Urban Knowledge Arenas
Re-thinking Urban Knowledge and Innovation
Final Report of COST Action C20
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Preface

This publication is the Final Report from COST Action C20 ‘Urban Knowledge Arena’ (2005-2009), a European concerted action, operating through the COST framework. The Action has actively involved more than 100 urban researchers, professionals and policy experts from 22 countries, representing a great variety of cities and organizations, professional expertise and scientific disciplines in social science, humanities, architecture, engineering and natural science.

The objective of the Action has been to investigate the emerging field of integrated knowledge, experience and know-how, which is needed in today’s highly complex and delicate urban development and regeneration processes. We summarise the field by using the term Urban Knowledge. We have identified and examined theories, methods and tools for cross-boundary and trans-disciplinary knowledge production, management and communication.

Furthermore, we introduce the concept Urban Knowledge Arena (UKA), i.e. a platform/forum/arena, which can give knowledge support in an urban development activity, and simultaneously contribute to production of new knowledge and learning. We have also explored how innovation occurs in urban development processes, and how it can exploit all aspects of Urban Knowledge to achieve it. The work has been carried out in three main work packages, each one followed by a Working Group (WG):

- **WG 1:** Characterization of existing and future urban knowledge (theories, methods, tools)
- **WG 2:** Facilitating a European arena for urban knowledge (gradually more focused on local urban knowledge arenas)
- **WG 3:** Innovative initiatives (in research, policy, practice)

As international state-of-the-art as such on urban knowledge and urban knowledge arenas was lacking, a lot of effort in the initial phase of the Action was devoted to moving this position forward in relation to the conceptual and theoretical understanding of urban knowledge and the notion of urban knowledge arenas. In this regard, methodologies, theories, organization and activities relate not only to the production, or generation of knowledge, but also to how knowledge is managed, stored, disseminated and brought into practical use in urban projects and policy making.

We have studied 15-20 innovative urban projects and processes in the participating countries, meaning either whole projects which were innovative in their entirety, or parts of projects which effectively demonstrated innovation. The Action has also organized a sequence of workshops with thematic focus on different urban issues, illustrated by local urban projects/processes, with the objective to investigate the role of urban knowledge and UKA in urban development. Complementary to this, a series of theoretical and conceptual seminars have been held.

In order to encourage the involvement of younger researchers and professionals in the Action, a C20 Junior Network (JN) was established. 10 junior experts from 8 countries have participated as full members of the Action. Following an initiative by the COST Office, C20 has established a liaison group between C20 and COST Cultural Heritage, under the title C20 Urban Built Heritage. The group has organized a number of workshops dedicated to the role of built heritage in city development.

This Final Report of COST C20 is a joint effort by the members of the Action – and I wish to stress this, each WG has been responsible for producing a chapter in the report – and it summarizes and synthesizes where we stand in view of our Final Conference (Sofia, November 2009). There is still a lot to be said and done about urban knowledge, innovation and urban knowledge arenas, and the conclusions and recommendations in this report are merely to be seen as “a step on the way”. Nevertheless, the collective work of the group has
thrown some light on these issues, and our findings have already contributed to the current international discussion on knowledge and capacity building for urban development, and directly informed initiatives such as the URBAN-NET project, the Mistra Urban Futures Initiative and the Sida Urban Research Discussion. UN-HABITAT has taken inspiration from the concept of Local Urban Knowledge Arenas in its work with capacity building for sustainable urban development.

It has been a most interesting experience, both from an intellectual and social point of view, to follow the course of events in the C20 Action; from the initial proposal to COST in 2003 and the launching meeting in Nicosia in September 2005, through the dozen of events, with the Mid-term Conference in Vienna as a milestone in 2007, reaching the final stage in 2009 with the production of the Final Report and the Final Conference in Sofia. I certainly have learned a lot about the issues of our concern, but also about the diversity of urban transformation and change across Europe. I wish to thank all the colleagues who have contributed to the accomplishments by writing, reading, debating and, not the least, by putting up so much energy, mind and heart in hosting and organizing the C20 Workshops.

I hope you will enjoy reading this report, our last joint effort as a group, and we look forward to debating the issues with you in the near future!

