

## Internal growth: can strategic planning procedures help to achieve it?

### 1. Introduction

Exceeding land consumption and growth of urban sprawl are causes of major problems e.g. in regards to ecological sustainability, public services and infrastructure costs. Spatial planners (on regional and local scale) are challenged to solve these problems and at the same time have to underpin requirements of industry and economy, future development options and global competitiveness of the region. In view of these new challenges (also climate change, ageing of population etc.) spatial planning on regional level has to evolve its ability to plan strategically in order to gain higher political relevance and act more effective.

Initial point of the research project FLAIR, German acronym for 'Land Use Management by Innovative Regional Planning', was the finding (see Schönwandt and Jung 2006a), that in spatial planning over 70% of all planning activities start with

- action proposals and projects (“Let’s make a project”),
- application of available methods or instruments (“It’s part of the environmental impact assessment anyway”),
- pursuit of aims (“It has to be sustainable”) or
- ideas based on theories or ideology (“Theory of gravitation”)

rather than carefully identifying the (socially constructed) problems/issues of planning. A foregoing research project also showed that a majority of spatial planning practitioners in Baden-Wuerttemberg (the third largest federal state of Germany) are unsatisfied with long term effectivity of spatial plans, meaning that spatial development in their region stroke paths different from their proposals. As planning effectivity had scarcely been monitored or measured explicitly and independently, we depend on individual assessments of planning professionals. But also examples like the on-going land consumption for civic purposes (see appendix for figures) indicate that market forces, political and individual decisions, and other processes take effect in conflict to spatial plans and long term spatial policy.

We see both, planners' dissatisfaction with effectivity of spatial plans and undesirable spatial development (on-going land consumption), as a cause to think about planning itself. In particular we reflect on planning approaches. Our assumption is that the better concepts of planning and understanding of (socially constructed) problems are, the more politically relevant planning proposals will be and the more likely is implementation of plans effective (see Schönwandt and Jung 2006b,370). Therefore we criticize that in over 70% of planning processes the 'problem' was/is not the starting point.

By developing Problems-First-Planning we redirect our attention to the bases of the planning process (see chapter 2). In the research project FLAIR we applied Problems-First-Planning to the question of land consumption and innovative ways of Land Use Management on regional scale (see chapter 3).

The research project FLAIR started in October 2006 and will be finished by December 2008. FLAIR is part of the REFINA-Program of the German Federal Ministry of Education and Research. The REFINA-Program provides funding for research projects which contribute to the

reduction of land consumption. FLAIR is a cooperation of the the regional planning association in the Southern Upper Rhine Region (RVSO), the Institute for the Foundations of Planning at the University of Stuttgart (IGP) and the private consultants pakora.net - network for towns and regions from Karlsruhe.

## 2. Problems-First-Planning

Three major aspects of Problems-First-Planning and the research project FLAIR will be explained in the following paragraphs: A reflection on planning approaches, modes of interventions, problem-descriptions and the Strategic Planning Procedure.

### 2.1 Planning approaches

To better understand how planners search for solutions, we refer to Bunge's concept of "planning approaches" (Bunge 1996,79). A planning approach always contains a set of five components: problems, aims, methods, discipline specific knowledge (theories) and background knowledge (ethics, epistemology, ontology). The specific 'combination' of all five components sets up the starting point for any solution searching activity and hence allows people to plan. Also these five components determine the range of possible solutions, that means they create "partial blindness". For example a planner aligned to a neo-liberal market economy ideology (we would call this part of his background knowledge) would neglect the existence of a problem of unemployed people - he might rather see this as a temporary state of labor markets, and maybe not start to think about solutions at all. Or for example if we look for solutions on the base of collected data, e.g. number of unemployed people, we only find problems which can be red out of this data.

Though the 'chosen' planning approach is eminent for planning results and effects usually a planner does not realize his/her planning approach – maybe similar to a fish that doesn't realize the water.

Another complicity we see is that planning approaches which are accepted/acceptable by a majority of practitioners, teachers, researchers etc. do not necessarily enhance, when planning issues change. Spatial planning is strongly connected to real life problems, so it really matters when planning approaches do not change but real life problems do. That is why we recommend that spatial planners in principle should:

- reflect on planning paradigms/approaches,
- scrutinize the existing toolbox for possible solutions (and if necessary in consequence discard tools and develop new helpful tools),
- start the planning process with a careful identification of the (socially constructed) problems and
- adjust spatial planning strategically, meaning reasonable also in the long run.

