

# PLUREL



Land use relationships  
in rural-urban regions

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STRATEGIES AND SUSTAINABILITY  
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**D2.2.2**

## Review of further instruments with indirect effect on regulation of peri-urban land uses

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## Abstract

### Objectives

The current deliverable report has been prepared in the framework of PLUREL Work Package 2.2 (Typology of EU national governance and spatial planning systems).

The objective of this deliverable report is to produce a systematic overview of public sector regulations, policies and tools with effects on the peri-urban land uses. First financial instruments (e.g. intergovernmental financial transfers, public subsidies, taxation, service pricing) will be analysed, followed by the overview of some of the sectoral policies (infrastructure development, housing, transport). Finally an overview will be given about the regulatory tools local governments have to influence development processes. This analysis is a fine-tuning of the results of D2.2.1 which analysed in more general way the existing planning and administrative systems providing the framework for the RUR processes.

### Methodology

While deliverable report D2.2.1 gave a broad overview about government and planning systems in all EU member states, the present deeper analysis is done for selected regions only (those of the PLUREL case study regions and some others to cover all categories of the common typology of D2.2.1).

## The typology of countries developed in D2.2.1

**Table 1. Country coverage of the questionnaire in the typology developed in D2.2.1**

Government structure	1. Classic unitary countries	2. Centralized unitary countries with strong, but non-integrated local authority level	3. Centralized unitary countries with strong, integrated local authority level	4. Decentralized unitary countries with strong local and strong regional level	5. Regionalized unitary countries	6. Federal states
EU-15 and EFTA countries	<b>Greece</b> Ireland Luxembourg	Portugal	Denmark Finland <b>The Netherlands</b> Sweden Norway	<b>France</b> <b>United Kingdom</b>	<b>Italy</b> Spain	Austria Belgium <b>Germany</b> Switzerland
New Member States		Bulgaria Czech Republic <b>Hungary</b> Romania Slovakia Cyprus Malta	Estonia Latvia Lithuania <b>Slovenia</b>	<b>Poland</b>		

Based on theoretical studies, a questionnaire has been compiled and distributed to the case study regions and to the additional RUR regions. The questionnaire and the summaries of the case study answers are presented in chapter 4.

**Regions in bold in the table are those to which the questionnaire has been distributed, regarding public sector regulations, policies and tools with effects on the peri-urban land uses.**

Among the factors influencing the interests/motivations of the government actors in regard to the processes in the RUR area, the following will be discussed in details:

- the local government financing system (from where and according to which parameters the local governments receive their revenues),
- the taxation system (the existence of different types of taxes the local governments are allowed to levy and the spatially relevant consequences of these taxes)
- sectoral (infrastructure, economic development, transport, housing) planning, policies, regulations and subsidy systems.

Among the tools the public sector has to steer the land development process (through influencing the parameters of new developments which determine the interest of the moving actors), the following preserve most attention:

- regulations applied on new land developments in general, such as sectoral requirements attached to permitting larger new land developments (balance between jobs and homes, transport services, physical and social infrastructure requirements) and financial regulations, such as taxes on green field investments, subsidies for brown field redevelopment;
- rules applied in the case of concrete decisions on larger land developments: possibilities for the public sector to recapture some part of land value increase when re-zoning a piece of land is allowed or at the moment when building permission has to be issued for the planned project.

Through the overview of the factors influencing the interests/motivations of the government actors and the analysis of the tools the public sector has to steer the development process it is possible to highlight the problematic aspects of peri urban development. Such an overview also leads to ideas, in which regards the legal and financial regulations have to be changed in order to modify the development process towards more sustainable directions.

## Results

Based on the answers given on the questionnaire, indicators have been elaborated to quantify the qualitative information gained from the descriptions. Each indicator is a dummy variable, the value of which can be 0 or 1. Chapter 5.1 shows a table including the description of how the information received from the case studies have been evaluated regarding each indicator.

Chapter 5.2 presents the table including the values achieved by the case study areas regarding the composite indicators according to the areas of analysis. These values are summarised according to the three main topics of the analysis in a way that for each topic the regions can have a value between 0 and 1 (higher values meaning less interest/motivation for urban sprawl and/or more control over it). The results are shown in the table below:

**Table 2. Evaluation of the regions**

	Haaglanden	Manchester	Montpellier	Leipzig	Koper	Warsaw	Thessaloniki	Budapest	Bologna
Transfer system	0.67	1.00	0.67	0.67	0.00	0.33	0.00	0.33	0.67
Taxation	0.67	0.67	0.67	0.33	1.00	0.67	0.67	0.33	1.00
<b>Financial interests of municipalities</b>	<b>0.67</b>	<b>0.83</b>	<b>0.67</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.33</b>	<b>0.33</b>	<b>0.83</b>
Economic development and infrastructure	1.00	0.50	0.50	1.00	0.50	1.00	1.00	0.50	0.00
Transport	0.83	0.67	0.50	0.50	0.17	0.33	0.67	0.50	0.50
Housing	1.00	0.67	0.67	0.33	0.33	0.33	0.33	0.00	0.33
<b>Sectoral policies</b>	<b>0.94</b>	<b>0.61</b>	<b>0.56</b>	<b>0.61</b>	<b>0.33</b>	<b>0.56</b>	<b>0.67</b>	<b>0.33</b>	<b>0.28</b>
Tools to steer new land developments / Rules of concrete decisions on developments	0.75	0.50	0.50	0.75	1.00	0.25	1.00	0.25	0.50
<b>Tools to steer development</b>	<b>0.75</b>	<b>0.50</b>	<b>0.50</b>	<b>0.75</b>	<b>1.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.25</b>	<b>0.50</b>

1) The results can be summarised along the three main topics of analysis as follows.

**Table 3. Summary of the results**

	Haaglanden	Manchester	Montpellier	Leipzig	Koper	Warsaw	Thessaloniki	Budapest	Bologna
<b>Financial interests of municipalities</b>	<b>0.67</b>	<b>0.83</b>	<b>0.67</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.33</b>	<b>0.33</b>	<b>0.83</b>
<b>Sectoral policies</b>	<b>0.94</b>	<b>0.61</b>	<b>0.56</b>	<b>0.61</b>	<b>0.33</b>	<b>0.56</b>	<b>0.67</b>	<b>0.33</b>	<b>0.28</b>
<b>Tools to steer development</b>	<b>0.75</b>	<b>0.50</b>	<b>0.50</b>	<b>0.75</b>	<b>1.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.25</b>	<b>0.50</b>

- Regarding the **local government financing system** in some regions (e.g. Haaglanden, Manchester, Montpellier) the system does not motivate directly the municipalities to increase their population (which would lead to urban sprawl), while in other regions (e.g. Leipzig, Koper, Warsaw, Thessaloniki) such motivations are created by the financing system.
- Regarding **sectoral policies** Haaglanden stands out as very few of its analysed policies has a sprawl-oriented territorial impact. (This doesn't mean that high demand or other pressures don't have such impacts.)
- Regarding the **regulatory tools**, in some regions (e.g. Koper, Thessaloniki, Haaglanden, Leipzig) the municipalities are equipped with a broad range of tools which they can use to steer private developments.
- In the case of Thessaloniki we also see municipalities that can use innovative tools – but from the financial point of view they are more interested in new developments than municipalities in other regions.

2) On the basis of these results the analysed regions can be evaluated in the following way.

In the case of **Haaglanden** and **Manchester** a strong potential control can be seen parallel to moderate municipal interests to increase population. This suggests a high probability for an **effective control over peri-urban land-use**. **Leipzig**, **Montpellier** and **Bologna** seem to be in a less favourable, but still **manageable situation**.

**Thessaloniki** shows a potentially strong, hierarchical government and planning system, while municipalities are strongly interested in expansion, which can lead to **conflicts in the land-use** decisions. **Koper**, **Warsaw** and **Budapest** have a much weaker



government and planning framework. Municipalities have average interests to expand urban land-use, but most sectoral policies lead into this direction. In these regions (with the potential exception of Koper) the public control over land-use does not seem to be efficient.

### 3) Comparison with the outcomes of D2.2.1 on the potential strength of the public sector controlling urban sprawl

The results of the analysis can be compared to the outcomes of the deliverable report D2.2.1, which provided a **quantitative scale showing the potential strength of public regulation over land-use change** in the different countries as follows:

**Table 4. Results of the government and planning system evaluation**

Value	Countries
7	
6	Denmark, <b>The Netherlands</b> , Portugal, <b>United Kingdom</b>
5	Belgium, Cyprus, <b>France</b> , <b>Germany</b> , <b>Greece</b> , Ireland, Lithuania
4	<b>Italy</b> , Spain, Sweden
3	Austria, Bulgaria, Finland
2	Estonia, Latvia, Luxembourg, Malta, <b>Poland</b> , <b>Slovenia</b>
1	Czech Republic, <b>Hungary</b> , Romania, Slovakia

The results gained on the public sector regulations, policies and tools (with effects on the peri-urban land uses) compared with the classification in the table above, showing the potential strength of the control, might lead to the following conclusions.

Regions in countries with weak control potential (values 1-2) show strong interest in expansion while local authorities have only a limited number of tools to control urban sprawl. Thus the public sector regulations and policies are not able to change the deficiencies of the formal government system and planning framework.

On the other hand, regions in countries with high control potential (values 5-6) show more diverse results. While Haaglanden and Manchester seem to fulfil the possibility of strong control given by the formal government and planning systems, the case of the other regions seem to be different: the regulations and tools do not match the potential these regions could have in controlling peri-urban development.

These results underpin the hypothesis raised in deliverable report D2.2.1 that a weak potential control level assured by the formal government and planning systems is hard to overcome by regulations and policies, even if the willingness is given by the public actors. On the other hand, a high potential for control may or may not be used entirely, depending on the intentions of the public bodies in power.

While presenting the results it must be stated, that uncertainties result both from the limited number of case study regions analysed and the accuracy of data collected.

## Popular science description

Urban sprawl processes are not random outcomes, they are heavily influenced by many factors. Besides the analysis in D2.2.1 about the formal government structure and planning policy, this deliverable concentrates on the effects of public sector regulations and policies which directly or indirectly influence land use decisions and urban sprawl processes.

The results show the importance of the different public sector regulations and policies, which otherwise remain often hidden and are missing from many explanatory works on urban sprawl processes. There are a few countries (among the case study countries the Netherlands and UK) where the potential strong control assured by the formal government system and planning policies over RUR processes seems to be underpinned by the regulatory tools and planning policies which are used in practice. These countries have good chances to control peri-urban developments and avoid urban sprawl.

The other extreme is those group of countries (mainly the new member states of the EU) where the formal government system and planning policies are weak and do not allow sufficient control over the RUR processes. In these countries neither the practically used regulatory tools and planning policies assure such a control thus the public sector is from all aspects weak to control peri-urban development. The most likely outcome is growing urban sprawl.

In some countries there are internal inconsistencies in the way how the different analysed regulations and policies function and they fit the formal government and planning framework. In these countries further investigations are needed to explore to what extent and by which tools and/or policies urban sprawl could be controlled.

These preliminary conclusions will be extended with the results of D3.3.8, examining the governance processes in the case study regions. According to the hypothesis the governance processes could potentially modify to a given extent the strength of control over peri urban processes – especially if local governments agree in policies or regulations which would not be compulsory according to the formal systems in the RUR region.

## Keywords

taxation systems, transfer systems, sectoral policies, land-use change, public control

## Classification of results

<b>Spatial scale for results:</b> Regional, national, European	<b>regional (case study regions)</b>
<b>DPSIR framework:</b> Driver, Pressure, State, Impact, Response	<b>response</b>
<b>Land use issues covered:</b> Housing, Traffic, Agriculture, Natural area, Water, Tourism/recreation	<b>not specific</b>
<b>Scenario sensitivity:</b> Are the products/outputs sensitive to Module 1 scenarios?	<b>no</b>
<b>Output indicators:</b> Socio-economic & environmental external constraints; Land Use structure; RUR Metabolism; ECO-system integrity; Ecosystem Services; Socio-economic assessment Criteria; Decisions	<b>none</b>
<b>Knowledge type:</b> Narrative storylines; Response functions; GIS-based maps; Tables or charts; Handbooks	<b>texts, assessment</b>
<b>How many fact sheets will be derived from this deliverable:</b>	<b>1</b>

## Introduction

PLUREL has a strong focus on land-use change. Work Package 2.2 aims to elaborate the role of the government system, planning policy and governance in public decisions regulating land-use change. It depends from these decisions how much will be the future expansion of urban land use in rural-urban regions.

The tasks to be done in WP2.2 can be grouped into two sub-tasks. The first considers work to be done for all the EU-27 countries, as it contributes to the model which aims forecasting land-use change on the European level. The second refers to a more detailed analysis which has been done only for the case study regions and some other selected areas, representing different categories of countries.

The current deliverable report is the final report of the second task, while the first task has been delivered as deliverable report D2.2.1.

## PLUREL context

As already mentioned above, Work Package 2.2 aims to elaborate the role of the government system, planning policy and governance in public decisions regulating land-use change.

The objective of this WP is to produce a systematic overview of existing planning and administrative systems that are influenced directly or indirectly by policies on national and EU-level, providing different frameworks in the context of governance for Rural-Urban Region development planning.

The discussed instruments with effect on the peri-urban land uses are the following: intergovernmental financial transfers, public subsidies, taxation tools, service pricing, tools to regulate development processes with key importance to

- a) indirectly influence the functioning of the functional urban area, i.e. the mobility of people, investments, services between urban and peri-urban areas; and
- b) directly regulate the change towards more intensive land use, e.g. residential, commercial, industrial, office through re-zoning regulations; and influencing the level of development in already established areas through regulating the conditions for building permissions.

## Objectives of the deliverable

Deliverable D2.2.1 gave an overview on European national governance and planning systems at national scale, for all 27 EU countries on the basis of national reports. The results of the analysis were summarized in the form of a qualitative matrix at national scale (marks 1-5, determining the potential level of public control over land-use changes). The functioning of the governance system (fragmented/consolidated) and the planning policy system (strong/weak control through regional, national governance level) were the two dimensions.

The typology provided a generic approach for the understanding how the RURs related to the level where land conversion decisions were taken within the administrative and planning system of a given country. The typology related the RURs to the system of territorial governments: the size of the different units (local municipalities, supra-local

entities) the power and the basic functions they performed, and the planning competencies ascribed to each NUTS level. The relationship between RUR typology and the typology of government systems and national spatial planning policies was discussed along the questions:

- (i) whether there was a regional level of decision making which was dominant for RURs, or if decision making for RURs was made primarily on the municipal level, usually smaller in size than the RURs' size, and
- (ii) whether there was a structure like the „Metropolitan Government” which might have included more than one municipalities, it was below the regional level, and very frequently has been formed in order to precisely control and manage the RUR dynamics.

While deliverable report D2.2.1 gave a broad overview about government and planning systems in all EU member states, developed a common typology and summarized the results of the analysis in the form of a qualitative matrix at national scale (indicating the potential level of public control over land-use changes), the present deliverable D2.2.2 aims to present a deeper view on interests and tools of the public sector to control urban sprawl. With this analysis the potential level of public control over land-use changes (D2.2.1) can be refined towards the actual level of control the public sector is able to exert over land-use changes (D2.2.2).

The deeper analysis of D2.2.2 is performed only for selected countries (representing the categories of the typology developed in deliverable report D2.2.1), namely the PLUREL case study regions and some other RUR regions to cover all categories.

The results of D2.2.2 feed into the new joint WP2.2, WP2.4 and WP3.3 and thus also into deliverable D3.3.10: linking Governance typology between EU and regions, as well as into WP5.3 (PLUREL XPLOER) and WP5.4 (books).

## Structure of the deliverable

The report consists from the following parts:

- A theoretical analysis on the interests and tools of the public sector to control urban sprawl
- The evaluation and results of the case study questionnaires
- A questionnaire distributed to the case study regions and the summary of their answers
- The assessment of the case study answers based on selected indicators

# 1 The interest and the tools of the public sector to fight urban sprawl

## 1.1 Introduction

When analysing the process of urban sprawl it is useful to make a distinction between two types of actors:

- moving actors in the RUR: households (low-middle-high income), industry/businesses, retail/leisure centres
- non-moving actors in the RUR: key actors in the development process (landowners, developers); local and supra-local governments of the RUR region (doing planning, regulating, financial influencing, investments/taxing).

Based on this differentiation (which is taken from the URBS-PANDENS project) this chapter concentrates on the local and supra-local governments of the RUR region. Although most of the land might be in private ownership, as Larsson (2006:19) put it: ownership rights do not mean development rights, which need approval in former plans. “Most Western countries nowadays consider it a power of the local authority to decide if, where, when and how a development may take place.”

Thus the local and supra-local governments are in key position to influence land development in the RUR region. This paper has the aim to analyse a) which factors are determining their interests and b) what tools they have to fight urban sprawl, through influencing the decisions of the moving actors.

The public (government) actors can determine the conditions for new developments and through this to influence the suburban and periurban processes. There are differences between countries, how the decision-making power is allocated across the different levels of governments in the RUR area. For the subsequent analysis the emphasis is laid on those government levels, which are smaller – regarding their territory – than the RUR area. The sub-areas of the RUR, belonging to different governments with different regulations, might easily find themselves in competition with each other to attract the moving actors.

Among the factors influencing the interests/motivations of the government actors in regard to the processes in the RUR area, the following will be discussed in details:

- the local government financing system (from where and according to which parameters the local governments receive their revenues),
- the taxation system (the existence of different types of taxes the local governments are allowed to levy and the spatially relevant consequences of these taxes)
- sectoral (infrastructure, economic development, transport, housing) planning, policies, regulations and subsidy systems.

Among the tools the public sector has to steer the land development process (through influencing the parameters of new developments which determine the interest of the moving actors), the following preserve most attention:

- regulations applied on new land developments in general, such as sectoral requirements attached to permitting larger new land developments (balance between jobs and homes, transport services, physical and social infrastructure requirements) and financial regulations, such as taxes on green field investments, subsidies for brown field redevelopment;
- rules applied in the case of concrete decisions on larger land developments: possibilities for the public sector to recapture some part of land value increase when re-zoning a piece of land is allowed or at the moment when building permission has to be issued for the planned project.

Through the overview of the factors influencing the interests/motivations of the government actors and the analysis of the tools the public sector has to steer the development process it is possible to highlight the problematic aspects of peri urban development. Such an overview also leads to ideas, in which regards the legal and financial regulations have to be changed in order to modify the development process towards more sustainable directions.

Such changes in the public sector, of course, have to be discussed with the other major actors of the urban development process and can only lead to the aimed results if applied in the framework of a multi-actor governance procedure. This aspect will be discussed in other parts of PLUREL.

## 1.2 Factors influencing the interests/motivations of the local governments to attract the moving actors

Local governments are embedded into the national regulations on public sector financing, taxation and sectoral policies. These regulations are usually not studied in details when discussing the dynamic processes in the RUR areas, although they might strongly influence the motivations, the „behaviour” of local governments.

### 1.2.1 Local government financing systems

There are large differences across European countries regarding the local government financing systems, determining from where and according to which parameters the local governments receive their revenues. There are at least two questions of interest here, from spatial (metropolitan, urban-rural) point of view. One is the regulation along which transfers from supra-local (central, regional) levels are directed towards the local governments. The other is the level of independence given to local governments to raise their own revenues – this will be discussed in the next chapter, dealing with taxation systems.

A new taxonomy of the grant system (Bahl-Linn, 1992) takes into account three different dimensions. The first dimension is the determination of the size of the total amount to be distributed in a given year, that is, the divisible pool. The second dimension is the allocations among local governments. Once the amount of the pool is determined, allocations among local governments are typically made in four ways: by returning shares to the jurisdiction from which the taxes were collected, that is, using a derivation principle; by formula (which can vary from very simple models -- considering just the number of residents -- to more sophisticated models -- taking into consideration some expenditure needs); ad hoc or by reimbursing costs.

According to the level of the autonomy of the local government which will use the transfers (third dimension), there are unconditional (or general purpose) and conditional transfers or grants. In the case of unconditional transfers local governments have full control over the use of the money, while in the case of conditional transfers, the purpose of the use of the money is strictly defined ex ante. There are also so called block grants that can be freely used by local governments but in a certain defined area of local government services.

In the higher-level financing of public services it is of crucial importance, to what extent the real net costs (deducting fees collected for the service) of the services are covered by these transfers. If the centrally given normative support only covers e.g. 2/3 of the real net costs of providing the given service, the rest has to be assured from the budget of the local government which runs the service.

Example: For the performance of their mandatory responsibilities, local governments in Hungary are automatically entitled to normative contributions from the central budget. This, however, is not a form of task-financing, as the spending of such subsidies is not subject to restrictions (unconditional transfers). A local government decides at its own discretion, how much it spends on what tasks. Initially (in 1990), general contributions dominated the Hungarian transfer system (relating at first to the total number of residents, later to the number of individuals in the various age groups). Later on, however, the share of contributions based on the indicators of more concrete tasks (number of children in crèches, kindergartens, primary and secondary schools, those using the services of student hostels, social institutions, etc.) made up an increasing part of the



total funding. The aim of this, however, was to improve the allocation of transfers among specific sectors. (Source: Fiscal Design Across Levels of Government, Year 2000 Surveys Country Report: Hungary, May 2001)

These grant allocation principles influence the behaviour of local governments to a great extent. If the share of general purpose transfers and/or grants calculated by a simple formula (number of residents) are high, this creates interest to increase the number of population in general. Regarding the conditional transfers which are service-related, local governments have more “positive interests” in those services which are to a great extent financed by the higher level transfers. On the other hand, this interest is much lower in the case of the centrally less financed services.