Gothenburg, October 2009

Henrik Nolmark
Chair of COST Action C20
Urban Laboratory Gothenburg
Director, Node AB

The Action has been co-ordinated by Urban Laboratory Gothenburg, with administrative support from the COST Office in Brussels.

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COST- the acronym for European Cooperation in Science and Technology- is the oldest and widest European intergovernmental network for cooperation in research. Established by the Ministerial Conference in November 1971, COST is presently used by the scientific communities of 35 European countries to cooperate in common research projects supported by national funds.

The funds provided by COST - less than 1% of the total value of the projects - support the COST cooperation networks (COST Actions) through which, with EUR 30 million per year, more than 30,000 European scientists are involved in research having a total value which exceeds EUR 2 billion per year. This is the financial worth of the European added value which COST achieves.

A "bottom up approach" (the initiative of launching a COST Action comes from the European scientists themselves), "à la carte participation" (only countries interested in the Action participate), "equality of access" (participation is open also to the scientific communities of countries not belonging to the European Union) and "flexible structure" (easy implementation and light management of the research initiatives) are the main characteristics of COST.

As precursor of advanced multidisciplinary research COST has a very important role for the realisation of the European Research Area (ERA) anticipating and complementing the activities of the Framework Programmes, constituting a "bridge" towards the scientific communities of emerging countries, increasing the mobility of researchers across Europe and fostering the establishment of "Networks of Excellence" in many key scientific domains such as: Biomedicine and Molecular Biosciences; Food and Agriculture; Forests, their Products and Services; Materials, Physical and Nanosciences; Chemistry and Molecular Sciences and Technologies; Earth System Science and Environmental Management; Information and Communication Technologies; Transport and Urban Development; Individuals, Societies, Cultures and Health. It covers basic and more applied research and also addresses issues of pre-normative nature or of societal importance.

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Executive summary

Cities and city-regions have acquired growing importance in the international policy field, as witnessed in policies at global, EU and national levels. The well-being of cities and the quality of life of their citizens have taken on greater salience for economic and political reasons. The earth’s population is becoming more and more urbanised. Starting with an estimated 750 million in 1950, we now have some 3 billion urban dwellers, half the world’s population. The figure for Europe is higher, with roughly 80% of the EU’s inhabitants living in urban communities. In addition the main economic activities of nations are located in cities which are seen as essential to the enhancement of Europe’s competitiveness. Moreover, most cultural production and consumption is also urban. Thus many cities consider an attractive environment, carbon free energy production, clean water and air, low levels of crime, efficient public transport, affordable and good housing, public services (including educational systems) and leisure facilities as important elements in the improvement of their competitiveness.

Given this a single scientific field cannot offer appropriate solutions for the complex issues urban professionals and decision-makers face, whether related to generic, non-local and long-term issues such as climate change, demographic transformations, EU enlargement and globalization or the specific local issues in each city. In recent years there has been much talk of interaction, the holistic view and integral thinking, but this has seldom been matched by action. Society appears to lack supportive structures for the co-production, co-management and co-use of knowledge which is needed to find innovative solutions for cities.

URBAN KNOWLEDGE

Urban knowledge can be viewed as an attempt to point to the value of combining different perspectives (i.e. practice and theory) with different approaches and disciplines. This approach accepts that knowledge is also produced outside university departments and other research institutions. In particular, it recognises the importance of non-institutionalised forms of knowledge and the need to be open to changes at ‘street level’ as well as the existence of ‘tacit’ knowledge. Knowledge, therefore, should be conceived as a social product, which implies that someone (or some process) decides what is and what is not acceptable as “knowledge”, under which circumstances knowledge is produced and who the producers of knowledge are. Urban knowledge cannot be isolated from the conditions of its production and concepts must be related to specific circumstances in order to make sense of them. Here urban knowledge is action-oriented, multidisciplinary and contextually defined. It is about bringing about practical improvements for cities and their citizens.

INNOVATIVE CAPACITY

The urban development ‘industry’ spans an infinitely large number of disciplines, each of which is both pursuing a policy of developing innovation within its domain, while continuously collaborating with other disciplines to generate cross discipline innovation. Working on large, multi-disciplinary projects, stimulates innovation in product, technological systems, management systems, political systems, with new knowledge being produced constantly,
much of which is fed back in the form of ‘best practice’. It should be acknowledged, however that the mere achievement of innovation cannot always to taken to mean good, or successful.