In a nutshell that is what we call Problems-First-Planning. Planning by the principle of "Problems-First" facilitates to examine problems, generate innovative strategic solutions and allows it to scrutinize the toolbox for possible solutions and the given planning task as a part of the planning process.

In the research project FLAIR we applied Problems-First-Planning to the issue of land consumption in the Region of Southern Upper River Rhine. In a first step we investigated problems and processes which are relevant to land uses and causal to consumption of open

land and put them together to problem descriptions (see chapter 2.3). In a second step we proceeded two "Strategic Planning Procedures" to find innovative solutions (see chapter 2.4).

## 2.2 Modes of interventions

Dealing with planning approaches nearly inevitably leads to questions, whether we can solve spatial problems with the existing spatial instruments.

Regarding land claims one can find a variety of approaches how to steer and to deal with the development of settlement and traffic infrastructure and consequently reducing land use consumption. Spatial planning approaches are mainly focused on an overall reduction of land use consumption (quantitative aim), zoning regarding the decentralized concentration (aim of spatial distribution) and infill development respectively provision of spaces on sites of minor ecological quality (qualitative aim). Most of these approaches lack of success in practice and implementation.

Due to the FLAIR approach Problems-First we assume that spatial solutions are not sufficient to solve spatial problems, but additional interventions have to be taken into account. Spatial planning has four modes of interventions to its disposal (see figure 1):

1. Provision of spaces (e.g. zoning in housing areas or business districts, green belts).
2. Construction and maintenance of facilities on these areas (e.g. houses, parks, roads).
3. Adjustment of organisations operating in or with this facilities (households, companies, public authorities).
4. Influence on behaviour of actors (use of land and facilities like roads only for motorised traffic or mixed used, environmental-friendly or -harmful behaviour etc.).

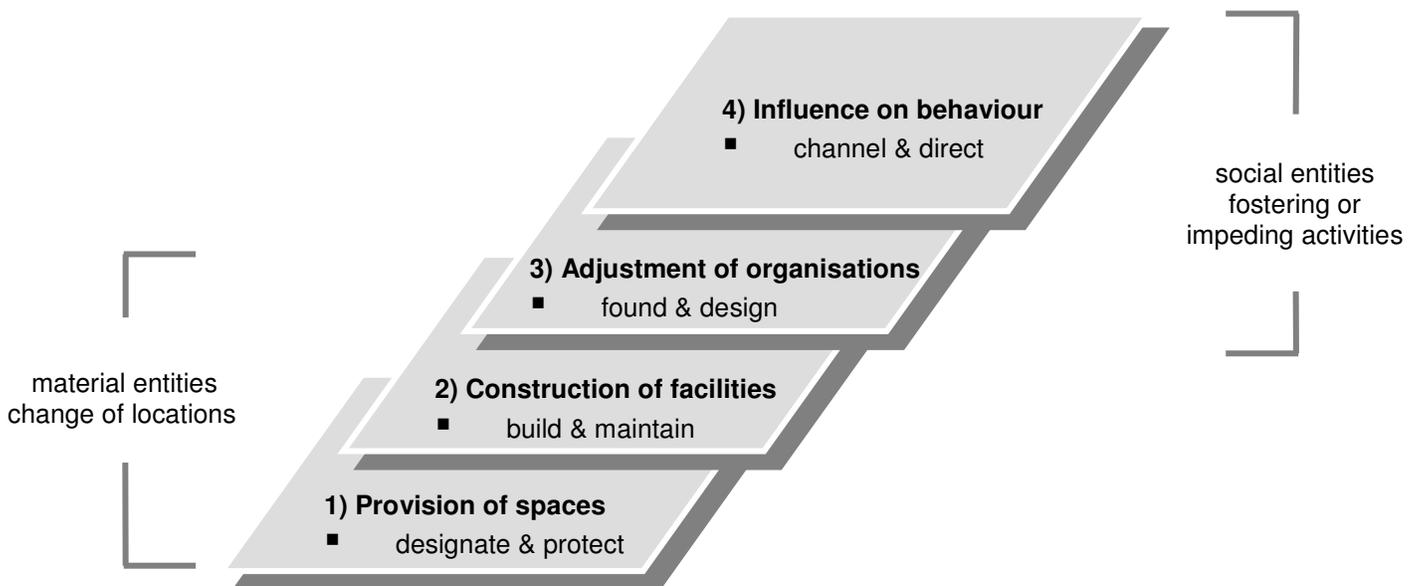


Fig. 1: Modes of interventions (source: Jung 2008,31)