Some public services have spillover effects (or externalities) on other jurisdictions. Examples are pollution control (water or air), inter-regional highway, education and social services, recreation facilities (may be used by neighboring areas), etc. The spatial consequences are clear: local governments are the less ready (eager) to run a public service the larger share of the real net costs has to be financed from their own budget. If a public service gets little higher-level financing, the interest of the local government is not to run this service but convince the population to use this service in another settlement. In this case the suburban population is using the service as “free rider” in the other settlement (as they are not resident there, thus they do not contribute with their taxes, etc., to the general budget of this settlement).

Example: the municipality of Budapest prepared some years ago an analysis about the magnitude of externalities paid for the residents of the surrounding metropolitan region, through the financing of local public services. Starting from the facts, what share of the real costs are paid from the central budget of the local public services (in the case of kindergartens this was only around 50%, while in elementary schools around 80%) and the facts, how many non-Budapest residents use these services, the study arrived to a figure of 8 million eur per year. It can be said that this is the magnitude of the indirect subsidy given by Budapest to the surrounding settlements, as if the residents from these settlements were not allowed to use the local public services of Budapest, this cost should have been covered by the settlements as they were be forced to run these services.

As a consequence, families moving out to suburban settlements often face the lack of services – especially of those services which are less financed by higher level financial transfers. In such cases suburban families are forced to use these services in the city from where they moved out, contributing to the increase of suburban traffic and to the increase of financial difficulties in the core city budget.

To solve such problems metropolitan-wide programmes can be set up for the delivery of local public services with inter-jurisdictional spillover effects. This is, however, only possible if a higher level law makes this compulsory (see e.g. the French intercommunal associations or the German Transport associations) or the municipalities of the area cooperate with each other. A financial agreement has to be reached, in the framework of which the municipalities where such services are not offered, contribute to the costs of the municipalities which run these services, proportionally to the number their residents (the free riders) who use the services.

### ***Questions to clarify from case study regions***

- What types of grants exist in your country? What are the main grant allocation principles (derivation, formula, reimbursing cost, etc.)? What is the approximate

share of general purpose vs. conditional grants? How does the grant allocation system influence the behaviour of local governments?

- Are there any differences in your country in the share of higher level normative financing of the different local public services – i.e. how much of the real costs of one elementary school student, of one place in kindergarten, etc is financed from the central budget? How does the grant system in your country treat the services with inter-jurisdictional spillover effects?
- *What kind of differences this creates among the local governments of the RUR region in their interests/motivations to run these public services for their population?*
- Is it in the interest of the local governments of the RUR region from financial point of view to increase the number of their population? Why?

Are there any other financial subsidy forms in your country which have the effect to strengthen urban sprawl?

## 1.2.2 Taxation systems

The aim of this chapter is to analyse – on the example of the case study regions – the existence of different types of taxes the local governments are allowed to levy and the spatially relevant consequences of these taxes on the mobility decisions of the moving actors, i.e. the residents and businesses.

Sub-national taxation is a quite difficult topic within the economic literature. Some basic knowledge is summarized below, based mainly on a conference paper (Kovacs, 2009).

Although most productive revenue sources are assigned usually to the central government, as part of fiscal decentralization a certain portion of financial sources can be assigned directly or indirectly to local level. There are some arguments for levying taxes at lower level of government:

- Provision and financing of services at a local level might induce improvement in attitude to taxation.
- Higher local tax revenue might reduce the dependence on state budget support.

The share of financial sources which are assigned directly or indirectly to the local level indicates the level of financial independence of the local governments. Needless to say, there are huge differences in this regard across Europe. According to a British analysis (House of the Commons. 2009):

„Danish municipalities raise 60% of their revenue from local taxes (mainly income tax), and a further 14% from charges for services. ... Similarly, Swedish municipalities raise 69% of their revenue from local taxes (mainly income tax), and only 15% in the form of government grant. The local government representatives ... felt that the clear link between local tax payment and the delivery of local services led to a strong engagement in local democracy. In England the financial situation is reversed. Local government raises, in total, only 25% of its revenue locally – mainly through the council tax.”

Another country where the municipalities have little freedom to raise taxes themselves is the Netherlands, where the bulk of their budget comes from the state based on the number of inhabitants.

A basic term in taxation literature is that of “benefit taxation” which refers to tax systems in which taxpayers are taxed according to the benefits they receive from public expenditures. In the alternative “nonbenefit” tax systems there is no link between taxation and local government services (one form of this is “ability-to-pay” taxation).

There are some “rules of thumb” economics is suggesting for sub-national governments in order to control their own revenues and to be able to act responsibly when making their own policy choices. According to these, a lower level of government should be relied as much as possible on benefit taxation of mobile economic units, including individuals and mobile factors of production. It is also essential that “to the extent that local governments make use of nonbenefit taxes, they should employ them on a tax bases that are relatively immobile across local jurisdictions” (Oates 1996, 36).

Bird (1999) notes that property taxes, excise taxes, personal income taxes, sales taxes and taxes on business are the only economically acceptable categories of taxes levied at the local level of government. Property taxes and/or personal income taxes are economically and socially most justified at lower level of government. The property tax is a stable form of revenue, allows only limited tax exportation. It acts as a rough form of benefit charge as well: the value of real estate is strongly influenced by the level of local services. Nonetheless property tax is an unpopular form of taxes because it is a visible tax burden therefore citizens directly confront it. Property taxes levied on plots and buildings discourage investment in improvements. The other important and frequently used form of local taxation is levying a personal income tax generally in the form of a surtax on the national income tax base.

It is a general opinion that taxes on business are very weak on efficiency grounds and are strongly criticized for distorting location decisions. Even so, such taxes are widespread and generally popular by the politicians (as being easy to collect and might result substantial revenues) and by the population (as not they have to pay) as well. (Bird, 1999)

In Europe local taxation is based on property taxes in the United Kingdom, France, Spain or Poland. On the other hand all Scandinavian countries provide good examples for local tax systems where personal income tax plays a dominant role. In that countries local tax revenues amount to even 30-40 percentage of national tax burden.

From the point of view of PLUREL the most important question regarding local taxes is the topic of tax-competition within the RUR region. According to Goodspeed (1998) tax competition results “... when the tax system of one government entity affects the tax system of a second governmental entity, usually through an effect on the second entity's tax revenues.” If the settlements within the RUR region are entitled to levy a certain type of local tax, and can also determine by themselves the parameters of this tax (within the framework the taxation law allows), the result is usually tax competition: some settlements will lower the percentage in order to become more attractive towards the mobile actors. Tax competition exists in some of the PLUREL regions (e.g. Leipzig, Warsaw).

It is easy to assume that tax competition between the municipalities of a RUR area is harmful as it distorts the location decisions of mobile actors. However, economic literature shows that this is not always the case. Analysis shows that horizontal (i.e. between local governments) tax competition can result in an efficient allocation of resources if the taxes used are benefit taxes. According to Goodspeed (1998) in such cases “... firms and individuals will sort themselves among jurisdictions to obtain their most preferred tax-expenditure package in the same way that individuals shop in the private market. Benefit taxes reflect social marginal cost and therefore lead consumers and firms to choose jurisdictions efficiently. If taxes do not reflect benefits, however, externalities are created so that tax prices diverge from social marginal cost. This creates incentives for inefficient location decisions. ... Consequently, one cannot gauge the level and effects of tax competition simply by analyzing differences in tax rates.”

### Example: the case of Hungary and Budapest

On the case of Budapest and its metropolitan region a clear link can be proved to exist between changes in taxation regulations and the intensity of suburbanisation. The changes in the spatial allocation of the PIT (personal income tax) and the business tax has clear consequences on mobility decisions of people and businesses, as well as on the strategy of the local governments of the RUR region, how and to what extent attract population groups with different incomes and different types of commercial investments. (Kovács-Tosics, forthcoming)

In Hungary, „... a number of important public policies, enacted during the early 1990s, provided a hefty push propelling the process of suburbanization forward. These included the decentralization of decision making increasing the autonomy of local governments, the state infrastructure investment policies favoring previously neglected smaller settlements, the new taxation policies allotting 100 percent (later reduced to 50 percent) of the collected personal income tax revenues in the hands of local governments. This regulatory environment created incentives for suburban municipalities to adopt policies aimed at attracting middle and higher income households.”

... „Around the end of the 1990s, the strategy of some suburban municipalities to entice new residential development changed as a consequence of the increasing demand placed on these governments to provide public services to a rapidly growing population. This increased burden was made even heavier by the reduction of revenue flowing into local government coffers as a result of the restructuring of national taxation policies.<sup>1</sup> At the same time, new opportunities to acquire business turnover tax revenues became available. Within a short period of time, the interest of suburban local governments shifted from supporting housing growth to attracting non-residential development investments.”

... „Many of the suburban settlements adjusted the focus of their development strategies away from residential development, concentrating their efforts on assembling large-scale greenfield sites earmarked for non-residential investments. The lack of effective policies coordinating regional development patterns resulted in channeling the majority of investments to the agglomeration belt, while Budapest emerged as the clear loser in this competition, hindered by the weight of the problems of its numerous brownfield sites (Barta, 2004). Foreign investors learned quickly how to “play the game” of pursuing easy development opportunities and in this, once again, Budapest proved to be the weaker competitor. Its two-tier administrative system of municipal and district governments translated into a more difficult investment environment compared to the case of

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<sup>1</sup> In 1990, the entire amount of the Personal Income Tax revenues were allocated to the taxpayers' local governments. This share was reduced to 50 percent in 1991-92 and to 30 percent in 1993-94. In 1995, the distribution of PIT revenues was changed again – local governments received directly 29 percent, while 6 percent were redistributed according to normative criteria. The formula was continuously amended, lowering the share of direct appropriation, which by 2003 fell to 10 percent (Kecskés, et al, 2005).

doing business with suburban governments, where development permits were a lot easier to obtain.” (Kovács-Tosics, forthcoming)

An important part of the strategies of the suburban settlements to attract investors is the lowering of the level of the business turnover tax. The national Tax Law determines the upper level of this tax (max. 2% of the yearly net turnover of the business) and allows the local governments to determine the concrete levy by themselves. While Budapest always applied the highest possible level, many of the suburban settlements apply lower levels, creating in this way a clear tax competition. As there is no or only very weak correlation between the level of the tax and the benefits the businesses receive from local public services, this tax can not be considered as benefit tax, thus this tax competition is not a healthy one.

As an extreme example one of the municipalities of the Budapest Agglomeration applies the business turnover tax with a 0% rate. As a consequence all the car leasing companies put their headquarters into this small settlement. According to statistics in this settlement there are 20 times more registered cars than inhabitants...

Despite all the controversies, in the case of Hungary the application of local taxes is the exclusive right of local municipalities which can not be limited by higher administrative levels (e.g. counties or regions). Thus metropolitan tax harmonization from above is unthinkable under present circumstances. As the cooperation culture of local governments is very low, not even efforts for bottom-up voluntary harmonization schemes are observable.

On the basis of this overview RUR regions should survey the local taxation systems applied across their settlements. Exploring these taxes the major question is to find out, which of these create horizontal tax-competition within the region and how strong this competition is (to what extent is it influencing the location decisions of the moving actors). In order to estimate the real effect of this competition on the functioning of the RUR region the given tax should be analysed, to what extent it can be considered as benefit tax, i.e. to what extent is it levied on the basis that benefiting businesses should pay for the benefits they receive from local public services (Bird, 1999)? Finally, the chances/discussions of higher level regulations (e.g. in order to limit such competitions) should be explored.

### ***Questions to clarify from case study regions***

- Usually how big share of the local budget is covered by revenues from local taxes?
- What are the main types of the allowed local taxes? Which are the types most favoured by local governments and why?
- What are the spatial consequences of the local taxation system – which of the local taxes create tax competition between municipalities of the RUR region?
- *Are there any analyses about the consequences of the tax competition, whether this can be considered as efficient allocation or the opposite, unhealthy distortion of allocation decisions?*
- Are there any higher level public regulation efforts against tax competition? If yes in what forms and how efficient these regulations are?

Are there any other taxation forms in your country which have the effect to strengthen urban sprawl?

### 1.2.3 Sectoral planning, policies, regulations and subsidy systems

It is quite obvious that the internal development of the RUR area is not only affected by general financial and taxation issues but also by sectoral policies, regulations and subsidy systems. From the broad range of sectoral issues this chapter only deals with three: economic development and infrastructure, transport, and housing. The nature of the PLUREL project and the composition of the partners ensures that environmental policies are sufficiently discussed in other chapters.

#### 1.2.3.1 Economic development and infrastructure

Economic development and infrastructure is usually planned parallel on different government levels. While national plans and policies deal with macro-regional aspects (such as international competitiveness and regional inequalities), the regional and sub-regional ones are more concrete and territory specific.

PLUREL is interested in the functioning of the RUR area. The D2.2.1 deliverable gave an overview about government systems and spatial planning policies across European countries. From this analysis it became clear that there are huge differences in Europe regarding the strengths of the supra-local tier of administration: while in some countries elected regional governments exist with strong planning power, in others only some weak planning and statistical roles are allocated to non-elected regional bodies. In centralized countries public control can be executed through functional (sectoral) bodies, authorities. In the most decentralized countries upper-level public control is weak: neither administrative nor strong functional control exists over the local municipalities.

From the perspective of the development within the RUR area it is of crucial importance, on what level decisions are taken about economic and infrastructure development. If such decisions are taken on regional, or any other administrative level which cover the RUR area, there is a high chance that the sustainability aspects of development will be taken into account – new economic investments will be in accordance with the other infrastructure conditions for development, taking also environmental and social aspects into account. The chance for unsustainable development is much larger when these decisions are decentralized to the local government level – especially if the local government system is fragmented, consisting of many small, non-integrated local governments (i.e. preference is given to local autonomy over the efficiency aspect of service provision).

If the strength of supra-local administrative levels to steer economic development processes is weak (e.g. limited to drawing non-compulsory structural plans, regional economic development concepts), the real decisions to attract economic investors are taken at the local level. Local governments can decide about the level of local taxes, as discussed in the previous chapter, but also about direct or indirect subsidies (e.g. in form of subsidies to infrastructure development) given to investors, in order to attract new developments to their territory. Agreements between the local governments and the investors might be kept secret referring to it as private business matter. In the lack of higher level regulations the municipalities do not even have to take into account the interests of the surrounding areas (whether the planned investment will cause any harm to other municipalities through increased traffic, pollution, etc). In extremely decentralized systems probably the only regulation to be taken into account is the EU



competition legislation which forbids giving too much subsidies to investors which would distort the functioning of the free market.

In the national patterns of the development of infrastructure similar differences can be seen across Europe. Also here the most problematic case from the perspective of sustainable development is the strongly decentralized systems with the almost total control of the local government over new infrastructure investments. In such cases not only the RUR-level coordination is difficult but even to achieve concerted actions between neighbouring municipalities.

#### Example: Budapest, Ferihegy area

A clear example on the sharp competition between local governments for the economic development opportunities and also in infrastructure development can be brought up from the Budapest Ferihegy area. The following analysis is based on research work done by Péter Schuchmann (Pestterv Ltd).

Budapest is a city of 1.7 million inhabitants. There are further 81 local governments (plus 23 districts within Budapest) in the Budapest agglomeration area which comprises 2.5 million people. All these local governments are totally independent, they have the full rights to approve their own plans for development. The Budapest agglomeration area corresponds more or less to the suburban area (although the 1996 defined borders of the Budapest Agglomeration are not good any more, the functional area is bigger, partly crossing through into other regions). Outside of that there are two city rings around the capital, with even less (nonexistent) relationships to the capital or the agglomerational belt. This largest area has some 4 million inhabitants. The RUR area around Budapest could be delimited somewhere in between the 2.5 million agglomeration and the 4 million larger economic zone.

Regarding the administrative system, in 1996 there was a weak (only statistical) level established for Budapest and the 81 local governments, called as Budapest Agglomeration Development Council. The “official” NUTS2 unit comprises of Budapest and Pest county (altogether 2.9 million residents). Even this level is, however, weak, having no elected regional government, only a delegated body for development issues: the Central Hungarian Region Development Council.

Ferihegy is the airport of Budapest, situated on the boarder between the city and the county. There are large development opportunities around the airport in the county. These opportunities were further strengthened by the building of the M0 orbital motorway, supported by the EU Structural Funds.

As mentioned, local governments can make all development decisions by themselves, including the re-zoning of parts of their territories from agricultural into development areas. In the last years, in connection with the development of the M0 motorway, all together 2500 hectares have been rezoned into industrial, logistical area by the affected seven local governments nearby the airport. These rezoning decisions did not take into account the real demand for development, the existing infrastructure conditions and their realistic development, and were not at all with account to any environmental consequences.

The lack of any territorial cooperation between the seven neighbouring municipalities of the area can also be illustrated by the fact that the rezoned 2.500 hectar is clearly too much for new development, many times more than any realistic calculation of development demand. There is also a lack in cooperation for the infrastructure development: according to the separately prepared development plans of the affected municipalities there are five sewage plants planned at the moment.

Recognizing this situation Pestterv initiated an unusual joint planning work to make the problems visible. The contractor is the municipality of Budapest, and through the Budapest Agglomeration Development Council the mayors of the seven settlements (who otherwise would never exchange information about the developments) participate in an ad-hoc committee.

As the regulatory plans for the oversized developments are already approved by the municipalities, the actual development process can only be influenced through the development of the missing infrastructure (there is lack of sewage capacity). Pestterv will prepare a plan to prioritize the most logical development ideas while postpone those which are clearly mistaken. There are some chances that developers will accept such a prioritization as they can wait even longer time to carry out the development.

The area plan of Ferihegy is an innovative step forward and can even serve as a model for the 2010 revision of the large Regulatory Plan of the Budapest Agglomeration. However, it is a rare example and the communities could only be forced to talk about cooperation, because the development of the sewage network is in the interest of all of them.

### ***Questions to clarify from case study regions***

Are there supra-local administrative or functional bodies regarding the control over economic development and the development of infrastructure within the RUR area? What powers do they have?

To what extent are the local governments within the RUR area competing with each other for economic development opportunities? What are the usual means applied to attract investors to their territories?

Are there any other public subsidies in your country, given to infrastructure or economic development, which have the effect to strengthen urban sprawl?

### **1.2.3.2 Transport**

According to a recent summary on transport problems (European Commission, 2009) urban areas pose the main challenges to transport policies from both sustainability (CO<sub>2</sub>, air pollution) and competitiveness (congestion) viewpoints. Urban traffic and congestion is expected to grow as a consequence of increased urbanisation and greater urban sprawl. Congestion reduces the logistic efficiency of deliveries. Besides the obvious problems of urban transport, also international and inter-regional transport will more and more suffer from the 'last mile' problem (virtually all transport tasks/routes start and end in dense urban areas).



Cities may not be able to accommodate much larger volumes of private cars as infrastructure space to drive and park may be limited. Many cities might have to find radical ways of dealing with congestion.

From the European Commission report many important statements and suggestions can be derived regarding the future of transport, i.e. on the required direction of changes:

- Urban places are the main nodes in the transport system of larger areas. In these nodal points the links between the different transport providers (local and suburban transport companies vs. long distance transport providers) of different size and ownership have to be optimized. Coordination and multi-modality should enable the access to public transport and reduce the need to use the car to approach the urban core. Thus “co-modality” should be achieved in such a way that the share of private car use should decrease. i.e. steps towards modal shift should be done.
- Financial regulations, such as taxes, charges and emission trading systems should under no circumstances create incentives for car use. Just the contrary: such tools should ensure the internalization of external costs of transport, while keep the free choice of users regarding transport modes. Only real prices, which fully reflect costs, can lead to economic efficiency<sup>2</sup>.
- In the case of new developments (commercial, industrial, office, housing, etc.) above a certain size, the planning process should include as a compulsory element the preparation of a mobility audit, the results of which should be taken into account in the locational decisions, within the framework of strict land use policies.
- On the top of all these measures, in the most dense urban areas – besides the improvement of public transport services – the application of special mobility management tools, such as green zoning and urban road pricing<sup>3</sup> should be considered. These measures should contribute to the behavioural change of transport users without decreasing the mobility options.
- Public authorities have an essential role in providing the planning, the funding and the regulatory framework for a complex system such as that of transport. They should also act as catalysers in city-region wide public transport associations.

For PLUREL transport is of key importance as RUR regions include territorial units with very different densities, ranging from high-density core urban areas through medium density residential, office and commercial parks to very low density peri-urban areas.

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<sup>2</sup> The German commuters’ tax allowance (Entfernungspauschale) is an example of subsidizing commuters’ expenses. People commuting from more than 20 km distance can reduce their taxable income, independently of the real expenses and of the transport mode (foot, bike, motorbike, public transport or car). From the ecological point of view the commuters’ tax allowance is very critical as it contributes to the spatial detachment of residence and work, i.e. work in town, live in the countryside (“Premium for urban sprawl”).

<sup>3</sup> The best known European examples on urban road pricing are London, Stockholm, Oslo, while the system introduced in Milano has strong environmental character. In Manchester the idea for large congestion charging system has been rejected in a local referendum, although 1.5 bn GBP government fund was offered for expansion of public transport network.