Innovations can take the form of an incremental evolution, a gradual improvement, or structural change in a product or a process. As a general rule, incremental innovations aim to maintain existing systems, disguising their inability to resolve new problems. As for structural innovations, they raise the questions of economic adjustment and social acceptance.

As societies enter a period of transition their leaders face the challenge of difficult choices as they envisage innovation options. The duty to anticipate, demands that we pursue research and the implementation of solutions which are intermediate and reversible, able to rapidly produce more enlightened answers.

**URBAN KNOWLEDGE ARENA**

The complexity of an urban project, and the necessity in urban knowledge to rely upon a large diversity of expertise and experts, require new instruments allowing a more collective and creative approach: The *Urban Knowledge Arena*, which can be described as a group of free actors - typically including a mix from government, industry, academia and the citizenry - sharing a common project related to urban knowledge management. It is actually a collective action based on partnership and specific relations between the actors, working in a specific way on the development of innovative knowledge related to a specific place and time, usually addressing an issue of immediate urban concern.

Examples show that successful UKAs often are informal (i.e. not institutionalized), temporary phenomena; an ad hoc initiative most often organized from ‘below’, with geographically defined boundaries and not necessarily leading to a final decision. The knowledge output from a UKA process is thus twofold; highlighting and managing the specific local knowledge and producing new generic urban knowledge which can contribute to the comprehensive field of urban knowledge.
1 Introduction: 21st Century Urban Challenges and the Needs for Innovative Capacity and Urban Knowledge

Cities and city-regions have acquired growing importance in the international policy field, as witnessed in global policies and at EU and national levels. The well-being of cities and the quality of life of their citizens have taken on greater salience for economic and political reasons. The earth’s population is becoming more and more urbanised. Starting with an estimated 750 million in 1950, we now have some 3 billion urban dwellers, which is half the world’s population. The figure for Europe is higher still, with some estimates indicating that roughly 80% of the EU’s inhabitants live in urban communities.

1.1 COMPLEX CHALLENGES OF THE 21ST CENTURY SOCIETY

The 21st Century society can be broadly described by four different aspects of its self-perception and management.

First, the dominant time-perspective of the 21st Century society is not a perspective of the past (paradise lost) but of the future (paradise to be built up). It is a society striving towards entirely organizing itself in order to plan its self-production in a future time. It is a society of investment, planning and organization (i.e. the organization of change rather than one of maintaining or restoring a lost past).

The 21st century society, like any other society on earth, has a “beyond” - a “beyond” that requires efforts and sacrifices, that drives enthusiasm and passion. But, the 21st century society’s “beyond” is invisible and indescribable. It cannot be defined as a clear and precise vision to be reached, because it is simply its own surpassing. For instance, nobody knows what the city of tomorrow would be like, but for sure it has to be produced, right now, step by step, keeping in mind that the process of construction is probably more significant than trying to choose a moving objective. However, the “future perspective” exists: we intend to change the world and improve it to the best advantage of human beings, but the “how” remains open. Even if this perspective remains abstract and theoretical, its historical feature helps at least understand that presently available resources must be shared with our descendants and that any decisions taken now will have unknown future consequences. In all cases, it is probable that “parsimonious use of resources” and “reversibility of decisions” will become significant parameters in major urban project management decisions.

Second, it is a society subjected to itself - i.e. what has been called a ‘reflexive’ society (Beck, Giddens and Lash, 1994) whereas previously it was in subjection to moral and political authorities, public bureaucracies and experts who were in charge of contemplating/specifying the (urban) future. Most often, it was also guided by idealistic or ideological approaches. But things began to change around 1980 with the rise of the global society. Today most people no longer respect the traditional political and moral tenets of the past which are supposed to structure the future. Now nobody can seriously pretend to foresee the future in detail. Lay people no longer blindly trust arguments presented by the political and expert elite and...
criticize their legitimacy. People now raise claims for more transparency, societal control, participation and cross-disciplinary approaches. There is a serious challenge to all forms of authority but also clear signs of a democratic deficit.

