

Sustainable Land Use Management in Europe

Providing strategies and tools for decision-makers



Connecting cities
Building successes



Éditions du Certu

Sustainable Land Use Management in Europe

Providing strategies and tools for decision-makers

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Certu

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Contents

Foreword	Dirk Ahner, DG Regio	5
Prelude	Land Use management: A Key Point For Sustainable Cities	7
Chapter 1	Trends in Land Use Management in Europe	11
	1.1 European Cities and Urban Development	11
	1.2 Urban Sprawl And Brownfields in European Urban Areas	14
	1.3 Policy Responses For Sustainable Urban Areas in Europe	16
Chapter 2	Intervention in Land Use Management	21
	2.1 Intervention in Land Use Management And Need For Integrated Actions	21
	2.2 Spatial Patterns and Land Use Management	24
	2.3 Governance of Land Use Management	32
	2.4 Capacity layer on/to Deal With Land Use	37
Chapter 3	Integrated Approach to Sustainable Land Use Management	43
	3.1 Layers of Intervention in Sustainable Land Use Management	43
	3.2 Integration of Different Layers of Intervention	45
	3.3 Tools of Sustainable Land Use Management	48
	3.4 Sustainable Land Use Management in The Context of European Policies	50
Chapter 4	Case Studies on Local Action Plans	55
	4.1 Local Action Plans	55
	4.2 Planning And Implementing a Brownfield Regeneration Strategy: The Case of Bytom (Poland)	57
	4.3 Urban Regeneration in Kavala (Greece): The Case of the Panagouda Area	61
	4.4 Urban Renewal in Bristol (Great Britain): The Regeneration of Knowle West Area	64
	4.5 How to Develop an Inter-municipal Land Use Strategy: The Case of Saint-Étienne Métropole (France)	71
	4.6 The Brownfield Regeneration Issues: The Example of Ferneziu Area in Baia Mare (Romania)	79

Chapter 5	Conclusions and Recommendations	85
	5.1 Land use Management as a Key for Sustainable European Cities	85
	5.2 Barriers of Implementation of Land Use Management on City Level	85
	5.3 What are the Policy Implications?	
	... for Cities in Europe	87
	... for European Institutions	89
	5.4 What are the Tools?	
	... for Cities in Europe	91
	... for European Institutions	93
	5.5 Towards a Toolkit for Sustainable Land Use Management for European Cities	94
	References	98
	Acknowledgments	103
	Appendix	105
	A.1 Full Interview with Dirk Ahner	105
	A.2 Further Information about LUMASEC	109
	Resume	111

Foreword

Seventy percent of all Europeans live in cities and their agglomerations, and cities play a vital role in the development of European regions. They are hubs of education, culture and creativity. However, European cities are confronted with huge challenges and risks of social tension, insecurity, congestion and pollution, which need to be addressed. In such a situation, achieving a sustainable urban development is a challenge in itself. And this development should occur in an integrated manner: as an example, integrated urban projects funded under the URBAN Community initiatives have secured a good balance between the allocation of funds both for the built environment and for what may be called the “soft” investments, involving social services and cultural actions. Urban development through Cohesion Policy is a place-based strategy.

It is becoming increasingly obvious that challenges in urban areas go beyond the administrative boundaries of the city; our mindset is still influenced by a traditional configuration of the city as a well-defined spatial environment. However, urban reality is now made up of complex urban systems and sub-systems, the fabric of which is partly the result of people’s mobility, their means of transport, as well as the location of their jobs and where they live.

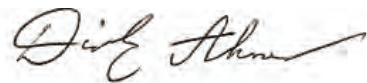
Most of today’s cities and towns are sprawling into neighbourhoods, which are neither urban nor rural. Consequently, tackling the challenges facing urban areas today requires a sustained coordination between the different administrative levels concerned. The need for metropolitan governance as well as urban and local governance is evident: we need both, a top-down approach defining

the overall objectives and priorities, a framework to ensure coherence, and a bottom-up approach, that allows sufficient flexibility for local actors to develop and implement strategies according to their needs.

