottom-up approach is to be achieved through proactive public relations work	15 municipalities, local stakeholders, residents = Association Municipal Forum Southern Leipzig Area/Zweckverband Kommunales Forum Südraum Leipzig	Involvement of regional actors and officials in three thematic groups	Decision making by chair of association and general assembly	design of development models for the post-mining landscape, development of cycle-paths for recreational use of post-mining landscape, among other things	strategy for development of Southern Leipzig Area (post-mining landscape and lakeland)
Integrated rural development concept (ILEK) Delitzscher Land (2007-2013)	regional	to safeguard existing jobs and to create additional jobs, to provide additional education opportunities for young people, to collaboratively develop the new lakeland and to establish new avenues for public and civil society participation as well as for	Strategy development in thematic workgrops, focus on 3 areas of work: economy, general public services, lakeland and cultural, man-made landscape, subsequent selection of 62 key projects	association Delitzscher Land, local stakeholders	churches as well as of civil society	the decision-making committee is made up of rep. of local and planning authorities, civil society organisations and private actors (bank, planning agency)	project-overview at http://www.leaderplus-delitzscher- land.de/html/projekte.html	strategy to contain and develop existing (agricultural, residential, economic and recreational) land-uses in the Delitzsch region
Integrated rural development concept (ILEK) Leipziger Muldenland (2007-2013)	regional	multiple aims and objectives: to support and link crafts, agriculture and food industry, flood protection, development of tourism and recreational uses, nature and landscape conversation, among others	design of an integrated and sustainble spatial development strategy by diverse actors - economy, civil society, associations and civil initiatives; this includes project suggestions and their assignment to thematic areas of work; implementation by a local work group and a steering committee	regional landscape conservation association, local authorities, representatives of economy, civil society organisations, the public		decision-making by steering committee, which is elected by general assembly	project-overview at http://www.lpv- muldenland.de/start.html	strategy to protect the natural and man-made landscape and to develop recreational and economic land- uses

	scale	aims	conception	actors	stakeholder/public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban
Integrated rural development concept (ILEK) Weiße Elster (2007-2013)	regional	stabilisation and development of local economy and agriculture, improvement of educational infrastructure and social infrastructure for the elderly and marketing of region	The ILEK Weiße Elster is a first step to agree upon desired developments in the area in question, in particular with regard to demographic change. Work is organised between a local tasc force, thematic work groups, project groups and regional management.	local authorities, firms and enterprises, the public	participation of firms and enterprises and members of the public in strategy-develpment		Key projects aim at marketing of region and the improvement of the local economy, improvement of touristic facilities and flood protection, among others	fringe In particular: stabilisation and development of economic land-uses
Integrated urban development concepts / master plans	local	integrated urban development concepts aim to set up spatial strategies that link diverse policy- sectors; they are a tool to recognise potential synergies and conflicts between policy sectors	Collaborative, inter-discinplinary preparation of development plans by representatives of local authorities, civil initiatives, the economy, public infrastructure and the public	local authorities, diverse stakeholders from civil and/or private organisations, the public	stakeholder and public participation in plan-preparation and implementation	Decision-making usually takes place at the city council level	examples of integrated urban development concepts: - STEP (1999-ongoing) and STEKO (in preparation) in Leipzig - INSEK/SEKO of city of Schkeuditz	indirect strategy against suburbanisation and commercial development in the urban fringe
local development concepts	local (district / quarter)	to improve public open space, streets and squares, to provide for more open green space in the town centre, to provide for meeting points for residents and to assess how planned developments fit to the urban form	preparation of concept by private planning agency together with members of the public	city, planning agency, office for rural development, members of the public	public participation in preparation of concept		e.g. local development concepts for Glesien, Radefeld, Freiroda, Wolteritz and Kleinliebenau	strategy to control new development and to cope with impacts of new development
Leipzig self-use programme (2001 ongoing)	local	creation of property in the inner city, filling in gaps between buildings, countering suburbanisation and retaining residents for good; the focus is on three sections of property market, Wilhelminian style houses, lofts and newly constructed city-houses	the city of Leipzig supports the creation of property in the inner city for "self-users" by offering advisory, organisational and information services; no funding	NGO ("Selbstnutzer association"), city of Leipzig, Immothek Property Marketing Service, citizens	No public and stakeholder participation as such but regular meetings of the "self-users", intense public relations work and a public internet discussion forum at http://www.selbstnutzer.de	Strategic decision-making takes place at level of mayor / city council	until the end of the year 2006, 274 households were supported in creation of own property to live in	direct strategy against suburbanisation, the aim is to retain residents, especially the most important target group - middle class families interested in building one-family houses
Re Urban Mobil (2002-2005)	local	to analyse re-urbanisation potentials and obstacles of inner- city residential areas, develop instruments, incentives and strategies for an appropriate and long-term use of these areas taking into consideration changing demographic premises	13 partners from 8 countries develop reurbanisation strategies for 4 European cities (Léon, Leipzig, Ljubljana, Bologna), combination of research and practice, it is an interdisciplinary approach (urban planning, architecture, sociology, economy, law, environmental studies, demography research), development of two case studies per city analysing problems and potentials of the areas, the project concentrates on a small scale qualitative approach, focusing quarters of a city, - research questions: How do the existing conditions create the base for fulfilling the needs of changing user groups and their preferences? Which and how many changes need to be developed or influenced to make use of existing resources for reurbanisation? applied methods: statistical data was organized through a Geo-information System (GIS) as a "objective" background of knowledge, interviews with residents about their needs and preferences, interviews with local experts, the results were the base for evaluation of the expected processes of reurbanisation, young architects worked on c	Scientists, City of Leipzig, Department for Urban Renewal, NGOs, citizens			for the case study two traditional workers' housing areas (Attinendau and Neustadt-Neuschönefeld) have been analysed, development of a sustainable monitoring concept, compilation of a specific set of indicators for detailed description of reurbanisation	strategy for re- urbanisation