Nevertheless today's spatial planning in general is still focused on intervention (1) 'provision of space' (zoning). The provision of spaces is mainly done by the typical instruments of spatial planning: Planners use their regional, comprehensive or local plans to provide zones i.e. assign different uses to different spaces by plans of different levels or different legal basis; additionally are to mention central places, green belts and so on. Architects, landscape architects or transport planners concentrate on the 'construction of facilities', like buildings, parks or roads (inter-

vention (2). Planners often disregard a high potential to regulate the use of spatial structures by 'adjusting organisations' (3) and 'influencing the behaviour of actors' (4). But behaviour influences space to a high degree: decisions of where to settle, which mode of transport to use, how to use the environment and natural resources etc. are based on these behaviours of organisations and actors. By the interventions (3) and (4) the arena of actors is extended: not only public actors are focused but also private (and public) users of spaces and facilities. So these fourth modes of intervention are the interlinks of spatial planning to other space related disciplines. Stakeholders outside spatial planning business are acting in these modes (to convince people to be voted, to produce in order to sell products, aso) and so spatial solutions on land use management have to launch into these modes of intervention.

### *2.3 Problem descriptions*

Problems are always as socially constructed. There might be awareness of a problem but it depends on individual perspectives how people see "the problem" (see Koppenjan and Klijn 2004). In the end problems never are absolute, at best they are "true by convention". For this reason in the research project FLAIR, we took almost one year for a phase of investigations on (spatially relevant) problems of our model region. During this time we did:

- desk research in newspapers, internet, journals, parliament/council protocols and similar.
- Interviews with experts, respectively "actors ('helicopters') that are chosen because they have the overview of the field" (Hajer 2006,73). Those were executives in public and private bodies (e.g. in the railroad sector, health sector, energy sector, public services), mayors, parliamentarians, researchers (e.g. in agriculture, economy, tourism, demography), governmental sectoral planners (e.g. schools, airports, business development) and similar.
- In 10 case study communities we made surveys on brownfields, existing and prospective building vacancy, each for industrial, commercial and residential uses.
- Internal debate among the project partners. At this point it was crucial that the cooperation of FLAIR was set up of three sectors: practitioners in regional planning (RVSO), private planning consultants (pakora.net) and planning researchers (IGP).

The result of this first phase was a paper containing about 20 'problem-descriptions' on issues of actual spatial relevance in the model region. In three loops of text production those texts were phrased until anyone in the research team agreed to the description.

It is important to note, that an overview of problems might also be done in different ways and that all problem-descriptions are valid only for a limited period of time.

In the research project FLAIR thematic layers structured the overview of 20 relevant problem-descriptions. Each layer featured 1-2 problems:

- |                   |                             |
|-------------------|-----------------------------|
| - Demography,     | - Agriculture,              |
| - Habitation,     | - Tourism,                  |
| - Basic services, | - Environment,              |
| - Health care,    | - Mobility,                 |
| - Education,      | - Technical infrastructure, |
| - Economy,        | - Time horizon of planning  |
| - Energy,         |                             |

The problem-descriptions were input to the second phase of the Project FLAIR, but they may also be used in other planning projects in the region.

### 2.4 Strategic Planning Procedure

All results of phase one (problem-descriptions and results of the spatial surveys) were input to the second phase of the project FLAIR: Two so called Strategic Planning Procedures and the implementation of their results.

The Strategic Planning Procedure is a sequence of events that puts a bunch of proposals to the test of an interdisciplinary expert jury and in the end the jury draws a co-edited conclusion. This way of planning had been developed significantly and described by Scholl (1990, 1995, 2007).

Strategic Planning Procedures usually combine the advantages of architectural competitions and expertises/feasibility studies: On one hand they produce a wide range of proposals (like architectural competitions) on the other hand they scrutinize proposals thoroughly (like expertises/studies).

A rhythm of meeting-appointments gives structure to the procedure. The meetings are in turns of four to six weeks: Kick-off-meeting, first intermediate presentation, second intermediate presentation, final presentation and a strategy workshop. The participants of a Strategic Planning Procedure consist of four groups: planning teams, expert jury, contact group and decision makers. One person of the expert jury is the head of the procedure, he/she is supported by the contact group, which manages communication and organization. The principles of a Strategic Planning Procedure are shown in Figure 2.