Third, the society of the 21st century has also inherited a huge amount of rules, regulations and norms, accrued over years, which constitute a common knowledge managed by numerous public or private institutions. These institutions are supposed to capitalize, transform and redistribute the ‘know-why’, ‘know-how’ and ‘how-to’ among all social and technical actors. In urban contexts they play a significant role in rule generation and regulation. The most basic among them are the state and its bureaucracies, but there are also many institutions of industrial and professional origin, groups and associations that regulate practice. These institutions carry out a huge amount of work establishing accepted parameters and value, methods of validation and calculation methods, etc. However there is a strong demand for better integration of that knowledge and for improved management.

Even if such a system has favored the development of an enormous bureaucracy (something paradoxical in a society of individuals), it has ensured the smooth organization of societal management. With regard to the urban development sector, its activities have positive effects on the users’ protection, reassuring investors and professional practice and also contribute to the concentration, verification and diffusion of knowledge. This is especially true when urban actors are under the strong obligation to produce results by investors and credit institutions. Usually these knowledge-organizational aspects are organized by networking and forums at different levels, whereas the Urban Knowledge Arena is more concerned with free and creative developments.

In situations of ongoing unpredictability, where innovation and creativity can produce destabilizing effects, some institutions can become self-protectionist (conservative) and develop attitudes that put a brake on their own transformation. Serious problems may develop when extremely powerful institutions (public and private) adopt corporatist attitudes and try to impose monopolized approaches to an uncertain future. They could also try to benefit from their dominant situation and impose their own decisions on the rest of society.

Fourth, the long-term development of modernism has favored people’s autonomy and finally produced a society of individuals. Liberalism (and its contemporary form neo-liberalism) asserts that only individuals pursuing their own self-interest fosters the development of links among people. However, “interest” is not a process endogenous to individuals. Individuals never show “interests” (or perhaps more accurately “desires”) that cannot be attributed to external or environmental factors. Desires and interests must be seen as trends and tropisms, as expressive forms of a multiplicity much broader than individuals, but able to express themselves in an individual way (Benasayag and del Rey, 2007). This is the reason why social conflicts cannot be conceived as simple conflicts of interest as in the Liberal approach. The conflicts we are interested in are those generated by collective activities, multi-directional and multi-level interaction.
In our societies (Reynaud, 2004) the most important problem is how can individuals live together and how can they build social links among themselves. How can they manage growing levels of conflict and transform them into positive drivers for creativity and innovation?

1.2 COLLECTIVE PROBLEMS AND SOCIETIES OF INDIVIDUALS

Not least because the vast majority of the population now live in urban areas and the main economic activities of nations are located in cities which are seen as essential to the enhancement of Europe’s competitiveness. Moreover, most cultural production and consumption is also urban. Furthermore, the performances of cities and surrounding areas are now considered as a matter of major concern for national governments: It has become too important to leave to city councillors alone. Thus, rightly or wrongly, many cities consider an attractive environment, carbon free energy production, clean water and air, low levels of crime, efficient public transport, affordable and good housing, public services (including educational systems) and leisure facilities as important elements in the improvement of their competitiveness (http://www.c40cities.org/).

The constant pressure to bring about improvements in both the performances of people and localities has lead to growing attention on how places can change their role from passive victims into active participants in the process of improving economic competitiveness and social cohesion. How much can carefully planned localities add to the process? Will the reconstruction of cities or parts of cities help to make them more efficient? Will cities, which are able to attract investors and creative workers, improve the quality of life among their citizens? Will it be possible to avoid conflicts and waste of resources if past experiences are re-examined? Will new and different ways of organization provide better living conditions for citizens; create more liveable places and thus more successful localities?

Cities’ ambitions to meet these requirements should be seen against a backdrop of macro-trends, which sometimes turn possibilities into challenges, opportunities into pressures. The 21st century is characterized by contradictory challenges to decision-makers and practitioners in cities.

Globalisation of the financial and environmental systems pushes cities to take active roles in international policy and action for sustainable development, whereas political democracy becomes more and more individualized and people strive for increased private spheres. Demographic and geo-political transformations are causing new influences and lifestyles to be contrasted with the pursuit of local history, identity and culture. Personal security and integrity, in urban public space and not the least on the internet, are being challenged by demands for transparency and open accessibility.