These units have usually very different dominant transport modes, ranging from high-capacity fixed track rail-metro-tram systems through buses till the individual cars.

The big challenge for the RUR regions is to find the optimal way to connect these transport modes to each other, ensuring very different aims at the same time: avoid congestion in the dense urban areas, assure mobility options even in the low density areas while control for the sustainability of transport and the reduction of urban sprawl for the whole area.

The good organization of transport across the RUR area, based on public transport association for the denser urban areas and extended by good opportunities provided for changes between different transport modes (P+R, etc) can become one of the strong identity elements in the strengthening of the RUR cooperation.

#### Example: Budapest.

Being one of the largest cities of east-central Europe and due to her excellent geographical position, Budapest was always in central position regarding the links between western and south-eastern Europe. From this it follows that Budapest is a nodal point in the highway structure in an international perspective. Additionally, Budapest is the clear center regarding the national road system: the links between the different parts of Hungary lead practically through the capital city. Besides the international and the national traffic, there is an intensive traffic between the city and its functional urban region. In the last decades a substantial share of the urban population moved out from the city towards the suburbs, as a result of which the population of the capital decreased from 2 million (1985) to 1.7 million (2008). Most of the suburbanites have kept their working places, the school of the children, etc, in the capital city, thus the daily mobility between the city and the suburbs grows dynamically. This mobility is, unfortunately, recently dominated by private car use.

As a result of all these factors traffic became the most important problem of the Budapest metropolitan area. Congestions are spreading out in area and in time (endangering the competitiveness of the economy) and the resulting air pollution is significantly decreasing the quality of life in and around the city.

Budapest Municipality has the clear mandate to organize public transport in the city and also to maintain and further develop the urban road structure. In the Central Hungarian Region (consisting of the City of Budapest and Pest county) the Budapest Transport Association has been established in 2005, as a service-oriented collaboration between the Ministry of Economy and Transport, the Municipality of Budapest and the Self-Government of Pest County (surrounding Budapest). At the same time the three partners established the Budapest Transport Association Public Company (BTA), which has increasing competencies in the Budapest functional urban area (delimited by the end-stations of the radial commuters' rail lines). The main aims of the BTA is, on the one hand, to mitigate the road traffic which is dynamically growing in the whole urban area, and, on the other hand, to contribute to the development of public transport and to the increase of its quality in and around Budapest.

However, there is a long way to go until BTA achieves the position of a fully-fledged transport association (with integrated ticketing, coordinated time-tables of the different transport operators and cooperation in infrastructure development and service provision). The current weakness of the transport association and the lack of cooperation between the main

public transport providers (Budapest Public Transport Company, Hungarian Railways, Regional Bus Company) is one of the big obstacles in the fight against urban sprawl in the Budapest urban area. . On the other hand, the BTA is very much interested in the good practices of the other partner cities in developing and running transport associations in the functional urban area around the core city.

### ***Questions to clarify from case study regions***

- What is the share of public transport use in the urban, peri urban and rural areas?
- What is the share of user fee payments in the total budget of public transport? Are there any special public subsidies given to the use of individual car traffic (such as tax deduction of travel-to-work costs)?
- Are there any other transport-linked public subsidies in your country which have the effect to strengthen urban sprawl?
- To what extent is the RUR area covered by public transport associations? How are the areas outside of these associations connected, how is co-modality organized?
- What kinds of interventions are considered to ensure the internalization of external costs of transport?
- How is the close link between spatial/strategic planning and transport planning ensured? Besides these general links are there mobility audits required for locational decisions in the case of larger projects?
- What kinds of mobility management tools are considered in the most dense urban areas in order to reduce congestions and improve the environmental conditions of transport? Are there any steps forward to achieve the behavioural change of transport users?

### **1.2.3.3 Housing**

In the development of RUR regions housing is one of the important aspects. It is in direct connection with the spatial moves of households and in indirect connection with those of the business actors.

American surveys clearly show how the process of suburbanization of the households was followed by the suburbanization of retail, office and all other business investments. In Europe, however, there are different patterns of these processes observable. In the case of Germany, for example, Fassmann has shown the opposite sequencing: it was the capital which went out from the cities first. As an additional process, the western capital investments into the eastern part of Germany were directed to the suburban areas instead of the cities themselves.

The hypothesis of Fassmann (2001), that this pattern (first the capital moves and households follow) is the general feature of the European suburbanization, and in that regard suburbanization in Europe is very different from the American, is, however, not true. The German example is special, connected to the enormous state subsidies given to all kinds of capital investments in Eastern Germany, without, unfortunately, to control the spatial consequences of these subsidies. As in the other post-socialist countries such subsidies were not given to investors, the suburbanization processes are closer to the American pattern, i.e. in the beginning the movements of the households played the more

important role. (The early suburbanization of the capital was also hindered in these cities by the fact that suburban locations had very underdeveloped infrastructure.)

The mobility of the households is in a natural way very closely linked to housing policy. Both the market processes and the public interventions (subsidies, regulations of the different construction and renovation forms, available financial means) have to be surveyed in order to be able to explore and explain the spatial consequences they cause in the movement of households.

#### The double advantage of territorial cooperation in housing issues

In the development of the RUR areas housing policy (and in a narrower sense the cooperation of municipalities in the planning of housing) might play a double role. On the one hand, housing might have strong 'regulatory' functions. Residential locations largely influence the environmental and social conditions in an area and they also influence the spatial allocation of wealth and poverty through the taxation aspect. Cooperation between the municipalities of a given area in land-use and housing policies might help to avoid urban sprawl and its non-wanted negative externalities, such as traffic congestions, air pollution, social segregation. In this regard territorial cooperation (based on jointly accepted regulations) in housing policy issues might efficiently contribute to a more balanced, cohesive and sustainable functioning of the RUR areas.

On the other hand, housing has also links to the 'positive', win-win agenda of the economic development oriented, broader territorial cooperation aiming at stronger competitiveness. If housing is included into multi-sectoral strategic planning, this might help to establish strong link between the development of residential and working places in the RUR area, which is necessary to avoid the increase of traffic demands. Furthermore, housing is one of the main aspects of 'Quality of Life', thus it is an essential condition for the improvement of the economic competitiveness of the RUR area (without good quality housing supply no good quality workforce can be attracted) and it also connects directly to economic functions (building industry).

Consequently, the housing sector can potentially play an important role to strengthen both the cohesion-sustainability and the competitiveness aspects of the development of RUR areas. This is a strong argument to control the housing sector by public considerations from a higher territorial level, such as the functional urban area or the RUR area. If agreements can be reached on territorial housing policy cooperation (controlling access to and distribution of housing development possibilities, such as developable land, infrastructure), this might ensure the environmentally and socially sound functioning of the broader areas. Moreover, new housing development strategies agreed for larger areas, if well connected to economic development potentials, might contribute positively to the competitiveness of the RUR area.

#### The potential conflict between sustainability and affordability

The spatial, distributional effects of new housing investments might easily create conflicts between the housing and urban aspects. Without any public intervention the affordability aspect requires the construction of new housing in outside, more remote areas (with lower land values), which, on the other hand is increasing transport demand and is therefore in clear contradiction with the basic principles of sustainable urban development. The conflict is also obvious in the opposite direction: any prescriptions for more sustainability in housing (e.g. zero-emission construction) makes housing more expensive and therefore less affordable.

To handle this contradiction there are different public interventions possible. On the one hand, it is possible to ensure the affordability aspect for a substantial part of new housing which is built according to the principles of sustainability. The method is to prescribe by law the minimal share of social (affordable) housing in all new developments. The PLUREL case study regions include examples on this approach.

In France any new housing developments have to include at least 20% social housing. Municipalities, which do not comply with this rule, have to pay a penalty to the regional level, which is then used to support social housing in other parts of the region.

Similar regulations are in force or under discussions in other countries (Germany, UK).

On the other hand, it is possible to ensure the sustainability aspect for a substantial part of new housing which is built according to the principles of affordability. This can be achieved through creating links between new social housing and spatial planning decisions (e.g. put new social housing close to public transport); through public interventions into the land market, such as land banking and selecting investors for the construction of new housing on the land sold by the municipality by the criteria that in the new housing project both sustainability and affordability principles have to be applied.

Regarding Manchester, according to the NW regional spatial strategy 60% of all housing has to be on brownfield land (in Greater Manchester this share is 80%).

#### Decision making power in housing issues

European countries apply different models where to put decision making power in housing issues. In the majority of countries housing matters belong to the exclusive rights of local municipalities. In some countries, however, housing matters are transferred totally or partly to a supra-local level.

The UK and Netherlands are just two examples where decisions about the number of units to be built are taken „above” the municipalities. In this model interesting contradictions have to be solved. In the Netherlands, for example, “housing” is the task of the city-region, regarding production and allocation, while to set up visions for the future is the task of municipalities. These aspects, however, are difficult to separate in this way therefore the city-region starts informal discussions on housing visions of the future, in which all municipalities participate.

Another potential way to influence the housing market is to issue compulsory guidelines about the spatial allocation of new housing construction. In some UK regions there are ordinances about the minimal share of new housing to be built on brownfield land, while in the Netherlands for the share to be built within the existing boarders of developable land of municipalities. In France there is an attempt to link housing development plans to the areas where public transport infrastructure is being developed. Germany introduced nationally funded urban renewal programmes for city centres in Eastern Germany, and there are integrated regeneration programmes which also include the demolition of unnecessary housing stock (from 2002).

#### ***Questions to clarify from case study regions***

- Are there supra-local (regional, national) ordinances or prescriptions regarding housing policy? To what extent do they control local governments?
- What are the reasons for these limitations of local decisions making independence and how can the real effect of be evaluated?
- Are there any special housing-linked public subsidies in your country which have the effect to strengthen urban sprawl?
- Is there any cooperation between the municipalities of the RUR area (or smaller subsets of it) regarding housing policy? What are the aims and tools of this cooperation and how successful it is?
- How is the conflict between affordability and sustainability be addressed in the municipalities of the RUR region?

## 1.3 Tools for the public sector to steer new land developments in the RUR area

This chapter aims to give an overview about the tools the public sector has to steer the land development process. The point of departure is the demand/wish from the side of the moving actors (households, businesses, developers) for a sizeable new development somewhere in the RUR area. The municipalities (and/or the higher level public actors) have a range of possibilities to influence the parameters of new developments, which, on the other hand, have an effect on the decisions of the moving actors.

The possibilities of the municipalities to influence large-scale new land developments can be classified into two broad categories: regulations applied on new land developments in general, and more detailed rules applied in concrete decisions concerning larger new developments.

Before going into the details of these possibilities, two very direct intervention tools have to be mentioned briefly. The first is acquiring land ownership by the public sector. The municipality can directly intervene into the land market by buying up land for future development purposes (land banking). If the share of the municipality among the different types of owners of developable land is high, then it can actively influence land prices and can also raise connected requirements towards those developers who buy the land for their developments from the municipality. This was the case, for example, in Vienna. The city bought up a lot of land and in the 1920s could initiate large social housing construction. Later housing development was influenced also in less direct way, by selling the land to developers under specific conditions. Several countries across Europe, such as Netherlands, Sweden, Spain use active land banking strategies (Larsson, 2006:57).

The other direct intervention possibility is investment by the public sector (or in PPP) into revitalization and compact urban development. There are many examples across Europe on nationally funded urban renewal programmes for the regeneration of city centres. These programmes usually changed through time from purely physical interventions towards more integrated regeneration programmes, including also social, economic and environmental measures. Also the redevelopment of settlements, allowing larger densities around public transport stops can be considered as development oriented intervention, close in spirit to the TOD policies, discussed under the heading of transport policies. Finally in some European countries the share of the public sector (directly or through housing associations) is substantial in the construction of new housing which gives good opportunities to promote sustainability (and affordability, at the same time).

### 1.3.1 Regulations applied on new land developments in general

Jorgensen et al (2007, see WP2.4) give an overview about tools to manage urban growth. Most of the examples quoted below come from the USA, where the strict planning tools used in most European countries (zoning regulations, clear limits of developable land, etc.) are not universally applied. Instead, there are many local attempts to control the otherwise quite un-regulated urban development and from these interesting and innovative ideas can be learnt.

European practices are very much concentrating on „... restricting urban growth through land use regulations that hinder or forbid urbanisation in certain parts of the urban fringe



or the peri-urban areas ... urban growth boundaries, various forms of zoning, green belt protection, or the like. These strategies are thus connected very strongly to protection of land from urban development rather than attracting urban growth to the more densely built up areas.”

In Montpellier a Green tax has to be paid by people building or buying new houses, in order to preserve green or blue areas. In Manchester 47% of land in the Greater Manchester area is protected in principle as green belt (no development possible), but exemptions exist (e.g. road developments). Recently a policy change is suggested from green belt towards ‘eco-belt’ in which eco-friendly activities should be enabled - UK planning moves from direct regulation and fixed zoning towards partnerships, spatial management and flexible frameworks. In Leipzig an Inter-communal land balance pool has been established in the Green Ring of Leipzig, to make use of the legal obligation for compensation in the process of land use change. In Haaglanden some of the profits municipalities get from developing an area into residential has to be given into a green fund, ensuring the future of the remaining farmland. The state bought up land as buffer zones between settlements for landscape protection.

Many of the American attempts can be summarized under the heading of “smart growth techniques” which aim to achieve more sustainable development through economic incentives and disincentives, rather than strict planning regulations. “Economic incentives comprise several instruments: development impact fees that internalise infrastructure costs via a fee on new development corresponding to the infrastructure services cost, transfer of development rights (TDR) from some areas to others in a sort of quota organisation, and tax reductions in areas that meet certain requirements (density, nearness to public transport) and direct support for denser and socially mixed neighbourhoods as well as for infill and revitalisation.”

Some special versions of smart growth techniques (applied in certain especially innovative US cities) are the following:

- maintaining balance between jobs and homes: larger office developments are required to pay contribution to the fund of the city from which affordable housing is being built (Santa Monica)
- maintaining a minimal level of physical and social infrastructure services: as a result of new private developments (office, retail, housing) the level of public services should not decrease below a certain threshold – if this would be the case, the private developer has to contribute to the development of the public service or has to postpone the development (Boulder) until the public sector increases the level of service
- maintaining a minimal level of transport services and/or opportunities: as a consequence of large developments transport possibilities usually deteriorate – in Palm Beach county a plan about future road congestion is prepared and if the outcome shows significant deterioration, the private developer has a choice to contribute to road development or wait until the public sector is able to do this. In many European cities private housing development schemes are obliged to contribute to the establishment of links to the public transport system.

A special version of these techniques is that of Transit Oriented Urban Development (TOD), addressing the relationship between transport infrastructure and urban development. “TOD implies that the link between urban development; functions; and public transportation is designed at the project level or through targeted policies. In the US TODs are part of the “Smart Growth” agenda and are promoted in different ways,



depending upon the city or state in question (zoning regulation of use, parking, and possibly ‘density bonuses’) ...”.

Among the European versions of the TOD approach the Dutch ABC-location principle and the idea of VINEX locations for residential development is well known. In Denmark the general principle of proximity to train stations is applied to the location of intensive land uses. The Montpellier SCOT plan defines different urban densities, with special regard to increased urban densification around new tram stops (as part of priority for urban renewal in a strip of 300 m along the tram lines).

It is an important lesson to be learnt from the American examples, that “...local growth management programs without a state-wide framework have negative consequences, such as regional traffic congestion, increased housing affordability problems, income segregation, etc. ... therefore growth management need to be practised at regional or state level.” This observation is equally valid for the more traditional planning tools, such as zoning: restrictive measures only have real effects if introduced for a sufficiently large area, otherwise the development power goes just outside the restricted area, causing even more trouble, than in the case without the restriction.

A seemingly easy and direct way to influence the spatial allocation of new construction into sustainable direction is to introduce a differentiated taxation policy: to levy a tax on greenfield investments, while introduce subsidies (negative tax) for brownfield redevelopment.

Jorgensen et al (2007:18) give the following analysis about this tool. “The taxation of new developments on the fringe is generally judged to be effective in reducing urban sprawl. Such taxation was included in the policies being modelled in the PROPOLIS as well as in the SCATTER project. According to the models, the effects of putting a tax on all new developments is hard to distinguish from zoning and urban growth boundaries and is likely to be just as efficient as such more direct measures of control. Similar results have been found in the USA (Turnbull 2004). There are questions, however, to the spatial precision of such (dis)incentives for sprawl. Also the problem of distributional effects (the affluent would be able to afford higher taxes) emerge so such a policy may not only reduce sprawl but also be likely to generate affluent suburbs and thus segregation by income.”

### ***Questions to clarify from case study regions***

- What are the land ownership relationships across the RUR region: what share of developable (already re-zoned) and potentially developable (agricultural, which could easily be rezoned if demand increases) land is in the ownership of the public sector in different parts of the RUR region, i.e. in the urban core, in suburban areas, in peri-urban areas?
- Are any of the listed non-planning tools applied in the RUR region or any smaller part of it? Are there any discussions on the efficiency of these measures compared to traditional planning tools against urban sprawl?
- Are there differences between the sub-parts of the RUR region in the approach to the different tools (e.g. the more flexible economic incentive tools applied in areas wanting economic growth)?
- Are there any significant „boarder effects” observable? Are there any discussions to apply the successful tools on higher administrative level with relevance for the whole RUR area?

### 1.3.2 Rules applied in the case of concrete decisions on larger land developments

Besides the discussed general regulations applied on new land developments, in case of concrete projects more detailed rules can prevail. The following overview relates to two situations, where local governments have key role to play in the process of land development. The first is the case of land-use change, when the planned development requires a decision on re-zoning a piece of land and the question, how to allocate the land value increase due to re-zoning decision among different actors is emerging. The second is the moment when building permission has to be issued for the planned project and the question, how to regulate the cost-sharing of the required infrastructure and other developments vis-à-vis the sharing of the further increase of the land value emerges.

In both cases the public sector, usually the local government, aims to capture some part of the value increase, which is in connection with public action. This is part of the more general topic of “value capture”, which “... refers to a type of innovative public financing in which increases in private land values generated by a new public investment are all or in part “captured” through a land related tax to pay for that investment or other public projects.” (Wikipedia). The following analysis is limited within this broad topic to the two most important moments, when the public hand can take decisions with high importance regarding urban sprawl: re-zoning and giving building permission.

The re-zoning of the current use of a piece of land into another use needs the decision of the administrative level, where the zoning regulation is generally handled. In the course of such decisions it is always an important question, what should happen with the land value increase due to the re-zoning decision.

The gap between the agricultural value of land and the residual value of it (when it becomes urbanised) can be very substantial amount: according to a brochure of TCPA (2007) agricultural land in England has a market value of 8-10 th GBP/hectare, while this value increases to at least 800 th GBP/hectare, when the owner is given planning consent for new housing (industrial or commercial uses result in somewhat smaller value increase).

In a more precise analysis the land value increase should be considered to consist from two parts. The first relates to the decision on re-zoning the piece of land, which, however, does not create yet building rights, to which also the second decision, to give building permission to a concrete project idea, is needed. At the time of the decision to give building permission to a concrete project idea also another financial issue emerges: the share of the costs needed for infrastructure development. Given the fact that the building permission contributes to the further increase of the land value, the local government might try to raise as condition for the building permission that the developer contributes to the costs of the necessary infrastructure developments. Of course there are very different conditions existing across the EU countries for such negotiations between the local governments and developers.

Although it would be essential to distinguish between the re-zoning and the building permission phases, this became impossible due to the lack of enough detailed and precise information. Thus we look to the question, how the local government can re-capture some portion of the land value increase due to either parts of the land development process.

The analysis of Wolff (2007) shows that at least four actors are in competition with each other to get the largest possible share of the plus value, created by re-zoning or building permission: the landowner, the developer, the owners of the new homes and the public hand. The latter has in principle several tools to get a share of this increase: „having the

land owner pay for or take care of some measures, by following an integrated land development procedure, entering into an agreement, levying a tax or obligating the land owner to in kind contribution.” (Wolff, 2007).

These options, however, are not easy at all and depend on the legal system of the country. The brochure of TCPA (2007) describes the four attempts of the UK government to ensure a share for the public sector from the land value increase. The first attempt was in 1947 when landowners were obliged to obtain permission from local authorities for any land development. This and the following two government attempts were unsuccessful, the measures introduced by the Labour government were usually withdrawn by the subsequent Conservative governments. The last attempt is the 2004 Labour proposal to introduce a Planning Gain Supplement to impose a charge, levy or tax on the increase in the development value of land attributable to the grant of planning consent. The outcome is not decided yet, even if the government only aimed to introduce this measure at a modest rate.

Austria is another country where the re-capture of the value increase of re-zoned land is difficult. According to a decision of the High Level Court in Austria it is forbidden to combine public and private law – thus zoning cannot be connected to taxation... Therefore the only possibility for the public actors is to be more active in the land market, as the public sector can only get back money if participating in the process as part of a development company.

The history of the Dutch regulation is described in Wolff (2007). After long debates the outcome is a new regulation, which allows the local municipality to capture some part of the land value increase – however, not as a „profit tax”, but in a regulated process to force the landowner to pay for the quite broadly defined costs the public sector has in connection with the development. Because of the many possibilities left open by the law, the system allows more than simple cost recovery. The process is made transparent, insofar the public costs have to be reported and proved that they are used for the area and improve spatial quality.

