

Summary

SPATIAL DEVELOPMENT IN AUSTRIAN URBAN AGGLOMERATIONS: NEED FOR ACTION AND STEERING OPTIONS

Urban agglomerations are the key drivers of regional economic development as well as the most important supply centres for the population in urbanized as well as in rural regions. In the year 2001, around 69 % of the population (approx. 5.54 million inhabitants) lived in the Austria's urban agglomerations; around 54 % lived in the densely populated agglomerations. Furthermore, economic activities concentrated in the urban agglomerations (77 % of all employees/jobs).

However, within and between the urban agglomerations there are imbalances in added value creation and employment development as well as major changes in the demographic structure and population trends due to spatially divergent net migration and birth rates (inter and intra-regional polarization). The two trends mentioned above have resulted in disparate fiscal developments between the core cities and their surrounding municipalities, the heavy urban sprawl and an ever increasing amount of space being used, the high consumption of resources as well as a growing imbalance in the development of public passenger transport services, which has worsened the accessibility of peripheral areas within urban agglomerations. These are some of the key issues of urban agglomerations that pose a great challenge to any targeted efforts to steer spatial development.

This study therefore deals in more depth with the space type "urban agglomeration" in Austria. It describes the main results of the project "Spatial Development in Austrian Urban Agglomerations: Need for Action and Steering Options" conducted from June 2007 to November 2008 by the Department of Spatial Development, Infrastructure and Environmental Planning of the Technical University of Vienna.

The work of the project focused mainly on the following areas: demarcation and definition of functional urban agglomerations in Austria; analysis of spatial developments as well of the constellation of actors in selected Austrian urban agglomerations; identifying where action needs to be taken and/or requirements especially for the actors involved in spatial planning, and spatial studies in the political-administrative systems; the presentation of innovative approaches for steering spatial developments

in urban agglomerations; deriving recommendations for action in response to the question of how to react to the different challenges of urban agglomerations and which types of steering and instruments are suitable for this purpose.

Research approach: Work on the project largely followed the approach referred to as "interactive research". Scientists from various disciplines, representatives from different political and administrative institutions as well as from the business sector worked together within the scope of workshops (including two focus group workshops) to arrive at a common body of knowledge on the project issues. Ultimately, the purpose was to achieve two aims: First of all, to develop practical knowledge (requirement for action), which was worked on jointly by the actors involved, and secondly, the development of an interdisciplinary approach and knowledge (recommendations for action).

A key goal of this publication is to raise awareness of the possibilities for steering spatial developments in urban agglomerations in Austria among the competent actors in the federal government, Länder, cities and municipalities (but also in the business sector and civil society). Ultimately, creating awareness is an important precondition for solving the problems of urban agglomerations and for developing suitable steering mechanisms.

The concept of "urban agglomeration": basic features and methods

Since the 1960s, economic, technological and social developments have resulted in the emergence of a trend of growing formation of continuous extended agglomerations in Austria that reach beyond the administrative borders of a municipality. This process was originally characterized by strong Fordist working and living conditions, and therefore, in the past research concentrated on the relationships between the city as the centre and its hinterlands as the surrounding urban area. If one were to attempt to identify agglomerations in the today's setting, this traditional understanding of city-hinterland relationships would have to be modified.

Austrian urban agglomerations are defined and demarcated taking into account homogeneity and function criteria. Instead of static units such as municipalities or settlement units, this approach applies identical grid cells of 500x500m side length to which the precise number of inhabitants and employees are allocated. This changeover from static units to a grid-based representation makes it possible to calculate density values with greater precision as well as rendering topological and geometrical features such as neighbourhood, distance and area easier to operate with.

Starting out from the grid-based data, the spatial categories listed in the following were applied that take into account the notion of polycentric settlement development within urban agglomerations that evolve independently of municipal borders: agglomeration area, core settlement area, supplementary area, surrounding urban area, urban agglomeration (functional spatial unit comprising the densely populated urban agglomeration area and the corresponding surrounding urban area). With the help of this method, agglomeration areas and their corresponding surrounding urban areas were identified resulting in a total of 38 Austrian urban agglomerations. Finally, urban agglomerations were classified according to the following criteria: size of urban agglomeration, economic structure, degree of embeddedness in a settlement system.

From "steering" to "regional governance"

Many different procedures and structures have been developed for the steering and coordination of developments in urban agglomeration as a means of actively mastering the challenges that arise from the spatial trends in urban agglomerations. In this context, the effectiveness of the "classical" direct (hard) steering instruments of urban and regional planning was questioned and the growing significance of indirect, more strongly communicative and cooperative (soft) steering instruments was confirmed. This is related to a changed understanding of steering that perceives spatial planning as part of government activities. The heightened need for coordination in urban agglomerations calls for the application of cooperative procedures and structures. Regional governance is based on concepts that rely more on cooperation and negotiation and combine a targeted mix of different steering instruments (direct, indirect) as well as different steering mechanisms (hierarchy, networks, market). This type of steering is contingent on how well the attempt succeeds to overcome the "negotiating dilemma", i.e., to which extent it is possible to arrive at common so-

lutions in an environment of competition and competing interests on the part of the actors. Therefore, incentive systems and the appropriate steering instruments are central components of regional governance that enable and support cooperation.