The DG Regional Policy is happy to see that the thematic scope of the URBACT program has increased with projects, which tackle cities sustainable development. The LUMASEC project on land use management goes into this direction since environment is becoming an essential part of our cooperation in the field of sustainable urban development.

Land use planning is part of a long-term process for reconciling what are often competing social and economic demands, in a way that balances the needs and well-being of the community as a whole, while taking full account of physical and technological opportunities and constraints.

The successful outcome of managing these tasks or processes should contribute to the creation of an urban environment which is dynamic, attractive and inclusive, where people are happy to live and work and where they have good access to the services and amenities which the modern city has to offer.



Dirk Ahner
Director General DG Regio,
European Commission



Prelude

Land Use Management: A Key Point For Sustainable Cities

Since the ratification of the Aalborg Charter of European Cities and Towns Towards Sustainability in May 1994 and the spreading of “Local-21 Agenda” initiatives, European cities have gained crucial advantages over the Member States, which meet strong difficulties to sign and implement international agreements or to elaborate national policies on sustainable development.

More than two thirds of the European population live in cities, and ***cities have a great impact on global warming, natural resources management and the consumption of land***. Cities are highly concerned with these issues today, and appear to represent an efficient scale to imagine and implement actions and policies with a direct impact on our way of life.

Sustainable development cannot be addressed by the sole use of clean or green technologies; nowadays, most European cities are facing urban sprawl as well as economical and technical difficulties to recycle brownfields. Cities are searching for alternative means to reduce car-use dependency and to promote a fair access to affordable housing, employment areas and leisure activities for their inhabitants. Cities also need to imagine and implement new actions and policies to develop sustainable settlements and sustainable ways of living.

The “Leipzig Charter on Sustainable European Cities”, adopted in May 2007 by the European Ministers of Urban Development, lays stress on European cities strengths but also on their weaknesses to succeed in achieving sustainable development. The Charter also

insists on the benefits of implementing integrated urban development policy approaches in European cities.

These new approaches should be built on “implementation-oriented planning tools”, and should lead to a strong mobilization and coordination of public (multi-level) and private actors involved in urban development. Planning documents should define “consistent development objectives for the urban area and develop a vision for the city”. They have to coordinate the different neighbourhoods, sectoral and technical plans and policies, the use of the public and private funds and be coordinated at local and regional level, involving all the relevant stakeholders. ***Management of land use*** is needed.

Management is the human activity of working together with the intention of accomplishing desired objectives. Land use management is the process of managing the use and development of land, in which spatial, sector-oriented and temporal aspects of urban policies are coordinated. Land use management covers the debate about norms and visions driving the policy-making and sector-based planning both in the strategic and operative time spans, as well as the spatial integration of sectoral issues, decision-making, budgeting, participation, implementation of plans and decisions and the monitoring of results and evaluation impacts. Urbanisation – and in particular sustainable urbanisation – is a ***heterogeneous process*** and does neither envisage blanket solutions nor recipes and tools applicable all over Europe. A distinction has to be made between the mayor transferable part of sustainable land use management and its local adoptions.

Integrated urban development policies should take into account the different pillars of sustainable development but also the different scales, stakeholders or aspects of the implementation of these policies. One major point for the implementation of these documents, the way the visions can turn into reality, is the spatial arrangement of well-located and affordable land, land for public areas, amenities, infrastructures, activities or houses. ***Land use management is a key point in developing competitive and sustainable cities and regions.***

Local situations are very different all over Europe. In some cities, building land is abundant due to the collapse of old industrial factories, however difficult to re-use because of soil pollution, lack of territorial attractiveness, integrated projects and private investors. In other European cities, building land is rather scarce and subject of hard competition between private investors, leading to inflation of land prices to worrying levels.