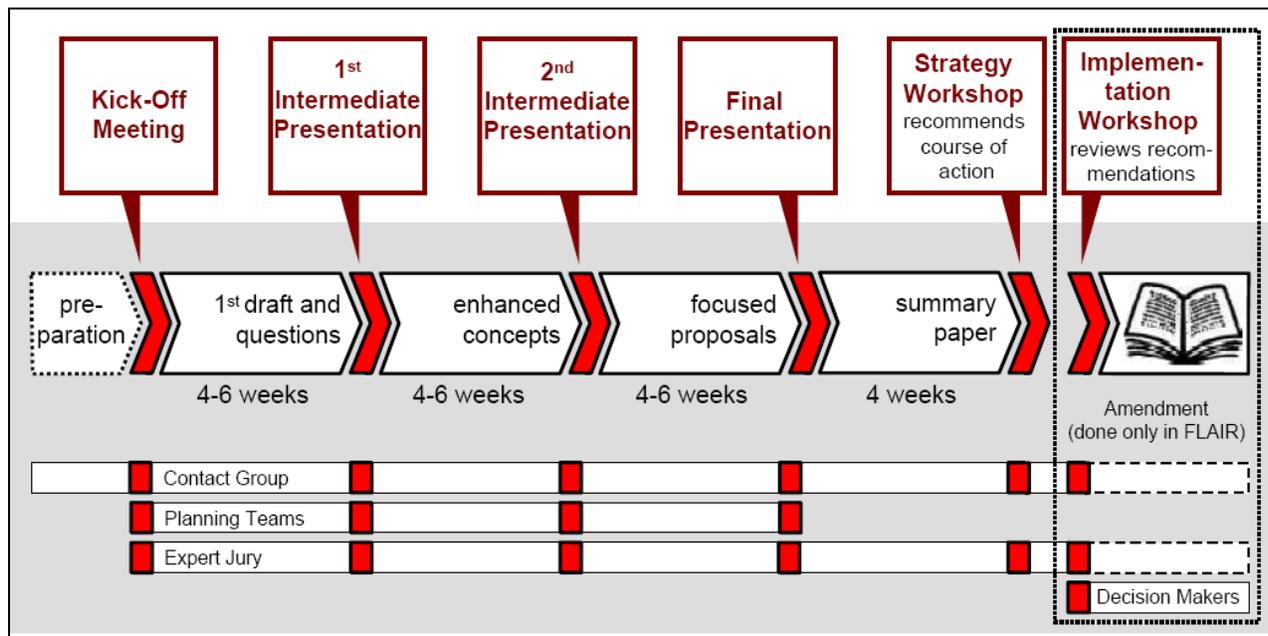


Fig. 2: Scheme of a Strategic Planning Procedure (source: IGP)

In general the Strategic Planning Procedure allows results of high quality within a relatively short period of time of about four months. The Strategic Planning Procedure had successfully been applied to strategical questions e.g. in large scale infrastructure planning (civic engineering project in Vienna, see Maurer 1985), railroad planning in the Upper Rhine Valley and Alps, large organization strategic/spatial development (University of Gießen), brownfield development (Frankfurt, see Scholl 1990) and many others.

### 3. 'FLAIR' - A research project on land use management in the Southern Upper Rhine Region

In Germany the area claimed for settlement and transportation infrastructure after World War II is of the same amount as the area occupied by settlements and transportation infrastructure in all centuries before. Land consumption today is still on a high level of about 115 hectares per day (see appendix). It is a social and political concern that unabated consumption of green land as it has occurred for decades is impossible in the long run. Hence there is political consensus that land consumption ought to be slowed down - the aim is set to only 30 hectares per day in the year 2020. The question is how this aim might be achieved. FLAIR is one of many research projects in a governmental program (REFINA) to develop answers and ways of action.



**Fig. 3: Location of the Southern Upper Rhine Region in Europe (source: IGP)**

The Southern Upper Rhine Region (see figure 3) has been model area for the research project FLAIR. This region is located in the South-West of Germany along the River Rhine and covers parts of the Black Forest. The region has about 1.000.000 inhabitants and about 4.000 km<sup>2</sup>. Some communities in the prosperous and densely populated valley of the River Rhine benefit from economic growth and attract new inhabitants, whereas more rural communities, for example in the Black Forest, are affected by changes in demography: For example these rural communities loose grown-ups who leave for education and often don't come back, while babyboomer generations grow older and raise the demand for new public services (care, retail, mobility etc.); in some villages buildings and shops get vacant, at this point degression becomes obvious.