“They [societies] are more and more fragmented, composed of relatively autonomous subsystems, the “network age” being consequently substituted by the “organisation” one. […] Societies are more able to co-ordinate themselves horizontally, to self-organize, appealing less to tutelary authorities.” (Roseanvallon 2006, p). Thus even if individuals are more and more autonomous, they are also constantly faced with situations that need to be managed in common. For instance, real estate cannot be managed in isolation; it is a collective problem
with strong implication for individuals at each social and urban level (from the land owners to the ordinary citizens, stakeholders and political authorities). Numerous problems in urban development or management cannot find an adequate solution without the contribution of a large number of people thinking and working collectively.

**CONTRADICTORY URBAN CHALLENGES**

Summing up all the wishes usually put forward concerning the city in different contexts by representatives of different interests, a massive shopping list emerges, containing lines of development which are hard to combine or in certain cases are downright contradictory:

- The city must be ecologically viable without this meaning too much inconvenience in everyday life.
- The city must be economically prosperous without social exclusion.
- The city’s transport system must run efficiently, with short transit times and a high level of accessibility, at the same time as the urban environment has to be inviting and pleasant.
- The technical infrastructure must be lean and must achieve highly pitched environmental targets, but without being too expensive to its residents.
- A good, sustainable city must also be exciting, though not dangerous, unpredictable but not incomprehensible.
- An attractive and harmonious city must have a strong identity without being socially or ethnically exclusive; it must have a well-preserved heritage without becoming a museum full of restrictions.
- The city must be dynamic and open to new influences without losing its soul.
- It must offer plenty of scope for freedom of thought and action, but not at someone else’s expense.
- And all this has to be achieved with a high level of civic participation in the democratic processes and without the latter becoming slow and inefficient.

(Nolmark 2007a)

### 1.3 THE NEED FOR URBAN KNOWLEDGE AND INNOVATIVE CAPACITY

A single scientific field cannot offer appropriate solutions for the complex issues urban professionals and decision-makers are facing, whether related to generic, non-local and long-term issues such as climate change, demographic transformations, EU enlargement and economic, political and cultural globalization or to the specific local issues in each city. Intensive interaction and co-operation between different domains of expertise will be necessary in order to find solutions. But rhetoric tributes to interaction, the holistic view and integral thinking are seldom matched by sufficient capacity for action, and society appears to lack supportive structures for the co-production, co-management and co-use of knowledge which is needed to find innovative solutions for cities. What is the best way for bridging research-policy-action-professional practice? What are the innovative approaches to facilitate a more knowledge-based urban management, which could facilitate effective dialogue in the current multi-actor urban process and projects and recover public trust for the processes of urban change?
2 Theoretical Debates on Knowledge and the Nature of Urban Knowledge

In this chapter we discuss the continuous growth in demand for knowledge on urban issues: First of all it asks; has the demand for a broader and deeper understanding of urban changes and opportunities been in any sense remarkable and different to the past? Moreover, it is not just public authorities that are demanding more and in particular applicable knowledge. In addition to governments and other public institutions this demand has been supplemented by a wide range of actors from private organizations and businesses, civilian associations and individuals. Moreover, this knowledge should not only be retrospective, but also provide proposals for future improvements. This points us to a second issue - the character or existence of knowledge; here the what – how – when – who questions become highly relevant. Third, the production and implementation of knowledge in urban contexts is far from simple and straightforward; knowledge is not produced either randomly nor whenever there is a need but is closely related to interests and power. Fourth, we aim to provide an analysis of how knowledge is received and filters down into practice and vice versa.