In Hungary the legal possibilities for value increase taxation are missing. Recently a flexible tool has been introduced in the building law, that of “development agreement”. This allows the local government to negotiate with the developer the financial conditions for new developments, in case municipal decision is needed because of re-zoning of land or giving building permission for the project. Even if such development agreements allow to some extent to clarify the situation, they clearly do not compensate for the lack of any value-increase taxation. Neither is solved the problem of lack of territorial cooperation between the municipalities. The development agreements are by purpose very flexible, there is no prescribed content. This is a reaction to the well known fact that municipalities use very different methods to calculate the required financial contribution from the developers.

As a consequence, in Hungary a competition situation emerges between the municipalities, who offer better circumstances to the developer. This logically leads to the fact that developers will determine the place and the sequencing of their developments according to the financial criteria the different municipalities raise. In this way the financial circumstances and not the logic of the development determines the location decision. (As a further problem the municipalities usually do not have enough highly trained officials to hammer out correct development agreements with the developers – and also the danger of corruption is high.)

The contractual relationship between the local municipality, the landowner and the developer is broadly used in European countries. The content of the development agreements differs across countries, and besides the economic and financial conditions in many cases also the timing is specified (in some countries after a given number of years

the land can be expropriated by the municipality on before-development value if the developer does not perform its duties). Larsson, 2006:59

The British system is based on cases, not rules. Although the size of local governments is large (not fragmented, as in France or Hungary), they are not independent in their decisions, the influence of the central government is substantial through the development agencies. The procedure can be highlighted by the example of Royal Woolwich Arsenal, which belongs to the poorest parts of Easter London. The task of development of a former military area was given to the London Development Agency. After a general plan has been passed by Greenwich authority, the main developer is selected in a competitive bid. The developer has to get the building permissions for each block separately. Until that the value of the plot is not decided yet. 30% of the new flats have to be affordable, the social infrastructure and also the preservation of the heritage values have to be covered by the developer. As a result, in the final evaluation the price of the plot can even be zero, as the developer has many public tasks to perform. However, if a profit is achieved (above a given limit) this has to be shared with the local government.

***Questions to clarify from case study regions***

- To what extent can local governments re-capture value increase from private actors, due to rezoning of land or issuing building permission?
- How fragmented is the system: to what extent can local municipalities be influenced by higher level public actors in their decisions regarding rezoning of land or issuing building permission?

## 2 Evaluation of the case study results and summary

### 2.1 The level of public steering in the land development process

On the basis of more detailed information acquired from PLUREL partners (see the Koper workshop summary below) the following conclusion can be drawn.

In an optimal case the interests of the different actors in the land development process have to be clear, the value of land before and after development has to be known, and transparent procedure should be in place (with a leading role of the public sector). This would allow clear decisions to

- allow or not the development
- share the benefits (land value increase)
- share the costs (infrastructure development).

The overview of existing practices shows that in some countries with large planning traditions the well designed planning regulations are very inflexible and give no option for the public sector to negotiate with the private developers the land value increase and the private contribution to infrastructure development. On the other hand in some other countries the lower level of planning control is accompanied by larger independence given to local municipalities to negotiate the financial conditions.

In a more detailed analysis the legal-political (decision-making) and the financial aspects of the land development process can be separated from each other. According to these dimensions the case study regions can be classified as follows.

**Table 5. Administrative and financial independence of local municipalities**

	Financial independence of the local municipalities to handle financial conditions	
Administrative independence of the local municipalities to take planning decisions	Low	High
Low	AT, NL, DE, DK	
High	SI	HU, IT

Behind this draft classification there is a certain dynamism. In most European countries the developers gain in importance and the public sector is losing in opportunities to fight for sustainable development (as job creation gets more and more importance...). This

means that the countries in the upper left corner tend to change towards the direction of the lower right corner (changes seem to be quick especially in the Netherlands).

The European message derived from this analysis could be that the EU should help the supra-local, metropolitan level to achieve enough power to become able to control the development processes from the side of public interests, especially the aspect of sustainability (i.e. to fight market failures). One precondition for that is the transparency of the development processes: especially the financial aspects should be clear, regarding the role of the public-developer-landowner-resident actors.

## 2.2 Evaluation of the case study results

As already mentioned, a questionnaire has been sent to the PLUREL case study regions with those questions, which were developed alongside the issues discussed in the theoretical part of this study. The questionnaire and the results are to be found in Chapter 4.

Based on the answers given on the questionnaire, indicators have been elaborated to quantify the qualitative information gained from the descriptions. Each indicator is a dummy variable, the value of which can be 0 or 1. Chapter 5.1 shows a table including the description of how the information received from the case studies have been evaluated regarding each indicator.

Chapter 5.2 presents the table including the values achieved by the case study areas regarding the composite indicators according to the areas of analysis. These values are summarised according to the three main topics of the analysis in a way that for each topic the regions can have a value between 0 and 1 (higher values meaning less interest/motivation for urban sprawl and/or more control over it). The results are shown in the table below:

**Table 6. Evaluation of the regions**

	Haaglanden	Manchester	Montpellier	Leipzig	Koper	Warsaw	Thessaloniki	Budapest	Bologna
Transfer system	0.67	1.00	0.67	0.67	0.00	0.33	0.00	0.33	0.67
Taxation	0.67	0.67	0.67	0.33	1.00	0.67	0.67	0.33	1.00
<b>Financial interests of municipalities</b>	<b>0.67</b>	<b>0.83</b>	<b>0.67</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.33</b>	<b>0.33</b>	<b>0.83</b>
Economic development and infrastructure	1.00	0.50	0.50	1.00	0.50	1.00	1.00	0.50	0.00
Transport	0.83	0.67	0.50	0.50	0.17	0.33	0.67	0.50	0.50
Housing	1.00	0.67	0.67	0.33	0.33	0.33	0.33	0.00	0.33
<b>Sectoral policies</b>	<b>0.94</b>	<b>0.61</b>	<b>0.56</b>	<b>0.61</b>	<b>0.33</b>	<b>0.56</b>	<b>0.67</b>	<b>0.33</b>	<b>0.28</b>
Tools to steer new land developments / Rules of concrete decisions on developments	0.75	0.50	0.50	0.75	1.00	0.25	1.00	0.25	0.50
<b>Tools to steer development</b>	<b>0.75</b>	<b>0.50</b>	<b>0.50</b>	<b>0.75</b>	<b>1.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.25</b>	<b>0.50</b>

1) The results can be summarised along the three main topics of analysis as follows.

**Table 7. Summary of the results**

	Haaglanden	Manchester	Montpellier	Leipzig	Koper	Warsaw	Thessaloniki	Budapest	Bologna
<b>Financial interests of municipalities</b>	<b>0.67</b>	<b>0.83</b>	<b>0.67</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.33</b>	<b>0.33</b>	<b>0.83</b>
<b>Sectoral policies</b>	<b>0.94</b>	<b>0.61</b>	<b>0.56</b>	<b>0.61</b>	<b>0.33</b>	<b>0.56</b>	<b>0.67</b>	<b>0.33</b>	<b>0.28</b>
<b>Tools to steer development</b>	<b>0.75</b>	<b>0.50</b>	<b>0.50</b>	<b>0.75</b>	<b>1.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.25</b>	<b>0.50</b>

- Regarding the **local government financing system** in some regions (e.g. Haaglanden, Manchester, Montpellier) the system does not motivate directly the municipalities to increase their population (which would lead to urban sprawl), while in other regions (e.g. Leipzig, Koper, Warsaw, Thessaloniki) such motivations are created by the financing system.
- Regarding **sectoral policies** Haaglanden stands out as very few of its analysed policies has a sprawl-oriented territorial impact. (This doesn't mean that high demand or other pressures don't have such impacts.)
- Regarding the **regulatory tools**, in some regions (e.g. Koper, Thessaloniki, Haaglanden, Leipzig) the municipalities are equipped with a broad range of tools which they can use to steer private developments.
- In the case of Thessaloniki we also see municipalities that can use innovative tools – but from the financial point of view they are more interested in new developments than municipalities in other regions.

2) On the basis of these results the analysed regions can be evaluated in the following way.

In the case of **Haaglanden** and **Manchester** a strong potential control can be seen parallel to moderate municipal interests to increase population. This suggests a high probability for an **effective control over peri-urban land-use**. **Leipzig**, **Montpellier** and **Bologna** seem to be in a less favourable, but still **manageable situation**.

**Thessaloniki** shows a potentially strong, hierarchical government and planning system, while municipalities are strongly interested in expansion, which can lead to **conflicts in the land-use** decisions. **Koper**, **Warsaw** and **Budapest** have a much weaker government and planning framework. Municipalities have average interests to expand urban land-use, but most sectoral policies lead into this direction. In these regions (with the potential exception of Koper) the public control over land-use does not seem to be efficient.



3) Comparison with the outcomes of D2.2.1 on the potential strength of the public sector controlling urban sprawl

The results of the analysis can be compared to the outcomes of the deliverable report D2.2.1, which provided **a quantitative scale showing the potential strength of public regulation over land-use change** in the different countries as follows:

**Table 8. Results of the government and planning system evaluation**

Value	Countries
7	
6	Denmark, <b>The Netherlands</b> , Portugal, <b>United Kingdom</b>
5	Belgium, Cyprus, <b>France</b> , <b>Germany</b> , <b>Greece</b> , Ireland, Lithuania
4	<b>Italy</b> , Spain, Sweden
3	Austria, Bulgaria, Finland
2	Estonia, Latvia, Luxembourg, Malta, <b>Poland</b> , <b>Slovenia</b>
1	Czech Republic, <b>Hungary</b> , Romania, Slovakia

The results gained on the public sector regulations, policies and tools (with effects on the peri-urban land uses) compared with the classification in the table above, showing the potential strength of the control, might lead to the following conclusions.

Regions in countries with weak control potential (values 1-2) show strong interest in expansion while local authorities have only a limited number of tools to control urban sprawl. Thus the public sector regulations and policies are not able to change the deficiencies of the formal government system and planning framework.

On the other hand, regions in countries with high control potential (values 5-6) show more diverse results. While Haaglanden and Manchester seem to fulfil the possibility of strong control given by the formal government and planning systems, the case of the other regions seem to be different: the regulations and tools do not match the potential these regions could have in controlling peri-urban development.

These results underpin the hypothesis raised in deliverable report D2.2.1 that a weak potential control level assured by the formal government and planning systems is hard to overcome by regulations and policies, even if the willingness is given by the public actors. On the other hand, a high potential for control may or may not be used entirely, depending on the intentions of the public bodies in power.

While presenting the results it must be stated, that uncertainties result both from the limited number of case study regions analysed and the accuracy of data collected.

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## 4 Case study questionnaire

Based on the theoretical studies and discussions in the case study workshop in Koper, a questionnaire has been compiled and distributed to the case study regions (and to some additional regions).

In this chapter we present the results of the Koper case study workshop, questionnaire and the summaries of the case study answers, which are to be assessed in the next chapter.

### 4.1 Information acquired from the Koper workshop discussions

At the Koper General Assembly a workshop was organized in order to get an overview about the public control aspects over urban development. The main emphasis was on the regulatory framework (who decides, how strong is the upper level administrative control) and financial conditions (how much flexibility is given to the local government to negotiate with the developer). The following two questions were discussed with the countries present:

- 1 The regulatory and financial conditions of re-zoning: who decides and how to deal with the land value increase which occurs due to the change in zoning regulations? The following concrete example was raised: development of a business park on green field agrarian land in a suburban settlement (by whom is the re-zoning decisions taken, under what regulatory frameworks; how are the financial conditions negotiated regarding the share of land value increase).
- 2 Regulatory and financial conditions for issuing building permissions for larger scale development projects: the possibilities for the public sector to request from the developer a contribution to the costs of infrastructure development. The following concrete example was raised: the development of a large shopping centre in a suburban settlement (by whom are building permissions issued; how are the conditions – e.g. the costs of developing public infrastructure – negotiated).

#### 4.1.1 Germany

Q1: rezoning decision is to be taken by the municipality, but is controlled by the county and the German building law and already existing regional and comprehensive plans. The German building law and regional plans give the framework. The municipality may buy the land in advance, developing the infra and selling on higher price. This happens, however, only exceptionally, since the development push is lower. If zoning back, planning damage: only to pay if already detailed plan exists.

If there is a need for rezoning, there is an establishment of a detailed plan, and the developer must build public infrastructure and give it for free to the municipality rezoning itself done by the municipality.

Q2: If detailed plan exists, the public infra is already paid for. If detailed plan does not exist, the developer is forced to pay public infra and give it back for free to the public.

#### 4.1.2 Netherlands

Q1: usually the local government buys the land, develops the area and sells to the final developer. Municipal bank gives loan to local governments on good condition. Municipalities make good business on land development. The value of land depends on the use allowed on that. Earlier it was stricter planning hierarchy, now local independence is larger, sustainability is less important. Province had earlier veto right, now it has to be more pro-active and create quicker a plan for the area than the local government... Municipalities have the right of refusal (pre-emption right) for any agrarian land.

Q2: 32 aspects are controlled before building permission given, e.g. transport issues... local plans have to be in accordance with higher level plans ... but four years ago there was a shift towards decentralization. Larger projects: neighbouring municipalities can influence through political processes. Public infrastructure development must be included into the plan within the plot. Land development scheme allows now to get contribution from the developer. Project developers anticipate that the municipality will prepare the infrastructure, but it is also possible that the developer does that.

#### 4.1.3 Slovenia

Q1: rezoning decision is taken by the municipality, but it needs confirmation by the central government! Value increase goes to the owner of the land.

Q2: detailed plan is needed before building permission can be given. The national level has to approve all larger plans! Neighbouring municipalities have no right to influence... Infrastructure contribution is negotiated in the process of approval of the detailed plan.

#### 4.1.4 Denmark

Q1: the re-zoning decision is taken by the municipality but has to be sent to neighbouring and higher level municipalities and to the ministry of the environment who checks the compliance with higher-level plans. There is strict control. The increase in land value is assessed in a procedure and it goes to the owner of land. Value increase can be captured only if the public sector buys the land before transferring it. It happens rarely (and mainly only for residential developments). There is no legal possibility to share the land value increase.

Q2: building permission will be given by the suburban municipality, but it must be based on municipal plan with strict environmental conditions and retail plan. Planning hierarchy is strong, the greater Copenhagen plan can prescribe commercial spatial allocation. Public infrastructure is always financed by the public, there is no possibility to ask the developer to contribute to the infrastructure costs.

#### 4.1.5 Austria

Q1: Zoning decision is taken by the local authority, no influence by neighbouring municipality. Land value increase can not be negotiated, the value increase belongs to the owner. If reverse zoning is decided (back from building into green zone) the public authority has to refund the money already spent on developing.

Q2: All planning power is at the local administration, there is just a little influence by the country administration (maybe slightly increasing but still low; only the place of highways, railways and such stuff). No influence by neighbouring municipalities. Very large projects have to do an environmental impact assessment on a regional level. Infrastructure-development contribution has to be paid by the developer which increases

by the size of the lot (but it gets relatively lower). It also depends on the local authorities. Financial conditions are negotiated only by the municipality and the investor.

#### 4.1.6 Italy

Q1: developer-farmer-local government strange connections... side payments, quick development, before municipal government changes...

Q2: to get a permission the developer has to pay... also for the development of the infrastructure. Road construction: agreement has to be reached...

Very „flexible” process, full with corruption possibilities.

#### 4.1.7 Sweden

Since 1987 the most liberal new planning law. Local municipalities decide, usually dominated by the few and large corporations (e.g. LIDL has serious difficulties to enter the Swedish market...). Developers prefer places which are already served well with infrastructure. Otherwise they wait that the public sector prepares the services and they act only within their project area. Usually areas are developed in one, and only separated to plots later, which results in totally different outcomes than the traditionally developed European cities...

## 4.2 Questionnaire

### 4.2.1 Transfer system

1. What types of grants exist in your country? What are the main grant allocation principles (derivation, formula, reimbursing cost, etc.)? What is the approximate share of general purpose vs. conditional grants? How does the grant allocation system influence the behaviour of local governments?
2. Are there any differences in your country in the share of higher level normative financing of the different local public services – i.e. how much of the real costs of one elementary school student, of one place in kindergarten, etc. is financed from the central budget? How does the grant system in your country treat the services with inter-jurisdictional spillover effects?
3. Is it in the interest of the local governments of the RUR region from financial point of view to increase the number of their population? Why?
4. Are there any other financial subsidy forms in your country which have the effect to strengthen urban sprawl?

### 4.2.2 Taxation

1. Usually how big share of the local budget is covered by revenues from local taxes?
2. What are the main types of the allowed local taxes? Which are the types most favored by local governments and why?
3. What are the spatial consequences of the local taxation system – which of the local taxes create tax competition between municipalities of the RUR region?
4. Are there any higher level public regulation efforts against tax competition? If yes in what forms and how efficient these regulations are?
5. Are there any other taxation forms in your country which have the effect to strengthen urban sprawl?

### 4.2.3 Economic development and infrastructure

1. Do supra-local administrative or functional bodies exist regarding the control over economic development and the development of infrastructure within the RUR area? What powers do they have?
2. To what extent local governments within the RUR area compete with each other for economic development opportunities? What are the usual means applied to attract investors to their territories?
3. Are there any other public subsidies in your country, given to infrastructure or economic development, which have the effect to strengthen urban sprawl?

### 4.2.4 Transport

1. What is the share of public transport use in the urban, peri urban and rural areas?
2. What is the share of user fee payments in the total budget of public transport? Are there any other special public subsidies given to encourage the use of public transport?
3. Are there any other transport-linked public subsidies in your country which have the effect to strengthen urban sprawl, e.g. encouraging the use of individual car traffic (such as tax deduction of travel-to-work costs)?
4. To what extent is the RUR area covered by public transport associations? How are the areas outside of these associations connected, how is co-modality organized?

5. What kinds of interventions are considered to ensure the internalization of external costs of transport?
6. What kinds of mobility management tools are considered in the most dense urban areas in order to reduce congestions and improve the environmental conditions of transport? Are there any steps forward to achieve the behavioural change of transport users?

#### 4.2.5 Housing

1. Are there supra-local (regional, national) ordinances or prescriptions regarding housing policy? To what extent do they control local governments?
2. What are the reasons for these limitations of local decisions making independence and how can the real effect of be evaluated?
3. Are there any special housing-linked public subsidies in your country which have the effect to strengthen urban sprawl?
4. Is there any cooperation between the municipalities of the RUR area (or smaller subsets of it) regarding housing policy? What are the aims and tools of this cooperation and how successful it is?
5. How is the conflict between affordability and sustainability be addressed in the municipalities of the RUR region?

#### 4.2.6 Tools for the public sector to steer new land developments in the RUR area

6. What are the land ownership relationships across the RUR region: what share of developable (already re-zoned) and potentially developable (agricultural, which could easily be rezoned if demand increases) land is in the ownership of the public sector in different parts of the RUR region, i.e. in the urban core, in suburban areas, in peri-urban areas?
7. Are any of the listed non-planning tools applied in the RUR region or any smaller part of it? Are there any discussions on the efficiency of these measures compared to traditional planning tools against urban sprawl?
8. Are there differences between the sub-parts of the RUR region in the approach to the different tools (e.g. the more flexible economic incentive tools applied in areas wanting economic growth)?
9. Are there any significant „boarder effects” observable? Are there any discussions to apply the successful tools on higher administrative level with relevance for the whole RUR area?

#### 4.2.7 Rules applied in the case of concrete decisions on larger land developments

1. To what extent can local governments re-capture value increase from private actors, due to rezoning of land or issuing building permission?
2. How fragmented is the system: to what extent can local municipalities be influenced by higher level public actors in their decisions regarding rezoning of land or issuing building permission?

## 4.3 Koper

Summary based on contributions from **Anton Perpar**, **Marina Pintar** (University of Ljubljana) and **Davor Deranja** (Municipality of Koper)

### 4.3.1 Transfer system

**A large part of the municipal budget consists of own revenues (47%) and shared taxes (44%),** while grants amount only for 9% (data for the Municipality of Koper, 2009). However, **most municipalities get equalisation from the state,** while Koper is a rare exception.

**There is a formula for the “eligible consumption” of municipalities, calculated on the basis of number of inhabitants,** share of the youth/elderly, as well as per capita territory and per capita length of roads. **This is the basis of personal income tax sharing:** municipalities get a fixed share of the PIT revenues (the rest goes to the state), but if their PIT revenue is higher than the “eligible consumption” calculated by the formula the surplus is redirected to a solidarity fund. This fund is used to equalise the revenues by topping up the incomes of the municipalities which cannot cover their “eligible consumption” by their own PIT revenues. In this way **the formula shows the amount of the financial resources of a municipality.**

**For local public services** (kindergartens, schools, healthcare institutions, waste management etc.) there is a clear division between local and state responsibilities: **wages of the staff are covered by the state, all other operating costs by the municipalities. The expenses are covered by the municipality the service is located in; the only exceptions are kindergartens** where in case the pupils originate from another municipality, that municipality is charged the expenses for the pupil.

A special **subsidy meant to preserve cultural landscapes** (not to be overgrown by forests) attracts people to live in rural areas, while maintaining their jobs in urban centres, and in this way **enforces sprawl.**

**Municipalities are interested in population growth (o) for the following reasons:**

1. A higher population means **higher eligible consumption based on the formula, which is the basis of PIT sharing.**
2. **If there is land development, the NUSZ tax means direct income** for the municipality.