	scale	aims	conception	actors	stakeholder/public participation			link to land use change in the urban fringe
Water City Leipzig (1999- ongoing)	local	canals (Elster-Saale and Karl- Heine), improve quality of life near	waterbodies, signage of water trails with school children	non-profit association, members include citizens, the city of Leipzig, firms; collaboration with other	Collaboration with partner organisations, the Green Ring Leipzig, City of Leipzig, British Waterways, Wasserstadt GbmH Berlin, Citizens for Leipzig, Neue Ufer e.V., Leipziger Seesportclub e.V.	association's managerial board	rivers Weiße Elster and Lober; further projects at http://www.wasser-stadt- leipzig.de/index2.html	indirect strategy against suburbanisation, enhancement of the city by improving quality of life to retain residents in the city

	scale	on (kommunale Zweckverbände) aims	conception	actors	stakeholder/public participation	decision-making	implementation in	link to land use change
	Soale	amis	Conception	401013	State Holder/public participation	decision-making	Leipzig/results	in the urban fringe
Inter-municipal association Neue Harth (2000- ongoing)	regional	development of open-pit mining areas	collaborative, stepwise development of recreational uses on former mining areas by the cities Leipzig and Zwenkau as well as regional stakeholders	Cities Leipzig and Zwenkau, Federal State of Saxony (funding) and Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellsch aft mbH (state-enterprise in charge of renewal of former mining areas), Sächsische Seebad Zwenkau GmbH (developer), EVENT PARK GmbH und Co. KG (owner of theme nark)	collaboration with project partners/stakeholders for plan-preparation and implementation	Decision making by cities Leipzig and Zwenkau	development of theme park Belantis, flooding of former mines, development of walking trails and improved transport links	strategy for the development of recreational land-uses in the urban fringe
Inter-municipal association Parthenaue (1992- ongoing)	regional	protection of man-made, cultivated landscape, i.e. conservation of rural settlements; protection of nature areas and development of recreational uses		local authorities Leipzig, Taucha, Borsdorf, NGOs; tourism industry and recreation businesses,	collaboration with regional stakeholders	decision-making by local authorities involved	development and display of walking trails and educational trails, details at www.zv-parthenaue.de	
Inter-municipal association recreational area <i>Kulkwitzer See</i> (1989-ongoing)	regional	joint development of recreational facilities, such as restaurants, camping and sports facilities; organisation of sports events	diverse events (water festival, water city conference), clean-up of urban waterbodies, display of trails	cities of Leipzig and Markranstädt, private operating agency (LeipzigSeen GmbH)		decision-making by general assembly of association		promotion of recreational land-uses
Inter-municipal association industrial area Böhlen- Lippendorf (2005- ongoing)	regional	collaborative planning and development of industrial area Böhlen-Lippendorf	this includes improvement of transportation links and public services, public relations work and services for investors (information on planning and building, property acquisition and funding); the association consists of a general assembly, an executive body and a chairman	Local authorities of Böhlen, Zwenkau and Neukieritzsch	collaboration with public service providers (water, engery, waste) for development of area	decision making by general assembly of association	completion of conservation and modernisation measures on area, establishement of new links to public and individual transport network	development of economic/industrial land- uses
Inter-municipal association Witznitz lakes (2006- ongoing)	regional	coordinated development of tourism, recreation, research, housing and industry	a shared, overarching planning framework is used to coordinate municipal development and master planning	five local authorities (Borna, Rötha, Böhlen Lobstädt und Espenhain) and a private developer (Blauwald GmbH & Co KG)		decision-making by participating local authorities		housing, recreational and industrial development of area
Inter-municipal cooperation Southern Leipzig area	regional	to develop and improve former open-pit mining areas	Organisationally, the cooperation consists of a general assembly of the mayors of all 15 local authorities and an administrative committee	15 local authorities in the 'Leipziger Land' district as well as the district			REK Southern Leipzig area	recreational, economic and residential development of area