Reduction of land consumption is only one problem among others for regional and community planners. Of their concern is also sustainment of economic growth in the region as a whole. And in the future it will be a new task to manage growth and decline at the same time and often in neighbouring communities of the region.

In a comprehensive investigation for problems (see chapter 2.3) we produced 20 different 'problem-descriptions' of issues and underlying processes which experts who know the region well and our research team found to be crucial. All of them describe problems and tendencies which "hit the ground" in the region, meaning they are or are likely to become relevant to land use questions and hence to consumption of land and land use management in the region.

In two communities of the region Strategic Planning Procedures (see chapter 2.4) were carried out. The first one (in Hausach) put the focus on cooperation among communities which provide services of importance for a catchment area larger than the community itself, e.g. secondary schools, hospitals, sports facilities, industrial zones, railroad connection etc. The second Strategic Planning Procedure (in Vogtsburg) put the focus on issues of rather rural communities, like the provision of basic services and goods, and also the usage of landscape for touristic activities.

In both cases the input at the start was a comprehensive briefing on the proceeding of the Strategic Planning Procedure and Problems-First-Planning. Also the problem descriptions (see chapter 2.3) and information on the communities were handed on to planning teams and expert groups. During the four months of the procedure the planning teams were commissioned to redefine their task in a way of Problems-First-Planning (see chapter 2.1) and finally work out strategical options for planning in the model communities. The expert groups then used the results of the teams to give advice to political actors (decision makers). An important innovation of the Strategic Planning Procedure is that the procedure doesn't end with several "parallel" planning results, but that the results of the teams are being advanced by the expert group. These steps allow to put together best parts of the solutions of different teams and also to make the suggestions transferable and relevant to other communities.

*Major results of the research project FLAIR*

Here the derived planning proposals will not be shown in detail, but the most important results of relevance to an international audience in brief descriptions. Results of the two Strategic Planning Procedures and the research project FLAIR were on various levels of abstraction:

□ Spatial planning gets more effective if supported in 'non-spatial' modes.

The solution for many problems can't primarily be found in the 'provision of spaces' and the 'construction of facilities' which are still the main focusses of spatial planning. Key to solution of many spatial problems lies in additional modes of intervention: 'adjustment of organizations' and 'influence on behaviour' (see Jung 2008).

Examples of all four modes of intervention were found in the suggestions of the teams and experts in both Strategic Planning Procedures:

	Suggestions in Hausach	Suggestions in Vogtsburg
Provision of space	Identify "key sites", concentrate on existing and prospective brownfields and rethink industrial zone reserves	Survey existing and potential brownfields
Construction of facilities	Develop natural parks in the countryside with leisure facilities in order to protect the landscape by using it	Develop key sites to make the villages' cores attractive for tourists and good addresses for housing
Adjustment of organizations	Create a partnership of private property owner and community to develop and market brownfields	Initiate and assist new forms of serviced flat shares for aged-people
Influence on behaviour	Do initial steps of project development like profitability analysis in order to attract investments for specific, important sites	Appeal for the densification on inner-city private property through a billboard campaign

□ Problems-First needs a strong reminder.

An important experience in two Strategic Planning Procedures was that it's not easy to bring planners to leave their field of expertise: Most of the time a town planner offers a master plan, a landscape architect cares about open spaces, a regional planner distributes public services... In order to prompt them to solve the task by the principle of Problems-First it turned out to be necessary to direct planners strictly to put aside their intimate approaches.

□ Slow changes must not be ignored as planning issues.

In both of the case-study communities major changes come relatively slow and gradually (like demographic change, young skilled people leaving for the bigger cities or land consumption), hence today they might hardly be visible as problems because at the beginning "they do not hurt" anyone. These problems demand for solutions in a long run and strategic plans.

□ Effective planning needs interdisciplinary expertise.

The problem analyses in the project FLAIR affirmed that Problems-First-Planning must be done interdisciplinary: Experts in different fields saw diverse problems being crucial in the same region and sometimes saw totally different aspects of similar problems. On the other hand experiences from the problem analysis allowed an appropriate interdisciplinary casting in the Strategic Planning Procedures. During the procedure teams and experts derived balanced and comprehensive planning proposals after they had found a "common language" to negotiate their concerns.