Except for kindergartens, **the phenomenon of free-riding (unfinanced use of local public services by non-residents) exists (o),** which means that municipalities attracting new residents can – at least on the short term – raise tax revenues while the public services are financed by another municipality.

The **subsidy meant to preserve cultural landscapes is a driving force of sprawl (o).**

### 4.3.2 Taxation

The **biggest part of municipal revenues is represented by personal income tax** (on average in Slovenia 78%, in Koper 44%), **a state tax which municipalities cannot influence.** Because of the domicile principle of people liable to taxation, the



distribution of personal income tax is disproportionate and reflects developmental differences. The personal income tax is the main shared tax. Currently 54% of the revenues goes to the municipalities. The equalisation is calculated by a formula (see at the “Transfer system” section).

The second biggest share of municipal revenues is taken from the **compensation for the use of building land (NUSZ)** (10.5% on average, 19,5% of the 2007 Budget of the Municipality of Koper). This is **the only real local tax**, as each municipality is free to decide how to collect this tax and the whole revenue is kept by the local government. Tax competition is however close to inexistent.

**There are no tax forms which strengthen urban sprawl. However, a new tax on vacant urban land would be desirable**, as it would prefer building in vacant site instead of keeping them empty and speculating on them, and thus decreasing the need for rezoning agricultural land.

**The majority of local revenues derives from shared taxes**; the only real local tax is the compensation for the use of building land (NUSZ). **There is no significant tax competition between the municipalities (1). Because of this upper-level control is not necessary (1).**

**There are no tax forms which strengthen urban sprawl (1). However, a new tax on vacant urban sites could decrease sprawl** by preferring developments inside urban areas.

#### 4.3.3 Economic development and infrastructure

**Each municipality is free to plan its infrastructure and economic development**, of course respecting the general development strategy of the municipality, which must be **in line with the general national development strategy**. There is no specified body to control the economic and infrastructure development of municipalities.

**The only tool local governments have to attract business is the creation of dedicated zones** (industrial zones, commercial zones), **where the local government invests in the construction of infrastructure** to create favorable conditions for development.

**There are no public subsidies** given to infrastructure or economic development, **which have the effect to strengthen urban sprawl**

**The municipalities are free in infrastructure and economic development**, as far as it is in line with the general national development strategy. **Their usual means of attracting businesses is creating dedicated industrial and commercial zones** with the necessary infrastructure. **Supra-local control can be seen as weak in this field (o).**

**There are no public subsidies strengthening urban sprawl (1).**

#### 4.3.4 Transport

**In Slovenia individual transport accounts for 91,3% of all passenger transport, which is the highest share in the EU.** Urban public transport is better used, but even there cars are predominant. Outside the urban core public transport is not competitive: it covers most of the settlements, but trips are rare and lengthy.

**Bus transport is subsidized:** user fee payments represent about 50-70% of all costs for inter-city transport and 85% for urban transport. **Travel-to-work expenses are refunded by employers** based on the type of transport (bus or personal): if bus transport is available on the settlement the price of monthly ticket is refunded (even if the person uses the car), if not the costs of car use based on distance. **This system creates motivation for car-users to live in settlements not connected to the bus system, as they get more refund.**

There are no transport associations. Externalities are poorly included in the cost of transport. Mobility management tools used in denser urban areas are limited, but it has to be noted that in Slovenia there are no big metropolises.

In Slovenia **car transport is predominant even in urban areas (o)**. **Public transport is subsidised (1)**. **Travel-to-work expenses are refunded by employers based on the type of transport, which may encourage increased commuting distances (o)**.

**There are no transport associations (o)**. **Externalities are poorly included in the cost of transport (o)**. **Mobility management tools used in denser urban areas are limited (o)**.

#### 4.3.5 Housing

The location choices of residential developments are being **addressed by spatial planning; there are no national regulations for housing**. In principle **residential developments should be located in new areas only if there is no more possibility within the already built-up area**; they should be a functional continuation of existing settlements; and should ensure a coherent development of settlement and transport systems. **Each municipality is independent to plan its development and housing policy**; cooperation is possible, but rare.

**In practice this view of sustainability is weak**, as private interests lead rather to sprawl. **Implementation of planning is weak**, as there are no financial instruments to influence the private actors, and control over spatial development is not strong enough.

There are no housing-related public subsidies with the effect of strengthening urban sprawl.

The location choices of residential developments are being **addressed by spatial planning; there are no national regulations for housing (o)**. **In practice the implementation of planning is weak**, which leads to sprawl. **Municipal cooperation in housing is rare (o)**.

There are **no housing-related public subsidies strengthening urban sprawl (1)**.

#### 4.3.6 Tools to steer new land developments

**Public sector owns about 30% of all land in Slovenia**; the developable land is in the hands of the municipalities, the agricultural land is owned by a state fund. In the case of Koper 58% of public land is owned by the municipality, and 42% by the state.

**All developers have to pay a proportionate share of their investments for the infrastructure costs. This amount however does not depend on the location.** It is possible to sign a contract between the developer and the investor, and the infrastructure to be developed by the private actor – in this case the costs can be deducted from the mandatory contribution. However, this instrument is rarely used.

As all municipalities operate by the same rules, there are no observable border effects.

**Municipalities own an important share of developable land in Slovenia (1),** which is a possible intervention tool. **Developers have to pay a fixed share of their investment for infrastructure costs (1),** which is independent from the **location**, and in this way cannot be used to influence locational choices. Other “smart growth” techniques are not in use.

#### 4.3.7 Rules of concrete decisions on developments

**Local governments have no direct mean of re-capturing the increased value from rezoning.** The whole profit of rezoning is gained by the owner of the land (private owners). **The only gain the municipality has is derived from the collection of the tax on compensation for the use of building land** (in case the rezoned land is being constructed upon).

**All developers have to pay a proportionate share of their investments for the infrastructure costs.** It is possible to sign a contract between the developer and the investor, and the infrastructure to be developed by the private actor – in this case the costs can be deducted from the mandatory contribution. However, this instrument is rarely used.

Local governments are very much bound to higher (national) level public actors when it comes to rezoning. **The rezoning plan has to be approved by various planning authorities (the most important the Ministry of agriculture),** so it is not a free decision of the local government. **The building permits are issued directly from the national government** through ministries and local administrative units, so the influence of municipalities is very limited. The only influences are the regulations prescribed by planning documents prepared by the municipalities.

**There is no direct means to recapture value increase from rezoning;** the profit goes to the land owner. However, **there is a tax on compensation for the use of building land (1),** in case the rezoned land is being developed.

**All developers have to pay a proportionate share of their investments for the infrastructure costs.**

**The local rezoning plan has to be approved by various planning authorities (1).** **The building permits are issued directly from the national government.**

## 4.4 Haaglanden

Summary based on contributions from **Judith Westerink** (Alterra)

### 4.4.1 Transfer system

**There is a formula by which the grants to the municipalities from the central municipality fund are calculated.** The amount of general grant depends on a series of social and physical factors, and there is also a fixed amount for some municipalities (e.g. big cities). There are also various grants which aim special government priorities; these amount for about 10% of the total government subsidies. **Both number of inhabitants and number of houses/ addresses are important**, this creates an incentive for municipalities to increase population.

**Local services** (basic health care, schools, kindergartens) **are fully financed by the state**, which has the advantage that no free-riding can occur.

For bigger cities there is “**ISV subsidy**”, which **is an investment budget for urban renewal**, for the co-financing of redevelopments within city boundaries. Municipal land development companies can obtain financial benefits from redevelopment projects.

**Municipalities are interested in increasing population and number of houses (o)** because these are positive parameters of the formula for calculating central government grants.

**Local services are financed by the state, which allows no free-riding (1).**

In bigger cities **the ISV subsidy is a tool for urban renewal (1)**, which acts indirectly against urban sprawl.

### 4.4.2 Taxation

In The Hague about **53% of the budget is grants from the central government**, 11% local taxes and 36% from other local incomes (2007, 2008).

The most important taxes are (in this order): property taxes (on owners and on users); parking tax; precario tax; tourism tax. **The property tax is the most important, but this is calculated according to standard rules**, and in this way generates no tax competition. The **transfer tax** (6% paid by the buyer when a house is sold, 19% for new houses) **is seen as a threshold for people to move closer to their working places**, which may stimulate needless mobility.

**The majority of local revenues derives from central government grants.** The property tax is the most important local tax, but it is calculated according to standard rules, and **there is no significant tax competition between the municipalities (1). Because of this upper-level control is not necessary (1).**

**Transfer tax restrains residential mobility, and thus stimulates commuting (o).**

#### 4.4.3 Economic development and infrastructure

**The municipalities compete but also cooperate.** City branding is important, but municipalities can also offer for instance cheap land for developing business sites, if they want.

**There are seven formal city regions** (one of them is Haaglanden), **in which municipalities are obliged to work together in** different fields, including **economic development**. One result of this is the Regional Structure Plan, including locations for new business areas.

The province level structure policy document gives broad outlines. **On the state level, the Nota Ruimte has a strong status.** The Ministry of Economic Affairs also had an economic structure plan, but now it is included in the Nota Ruimte.

The current excess of business sites in the Netherlands is seen as too much. There is a **national subsidy for restructuring existing business sites** bigger than 150 ha. It goes to the public sector only, but still diminishes land consumption. There are no subsidies with the opposite effect.

**The municipalities compete but also cooperate. They are obliged to work together in the seven city regions. Planning documents on the province and state level also handle economic development issues (1).**

The current excess of business sites in the Netherlands is seen as too much. There is a **national subsidy for restructuring existing business sites (1).**

#### 4.4.4 Transport

Modal split information is only available for the province of South Holland (including a much larger territory, also the city of Rotterdam), where the share of public transport is relatively low (16% of all motorised modes, 2003). **63% of all costs of local and regional public transport is covered by the government.** Public transport accessibility is good in cities, but poor in rural areas. **The city regions are giving out concessions to public transport companies;** from the land-use perspective this has similar effects as a strong public transport association.

**The employer may pay a travel-to-work fee,** but above a certain threshold this is seen as income and is taxed. Environmental taxes exist, but they are not earmarked to be used for environmental purposes.

Commonly used mobility management tools include pedestrian zones in city cores, public transport improvements, and intermodal nodes with P+R facilities on the fringe.

**Modal split in the province is relatively low (0).** In the Netherlands **public transport is heavily subsidized (1), but also a wide range of other mobility management tools is in use (1). The employer may pay travel expenses, but over a certain limit it is taxed (1). Externalisation of internal costs is made by environmental taxes (1).**

**The city regions are giving out concessions to public transport companies (1).**

#### 4.4.5 Housing

**The state imposes housing targets on the municipalities**, in some cases via the provincial authorities. Based on the key planning decisions, the ministry of VROM draws up **agreements with provincial authorities, city regions and municipalities** about housing targets. The decision in the 1994 National Housing Memorandum to **concentrate city expansion in a number of large housing sites** (so-called 'Vinex sites'). The Hague region has a housing policy document itself, which covers the municipalities of the RUR region.

**Affordability is achieved by more means:** there is a renting subsidy for lower income groups by the government, while municipalities can set maximum prices or minimum amount of affordable housing in new developments.

There are no housing subsidies leading to urban sprawl.

There is a **strong housing policy in the Netherlands. Housing targets are set by the government (1)** and included in agreements with regional and local authorities. Since 1994 **new residential developments are concentrated in a number of large housing sites** ("Vinex sites"). There is **housing policy also on the regional level (1)**. This strong housing policy can be assessed as **a strong tool against urban sprawl**.

There are **no housing subsidies leading to urban sprawl (1)**.

#### 4.4.6 Tools to steer new land developments

At first, the green buffer zones were kept open with the help of planning instruments. Later, the **government started to purchase land in these buffer zones**. Large parts of Midden Delfland and the Duivenvoordse polder in the The Hague / Leiden / Zoetermeer area are government-owned as a result of this. **Governments and investors already own large parts of the urban fringe areas**, but there is no exact data.

There is a national program to improve conditions in selected problematic neighbourhoods. There is some **competition with the Rotterdam Region and the Holland Rijnland Region because of their large-scale housing sites**.

There have been **large scale land purchases in the green buffer zones** to keep them open. **Governments and investors already own large parts of the urban fringe areas. This active land market intervention is a powerful tool (1) to influence development.**

#### 4.4.7 Rules of concrete decisions on developments

The active **land market intervention makes it possible to recapture the value increase as the owner** of the land. The **new Land Development Act gives municipalities the possibility to enforce investments into public values** such as green space.

**Municipalities are highly autonomous in zoning**, although higher tiers of government – in particular the provincial authorities – can interfere under specific circumstances. **Recent changes in legislation mean that part of the autonomy has been delegated to the provincial authorities**, allowing these authorities to make zoning plans as well.

**Municipalities are highly autonomous in zoning (o)**, although recently the weight of provinces has been increased. **Value increase can be effectively recaptured by active land market interventions (1)** (as an owner of land), but **a new law gives even more possibility to municipalities to enforce investments in public values (1)** such as green space.

## 4.5 Leipzig

Summary based on contributions from **Dagmar Haase, Annette Bauer** (UFZ), **Dr. Dietmar Roehl, Ralf Thomas, Eva-Maria Elbert, János Brenner** (Bundesministerium für Verkehr, Bau und Stadtentwicklung)

### 4.5.1 Transfer system

There are about 250 different funding schemes and programmes in Saxony. Most of them are based on the **principle of co-financing** (e.g. national state, federal state and local authorities or EU-funding). Funding programmes are available for most policy fields and for more or less well-specified purposes, leading to the mentioned multiplicity of grants and programmes. The grant and funding system is **often criticised for not being synchronised very well**.

**In the financing of the education system the Länder take the leading role** (e.g. they are financing the personnel costs), while municipalities and their associations play a much weaker role. **In general children have to go to the school of their residence**; exceptions are possible with the consent of the Education Agency of Saxony. These together mean that there are no strong spillover effects.

Local **municipalities are interested in raising their population**, as municipal income depends on the number of residents, apart from other factors (industry and commerce, for example).

Most **public services are co-financed by the municipality, the federal and the national state**. There are no strong **spill-over effects (1)**.

There are **no other subsidies strengthening urban sprawl (1)**.

### 4.5.2 Taxation

The most important local taxes are the following:

- **Business/industrial tax** (Gewerbesteuer – not corporate income tax): **most important source of income for municipalities. The collection rate is fixed by the municipality**. Every business enterprise has to pay. Basis of taxation are the trading profits.
- **Real estate tax** (Grundsteuer): relates to condition and value of an estate. Municipality is responsible for collection rate. So it may differ from municipality to municipality and is able to influence the development of residents. Revenues go directly to municipality budget.
- **Secondary residence tax**

In Leipzig, business/industrial tax and real estate tax together amount for 21,3% of all municipal revenues (2006).

**Municipalities also have a share in income tax** (15% of overall revenue of residents) **and purchase tax** (2% of purchases in their territory), which are allowed by the country according to an equalisation scheme. **Inter-municipal tax competition exists for income, corporate and sales taxes**, while individual taxes (such as



property tax) are not important enough to ignite competition. In the Leipzig-Halle region large peri-urban areas have been designed for development just to attract residents.

Regional planning and restriction of land for development is seen as an indirect measure to control tax-induced intermunicipal competition.

There are no other taxation forms which strengthen urban sprawl.

The **most important local taxes are business tax and real estate taxes**; the rates of both are set by the municipalities. These can be classified as benefit taxes. However, **municipalities get a share from the personal income tax and purchase tax, which creates incentive to raise their population (o).**

**Tax competition can be observed (o) mostly for income and corporate taxes**; there are **no direct higher-level control mechanisms (o)**, however regional planning is seen as an indirect measure. There are **no other taxation forms strengthening urban sprawl (1).**

#### 4.5.3 Economic development and infrastructure

**Infrastructure development is controlled by the federal state of Saxony** via the regional councils.

**Competition for industrial and commercial development opportunities is evident** in the fact that municipalities try to attract investors by attractive location offers.

While some funding schemes (e.g. INTERREG, GA-Infra) don't direct development towards urban cores, **an influential funding guideline** for regional development (FR-Regio) actually **supports the demolition of surplus infrastructure**.

**Infrastructure development is controlled by the federal state level (1).**

While some funding schemes might support sprawl, there are **public subsidies which rather support the demolition of surplus infrastructure (1).**

#### 4.5.4 Transport

The **modal split in Leipzig is 32,2% for public transport** (among motorised transport modes, 2008), **and the trend is increasing** (28,2% in 2003). According to data from 2003, modal split in the original area of the city of Leipzig was 29%, while in the outer districts newly merged with the city only 19%. **Public transport is subsidised.**

**Commuters' tax allowance** (Entfernungspauschale) **is used in German income tax law for commuters' expenses**. The commuter's tax allowance reduces the taxable income. The tax payer can make use of it independently of the real expenses and no matter if he/she went to work by foot, bike, motorbike, public transport or car. At the moment the rate is at 0,30 € for every complete kilometre **from 20 kilometres onwards. It contributes to the spatial detachment of residence and work, leads to problems of suburbanisation**, congestion and desolation of city centres. It disadvantages people who live close to their place of work, who additionally have to pay higher rents in the city.

**The whole region is covered by the transport association Mitteldeutscher Verkehrsverbund (MDV). A relatively large scale of mobility management tools is in use.**

The **share of public transport is relatively low (o)**, but increasing. **Public transport is subsidised (i)**.

The commuter's tax allowance reduces the taxable income. **It contributes to the spatial detachment of residence and work, leads to problems of suburbanisation (o)**. The whole **region is covered by a transport association (i)**. A relatively **large scale of mobility management tools is in use (i)**.

#### 4.5.5 Housing

The **Home Owners Grant** (until 2006) was available for persons about to acquire property for residential purposes; it was not available for second and holiday homes. The applicants' income could not exceed 70.000€ a year for singles, while the level was higher for families with children. Funding added up to 1% of total costs per year; it was available for a maximum of eight years. An **indirect effect of the Home Owners Grant was construction of dwellings in the Leipzig urban fringe**.

Local housing policy in Germany, in terms of housing development and demolition, is restricted and guided by the overall spatial planning framework. **Spatial planning at the state level prescribes broad development trajectories e.g. for housing**. It sets the frame for regional and municipal planning. Regional development concepts can be seen as a cooperation between municipalities, but their effect on housing policy is not strong. **Inter-municipal cooperation is, in principle, an option for inter-municipal housing development planning** or to related tasks, such as infrastructure planning. However, in the Leipzig-Halle case study, inter-municipal cooperation can mainly be observed for tasks such as landscape planning and brownfield redevelopment for recreation. The main reason for this is that **housing policy is seen as a core aspect of municipal self-government**.

**Non-planning tools understood as funding and subsidy schemes and programmes** (e.g. for urban renewal, rural development etc.) **are practised in and around Leipzig-Halle**. One of these is the **national programme for urban renewal in Eastern Germany**, which includes the demolition of vacant flats and buildings, renovation of the remaining buildings, and neighbourhood amelioration schemes. There are also social urban renewal programmes.

**Affordability is not an issue in Leipzig due to surplus in housing. There is financial support for disadvantaged households** which includes rent subsidies. In Leipzig, this is in the responsibility of the city of Leipzig.

**There is no strong housing policy on the federal, state or regional level (o)**. State level spatial planning prescribes broad development trajectories also for housing. **The opportunities for municipal cooperation exist, but they have no strong impact (o)** on housing development.

There **used to be a housing grant with negative impacts** on urban sprawl, but it **ceased to exist in 2006. There are large scale urban renewal programmes. (i)**.

Affordability is not an issue in Leipzig due to surplus in housing, however there is financial support for disadvantaged households.

#### 4.5.6 Tools to steer new land developments

**Land banking is not practised on a large scale** in and around Leipzig.

There are **different sets of funding schemes for different types of areas**, like the Social City Program for deprived urban areas, the GA-Infra and the FR-Regio for rural and regional (economic) development. **The possibilities to combine different funding schemes are limited.** This is particular salient in the case of the Saxony/Saxony-Anhalt state border running through the Leipzig-Halle region: funding schemes on both sides of the border are not compatible.

There is **no active land banking policy (o)** in the region of Leipzig.

#### 4.5.7 Rules of concrete decisions on developments

The legislation makes **it possible for the municipalities to recapture land value increase** resulting from changes in zoning, as they have the right to buy land dedicated as a development area at the original price. However, this is rarely used in practice, as it only concerns greenfield developments. There is also a possibility to recapture value increase resulting from rehabilitation. There is also a **possibility of an agreement that the investor provides funding for community facilities or infrastructure.**

**The local authorities have the responsibility for spatial planning and development control (zoning), within the limits set by** national legislation, federal state spatial development plans and regional development plans.

**The states set up state-wide comprehensive plans which contain broad statements** on spatial development intentions and settlement hierarchies. Regional plans are developed by regional planning associations together with local authorities. **The regional plans contain spatially explicit aims regarding protected areas, redevelopment and development** (housing, industry, commerce). It has to be considered in municipal planning, i.e. in local preparatory land use plans, local development plans and associated local housing policies.