General developments in urban agglomerations in Austria

- **Demographic indicators** At +3 %, the increase in population between 1991 and 2001 in urban agglomerations was not much higher than on the Austrian average. However, positive net migration was the main factor behind this trend in the urban agglomerations (+2.8 %). Additionally, growth concentrated there almost exclusively in the surrounding urban areas (+7.5 %). Also as regards the age structure, overall the 38 urban agglomerations were not very different from the rest of Austria, but there was a significant disparity between the agglomeration areas and the surrounding urban areas although this disparity narrowed between 1991 and 2001.
- **Economic developments:** Similar to the development of the population, employment growth concentrated mainly in the urban hinterlands. This disparity is the most pronounced in large urban agglomerations with a high share of urban services and in small town regions in singular locations. By contrast, employment growth in urban small and medium-sized town regions and in small town regions with tourism concentrated in the agglomeration areas.
- **Development of traffic flows:** Between 1991 and 2001, the number of commuters travelling out of the urban agglomerations increased considerably (+28.9 %), but this development was much slower than in the rest of Austria where the increase was over 55 %. However, the faster growth in the surrounding urban areas of all urban agglomerations is deceptive, because this figure is dominated by the special situation of Vienna. In almost all other types of urban agglomerations, the increase was higher in the agglomeration areas than in the urban hinterlands. These findings show that more and more inhabitants also of densely populated core areas tend to commute to the hinterlands.
- **Fiscal developments:** It has been revealed that compared to other types of municipalities, the core cities have the highest net financing needs; i.e., spending that is not covered by charges or transfers for specific functions, but rather those paid from the general budget. Compared to municipalities outside of urban agglomerations, the net financing requirements of the hinterland municipalities for central place tasks are not higher, and slightly higher for tasks specific to agglomerations

only in the case of municipalities in the (narrower) agglomeration areas. This indicates a strong urban-hinterland complementarity: municipalities in agglomeration areas and in the surrounding urban areas are supplied with services of the core city without any corresponding financial compensation.

Within the scope of expert talks with the key actors involved in the project, the urban agglomerations listed here were selected for the further analysis of spatial developments and for an analysis of the actors: St. Johann im Pongau, Graz-Graz-surroundings, Stockerau-Korneuburg-Vienna21.

Fields of action in urban agglomerations and steering instruments

The need to take action was identified for the following areas based on the analysis of spatial developments and the constellation of the actors in the three urban agglomerations selected: economic development and regional enterprise location, population development and quality of life, settlement development and culture landscape, traffic development and regional governance.

The following areas of action were selected for closer analysis: "regional enterprise location" (instruments and measures including local planning measures, fiscal incentives, legal planning security for locations), "urban sprawl and utilization of building land" (including of measures to promote the use of building land, rezoning of building land, housing subsidy schemes); "traffic development" (incl. pricing policy instruments, city congestion charges) and "regional governance" (cooperation entities: SUM Vienna-Lower Austria, Regional Management Graz-Graz-Umgebung (Graz and Graz surroundings), Regional Association Pongau). With a reference to the aforementioned fields of action, good practice examples, especially from Germany and Switzerland, were included in the analysis.

General recommendations for action as regards the steering of spatial developments in urban agglomerations

Apparently, the dynamic relations and interconnections between core cities and their hinterlands pose a major problem for actors from politics and administration for carrying out targeted and coherent steering measures. This is certainly the area with the greatest need for action considering that up to now a general definition or demarcation has been lacking and there have hardly been any integrated approaches to the steering of urban agglomeration processes.

Recommendations for action and requirements

- The concept of "urban agglomeration" must be firmly established in politics and administration: Development of a national policy for agglomerations and cities, definition of urban agglomerations, development of an Austrian network of urban agglomerations in the context of European developments, more attention devoted to different types of space in spatial development policy;
- Creation of an integrated data and planning basis: Compiling a region-specific data basis, compiling regional area potentials by type of location, recording of functions of free space, development of a standardised method and representation for assessing fiscal effects of regional enterprise location, recording and evaluating existing cooperation projects and assessment by category of cooperation results, publishing and raising the visibility of developments in urban agglomerations;
- Organization of more discussions under the motto of "sustainable development" and "territorial cohesion" in spatial planning: Organization of strategy discussions, development of supra-regional planning strategies, auditing and evaluating planning targets and measures;
- Establishment of urban agglomerations as a relevant planning and action level as well as the targeted promotion of urban agglomeration cooperation endeavours: includes carrying out the bottom-up processes that form urban agglomerations, definition of forms of cooperation for urban agglomerations, overcoming barriers when setting up cooperation projects for urban agglomerations, consideration of the specific features of urban agglomeration cooperation involving more than one Land, greater use of communicative instruments and public relations work in urban agglomerations;
- Targeted improvement of steering instruments of spatial planning and other sectoral policies: includes attaching greater value to supra-local spatial planning and improved coordination with local spatial planning, supplementing the planning instruments by adding (large) project-related planning instruments, spatial focus in residential housing subsidies, securing space for high priority transport routes (ÖV, IV) and their enlargement harmonized with supra-local and local spatial planning, shifting costs of transport infrastructure more to users, raising appeal of locating shopping centres in core city areas, greater availability and attractiveness of high-quality regional business locations, "distribution of funds by task" in revenue equalization processes;
- Differentiation of the set of steering instruments by urban agglomeration: includes adding the spatial type "urban agglomeration" to the set of plan-

ning tools, coordination of targets and measures between urban agglomerations and other spatial types, differentiated measures for housing subsidy schemes in the context of urban agglomerations, application of measures relating to enterprise location and shopping centre location to urban agglomerations, harmonization of selected and problem-related instruments in the collaboration between Länder and across national borders;

- Improved coordination between the "hard" and "soft" steering instruments of spatial planning: Development of bundles of measures to prevent urban sprawl, coordination of the instruments of local planning, development of a coordinated set of instruments for "land policy", coordination of measures and instruments to develop and market enterprise locations
- Closer collaboration among all partners of the federalist state: Creation of a cooperation platform "urban agglomerations".