In both cases, market-led processes cause unsatisfying situations. On the one hand, some spaces hardly break with territorial depreciation processes; on the other hand, competition for land entails an important consumption of natural and agricultural areas, a functional specialisation of spaces and social segregation. ***Despite these differences, European cities share the same need for public land use policies and for the improvement of the available tools.***

This demand does not only apply to urban areas. Also in rural areas and in agriculture, land use management is coming to the fore. Challenges like the adoption to climate change, globalised food and energy produc-

tion or the increase of landscaping measures imply this increasing attention to land use management issues in rural areas. In order to focus precisely on strategies, tools and stakeholders, ***this handbook concentrates on land use management in urban areas of different size only.***

Content of The Handbook

This Handbook aims to provide elements permitting a better analysis of local situations and allowing the development of different proposals for the elaboration and implementation of land use policies by cities. The conclusions are the result of exchange of national and local experiences about major land use management issues.

The Handbook firstly sets out the land-use management trends in Europe (Chapter 1), followed by a review of specific topics: The need for integrated actions, spatial patterns, governance and capacity issues (Chapter 2). The third chapter deals with an integrated approach to land use management, an aspect that has been developed by the UR-BACT working group LUMASEC.

Following the LUMASEC approach of intervention on different layers, the cities involved have worked out Local Action Plans to tackle a row of crucial land use issues, and have shared their experiences on these subjects. These five Local Action Plans cover a wide range of issues related to land-use: the ways to develop an inter-municipal and integrated land-use strategy, the regeneration of deprived areas or brownfields in various post-industrial contexts, the need for a strong community engagement and for public participation, the difficulties in

regulating and activating building and land ownership permits in some areas, or the ways to implement a collaborative decision-making process on land-use strategies and future developments. These are presented in Chapter 4.

Finally, the last chapter (Chapter 5) presents the main conclusions on sustainable land use management as well as recommendations as policy implications and tools for European cities as well as for European institutions.

Urban Sprawl around the City of Liège, Belgium (Vancutsem)



Trends in land use management in Europe 1

1.1 European Cities and Urban Development

Since the last EU enlargement in the year 2007, the European urban system has been dominated by about **70 major cities** with more than 500,000 inhabitants. About 20% of the EU's population in its 27 member states live in these cities. Approximately 120 million inhabitants or 40% of the urban population in Europe live in **600 cities** of between 100,000 – 500,000 inhabitants, which represent the economic poles and nodes characterising the polycentric development pattern of competitive cities and regions in Europe. There are almost 1,000 cities (with more than 50,000 inhabitants) spread across Europe and about 5,000 towns (between 5,000-50,000 inhabitants), acting as focal nodes for economic, social and cultural activities. This relatively dense urban network features very few truly large cities. In the EU, only 7% of people live in cities of over 5 million inhabitants compared to 25% in the US, and only five EU cities appear among the 100 largest in the world (CEC, 2008).

The distribution of urban areas by countries is strongly related to country size: The UK, Germany, France, Spain and Italy are the countries with a comparatively high number of urban areas. Finland, Sweden and Norway (for climatic and geographic reasons) have much less urban areas in relation to their size. The larger urban areas follow a North West – South East axis, with a higher density around Brussels and Dortmund. In comparison, Southern Europe is characterised by smaller urban areas, with the exception of Italy. However, this picture slightly changes if judged by the population: Large cities are located in Southern and Eastern Europe. These differences relate to different popu-

lation densities, which in turn reflect different city structures and patterns of land use. By 2020, about 80 percent of the European population will be living in urban areas, or much more, like in Belgium or the Netherlands, and the urban future of Europe will be directly affected by urban land use (EEA, 2006; CEC, 2008).

The largest urban land expansion in Europe started in the 1950s. Rapid changes during the past 60 years have resulted from the combined effects of increasing affluence, mass motorisation for the transport of persons and goods, the introduction of air transportation and the shift from manufacturing to services in urban economies. Central planning, dominance of public transport and deferred land market determined a specific form of compact city in former socialist countries, but this has changed since the end of 1980s (Drewett et al., 1991, 1992). The growth of urban areas in Europe has taken place at different rates in the period between 1990 and 2000: from 0.7% up to 70%. During this period, the growth of urban areas and associated urban infrastructure consumed more than 8 000 km², about the size of Luxembourg. This increase took place at a higher speed than population change. Combining land cover and population changes (1990-2000) with population density and the percentage of urban land (2000) available in Europe - urbanisation has generally led to less dense urban areas, because e.g. "dedensification" is the most dominant form of urbanisation today with the growth of the newly built-up areas in urban regions (EEA, 2006; Couch et al., 2007).