**Land value increase can be recaptured by the public sector (1). There are also agreements that the developer provides funding for community facilities or infrastructure (1).**

State-wide and regional plans give **a strong framework for municipal planning (1).**

## 4.6 Warsaw

Summary based on contributions from **Mirosław Grochowski** (Polish Academy of Sciences)

### 4.6.1 Transfer system

In Poland there are **both earmarked and general purpose grants**. General purpose grants are calculated according to a formula. Earmarked grants are for financing capital investments and delegated tasks. There are also **subsidies** (e.g. educational subsidy) which **are important in financings public services**. However, **they do not cover all expenses of local public services**, as the own resources are supposed to be the main source of financing.

**The local government system is highly decentralised**, which means that the measures of delivering services are different. It is also up to the local governments to find an organisational or financial solution for spillover effects. The tackling of these effects depends on local or sub-regional arrangements; the idea that money shall follow students has never been implemented. Basically the costs of education are covered by the municipality where the school is located, regardless of the place of origin of the students.

A large part of the municipal incomes is from the **personal income tax**, which is redistributed according to a formula. This definitely **creates incentive for the municipalities to increase their population**.

There are **no specific subsidies that can be blamed for stimulation of urban sprawl**.

The redistribution formula of the personal income tax **creates incentive for the municipalities to increase their population (o)**. **State subsidies cover only a part of the expenses of local public services (o)**.

There are **no specific subsidies stimulating of urban sprawl (1)**.

### 4.6.2 Taxation

The biggest shares in the municipal budgets are **own revenues** (46,6%, 2008; including municipal share of PIT and corporate income tax – 17,4%, property tax 13,3%), **general subsidy** (31,3%, including educational subsidy 23,1%) and **earmarked grants** (18,1%).

**Local taxes add up a small part of the budget**, the most important being property tax. **There might be differences in tax burdens between municipalities**, and this motivates people and businesses to find cheaper locations outside the urban areas. However, **the freedom of municipalities to set the tax rate lies within the limits set by the Ministry of Finance**, and in practice it is being exercised very carefully.

There are no other specific taxation forms that foster urban sprawl.

**Municipal taxes account for a small part of the budget**, the most important being property tax. However, **there might be differences in tax burdens between municipalities (o)**, which is a motivating factor of urban sprawl. However, **their freedom to set the tax rate is limited (1)**.

There are **no other taxation forms that foster urban sprawl (1)**.

### 4.6.3 Economic development and infrastructure

There are **central and regional bodies which play an important role** in sectoral decisions. The power of regional institutions depends on the specific issue. However, if an initiative comes from the regional level, it has to be **consulted with the municipalities and the relevant ministry**. Consensus is important, but final decisions are taken by those who have the functional responsibility and the financing.

**Competition between municipalities is for investors** (higher share in CIT) **and residents** (higher share in PIT). The main instruments are provision of land, lower local property tax and assistance in organisation of economic activity.

There are no other public subsidies fostering urban sprawl.

There are **regional bodies active in the field of economic development and infrastructure (1)**; decisions are taken after consulting with local and state actors. **Competition for businesses exists**; the main tools are provision of land and lower property taxes.

There are **no other public subsidies fostering urban sprawl (1)**.

### 4.6.4 Transport

**Private car is still the dominant transport mode**, as suburbs are poorly connected with the inner city and with each other.

**The public transportation is subsidized both by central and self government budgets**. The amount of subsidy depends on the region / municipality. However, there are many examples (including Warsaw Metropolitan Area) of strong interest of public authorities in supporting public transportation. The last initiative is **“metropolitan ticket” – ticket for public transportation that allows passengers to use different means of public transport** operated by different companies serving different areas. Municipalities contribute in amount that is calculated on the base of the number of their inhabitants.

**Employers may use different incentives including reimbursement of travel costs**. Owners of private firms may (under certain circumstances) deduct cost of transportation while filing taxes. However, generally these possibilities of making travel cheaper **do not trigger urban sprawl on large scale**.

There are **no transport associations yet**. **P+R is under development around Warsaw**, and is popular combined with subway – the problem is that there is only one subway line at the moment. Other mobility management tools include parking fees, bus lanes, new ticketing systems for PT (making it cheaper for users), as well as cycling paths and free transport of bikes on subway, tram and bus.

**Private car is still the dominant transport mode (0)**, although **public transport is subsidised (1)**. There are **no transport associations yet (0)**. **There are various mobility management tools in use (1)**, including new ticketing systems, P+R, bus lanes, parking fees and cycling development. There **are no interventions aiming the internalisation of external costs (0)**.

**Employers may use different incentives including reimbursement of travel costs (0)**, but it does not trigger urban sprawl on large scale.

#### 4.6.5 Housing

The local government law states that local government shall secure housing needs of municipalities' inhabitants. This is up to municipality how to do it. **Thus no supra-level ordinance exists.**

**Subsidies to foster construction of apartments** are supposed to help to implement housing policies. Subsidies go to municipalities and are not ascribed to specific location within their borders. The problem has systemic nature in this sense that there is **no coordination of development of new housing estates and technical and social infrastructure** that shall secure their proper functioning. There is no cooperation between the municipalities in this field. However, the system is not biased towards Greenfield developments.

The most important process is migration **of people to those municipalities where apartments** (rent, cost of buying) **are more affordable while working in the same places** (usually central city of metropolitan area). It has critical impact on mobility patterns and flows of commuters.

**Housing policy is organised on the municipality level; there is no supra-local ordinance or municipal cooperation in this field (o).** There is **no cooperation between the municipalities (o)** either. **There is no coordination of new residential sites and the development of necessary physical and social infrastructure.** However, **the subsidy system is not biased towards greenfield developments (1).**

Affordability is a problem, as **people are seeking cheaper housing in the outer parts of the RUR while working in the centre**, leading to increased commuting.

#### 4.6.6 Tools to steer new land developments

In municipalities surrounding central city majority of land is privately owned, **there is no active land market intervention by the public sector.**

Smart growth techniques are not really in use; tax relief from property tax or corporate income tax is used.

There are **guidelines concerning sprawl** in the national spatial planning concept, but **implementation depends on the municipalities.**

There is **no active land market intervention (o)** by the public sector. **Smart growth techniques are not really in use (o).** Anti-sprawl policies are formulated on the state level, but implementation is in the hand of municipalities.

#### 4.6.7 Rules of concrete decisions on developments

**Land value increase is not recaptured by the municipalities at all.** Because of the structure of taxation system re-zoning or building permits are just tools to build a base for future revenues (see the section about taxation).

Although the spatial **development plans do not have hierarchical structure** their final versions are **results of wide consultations among different actors.** Spatial development plans at the municipality level must incorporate all investment of public benefit that are being regarded as crucial for sustainable development at national, regional, and sub-regional level. Thus the system, although fragmented in some respect, is cohesive providing platform for reaching consensus.

**Land value increase is not recaptured by the municipalities at all (o).**

Spatial **development plans do not have hierarchical structure**, but they are **results of wide consultations among different actors (1)**, incorporating supra-local priorities.



## 4.7 Manchester

Summary based on contributions from **Joe Ravetz** (Manchester University) and **Graham Joyce**

### 4.7.1 Transfer system

Local government spending amounts to about 27% of all public spending. Local authorities spend the majority of this on providing schools, social services and maintaining roads, but they also provide many other services. **The main sources are government grants (61%), business rates (17%) and council tax (22%).**

**Specific grants (54%) are provided by central government to pay directly for individual services**, such as running schools and helping vulnerable people with their housing and accommodation needs. **Local authorities and schools would normally only spend this allocated grant** money on the specified purposes.

**A general grant (7%)** is also paid by central government to local authorities. This is known as the Revenue Support Grant or Formula Grant. **Formula Grant is largely funded by local business rates income** (which is ultimately collected for central government). General grant and business rates are added together to make up the Formula Grant, which is then distributed to local authorities using a complex formula.

There is limited **consideration of spillovers / externalities at the local level in the Rate Support Grant** calculation. There is also an **inter-regional calculation based on estimated need**, the Barnett Formula. The effects of these are mostly invisible on the ground at the peri-urban scale. This means that large urban authorities with the most concentrated poverty (such as Manchester) create the most spillover benefits for surrounding areas.

**The main sources of local government incomes are grants** from the central government. The **overwhelming majority is specific grants, which cover the full costs of the services (1)** they are allocated to – this gives less incentive to sprawl and eliminates the negative effects of free riding.

**Spillover effects are tackled by different measures**, such as the Rate Support Grant calculation and the inter-regional calculation based on estimated need.

### 4.7.2 Taxation

**Business tax** is a non-residential and centrally administered tax. It is a **property type tax based on the actual value**, thus it reflects locational differences.

**Council tax is residential and controlled locally.** It has been risen significantly during the last years all over the country, as central government funding was judged not enough to keep the level of local services. However, **the government has wide ranging powers to limit increases in council tax.** The **local Council tax appears to be higher in poor urban areas, and lower in rich rural areas.**

**Direct tax competition is not an important factor in locational choices** compared to other factors (accessibility, public service quality etc.)

**Business tax** is a central property tax redistributed to the municipalities; it reflects locational differences. **Council tax is a local residential tax, but the government has**



wide ranging powers to limit increases in council tax (1); minimal service level is a lower limit. **Direct tax competition is not an important factor in locational choices.** However, **there is a tendency of raising lower taxes in rich suburbs (0)**, which can be an incentive for people to move out of the city.

**Population growth is more seen as a problem than an opportunity (1)**, as additional council tax incomes do not cover additional service needs.

#### 4.7.3 Economic development and infrastructure

**There are strong incentives in most areas for new business development** for employment & investment, both direct & indirect. **Regional Development Agencies (RDA) have the job of economic development, using larger monies** from EU Cohesion Funds & national government: and also coordinating as far as possible major national programmes e.g. health, higher education, transport etc. Meanwhile **there are sub-regional, metropolitan & sub-metropolitan groups** taking on more of the administering / managing / influencing / coordinating the spending of various regional & national funds.

**There is strong competition between municipalities**, mainly by indirect means. **Sectoral policies and subsidies tend to encourage sprawl, generally in the name of economic development;** e.g. centralization of public services on to larger out-of-town sites.

There are strong incentives in most areas for new business development. **There are strong regional players deciding on important sources (1)**. There are also sub-regional, metropolitan & sub-metropolitan groups coordinating the spending of various regional & national funds.

**There is strong competition between municipalities**, mainly by indirect means. **Sectoral policies and subsidies tend to encourage sprawl (0)**, generally in the name of economic development.

#### 4.7.4 Transport

**Road construction:** strategic roads subsidized by central government form a regional scale network and **indirectly encourage long distance commuting. Local road bypasses & junctions** are sources of added development value and **a magnet for out-of-town development. Parking charges are generally high in urban areas**, but they are usually free in private out-of-town retail / leisure / business estates. The effect is to close down town centre shopping.

**Travel to work is not tax-deductible, but business cars capital purchase is tax deductible.** Also business distance travelled. So there is strong incentive for car ownership and combining business travel with commuting travel. Rail is subsidized and some argue it has a strong incentive for commuting at larger distances. **Internalisation of externalities** is done mainly by national taxes; **congestion charging was voted down.** Other mobility management tools include pedestrian areas and expensive parking.

**The Greater Manchester Integrated Transport Authority covers the 10 municipalities** in Greater Manchester. It coordinates and provides subsidies for bus, tram and local rail. However, in the wider region of 22 municipalities there is very little coordination.

**Road constructions and new bypasses** are incentives to longer commuting distances and new out-of-town developments. Disparities in parking fees have similar effects.

There is an **integrated transport association (1)** in the Greater Manchester area. **Travel to work is not tax-deductible (1)**, but **business cars capital purchase is tax deductible**. **Internalisation of externalities** is done mainly by national taxes; **congestion charging was voted down (0)**. **A wide range of mobility management tools is in use (1)**.

#### 4.7.5 Housing

**National ‘planning policy statements’ over-ride local governments**. These include density, accessibility and re-use of brownfield land. **The AGMA authorities coordinate** through the Chief Planning Officers Group, This covers housing allocations and cross-border issues.

**VAT is levied on restoration of old buildings, but not on new buildings**, with the effect of generally increasing costs in urban areas.

**Rural houses in many areas have prices as high, or higher, as in urban areas** of equivalent quality. Affordable house allocations are often built into planning permissions and planning gain conditions.

**There is strong national control over housing policy**, as well as regional cooperation **(1+1)**. A problem is that **VAT is levied on restoration of old buildings, but not on new buildings (0)**. Affordability is addressed by planning tools, but market processes are favorable from the sprawl point of view (as affordable housing is inside the city).

#### 4.7.6 Tools to steer new land developments

There is **no data on land ownership**. In England the **Green Belt is seen as a strong defence** against urban sprawl. In all areas there is a national policy of general ‘against development on open land’ However there is still a **slow trend of urban sprawl: much of this is related to transport infrastructure**, and internal population growth in rural areas.

Some is related to the need to strengthen market towns with rural populations: **the new housing in a range of size types, is often lower density than the older housing**. Developers are often against building at higher densities as it generally lowers values and increases their costs.

There are perceived **weaknesses in the planning system**, so that large developers can threaten the local authority with legal costs if the application is taken to an Inquiry.

Urban extensions have been re-labelled as ‘Sustainable urban extensions’ There was a national growth strategy ‘Sustainable Communities’, centred on the South East region, where there is greatest housing pressure. There is a small but controversial ‘eco-town’ programme.

In general **areas with high landscape quality are focused on conservation** and more resistant to development, while **areas with most socio-economic deprivation are focused on development**.

There are **no active land market interventions (0)** by the public sector. **Green Belt is seen as a powerful tool**. A problem is that **market processes lead towards lower density housing**. There are **different programmes for sustainable town development**.

#### 4.7.7 Rules of concrete decisions on developments

There is a long history of trying to recapture value gains, but it seems to be very difficult. The main scheme at the moment is **‘Section 106’ agreements, where the developer agrees to provide funding for community facilities or infrastructure**, or include affordable housing / open space, etc.

**The spatial planning system in the UK is strong, but not flexible.** It is **not well coordinated** between regional and local levels. Some argue that it encourages low quality commercial development.

There is **no direct recapture of land value increases (0)**, but **there are agreements that the developer provides funding for community facilities or infrastructure (1)**.

**The spatial planning system in the UK is strong (1)**, but not flexible. It is **not well coordinated** between regional and local levels.

## 4.8 Montpellier

Summary based on contributions from **Jean-Pierre Chery** (AgroParisTech)

### 4.8.1 Transfer system

About endowment and operating grants from the State for municipalities, there is the Overall operating endowment ("Dotation globale de fonctionnement") which consists of two parts, designated themselves as "endowments":

- The fixed endowment. Its amount is defined in an Act from the Ministry of Finance. It shall consider the size of the population in the commune and its area.
- The development grant (communes and inter communes cooperations) and balancing out grants. Its mission is to provide equalization between rich and poor communes.

**The approximate share of grants from the State to the municipalities and inter-municipal cooperations in France is about 26-28%.**

**It is in the interest of the local governments of the RUR region to increase the number of their population from a financial point of view** because the State grants are proportional to population weight and local taxes are proportional to households which increase with population. This interest is balanced with the depreciation charge of public equipments and the profitability between the depreciation and the incomes levied for its use.

The balancing out system gives equalization between the municipalities. For example the real costs of the educational system in France in 2004 are supported by: The State (64.2%), the local governments (20.2%), households, enterprises and the family allowance fund.

There are no other financial subsidy forms with the effect to strengthen urban sprawl (others than described in the following chapters).

Grants give a relatively small part of the municipal revenues, and they are population-proportional. **The grant and tax system motivates municipalities to raise their population (o).**

Local public services are partly financed by the municipalities, but **the balancing out system gives equalization between the municipalities (1).** There are **no other financial subsidy forms with the effect to strengthen urban sprawl (1)** (others than described in the following chapters)

### 4.8.2 Taxation

In France, **the share of local taxes in the operational revenues is about 47%** (direct and indirect local taxes), and the transferred taxes give an additional 11%.

Local direct taxes for municipalities are:

- Property tax on built properties (the tax rates are adopted by local authorities, each year)

- Property tax on undeveloped lands
- Housing tax (applies to each person (owner or tenant or occupier for free) who uses a housing property. It is paid by the person inhabiting the dwelling on January 1 of the tax year)

These taxes are also levied for inter municipal cooperations, Departements and Regions. They gave 20 billions € for communes and inter municipal cooperations in 2003. They concern the households. Other direct taxes are garbage collection tax and payment for public transport.

The inter municipal cooperations have their own tax system (capacity to decide the level of these taxes – they represent about 80% of the population of France).

The state policy is more involved in reforming tax system to preserve or ensure the economic competitiveness at the higher level (National territory) than to regulate regional or local competition between territorial entities.

**Local taxes give a high proportion of municipal revenues, and municipalities have a broad freedom to set the rates (o).** However, **inter-municipal cooperations with common tax levels can be seen as an effective supra-local control mechanism (1).** There are **no other specific taxation forms with negative sprawl effects (1).**

#### 4.8.3 Economic development and infrastructure

**Some supra local administrative and functional bodies exist regarding the control over economic development and the development of infrastructure within the RUR area.** These bodies are on NUTS 2 and NUTS 3 level, and the level of the State. On the NUTS 2 level, the main scope of the Region is economic development. After the Law of 2004, the Region “coordinates on its territory economic development activities of local authorities and their associations”. On the NUTS 3 level, the Departement scope outside the main one (social action), is partly on the development of space and equipment (Departement roads, public transport outside urban areas, transportation of schoolchildren, port management, rural infrastructure helps), and secondly on direct economic aid to companies, with a cap. At the State level, some offices are in charge of legal control or giving advice, as well as certain functions of monitoring of territorial policies, like DREAL (Direction Régionale de l'Environnement, de l'Aménagement et du Logement – Regional Direction for Environment, Spatial Planning and Housing) which is a state body at the regional level.

The main actions of public bodies which have a significant effect to strengthen urban sprawl are involvement for motorways infrastructures, in functional areas (made in a first time to give an answer to the traffic jams...); as well as economic policy about big box stores (allowed surfaces...).

**Economic and infrastructure development is controlled by the department, regional and state level (1).**

**Sectoral policies and subsidies tend to encourage sprawl (o), generally in the name of economic development.**

#### 4.8.4 Transport

The relative share of transport types varies with the size of urban areas and the region. **On average across all urban areas outside the Ile-de-France, 73.1% of**

**commuting trips to work are by car**, 7.6% walk, 5.6% in public transport, 6.0 % use multiple modes and 3.5% are bicycle. The remaining 4.1% correspond to people working at home. The share of private cars is a bit lower in urban areas of major cities (70% on average). It is partly replaced by public transport (8.6%) or the combination of several modes of transport (7.4%).

**The share of user fee payments is 25% to the total budget of public transport. Some special public subsidies exist.** Subsidies of the state and regional subsidies can be used to improve public transport, particularly on the price policy for users. Since the 2000s, many cities have established an "urban mobility plan (PDU), which consists of financial assistance to users as a support for a subscription to a local public transport network by the private company or public institution.

**In France, there is a tax deduction for business use of private car:** the deduction of real business fees. This deduction can support the use of cars and limit the practice of transportation. In addition, state subsidies to automotive industry in the form of support for change of vehicle for customers («scrappage program») are a form of subsidy that may affect the use of car for fleet renewal.

Generally, urban public transports are extend in the area of all municipalities included in the local authority area (metro, tram, buses, heavy development of bike paths). For peri-urban and rural areas, the service is provided partly by private companies, which typically treat a particular geographic area, and partly by road public transport companies (buses operated by the Departement) or rail (trains operated by the Region). The co-modality is a political issue and a fight for the elected representatives of affected communities. The organization depends of the level of integration in the concerned territories.

In the case of Montpellier, The public transport company in the urban and close periurban area is the TAM (Transport de l'Agglomération de Montpellier) with networks of tram and buses in its area. The public transport to reach all parts of the Departement of Herault is managed by the public company "Hérault Transport", under the control of the local collectivity of Hérault (Conseil Général de l'Hérault). Trains are "Trains express régionaux" under the control of the « Conseil Régional du Languedoc-Roussillon ». These trains have a tariff that allows the co-modality with public transport in different cities they serve, including the one of Montpellier (Subscription "Kartatoo").

For the car, there is a pricing policy linked to the level of CO2 emissions from cars, which penalize polluting cars.

The tools used to manage mobility in the most dense urban areas are technical and financial order:

Technical: reduction of car use, with spatial traffic plan, limitation of double track (also used for public transport on reserved lanes), speed restriction, limiting the number of parking spaces, for rising own uses, increased pedestrian zones, bike paths, public transport (tram, bus, bike fleet for rental)

Financial: expensive price of car use in the city (parking costs for outside users), and offers of use of car "relay parking" at the cities gateways to propose using public transport, and help about fees for of soft transport modes.

Since a decade, Montpellier Agglomeration has increased the application of these tools to manage mobility in the heart of the agglomeration (particularly in the Commune of Montpellier).

**The share of public transport use is very low (0), even in larger urban areas. Public transport is heavily subsidized, and there are also other incentives to**

**increase public transport use (1). Subsidies of car-use and purchase support the use of cars (0).**

**Transport associations generally don't exist (0),** but the tarification allows co-modality. However, there **are incentives to internalise external costs (1)** (e.g. car prices adapted to CO2 emissions), and a **wide range of mobility management tools is in use (1).**

#### 4.8.5 Housing

The main legal national system which gives prescription regarding housing policy is the SRU Law (Law on solidarity and urban renewal), adopted in 2000. Besides the procedures that deal with planning tools, **there are requirements to ensure a social mix** by the requirement that each municipality of a certain must have a share of social housing (20%).