2.1 THE INCREASE IN URBAN KNOWLEDGE

The production and use of knowledge, or more specifically “urban knowledge”, has taken on increasing significance and is increasingly common in urban development politics in European democracies. In terms of urban politics, policies and practice there are many ways to make use of knowledge, whether it be scientific knowledge, evidence based learning or the more tacit and intangible (i.e. often uncodified and/or implicit) forms of knowledge such as “know-how” learned through experience/practice. Moreover, recent economic and ecologic constraints and interdependencies on one hand and a growing individualisation of everyday life on the other have changed the societal framework for the application of knowledge. No longer is it enough to ask for expertise from a university institute on town planning, to commission an engineering company to produce a traffic development scenario or to obtain expert advice from investment consultants. Undoubtedly, these knowledge products/forms have not suddenly become obsolete; rather, they increasingly have to be combined and compared with, weighed against and – above all – they have to be complemented by additional knowledge forms (e.g. everyday knowledge, local knowledge, milieu knowledge) and integrated into new, extended, comprehensive structures of urban development processes.

The development of urban agglomerations – be they growing or shrinking – has always been complex and produced contradictory outcomes. Whilst change is a normal part of urban development there is considerable evidence that the pace of urban change has greatly accelerated in recent years and that the causes of change, at least partially, have their origins, spatially speaking, in a wider context. For instance new urban landscapes and semi-urban developments increasingly occur next to old, historically developed urban settlements. Sometimes these older settlements are displaced and on other occasions new settlements are simply superimposed on them. New population groups with different cultural backgrounds
and lifestyles become new urban inhabitants and encounter older residents. Today these changes happen in much shorter periods of time than ever before. The accelerating pace of urban development rarely provides enough time for social integration, mutual learning and understanding and acceptance of change and new populations associated with that change. In many cities and towns there are almost no signs of the initiation of an integrated urban development process; but there is considerable evidence of groups coming into conflict with each other in one area or spatially and socially segregating themselves from each other.

While the classical questions of urban development may remain the same, the acceleration of social change, the increasing mobility of population groups, and the growing intensification of interdependencies and competition between European (urban) economic spaces are at a historically unprecedented level. This is the new framework for urban development; these are the new factors within which the old questions and new challenges of European urban development have to be confronted. These changes constitute a qualitatively new phase in the historical development of European urban areas. These phenomena, the acceleration of change and spatial dissemination of different cultures and the globalisation of economies affect all cities. They make the production and exchange of knowledge about cities as systems, and their place in the wider global system, more necessary and more important than ever. Urban knowledge has become a key competence for and in problem solving.

In such situations urban development, and urban development politics/policies in particular, have partly to be understood as the ability of the urban community to cope with antagonisms and sometimes very contradictory and conflicting development goals while still being able to establish a liveable urban entity that is still able to develop social cohesion within the urban population and between population groups. One – and perhaps not the least important - aspect of this urban ability is the integration of different kinds of knowledge, knowledge which can (and will) be contradictory and even antagonistic. Nevertheless, more than ever, the highly complex realm of urban development requires greater efforts to be taken to ensure the integration of different forms of knowledge in these processes in order to facilitate the development of socially cohesive and sustainable forms of urban development.

This political and societal challenge forms the background for the concept of integrated urban knowledge. Its basic features are simple and optimistic. The concept is based upon the positive impact that is expected to emerge from combining and integrating different forms of knowledge. This can only be achieved through accepting, or at least striving for the acceptance, of a broader notion of knowledge; a notion broader than the traditional one exclusively formulated within science. However, this claim for mutual acceptance raises both intellectual and general social, inter-human issues. The concept of integrated urban knowledge requires the dismantling of traditional barriers between scientific disciplines, between different professional actors in the urban development arena, between various administrative units and finally between different groups of interest and power. This claim makes the concept of integrated urban knowledge appear somewhat naive, but also promising; it requires a mental (intellectual) openness vis-à-vis the exchange of ideas, it presupposes respect for, and a readiness by all participants to accept the points of view and the positions of others.
In spite of these much more positive attitudes cities still remain places with problems: some of the worst living conditions, the most polluted areas and highest levels of social problems can be found in cities close to concentrations of wealth, aesthetically engaging landscapes and highly attractive living conditions. The impressive growth in science and economic development over recent decades strongly contrasts with the modest progress in reducing some of the well known problems found in cities. Despite a substantial, general increase in wealth and welfare, social problems, environmental problems and economic inequalities have not been significantly reduced. This requires sustained reflection on our understanding of cities and their situations as well as on our attempts to address them.