From the perspective of urban policy development in Europe, many national gov^λ

Intervention in Land Use Management 2

The rapid changes in urban extension in the past 60 years have resulted from the combined effects of increasing affluence, mass motorisation, air transport introduction and a general shift from manufacturing to services in urban economies; urban areas together with urban infrastructure have consumed more land, at a higher speed than population change, resulting in urban sprawl, urban brownfields, high environmental costs, etc. ***This continuous change in urban development – weather prosperous or shrinking – has become the lifecycle of cities and regions.***

Answers to urban sprawl and brownfields are fragmented, as demonstrated in the previous chapter. The lifecycle of cities and regions, rather than urban form type or pattern of urbanisation, have been matters of policy and planning and seen as policy tasks by many governments across Europe. Nevertheless, developed policies in the past were too sectoral, or instruments not implemented, or did not work in particular situations because of the complexity of urban processes and the lacking effectiveness of the policy instruments applied.

More and more, the need for integrated instruments and answers is emerging, referring to the White Paper on multi-level integrated urban strategies adopted by the Committee of the Regions.

2.1 Intervention Through Land-Use Management And Need For Integrated Actions

It is evident that ***the frameworks of urban development in European cities are changing***: demographic change, climate change and financial crisis are the most critical topics confronting European cities today.

The European Union is facing ***unprecedented demographic changes***: an ageing population, low birth rates, changing family structures and migration. In the light of this, it is urgent to review and adapt existing policies, both at EU and national level. The ageing of the European Union's population is the result of four interactive demographic trends. However, their magnitude and rhythm may vary substantially from one country to another and from one region to another, ruling out a uniform response. A low average number of children per woman, a rising life expectancy, a raising amount of elderly people of an age older than 90 and major inflows of net migrations from third countries in working age, which tend to bring down the average age of the EU population. Related to this, the EU identified five key policy responses to manage demographic change (EC/COM/2006/0571/final):

- Supporting demographic renewal through better conditions for families and improved reconciliation of working and family life;
- Boosting employment – more jobs and longer working lives of better quality;
- Raising productivity and economic performance through investing in education and research;
- Receiving and integrating migrants into Europe;
- Ensuring sustainable public finances to guarantee adequate pensions, health care and long-term care.

Climate change is already taking place and represents one of the greatest environmental, social and economic threats facing the planet. The EU is working actively for a global agreement to control climate change and is taking domestic action to achieve substantial reductions in its own contribution.

Integrated Approach to Land Use Management 3

3.1. Layers of Intervention in Sustainable Land Use Management

The previous Chapter 2 has introduced the **three layers of intervention of land use management**: Spatial Patterns, Governance and Capacity Building.

The chapter on **spatial patterns** concluded by highlighting the need for strong planning policies and tools, connected with stakeholders' involvement, as the actual situation in Europe is fragmented. Also Spatial Data Information appears to be one of the key aspects when seeking to move towards a sustainable land use management.

The chapter on **governance** concluded with the need to generate further integration of sustainability dimensions across all policy sectors in Europe encompassing: a greater coherence of policy and action; the enhanced application of existing policies, programmes and mechanisms; the promotion of sustainability development appraisal throughout the decision making process; and the establishment of formal management procedures for declaring environmental aims.

The chapter on **capacity building** confirmed that there exists a general lack of formal tools to involve actors, so there is a need to involve people and private actors in the process of land use designation and a need for land use management interpretation.