**The State help to access the property of a individual home can participate in the urban sprawl.** Thus, the law on solidarity and urban renewal has been modified from 2006, with possible access to programs for the construction of houses € 100,000 (Borloo's law). Typically, these "€ 100,000 houses" are made in allotment as part of operation controlled by municipalities for land tenure issues (availability of land).

**The cooperation about housing is integrated in the inter communal cooperation** if it exists in the RUR. The planning ( SCoT and PLU (Local plan of urbanism)), are linked to the PLH (local Housing plan). The PLH is under the control of inter communal cooperations, which ensure its global coherence in the area.

**There is strong national control over housing policy, as well as regional cooperation (1+1).** A problem is that **state help to buy properties can strengthen urban sprawl (0).**

#### 4.8.6 Tools to steer new land developments

There is no public information available for the share of developable and potentially developable lands in the ownership of the public sector in France.

No information is available on the planning tools either.

There is **no information about the land ownership (0).**

#### 4.8.7 Rules of concrete decisions on developments

Until mid-2010, there is no process for local governments to re-capture the increase in value from land. In recent years, with the perspective of opening market for international rail transport to competition (in France since December 2009) there is a reflection to establish a tax on the appreciation in land and property around the poles of rail stations. For example, the draft law on the "Grand Paris", the Senate passed a tax on real estate gains related to the implementation of transport infrastructure in the Region of Ile-de-France. Intended to fund the state-owned company "Société du Grand Paris", this tax would hit the capital gains from sale of property located near the new infrastructure and the rate would be 15%. The region of Ile-de-France could establish a tax identical to the benefit of the Transport public company of Ile-de-France (Stif). Both charges will accumulate without their total can not exceed 5% but the sale price of the property. A similar measure has already been introduced in the Senate bill on the national



commitment to the environment (“Grenelle II”) to tax real estate gains of the same kind made outside the Ile-de-France (Impôt Service – Forum fiscal, 2010).

In France, the spatial planning land is concretized by the PLU (Local Plan for Urbanism), which is adopted at the municipal level. But municipalities can delegate the implementation of theirs PLU by the intercommunality which it may belong, if it has itself agreed to replace Communes for that. Where a development affects an area for which the stakes are different between different territorial levels (e.g. natural areas where the Departement or the State may want a strong protective action, while the Commune would capacity for development), **the possible conflict of interest is treated by the law**, with the possible involvement of pressure groups (associations, etc..). The procedures can be long and up to be processed by the state (Prefecture, which validates all local procedures) or an administrative tribunal. The degree of political fragmentation between the different territorial levels is important to consider because it can go fast or slow the development of conflict resolution. For very large developments, the State has strong pre-emption rights. Generally, legislation is being drafted for the particular equipment provided with appropriate items of pre-emption rights (case of the implementation of the Great stadium in Paris, or the new bills on the “Grand Paris”, towards the Communes and local authorities).

There is **no direct recapture of land value increases (0)**, although such tools are planned to introduce. **Private investors have to contribute to public infrastructure development (1)**. In spatial planning, **supra-local interests are tackled effectively** through intercommunal cooperation and the procedures according the law **(1)**.



## 4.9 Thessaloniki

Summary based on contributions from **Konstantinos Lalenis, Kousidonis Christos, Nathanail Eftihia, Psycharis Ioannis** (University of Thessaly) and **Spanou Maria** (Municipality of Xanthi)

### 4.9.1 Transfer system

The **main income sources of Greek municipalities (2008) are shared taxes (30%), local fees and taxes (27%), special grants from European and national programmes (23%), as well as other transfers (11%)**. The grant revenues originate from the personal income tax (20% of total PIT revenues), vehicle fees (50% of total vehicle fee revenues) and other specific taxes. The **distribution of PIT to the municipalities is calculated based on their population and geographical position** (municipalities close to the borders usually get extra grants).

**Greek municipalities have limited financial resources of their own**. This creates a high degree of dependence on central administration, which in turn, encourages phenomena of clientelism. Although grants for the municipalities are subject to law for their allocation, special grants are usually allocated according to political relations and pressures.

There are **three types of financing local public services**: A. **100% from central sources** (e.g. elementary schools and high schools); B. **Mixed system** (e.g. kindergartens and nurseries); C. **100% from municipal sources** (e.g. houses and facilities for elderly people, municipal polyclinics).

Services with inter-jurisdictional **spill over effects are seldom taken into consideration for special treatment**. This mainly happens when these effects are regarded by all municipalities involved, and **their special treatment is organized by inter-municipal cooperation schemes**.

**Increase in population number means also increase in grants** allocated by the Ministry of Internal Affairs according to the population of each municipality, and **increase of the local/municipal taxes**, fees etc. **On the other hand**, municipalities are usually inefficient or unwilling to collect local fees and taxes, while population increase also means increased needs for technical and social infrastructure which has to be provided by the municipality. So, **the extra cost often exceeds the extra incomings from the population increase**.

There **are some incentives for special types of activities** (hotels, light industrial units, warehouses) out of the city limits. These incentives might (although **not often**) **have the form of financial subsidy**, but more often have the form of increased building ratios, and/or other incentives in building regulations.

**The most important income sources are shared taxes and grants, while the share of local incomes is low**. However, **the grant system is population based (o)**. Financing of public services differs, but there are **no measures to tackle inter-jurisdictional spill-over effects (o)**.

**There are some financial subsidies strengthening sprawl (o)**, although they are not very often used.

#### 4.9.2 Taxation

**Greek municipalities have limited rights on local taxation.** This creates a high degree of dependence on central administration. The share of the local budget covered by central sources is usually more than 45%, while **revenues from local taxes do not usually exceed 20% of regular incomings.** **Local taxation turns out not to be a reliable source of municipal incomings,** since municipalities do not have efficient services for tax collection, and very often are unwilling to collect local taxes which they consider to be unpopular.

The main types of local taxes are: A. Electricity tax, B. Brewery tax. This particular tax is collected by central administration but is given to local administration according to the population of each municipality. Finally, **“contributions in money” from land properties** which were included in the expansion of city plans are also considered as local taxation. Besides the types of local taxation, there are also **a high number of municipal fees which most have a reciprocal character.**

**Local governments usually favour the types of taxes and fees which are collected by other agencies and given to them.**

**“Contributions in money” from land properties** which were included in the expansion of city plans **usually have spatial consequences, since they are used for building technical infrastructure in the expansions of city plans.** **Some local taxes and fees can create tax competition** between municipalities of the RUR region, **but in a limited degree, since there are usually upper and lower limits of these fees,** which are determined by the central administration.

There aren't any other taxation forms with positive effects for urban sprawl.

Greek municipalities have limited rights on local taxation. **Some local taxes and fees can create tax competition (0)** between municipalities, but in a limited degree, since **there are usually upper and lower limits of these fees (1).** There are **no other taxation forms with positive effects for urban sprawl (1).**

#### 4.9.3 Economic development and infrastructure

Currently, **the supra-local administrative bodies with significant powers to control local economic development are the regions** (13 in Greece), **which are parts of the central administration.** Regions have **powers and responsibilities overall economic activities and development of infrastructure,** with the exception of projects which are considered of national importance (international highways and ports, rail network etc.).

The usual **means of municipalities to attract investors are to provide lower local taxes** than their competitors. They also compete by **preparing spatial plans providing the necessary infrastructure for investors, or by easing some of the existing regulations** –mainly meant to be for the protection of the environment.

There **used to be a few subsidies which had the effect of strengthening urban sprawl.** These were subsidies for the construction of industries or tourist infrastructure, out of designated areas, which were also getting favourable building ratios etc., especially if they were in the sides of highways or significant transportation corridors. **Nowadays, though, there is an effort to reverse these trends** by allowing industrial or tourist developments only in designated areas.

There is a **supra-local control on economic development, exercised by the regions (1)**. There **used to be subsidies with the effect of strengthening urban sprawl, but now the trend has changed (1)**.

#### 4.9.4 Transport

In the urban areas the share of public transport is about 35% and the private transportation 65%. In the peri urban areas, public transport covers 25% of movements and private transportation 75%. In rural areas the share of public transport is even less, but there are no recent figures available.

In the Public Transportation Organization of Thessaloniki, the share of user fee payments is about 30%. At the same time, in the equivalent organizations in other Greek cities this share is about 90%. Organizations of public transportation often offer free service for working people in the hours of peak traffic. There are no tax deductions or public travel subsidies.

In Thessaloniki the public transport association regulates only the buses since the metro system is under construction. It has jurisdiction over an area which exceeds the RUR area. There is also a functional body, the Council of Public Transportation of Thessaloniki (SASTh) which formulates transportation policy and supervises the function of the Organization of Public Transportation of Thessaloniki (OASTh).

There are no direct interventions aiming the internalisation of external costs. Car and fuel taxes and motorway tolls aim the financing of the infrastructure.

Mobility management tools include pedestrianization of the city centres in most Greek cities, parking management with paying zones, bus only corridors in the main urban arterials, priority signalization in Athens, centres of traffic control in Athens and Thessaloniki, traffic monitoring for the ring road in Thessaloniki, alternating days for allowing private cars in the city centre of Athens according to the even or odd last digit of their license plates, and finally there is an operation under process for the unification of traffic control systems in both Athens and Thessaloniki.

The **modal split is not high (o)**, but not too low either. In Thessaloniki **public transport is highly subsidized (1)**, and there are **no public travel subsidies strengthening urban sprawl (1)**.

The **transport association covers the RUR region (1)**, and a **wide range of mobility management tools is in use (1)**, although there is **no direct intervention aiming the internalisation of external costs (o)**.

#### 4.9.5 Housing

In Greece there is no strong supra-local housing policy. The **main volume of housing provision is in individual constructions**, by individual land owners and by individual developers. **Local governments do not formulate housing policies**.

**There are no housing subsidies for new housing** in the expansions of city plans, **only for redevelopment of urban areas in the city core, and refurbishment of the old housing stock**.

There are forms of cooperation between municipalities of the RUR area, but not regarding housing policy or housing projects. Municipalities have very limited influence on housing policies and housing projects. They can only provide urban plans which might allow housing development in specific areas, but they are not involved any further than this.

The conflict between affordability and sustainability is addressed only by the organizations providing organized housing, or the housing cooperatives.

There is **no strong supra-local housing policy (o)**, **neither municipal cooperation concerning housing issues (o)**.

**Housing subsidies are only available for redevelopment of city centre areas and refurbishment of the old housing stock, not for new developments (1).**

#### 4.9.6 Tools to steer new land developments

Developable (already re-zoned) and potentially developable (agricultural, which could easily be rezoned if demand increases) land in Thessaloniki is mainly privately owned. The ownership of the public sector is usually restricted in forest areas, seashores, archaeological sites etc., and in general in areas which are of special characteristics and value, need protection, and is excluded from development. Public property in land to be developed is usually restricted to less than 15% of the total area for development, and this is the same in different parts of the RUR region, i.e. in the urban core, in suburban areas, and in peri-urban areas.

Smart growth techniques are not really in use. There is discussion on the efficiency of these measures compared to traditional planning tools against urban sprawl, but mainly in a theoretical level.

The challenge to control urban sprawl is great, and the Organization of Regional Plan of Thessaloniki is currently dealing with it. Part of its efforts is discussions about implementations of successful tools in the whole of RUR area under its jurisdiction.

The **overwhelming part of the developable land is in private hand (o)**.

#### 4.9.7 Rules of concrete decisions on developments

The obligations of land owners and developers whose land properties had their values increased due to inclusion in the expansion of the urban plan, to contribute for a better urban development, has been stated in the Greek Constitution. In the current planning legislation, these contributions are specified to be in land and money. In other cases, i.e. when land values increase due to rezoning, or due to changes in land uses, or when issuing building permission, there are no mechanisms for the municipalities to recapture value increases.

The Ministry for the Environment, Spatial Planning and Public Works is undoubtedly the key player in the planning game. Important powers are being devolved to non-elected regional secretariats, while 1st and 2nd tier local authorities (municipalities and prefectures) have limited powers. Important is the role of the master plan organizations of Athens and Thessaloniki, whose areas of jurisdiction coincide in a high degree with the RUR areas, although they remain under full control of the central government. Under this system, while local municipalities have the right and responsibility to organize and run the planning processes for master plans or city plans (part of which is the rezoning of land), but authorization of these plans or other planning/development decisions lie with the Region, which is still part of the central government. Thus, local municipalities are highly depended on the regions and they can be influenced in their decisions regarding land use changes.

**Municipalities can recapture a part of the land value increase due to the expansion of the urban plan (1).** **Local municipalities** are highly depended on the

regions and they can be influenced in their decisions regarding land use changes (1).

## 4.10 Budapest

Summary based on contributions from **Andrea Tönkö, Hanna Szemző, Iván Tosics and Antal Gertheis (MRI)**

### 4.10.1 Transfer system

In Hungary, **the main income sources of municipalities are grants (44%)**, own current revenues (27%) and shared taxes (16%; data of 2006). The most important shared tax is the personal income tax, 8% of which is returned to the place of origin, while 32% is used for a very complicated equalisation system.

**The most important grants are the nominative grants**, which are calculated by different types of calculations. **Many of them** (e.g. all normative related to education and social services) **are calculated on the basis of the number of recipients of the services** (these amount for 50,0% of all grants in 2004). **Some normatives are per capita, based on the population of the municipality (13,9%)**, while others are fixed amounts. There are also earmarked grants for specific purposes (e.g. fire protection, theatres) and deficit grants to assist local governments that have deficits through no fault of their own.

The share of transfers is the highest in the education sector. In an average, 60% of the total educational costs of a municipality are covered by central transfers. This share is only around 40% in the social sector, and less than 30% for cultural activities. **The grant system does not contain any equalization formula to handle the inter-jurisdictional spillover effects** of some municipal services.

The main sources of local government incomes are grants from the central government, however **an important part of them is population-proportional (o)**. The **normative specific grants cover only part of the full costs of the services (o)** they are allocated to, which causes negative effects of free riding.

**The grant system does not contain any equalization formula to handle the inter-jurisdictional spillover effects.**

### 4.10.2 Taxation

The law on local taxes determines the type of the local taxes, their minimum and maximum rate and some other conditions but gives **a broad freedom to local governments to develop their local tax policy**. The two most popular taxes are the local business tax and the communal tax on persons.

**The local business tax is widely levied** because its administration is easy, it pays significant revenue to the local governments, it is easy to make it politically acceptable, as it does not affect the citizens directly. However, **it causes significant tax competition among local governments because of the mobile tax base**.

**There is an equalization mechanism built in the transfer system. The potential** (and not the “real”) **tax revenue of the municipality is considered when calculating the PIT shares**. Beside this allocation mechanism no other public regulation can be identified to decrease tax competition.

The widely levied **local business tax creates significant tax competition (o)** among local governments because of the mobile tax base. There is an equalisation

mechanism built in the transfer system, and the minimum and maximum of local tax rates is set by the government, but these **measures are not enough to handle tax competition (o)**.

#### 4.10.3 Economic development and infrastructure

**Economic development policy rests with local governments** in Hungary. Regarding the power of supra-local administrative bodies we can say that they can influence development through the system of subsidies. The seven **NUTS2 regions can influence economic development through the allocation of EU structural funds**.

**Most local governments are strongly underfinanced** compared to the scope of their responsibilities. Consequently, they are forced to try to raise their own revenues, mostly **encouraging a strong economic competition** among them. **They also compete for the possibility of creating new employment** opportunities for their residents. They usually try to attract investors by **offering plots, by preparing the necessary infrastructure** beforehand or by easing some of the otherwise required regulations for the investors.

**Economic development policy rests with local governments.** The seven NUTS2 regions can influence economic development through the allocation of EU structural funds, but otherwise **upper-level control is weak (o)**. Most **local governments are underfinanced, which causes a strong economic competition**. **They also compete for employment**. They usually try to attract investors **by offering plots or by preparing the necessary infrastructure**.

#### 4.10.4 Transport

The modal split in Budapest is about 62-38% (public transport – passenger car) in the inner city, and about 35-66% at the city limits. Tendencies are negative. Share of fares in public transport financing is 41%.

Normally the travelling to work from another municipality by public transport is to be partly covered by the employer and subsidised by a tax deduction. **Travelling to work from another municipality by car is to be partly covered by the employer and subsidised by a tax deduction if there is no public transport alternative** or when working at unsociable hours or for the disabled. The employer may cover these expenses voluntarily also if the situation is different, and **tax deduction applies in this case too up to a certain limit**.

From a territorial point of view **the RUR area is covered by Budapest Transport Association (BKSZ)**. **However, this association is very weak at the moment**, doing minor coordination tasks concerning timetables, passenger information and the very first steps of a common tarification system.

Car and fuel taxes and motorway tolls aim the financing of the infrastructure, **not the internalization of external costs**.

Concerning the mobility management tools in use, there are small-scale projects in the city centre creating **pedestrian areas and traffic calming**. There is a **new regulation for heavy goods vehicles** which allows entering the municipality of Budapest only if they have successfully applied for a permit. In practice this doesn't work effectively because of the lack of enforcement. **Parking management** is also aiming this, with the paying zones recently expanded to cover the whole central area of the city.



Highway construction also has the side-effect of strengthening urban sprawl, as it facilitates transportation from and into the major city of an agglomeration area.

The **modal split** is decreasing, but it **is still relatively high (1)**. **Public transport is subsidised (1)**, and so is commuting by public transport (via tax deduction). **Commuting by car is also supported by tax deduction (0)** up to a certain limit.

Budapest Transport Association exists, but **it has no strong impact (0)** yet in its present, functionally weak form. There is **no specific tool aiming the internalisation of external costs (0)**.

**Mobility managements tools in use include traffic calming, pedestrian areas, freight traffic control and parking management (1)**.

#### 4.10.5 Housing

In Hungary no higher level compulsory prescriptions exist, **housing policy is the exclusive domain of local policy making**. Some public preferences are expressed in the form of national subsidy systems.

Although currently under rearrangement, **the housing subsidies, which clearly favour new developments to the refurbishment of the old stock strengthen the spread of new construction** in green field areas and in the agglomeration and suburban areas of major cities.

There is **no municipal cooperation** observable. **Housing is one of the competitiveness areas** as all municipalities want to attract middle- and higher income families. The public sector has only weak and indirect influence on the spatial allocation of new housing.

**Housing policy is the exclusive domain of local policy making (0)**, no higher level prescriptions exist. There is **no municipal cooperation** observable; **housing is one of the competitiveness areas (0)**.

**The housing subsidies, which clearly favour new developments to the refurbishment of the old stock strengthen the spread of new construction (0)**.

#### 4.10.6 Tools to steer new land developments

There is no data available about the ownership relationships of areas which are readily or potentially developable. In the transition period most of these areas have been sold to private actors, thus it can be hypothesized that **the share of land owned by the public sector and reserved for future development is very low**.

None of the mentioned non-planning tools is used. A somewhat similar instrument is the **'urban development contract' which makes it possible for municipalities to ask the developer to contribute to the infrastructure development costs**, before issuing a permission for the rezoning of a development area. **In some municipalities the building regulations include a 'bonus' system**, where if the developer pays a higher contribution to the public development tasks, it can build up its territory in a denser way (e.g. higher buildings are approved). The differences are in the practical use of the different tools, e.g. **a competition between municipalities leads to weak development contracts**.



**There are significant border effects:** municipalities (e.g. Budapest) which want to pose stricter conditions towards developers have to face the danger that the developer moves to other municipalities which apply less strict rules.

**The public share in land ownership is low; there is no active land banking policy (o).**

Non-planning tools are rare. **There is a tool called ‘urban development contract’ (1)** which makes it possible for municipalities to ask the developer to contribute to the infrastructure development costs, but because of competition it is rather weak.

**There are significant border effects.**

#### 4.10.7 Rules of concrete decisions on developments

In Hungary **the direct legal possibilities for value increase taxation are missing.** Nevertheless, recently a new tool, the „urban development contract” has been introduced, which **allows the municipality to legitimately demand contributions for the public good from a developer.** These development agreements are very flexible, which substantially weakens the position of the municipalities because of the **competitive situation between the municipalities.**

Hungary can be described as a country with a **fragmented planning system.** Deciding on zoning and construction belongs to the power of local governments. Nevertheless, these land-use changes **have to comply with the usually loose framework of the national and county level plans.** Besides these general plans, **only two regional master plans exist**, that of the Lake Balaton area and the Agglomeration area of Budapest. This means special protection for these areas, and most importantly, land-use changes, that are not permitted by the Acts, cannot be carried out by the local governments. Despite all these regulations, **the planning hierarchy can be considered very weak, the system is very fragmented, local governments can usually carry out their agendas even if these are against the principles of sustainable development.**

There is **no direct possibility to recapture value increase by the public sector (o).** A new tool, the „urban development contract” **allows the municipality to legitimately demand contributions for the public good**, but because of the competition for developers it is rather weak.

In Hungary **the planning hierarchy is weak, the system is very fragmented (o),** which allows municipalities to out their agendas even if these are against the principles of sustainable development.

## 4.11 Bologna

Summary based on contributions from **Monica Bocci** (Urban and Regional Planning Department, Technical University of Milan)

### 4.11.1 Transfer system

Italy is one of the most complex countries in Europe regarding tax and grants framework. Although since late '90s, Central Government tried to reduce grants' complexity, grants and tax revenue reduction still represent a serious problem for regional and local institutions.