	Interdisciplinary "casting" Strategic Planning Procedure in Hausach	Interdisciplinary "casting" Strategic Planung Procedure in Vogtsburg
Team 1	Town planners (private company)	Regional planning (university)
Team 2	Real estate consultant (private company)	Spatial development (university)
Team 3	Infrastructure planning (university)	Landscape architect (private company)
Experts	Regional planning association Mayors and communal planners Urban planning consultants Market research consultant Chamber of commerce and industry Civic engineering consultant and others	Regional planning association Mayors and communal planners Tourism business consultant Architect Real estate investor Economy researcher and others

□ The Strategic Planning Procedure facilitates to generate applicable planning proposals.

Planning on community and regional level is often subject to political majority situations, limited budgets, rules of state authority approval etc. Also many different plans/proposals were tested and had been discarded. Hence it is not easy to follow up with plans and strategies. Local planners might get restrained by their knowledge of obstacles whereas planners and experts from outside often have problems to respond appropriately to local conditions. Our experience in both Strategic Planning Procedures was that this could be negotiated during the procedure. Even more the final "strategy proposals" were of value to the model community and also to a number of similar cases within the region.

□ Results of the research project give impulses to political arena.

Part of the preamble to all planning proposals derived in the project FLAIR is that planning proposals shall be applicable to existing political structures. All planning proposals and strategic proposals (e.g. on the cooperation among communities) are passed on to legitimate parliaments for final decision. On one hand this makes sure, that a Strategic Planning Procedure is not to be understood as a substitution of democratic processes of decision-making. On the other hand it keeps proposals realistic because most of them will not work without political backing.

*Project conclusion*

Major results of the research project FLAIR are of interest and transferable to cases other than the model region and to other planning cultures: The research project FLAIR showed that Problems-First-Planning is applicable to problems in spatial planning on community and regional level. A well documented case study of Problems-First-Planning was proceeded and is input for further scientific evaluation. Outcome is also the dissemination of the Strategic Planning Procedure as a new manner to derive strategic planning proposals of high quality in a relatively short time among planners, experts of various sectors and politicians. Furthermore the research project FLAIR produced innovative and applicable planning proposals for local and regional planning in the model region Southern Upper Rhine Region. Prospectively the project will be successfully finished in December 2008.

**Appendix**

Year (at 31. Dec.)	Land consumption for settlement and traffic purposes in hectare per day (10'000m <sup>2</sup> /day)			
	Germany (area: 357.114 km <sup>2</sup> )	Baden-Württemberg (area: 35.751 km <sup>2</sup> )	Southern Upper Rhine Region (RVSO) (area: 4.062 km <sup>2</sup> )	
1988-1992	-	11,0 ③	1,3 ③	
1993	120 ①	10,2 ③	1,0 ③	
1994				
1995				
1996				
1997				
1998	124 ①	-	12,0 ③	1,0 ③
1999	130 ①	-		
2000	129 ①	129 ⑤		
2001	117 ④	128 ⑤		
2002	105 ④	123 ⑤	11,8 ②	0,8 ③
2003	93 ④	115 ⑤	10,6 ②	
2004	-	115 ⑤	10,3 ②	
2005	-	114 ⑤	8,8 ②	
2006	-	113 ⑤	8,8 ③	0,8 ③
			9,4 ③	0,9 ③

The spreadsheet shows the quantity of annual land consumption for settlement and traffic purposes 1993 to 2006 in Germany, Baden-Württemberg and the Southern Upper River Rhine Region (RVSO). Because of changes within statistic definitions through the years figures are comparable only roughly.

Sources:

- ①: Bundesregierung (Hrsg.) 2002: Perspektiven für Deutschland - Unsere Strategie für eine nachhaltige Entwicklung; Berlin: Presse u. Informationsamt der Bundesregierung, 289
- ②: Betzholz, T. 2006: Trendwende beim Flächenverbrauch? in: Statistisches Landesamt Baden-Württemberg (Hrsg.) 2006: Statistisches Monatsheft 3/2006; 3-9
- ③: Statistisches Landesamt Baden-Württemberg 2007: Siedlungs- und Verkehrsfläche für die Region Südlicher Oberrhein und das Land Baden-Württemberg; Datensammlung des Regionalverbands Südlicher Oberrhein, Stand 15.11.2007
- ④: Statistisches Bundesamt 2004: Zunahme der Siedlungs- und Verkehrsfläche: 93 Hektar pro Tag; Pressemitteilung Nr. 466 vom 08.11.2004
- ⑤: Statistisches Bundesamt 2007: Aktuell: Flächennutzung (Website vom 31.08.2007); <http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Statistiken/Umwelt/UmweltökonomischeGesamtrechnungen/Flaechennutzung/Aktuell.psm1>; 07.01.2008 15:00