Of course, these **three layers of intervention** demonstrate a more or less traditional approach to land use management. The demands highlighted in Chapter 1 underpin the demand for a broader approach, i.e. the application of land use management strategies to create sustainable European cities. According to the EU Toledo Urban Development Declaration of June 22nd, 2010, the

following land-use aspects are critical:

- "- reducing transport needs by the promotion of **proximity and mixed-uses schemes**, while at the same time stimulating a more sustainable mobility (on an urban, metropolitan and interurban scale) by: prioritising non-motorised ('walkable', 'cyclable' cities), less pollutant means of transport, supporting affordable and efficient public transport accessible for all - notably for deprived neighbourhoods, where it can play a key role in breaking physical isolation- and multimodal transport networks, while also optimizing urban logistics;*
- *boosting energy efficiency in existing buildings (by improving the thermal insulation of exterior walls, roofs and glazing, and the efficiency of heating and other installations), considering the physical conditions of the building stock ;*
 - *improving the management of energy and material resources and flows in the city (urban metabolism), including the whole water cycle, waste, etc., striving to close urban metabolic cycles locally and to reduce the ecological footprint;*
 - *promoting renewable energies and implementing them and their use in cities;*
 - *recycling land (by means of urban regeneration, the redevelopment or reuse of abandoned, derelict or unused areas, etc.) as a key strategy for contributing towards the reduction of land consumption and therefore combating 'urban sprawl';.....",*

It appears that the **central issue for sustainability of the European cities is strongly linked to land use management** as a tool to achieve this broader aim of sustainable development of European cities.

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Resume

Politiques foncières durables pour les villes européennes

Stratégies et outils pour les décideurs

Le projet européen LUMASEC (Land Use Management for Sustainable European Cities) vise à identifier les principales pistes de progrès en matière de politiques foncières dans les villes européennes.

Cet ouvrage présente le résultat d'un travail de deux ans (septembre 2008 - mai 2010) sur ce domaine d'action aujourd'hui essentiel pour assurer la compétitivité et l'attractivité des régions urbaines européennes, dans une perspective de développement durable qui suppose à la fois de limiter l'étalement urbain et de favoriser le renouvellement de la ville.

L'ouvrage met l'accent sur les aspects stratégiques (démarches de planification, outils d'observation) et opérationnels (programmes d'action, études de cas) des politiques foncières, et propose des éléments méthodologiques et des recommandations pratiques.

Nachhaltiges Landnutzungsmanagement in Europa

Strategien und Instrumente für Entscheidungsträger

LUMASEC (Land Use Management for Sustainable European Cities) ist ein URBACT Projekt, das zum Ziel hat, den strategischen und operativen Handlungsspielraum von Flächenmanagement für europäische Städte aufzuzeigen.

Das vorliegende Handbuch präsentiert die Ergebnisse des Projektes zum Thema nachhaltiges

Flächenmanagement, das sich zwischen September 2008 und Mai 2010 mit Stadtentwicklung im Zusammenhang mit urban sprawl und Brachflächen beschäftigte. Ziel war es Attraktivität und Nachhaltigkeit zu steigern – zwei der wichtigsten Themen bei der Steigerung der Wettbewerbsfähigkeit europäischer Städte und Stadtregionen. Das Handbuch konzentriert sich dabei sowohl auf die strategische Ebene (Planungsmethoden, Kontrollinstrumente) als auch auf die operative Ebene (Aktionspläne, Fallstudien) mit dem Ziel, Methoden und praktische Handlungsempfehlungen zu geben.

Políticas de suelo sostenibles para las ciudades europeas

Estrategias y herramientas para responsables políticos

El proyecto europeo LUMASEC (Land Use Management for Sustainable European Cities) pretende identificar las principales pistas de progreso en materia de políticas de suelo en las ciudades europeas. Esta obra presenta el resultado de un trabajo de dos años (septiembre de 2008 – mayo de 2010) sobre este ámbito de acción, actualmente esencial para garantizar la competitividad y el atractivo de las regiones urbanas europeas, en una perspectiva de desarrollo sostenible, que supone a la vez limitar la expansión urbana y favorecer la renovación de la ciudad.

La obra pone de relieve los aspectos estratégicos (acciones de planificación, herramientas de observación) y operativos (programas de acción, estudios de caso) de las políticas de suelo y propone elementos metodológicos y recomendaciones prácticas.



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