A main innovation, introduced by the present government, is the abolition of house property tax (ICI). This income was the most important grant for municipalities and since 2007 municipal income has been reduced drastically, causing also problems in managing municipal budget. The problem became even more serious since there was also reduction in revenues which the municipalities were receiving from Central Government. The direct effect was a downscaling and a reduction in quantity and quality of local services and welfare.

In the case of Bologna, local incomes amounted for 226 million euros (these consist of individual property tax, state compensation for the abolished ICI, and fees for local services such as rubbish tax), while non-local revenues (mostly central and provincial grants) for 168 million euros. 150 million euros from the latter are central government grants, which are calculated according to the number of inhabitants. This is about 38% of all incomes.

In Italy, secondary education is managed by provinces, while primary education is managed by the municipal level. However, **costs of teaching and educational services are covered by the central government**. Municipalities pay for building maintenance, transportation and meals in school. In general, **primary schools in a municipality accept students whose families reside to the particular municipality**. In cases that students from neighbouring municipalities go to elementary schools of other municipalities, **there are agreements between municipalities for transfer of revenues** supposed to cover transportation and food costs, to the municipality which provides them.

Local (municipal) level manages related revenues and decides how to distribute them and to invest on local services and infrastructure. There are no fixed shares of central and/or municipal finances for local public services, this depending on other factors as well (size of municipality etc.).

**There is no clear answer to the question of population increase since new population in the municipalities in a RUR region means additional needs for new services** (transport, schools, social services, etc) that represent additional costs for the community and often additional cost on environment sustainability. On the other hand, **the need of collecting revenues to manage local budget, gives to the municipalities the impulse to strengthen local development** (housing, industry, trade, infrastructure) which usually means also population increase.

There are no other subsidy forms directly strengthening urban sprawl.

The share of grant revenues is not very high, but **the central grant system is population-proportional (0)**. **Spillover effects are not observable (1)**, as most public services are financed by the central or provincial level, or there are agreements

between the municipalities solving the problems. There are **no other subsidy forms directly strengthening urban sprawl (1)**.

#### 4.11.2 Taxation

Italian municipalities manage some revenues from local taxation. **Defining the exact share, though, on local budget, is quite difficult, since there has been a transition period on this issue during the last years**, coinciding with central government policies in progressively reducing fiscal transfer to the municipalities, as well as setting limits to the potential of bigger municipalities to invest in big projects.

In Italy the issue of the reorganizing the system of local taxes is on the agenda: an instrumental reform has been announced some time ago, but has never been realized.

Actually there are three main local taxes:

- Real estate has been subject to a specific tax, the municipal tax on real estate (ICI). The taxable base is the imputed income determined by the land registry, multiplied by a certain coefficient. Since 2007, ICI tax was abolished, and the Central Government transfers to the Municipalities the same, more or less, ICI amount.
- Rubbish tax is one of the most important taxes, because waste collection is very expensive.
- Additional Regional and Municipal Income Tax – there are two different taxes: a Regional and a Local. Each Municipality determines the percentage of tax to be collected.

In Italy **there is no tax competition** between municipalities. Many municipalities are organized in “Municipalities’ Consortiums” which manage services and taxes in the participating municipalities and this makes the local taxation system “fair” and acceptable. In any case, there are usually differences among municipalities in local taxation, but not so grave, as to provoke strong competition.

Also, **there are often limits in local taxation set by the central government**. Generally, central or regional tax regulation determine a range with clear limits of applications on local taxes (usually in percentage on value), and municipalities have to decide on their own taxes, within the range set by the supra-level regulation.

There are no other taxation forms with a direct effect on urban sprawl.

In Italy **municipalities are not that free in levying local taxes that it would cause tax competition (1)**. There are also **limits set by the central government (1)**. There are **no other taxation forms with a direct effect on urban sprawl (1)**.

#### 4.11.3 Economic development and infrastructure

In Italy **economic development is under local control**. Central and regional grants for economic development have been ceased since 2009. The aim was to increase local involvement and reduce central, because of the financial crisis. The result was that there was a decrease of local and supra-local economic revenues.

**Economic development during many years in the past was without any control by supra-local bodies**. The idea that development should be boosted by the

creation of more motorways, highways, hubs, ports, etc., increased urban sprawl and had negative effects to the environment.

**During the '90s, many provinces started to control sprawl** by organizing infrastructures and industrial areas, restricting land consumption, and preserving environmental resources through preparation and implementation of Territorial Province Plans, which are compulsory in their implementation.

Municipalities try to offer incentives for investments in RUR areas, aiming to strengthen development. The most common means is to define zones in their jurisdiction as industrial areas with investment opportunities and incentives of various types. This zoning has caused sprawl, because of the related increase in needs of infrastructures and services in these areas. The idea of industrial growth as the sole source of wealth and development still remains deeply rooted in the main stream politicians' minds.

**There are other infrastructure and economic subsidies fostering urban sprawl.** One example is the Pilot Project called "Quadrilateral Umbria-Marche" that takes place across two regions of central Italy: Marche and Umbria. This project has the aim to improve motorway connection between Marche and Umbria (connection to Rome). It is a Public Private Partnership (called Quadrilateral Company). It focuses on 3 main axes (motorways) that have to provide faster access to Rome (besides the Ancona-Rome railway improvement project which runs over 20 years). The project proposes the creation of new extended commercial and industrial zones which would provide the finances for the project to be carried out. The spillover effects of these zones, combined with the lack of strict controls for the surrounding areas, will inevitably create urban sprawl.

In Italy **economic development is under local control (o)**. In the past, supra-local control was nonexistent in this area; nowadays many provinces try to influence it on the regional level. There are **also other public subsidies increasing urban sprawl (o)**.

#### 4.11.4 Transport

Concerning public transit users, 68% of working population in urban areas uses public transport in their home – work schedule. Public transport is used by 64% of city dwellers who have access to the public transport (41% regularly and 23% occasionally).

Public transport is more functional in North Italy. In metropolitan areas the share of public transport is quite good, while in periurban areas it depends on the transport organization and the funds available to it. In rural areas the share of public transport is very low. Use of public transport is increased during the last years, because in rural and peri-urban areas transport costs increased a lot in comparison to peoples' incomes which remained stable. In rural areas most of the people prefer to use private car.

Although in most European countries sustainability measures include reduction in gas emissions, and thus, encouraging public transportation, in Italy this task is not considered as significant as it ought to be, by both, central, regional and local authorities.

In the sector of railways, the regions offer an annual payment to Trenitalia Railway Company (national network operator) for the regional railways service. The amount of money usually paid by the regions to Trenitalia as well as to other private companies is usually not adequate to secure an acceptable level of service. At the same time, the regions decide about the ticket prices and in general, these **prices are not enough to cover the costs of use of the railways.**

Transport by bus networks is usually managed by provinces. Fairs, schedules, interconnections with other transport modes (railways, ferries etc.), public policy, public relations etc. are included in the Province Transport Plan.

There are **no other specific public subsidies encouraging urban sprawl**. There is **no intervention to ensure internalization of external costs** of transport either.

**In many cases, regions, provinces or metropolitan areas are reorganizing public transport in order to cover RUR areas** by private and/or public transport companies. In these cases, co-modality is taken under consideration. The areas outside these associations are connected mainly by bus transport.

**Areas of limited traffic have been created in most of the historical centres** of Italian cities. This decision – being at first very unpopular, above all among shopkeepers – has been taken to increase pedestrianized areas, boost commercial activities and reduce pollution, preserving historical sites at the same time. In these areas only authorized vehicles are allowed to enter, such as: buses, police cars, ambulances, etc. Residents have access as well. All of the authorized vehicles have their license plates registered with the Municipal Police.

**Car sharing, car-pooling, bike-sharing are encourage only in few cities** (Bologna, is among the first ones). Bicycle riding, in particular, is not as popular as it should be, because, in most big cities, there are problems of traffic safety which discourage people from using bikes. In case of bus transport, **there are only few cases in which Municipalities have provided bus lanes** of exclusive use.

There is **no information about the modal split (0)**. **Public transport is subsidised**, as user payment does not cover its costs **(1)**.

There are **no specific transport-related subsidies encouraging urban sprawl (1)**. There is **no intervention to ensure internalization of external costs (0)** of transport either.

In many cases, regions, provinces or metropolitan areas are **reorganizing public transport in order to cover RUR areas by creating transport associations (1)**. In bigger urban areas **some mobility managements are in use, but their scale is limited (0)**.

#### 4.11.5 Housing

**In Italy, central policy has never defined strong housing policies and housing was always a weak sector, left mainly to real estate or private initiative.** Supply of social housing has been scarce and, on the other hand, social housing policies have not been sufficiently targeted to the needs of social integration (poverty and immigrants).

**Housing policies have been formulated by regional governments:** housing problems are different in different areas; responsibilities for welfare and housing are regional, **although municipalities are quite independent**; because of this, local welfare systems are different from each other.

In the '80s and '90s, public policies re-organisation affected housing as well. During decades, **social housing slowly declined**. The share of 8% per year at the beginning of the '80s decreased to a 2% in 1991. In the '90s, a national housing programme was introduced in urban areas, trying to tackle urban decline by subsidising the provision of rented dwellings. In the past twenty years housing policies subverted the long stratification of policies. As in most European Countries, there was a general decline in

public investment, with a shift away from government regulation towards housing real estate.

**In Region Emilia Romagna, during the 1976 – 2003 period, urban sprawl redoubled** from 4,8% to 8,5% of the regional land. The decrease of agricultural land was even bigger: 198.000 hectares, almost the surface of one of the nine Emilia Romagna provinces. More remarks: in Emilia Romagna Region, land consumption index (urbanized surface on whole territorial surface) displays a considerable evolution of urbanized surfaces in settlement concentration areas, equal to 11,7%, shifting from 7,7% of the whole territorial surface in 1994 to 8,6% in 2004. This means that urbanized areas increased more than 51.000 hectares, involving therefore 0,9% of the territorial surface.

**Municipalities nowadays need to increase the stock of social housing** due to the needs of increased numbers of many social groups (immigrants, poor etc.). In many cases, municipalities build housing or social housing in peri-urban areas due to the high cost of land, causing thus, urban sprawl. This also means **that new urbanization needs high investments in social infrastructure**, since the areas in sprawl are in total lack of it.

**In Italy there is no coordination and cooperation between municipalities in RUR areas regarding housing policies.** In fact, there were cases that zones for housing were provided in provincial plans, but were never implemented because the municipalities in the province tended to have their own housing plans aiming to capture grants on housing.

In Italy housing policy has always been a weak sector, with **no strong supra-local policy (o)**. Municipal social housing developments often concern cheaper peri-urban areas, but there is **no information about public subsidies with the effect of strengthening urban sprawl (1)**. There is **no coordination and cooperation between municipalities (o)** either.

#### 4.11.6 Tools to steer new land developments

There are no accurate figures for the share of various types of land in terms of their ownership.

Although, during last decades, traditional planning has shown inefficiency in tackling urban sprawl, and academic discussions are still aiming in defining alternative planning strategies, **there are no implementations of non-planning tools**, or any discussion on their efficiency compared to traditional planning tools.

At this moment, in Italy it is evident that **any private interest, submitting any possibility of economic development, is encouraged by public, with no exception to RUR areas.**

A main problem of Italian urbanization is “border effects”. The most evident result of no planning restrictions on peri-urban areas is that most of these zones are areas with problems of urban quality (lack of public services, green spaces, infrastructures, etc).

There is **no accurate data on land ownership (o)**. **Non-planning tools are not implemented (o)**.

#### 4.11.7 Rules of concrete decisions on developments

In Italy **there are two different ways of re-capturing value increases related to land development by private actors. The first is called “building grant”, it is set**

by the municipality, and corresponds to a grant, given to the local government by the private actor in terms of money per sq.m., according to different types of zoning (housing, industry, commercial, etc) and according to the type of intervention (new building, restoring, etc). **The second way is called “building cost”** and it depends on the size of the construction and the covered area. This cost is annually adjusted, according to the statistical increase of cost of life.

**In 2009, Central Government decided to** introduce a regulation with special incentives for real estate investments. This was called “Housing Plan” and it allows increased developments in real estate, **cutting off most of the housing grants**, which were the only ways that local governments could re-capture some of the increased value stemming from land development.

During the last years, **Regional Federalism allowed each region to define specific planning processes to better manage planning**, also managing it at different levels. Starting from 1990 (Regulation 142/90), according to regional regulations, provinces started to work on **Province Territorial Plans (PTC) that could effectively manage supra-local planning**. Provinces used this tool in preparing strategic planning processes. This was very important; especially as it concerned activities whose sphere of influence exceeded the local level (i.e. big commercial or industrial zones etc.). This also requires negotiations, agreements and coordination in planning in the various levels of public administration (Regions, Provinces, and Municipalities). Project financing also requires involvement of stakeholders in the planning process.

In case of Region Emilia Romagna, which includes the municipality of Bologna, the regional regulation (Regulation 20/2000) allows private stakeholders to participate in planning processes even when private stakeholders are involved in project financing. In these cases, the so called Program Agreement (regulation 142/90) defines specific tasks and issues for both public and private stakeholders.

In Italy, there are **two different ways of re-capturing value increases related to land development (1)**, although they have been weakened during the last years.

Province level plans are **effective in managing supra-local planning (1)**.



## 5 Case study assessment

Based on the questionnaire and taking into account the answers from the case study regions, a limited number of indicators has been elaborated to quantify the qualitative information gained from the descriptions.

Each indicator is a dummy variable, the value of which can be 0 or 1. Chapter 5.1 shows a table including the description of how we evaluated the information received from the case studies regarding each indicator.

Chapter 5.2 presents the table including the values achieved by the case studies regarding each indicator. These values are summarised in a way that for each topic the regions can have a value between 0 and 1.

### 5.1 Assessment indicators

<b>Transfer system</b>	<b>0</b>	<b>1</b>
Local government finance	<p>The high share of population-proportional local revenues or the population-proportional grant system motivates the municipalities to raise their population.</p> <p><i>Consequence: direct interest to raise population.</i></p>	<p>The share of population-proportional local revenues is low and the grant system is not population-proportional.</p> <p><i>Consequence: no local government direct interest to increase population.</i></p>
Financing of public services	<p>Local public services are at least partly financed by the municipalities where the service is located, and there are no effective measures to tackle the inter-municipal spill-over effects.</p> <p><i>Consequence: inter-jurisdictional spill-over effects exist.</i></p>	<p>Upper level financing fully covers the costs of public services, or the spillover effects are tackled effectively (e.g. municipal share has to be covered by the municipality of residence).</p> <p><i>Consequence: no inter-jurisdictional spill-over effects.</i></p>
Special financial subsidies	<p>There are financial subsidy forms with the effect to strengthen urban sprawl, and there is no financial subsidy form with the effect to weaken urban sprawl.</p>	<p>There are no financial subsidy forms with the effect to strengthen urban sprawl or there are financial subsidy forms (e.g. for urban renewal) with the effect to weaken urban sprawl.</p>



<b>Taxation</b>	<b>0</b>	<b>1</b>
Taxation system	Important share of local taxes and broad local government freedom to set the conditions of local taxes.  <i>Consequence: tax-competition exists.</i>	Low share of local taxes and/or weak local government control over the conditions of local taxes.  <i>Consequence: no or very little tax competition between neighbouring municipalities.</i>
Special taxation forms expressing public values	There are specific taxation forms with effect to strengthen urban sprawl.	There are no taxation forms with effect to strengthen urban sprawl.
Correction policies	There is no efficient supra-local control on tax competition, while it would be necessary.	There are efficient upper level public regulation efforts against tax competition, or it is not necessary.
<b>Economic development and infrastructure</b>	<b>0</b>	<b>1</b>
Supra-local control	There is no or very weak supra-local control concerning economic and infrastructure development in the RUR region.	Supra-local administrative or functional bodies control economic development and the development of infrastructure within the RUR area
Public subsidies	There are specific public subsidies which have the effect to strengthen urban sprawl	No public subsidies given to infrastructure or economic development, exist which have the effect to strengthen urban sprawl

<b>Transport</b>	<b>0</b>	<b>1</b>
Modal split	The share of public transport use in the urban, peri-urban and rural areas is low (car use is dominant even in urban areas)	The share of public transport use in the urban, peri-urban and rural areas is high (in urban areas public transport is dominant)
Public transport subsidies	Public transport is not subsidised	Public transport is subsidised
Travel subsidies	There are transport-linked public subsidies which strengthen urban sprawl (such as tax deduction of travel-to-work costs by car)	There are no transport-linked public subsidies which strengthen urban sprawl
Transport associations	No or functionally very weak transport association on the RUR level	The RUR area is covered by public transport associations (or PT is organised by other RUR-level institutions)
Internalisation of external costs	No instruments directly aiming the internalisation of external costs	There are efforts to ensure the internalization of external costs of transport (environmental taxes, congestion charging etc.)
Mobility management	The range of mobility management tools used to ease congestion and improve the environmental conditions of transport in urban areas are limited	Wide range of mobility management tools (e.g. pedestrian zones, public transport priority measures, parking space management, intermodal nodes, P+R, cycling promotion) are considered to ease congestion and improve the environmental conditions of transport in urban areas

<b>Housing</b>	<b>0</b>	<b>1</b>
Supra-local control	No or very weak housing policy on the supra-local level	There is strong supra-local (regional, national) housing policy
Housing subsidies	There are housing-linked public subsidies with the effect to strengthen urban sprawl (e.g. preferring greenfield developments)	There are no housing-linked public subsidies with the effect to strengthen urban sprawl
Municipal cooperation	There is no municipal cooperation regarding housing policy	There is cooperation between the municipalities of the RUR area (or smaller subsets of it) regarding housing policy
<b>Tools to steer new land developments / Rules of concrete decisions on developments</b>	<b>0</b>	<b>1</b>
Land ownership	Most of the developable land in the RUR region is in private hand	Across the RUR region a substantial share of developable (already rezoned) and potentially developable (agricultural, which could easily be rezoned if demand increases) land is in the ownership of the public sector
Land value increase recapturing	Value increase due to rezoning is the benefit of the land owner	Local governments can recapture some portion of land value increase due to rezoning of land or issuing building permission, from private actors (e.g. via a specific value increase tax or via land banking)
Public development obligations of investors	Developers have no obligation to contribute to the public infrastructure connected to their projects, it is fully financed by the public sector	Developers have to contribute to physical and social infrastructure development connected to their projects (e.g. fixed share of the investment costs, development contract etc.).

Supra-local control	Municipalities are completely free in their land use planning decisions, there is no effective means to take supra-local interests into account	Local municipalities can be influenced by higher level public actors in their decisions regarding rezoning of land or issuing building permission (either by hierarchical planning system or by effective cooperation in practice)
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## 5.2 Case study indicator values

### 5.2.1 Financial interests of the municipalities

	Koper	Haaglanden	Leipzig	Warsaw	Manchester	Montpellier	Thessaloniki	Budapest	Bologna
<b>Transfer system</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>2</b>
Local government finance	0	0	0	0	1	0	0	0	0
Financing of public services	0	1	1	0	1	1	0	0	1
Special financial subsidies	0	1	1	1	1 (no info)	1	0	1 (no info)	1
<b>Taxation</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>
Taxation system	1	1	0	0	0	0	0	0	1
Special taxation forms expressing public values	1	0	1	1	1 (no info)	1	1	1 (no info)	1
Correction policies	1	1	0	1	1	1	1	0	1

## 5.2.2 Sectoral policies

	Koper	Haaglanden	Leipzig	Warsaw	Manchester	Montpellier	Thessaloniki	Budapest	Bologna
<b>Economic development and infrastructure</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>
Supra-local control	0	1	1	1	1	1	1	0	0
Public subsidies	1	1	1	1	0	0	1	1 (no info)	0
<b>Transport</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>3</b>
Modal split	0	0	0	0	0 (no info)	0	0	1	0 (no info)
Public transport subsidies	1	1	1	1	1	1	1	1	1
Travel subsidies	0	1	0	0	1	0	1	0	1
Transport associations	0	1	1	0	1	0	1	0	1
Internalisation of external costs	0	1	0 (no info)	0	0	1	0	0	0
Mobility management	0	1	1	1	1	1	1	1	0

	Koper	Haaglanden	Leipzig	Warsaw	Manchester	Montpellier	Thessaloniki	Budapest	Bologna
<b>Housing</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
Supra-local control	0	1	0	0	1	1	0	0	0
Housing subsidies	1	1	1	1	0	0	1	0	1 (no info)
Municipal cooperation	0	1	0	0	1	1	0	0	0

### 5.2.3 Tools to steer development

	Koper	Haaglanden	Leipzig	Warsaw	Manchester	Montpellier	Thessaloniki	Budapest	Bologna
<b>Tools to steer new land developments / Rules of concrete decisions on developments</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>
Land ownership	1	1	0	0	0	0 (no info)	0	0	0 (no info)
Land value increase recapturing	1	1	1	0	0	0	1	0	1

	Koper	Haaglanden	Leipzig	Warsaw	Manchester	Montpellier	Thessaloniki	Budapest	Bologna
Public development obligations of investors	1	1	1	0	1	1	0 (no info)	1	0
Supra-local control	1	0	1	1	1	1	1	0	1