Funding								
	scale	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
European Agricultural Fund for Rural Development (ELER) (2007- 2013)	European funding, implement ation in rural regions	forestry, (2) landscape management as a means to protect the natural environment and landscapes, (3) the diversification of	three areas of work (funding up to 50 percent for 1 and 3, up to 55 percent for 2). It is set out in Saxony via the	Environment, Agriculture and Forestry	Participation of diverse stakeholders in planning for ELER implementation in Saxony: agriculture and forestry organisations, commercial chambers, tourism initiatives, overarching municipal associations, organisations for the protection of the environment, among others; participation of members of the public in strategic environmental assessment (SUP)	the basis of integrated concepts by Saxon Ministry for the Environment, Agriculture and Forestry	2 LEADER and 1 ILE area in the Leipzig peri-urban area	containment and development of existing land uses (agricultural, residential, economic and recreational), protection of landscapes and nature areas
European Fund for Regional Development (EFRE) (2007- 2013)	European funding, regional implement ation		Funding is available for projects in one of the following areas of work: innovation and research, educational infrastructure, competitiveness of economy, improvement of transportation system and improvement of infrastructure for sustainable economic development. This includes sustainable urban development, development of brownfield sites, as well as provision of traffic, educational and technical infrastructure	Saxon Ministry for Economy and Labour		Funds are managed and awarded by diverse administrative units or organisations, depending on their thematic focus, e.g. the Regional Council Leipzig and the Saxon Development Bank		
European Social Fund (ESF) (2007- 2013)	European funding, regional implement ation	sustainable development in troubled urban districts of the European Union	cross-cutting themes: coping with demographic change, gender equality, sustainability	Saxon Ministry for Economy and Labour				
URBAN II (2000- 2006)	European funding, local implement ation (focus on special quarters)	sustainable development in troubled urban districts of the European Union	,,	for Urban Regeneration and			the project was realised in the West of Leipzig, a former industrial working class area with high unemployment rate, high proportion of vacancy, industrial waste land and difficult property structures, results regarding one of the main strategies of the program – to enhance residential qualities concerning land use change: 70.000 sqm new created or restored public green space, 6.600 m of new built foot and cycle paths, more than 3000 sqm of reconstructed and revitalised area useable for building, 20.100 sqm of revitalised or created public space for sports and leisure activities, other projects aiming at economic, social and ecological developments	suburbanisation, enhancement of the city by improving quality of life to retain residents in the city

	scale	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
LHASA (Large Housing Areas Stabilisation Action) (2004- 2006)	European funding, local implement ation	evolution of stabilisation strategies for large housing areas	7 partners from 5 countries work on solutions for problems in large housing areas, the project considered not only housing aspects, it also paid attention to general social, economic and employment market concerns raised by such large housing areas, combination of research and practice	scientiest, local administration, NGOs			detailed examination of the	strategy against suburbanisation, enhancement of the city by improving quality of life to retain residents in the city
"Stadtumbau Ost" (Urban reconstruction Eastern Germany) (2002- 2010)	national programm e, local implement ation	to maintain and enhance the attractiveness of towns and cities as places to live and work	this implies demolition of vacant flats and buildings, renovation and conservation activities in remaining built environment, adjustment of public services & infrastructure, using vacant plots for neighbourhood amelioration schemes funding of area-based initiatives in Leipzig. Prioritisation of how and where to use funds according to the Leipzig Stadtentwicklungsplan (STEP)	local government	in Leipzig together with	in Leipzig together with preparation and implementation	implementation in the Eastern and Western districts of Leipzig, Leipzig Grünau, Gohlis, Eutritzsch, Innerer Süden, Connewitz-Biedermannstraße, Stötteritz, Liebertwolkwitz	suburbanisation,