## References

- Beck, T.; Engelke, D. 2001: Planung illustrieren – Projektübersichten als Werkzeug im planerischen Klärungsprozess; in: Akademie für Raumforschung und Landesplanung (ARL) 2001: Wohin steuert die Regionalplanung? Arbeitsmaterial Nr. 283; Hannover: ARL
- Bunge, M. 1996: Finding Philosophy in Social Science. New Haven, Conn.: Yale University Press
- Eeten, M.J.G van 1999: 'Dialogue of the deaf' on science in political controversies; in: Science and Public Policy; 26, 1999, 3; 185-199
- Hajer, M. A. 2006: Doing discourse analysis: coalitions, practices, meaning; in: van den Brink, M.; Metzger, T. (Ed.) 2006: Words matter in policy and planning. Discourse theory and method in the social sciences; Netherlands Geographical Studies 344, Netherlands Graduate School of Urban and Regional Research, Utrecht, 65-74
- Jung, W. 2008: Instrumente räumlicher Planung. Systematisierung und Wirkung auf Regimes und Budgets der Adressaten; Hamburg: Kovac
- Koppenjan, J.; Klijn, E.-H. 2004: Managing Uncertainties in Networks. A network approach to problem solving and decision making; London: Routledge
- Schoenwandt, W. L. 2008: Planning in Crisis? Theoretical Orientations for Architecture and Planning; Aldershot: Ashgate
- Schoenwandt, W. L.; Jung, W. 2006a: Ausgewählte Methoden und Instrumente in der räumlichen Planung. Kritische Sondierung als Beitrag zur Diskussion zwischen Planungswissenschaft und Planungspraxis; Akademie für Raumforschung und Landesplanung (ARL); Arbeitsmaterial Nr. 326; Hannover: ARL
- Schoenwandt, W. L.; Jung, W. 2006b: The Turn to Content; in: Selle, K. (Hrsg.): Planung neu denken. Band 1 Zur räumlichen Entwicklung beitragen; Edition stadt|entwicklung; 364-377
- Schoenwandt, W. L.; Jung, W. 2004: Problems First. A strategic-planning approach to spatial planning - Paper for ACSP Annual Conference 2004, October 21-24, 2004, Portland, Oregon
- Scholl, B. 2004: Strategische Planung; in: Akademie für Raumforschung und Landesplanung (ARL) (Hrsg.) 2004: Handwörterbuch der Raumordnung; Hannover: ARL; 1122-1129
- Scholl, B. 1990: Neuere Erfahrungen mit dem "Wiener Modell" am Beispiel der Rahmenplanung Olympische Spiele Frankfurt am Main; in: Heer, E.; Scholl, B.; Signer, R. (Hrsg.) 1990: Aspekte der Raumplanung in Europa; ORL-Schriftenreihe 42/1990, Zürich: VDF; 231-251
- Scholl, B. 1995: Aktionsplanung. Zur Behandlung komplexer Schwerpunktaufgaben in der Raumplanung (Berichte zur Orts-, Regional-, und Landesplanung Band 98); Zürich: vdf-Hochschulverlag
- Signer, R. 2007: Testplanungsverfahren in der Raumplanung; in: Scholl, B. (Hrsg.) 2007: Langfristperspektiven für eine integrierte Raum- und Eisenbahnentwicklung am Hochrhein und Oberrhein; Arbeitsbericht des Instituts für Städtebau und Landesplanung, Universität Karlsruhe; Karlsruhe: Universitätsverlag; 51-62

Contact to authors of this paper:

Institute for the Foundations of Planning, University of Stuttgart, Germany

**Univ. Prof. Dr.-Ing. Walter L. Schoenwandt**  
**Dr.-Ing. Wolfgang Jung**  
**Dipl.-Ing. Johannes Bader**

igp@igp.uni-stuttgart.de  
jung@igp.uni-stuttgart.de  
bader@igp.uni-stuttgart.de