	scale	aims	conception	actors	stakeholder and public participation	decision-making	implementation in Leipzig/results	link to land use change in the urban fringe
Social City Programme (1999- ongoing)	national programm e, local implement ation	counteract the widening socio- spatial rifts in the cities, improve and stabilise living conditions and the economic background in the districts, enhance living opportunities by imparting qualities, skills and knowledge, strengthen the image of the area and the identification of residents with their quarter	fields of activity are: employment, qualification and training, sports, education, housing market, integration	authorities on national, federal and local level, NGOs, citizens			the project is subdivided into "core projects" comprising several individual measures to give initial	strategy against suburbanisation, enhancement of the city by improving quality of life to retain residents in the city
Home Owners Grant (Eigenheimzulag e) (- 2006)	national funding, local implement ation	to increase self-use property via construction and property acquisition	The Home Owners Grant is available for persons about to acquire property for residential purposes; it is not available for second and holiday homes. The applicants' income must not exceed 70.00© a year for singles, the level is higher for families with children. Funding adds up to 1% of total costs per year; it is availabe for a maximum of eight years.				An indirect effect of the Home Owners Grant was construction of dwellings in the Leipzig urban fringe.	Indirect effect: development of new residential areas; simultaneous vacancies in the city
Support guideline regional development (FR Regio)	federal State funding, regional implement ation	to provide incentives for intermunicipal cooperation, to address demographic change and the provision of public services focus is on the joint development of regional planning strategies, concepts for functional central places as well as for networks of central places.	combination with German government funding programmes	Ministry of the Interior, Federal State of Saxony, 22 "activity regions" in Saxony, non-administrative boundaries (Südraum Leipzig, Grüner Ring Leipzig, Schkeuditzer Kreuz, Muldentalkreis)proble m-based boundaries, not administrative boundaries			Funding for Green Ring projects and projects in the adjacent "activity regions" Südraum Leipzig, Schkeuditzer Kreuz and Muldentalkreis	platform for coordination and implementation of land-use strategies
Support of economic infrastructure (GA Infra) (2001- ongoing)	federal State funding, regional implement ation	improvement of economic and recreational infrastructure; development and expansion of educational facilities and foundation centres	of parishes as well as non-profit organisations can apply for project- funding at the Saxon Ministry for Economy and Labour	Ministry for Economy and Labour, Federal State of Saxony, municipality, public organisation, associations and societes			Funding for system of sluices in the southern Leipzig lakeland - thus making it navigable for boats.	development of recreational / touristic uses

	scale	aims	conception	actors	stakeholder and public participation		link to land use change in the urban fringe
Regional Development Agency Leipzig (1992-ongoing)		development projects; management and documentation of projects co-	3 - 3	City of Leipzig, districts Döbeln, Muldentalkreis, Leipzig region			strategy to strengthen influence of municipal actors in terms of financial ressources

Other							
	level	aim/purpose	conception	actors		implementation in Leipzig/results	link to land use change in the urban fringe
LEIPZIG CHARTER for sustainable European cities (2007)	European	to contribute to the sustainable spatial, economic and educational development of European cities to establish integrated urban development in town planning of the European member states to contribute to a balanced spatial development based on Europan poly-centric urban systems	a collaboratively developed statement on sustainable urban development in Europe, agreement of European ministers in charge of spatial planning to implement its principles nationally; The Leipzig Charter feeds into the European Strategy for Sustainable Development, the Lissabon-Strategy and the European Employment Strategy	European member states	stakeholder participation in preparation of Charter	use of integrated urban development concepts in Leipzig, e.g. STEP and STEKO	strategy against sprawl through promotion of compact settlements
Infrastructure projects German Unification (1991-2017)	Federal Republic, regional	improvement of transport links across the German-German border, positive effects for regional development anticipated	Decisions about programme and priority projects were made by the German government in the early 1990s. The programme includes 17 projects which are in construction or completed.	Federal Republic		high-speed train connection between Berlin and Munich via Halle, Leipzig, Erfurt / development of A9 between Nuremberg and Berlin	regional economic development through improved transportation linkage