Firstly, there is a clear need for more knowledge on cities, their functions, problems and current situation. In particular, what is required is knowledge that provides, or enables the development of, an integrated (holistic) understanding of the different aspects of contemporary urban situations and is able to facilitate the development of economically efficient and effective policies, thereby enhancing the competitiveness of cities whilst at the same time supporting social cohesion and integration and sustainable development. This points to an obvious need for more knowledge - e.g. how do urban settings relate to social, economic, political and cultural relationships. Unfortunately, there is no single ‘science’ of urban studies that is able to encompass all the different aspects of the urban situation. Networks and associations of cities and international organisations, as well as in European research policy-making activities, have also addressed the divide between urban research and practice. The gap between research and the use of scientifically based knowledge for urban development is partly due to inadequacies in terms of institutional capacities at local, regional and national levels, and partly due to the way research activities are traditionally organised and implemented and the ‘translation’ of research based knowledge into more practice orientated forms.

Secondly, there is an increasing demand that urban knowledge should look forward rather than simply backward (i.e. attempt to provide guidelines for policy intervention instead of purely building knowledge on retrospective analysis). This requires the development of a more forward looking approach based both upon ‘science’ and knowledge constructed on the basis of experience (e.g. about what works and what does not work). This approach implies the need to identify possible solutions to problems rather than simply looking for empirical evidence of failures. However, to make such a shift in objectives and established intellectual traditions conflicts with dominant conceptions of the nature of scientific knowledge in the social sciences - i.e. the fundamental claim that knowledge should be based on experience, not speculation or simple interpolations. Moreover, this growing requirement for future-orientated knowledge points to the need to conceive research and knowledge as related to and involved in society, not prior to or above social life and its realities. In recent decades important debates in the social sciences have challenged the dominant view that abstract knowledge is superior to specific knowledge(s) and similarly that systematic, and often statistically based, generalisation provides more correct knowledge than do case studies.

Thirdly, as no single academic disciplines covers the full spectrum of urban relationships, it is almost always necessary to combine different disciplines. Relevant knowledge of cities, their
structures and relationships and so on is not limited to one discipline (e.g. geography, architecture, sociology). On the contrary, elements essential to it can be located in many disciplines and no single discipline assigns ‘the urban’ a central role in its field of studies, as a result ‘the urban’ too often falls into the cracks between the disciplinary fault lines. It should thus be no surprise that the desire for disciplinary integration has proved rather difficult in practice; academia becomes ever more specialised and thus lacks the traditions for synthesis of various aspects of the research required to develop a more rounded understanding of the urban context. Generally speaking, research works in an overly narrow manner that does not allow for a synthesis of different perspectives and understandings. Similarly, it is not able to address specific problems and provide pragmatic or workable solutions. This kind of research is not considered ‘real science’ and the knowledge produced is seldom accepted as such. Yet, this institutionalised view on what can be recognised as knowledge and what cannot, may prevent a broader and more complete understanding of urban problems and their solution(s).

2.2 DEBATING THE NATURE OF KNOWLEDGE

A central topic in this context is the notion of knowledge itself. Knowledge takes many forms and in everyday life often appears as ‘common sense’ – a kind of reasoning based upon experience, which in this context could be defined as generalised ‘learning by doing’. Thus a good deal of knowledge is never expressed directly; experience tells the individual how to handle various situations. Another form is tacit knowledge, which is often the most common mode in which knowledge appears in many areas of life, including the scientific. On the other hand, formulated (or codified) knowledge is what we can discuss and exchange views about; to organise this debate some basic rules have developed over time. These rules form the basis of the philosophy of science (entailing specific notions of epistemology and ontology); what (evidence) to look for and what counts (and does not count) as truth etc.

The debate over the degree to which scientific knowledge production depends on its societal context is a very old one. In recent times this issue has experienced a revival, widely known as the “Mode 1 versus Mode 2” debate. According to one of the most often cited authors in this debate (Gibbons, 2003) the new mode of knowledge production is labelled ‘Mode 2’, as opposed to the structure of the old, Humbolditian university or ‘Mode 1’. “Mode 1 is disciplinary while Mode 2 is transdisciplinary”. Deyanova gives a brief description of the two modes referring to Gibbons:

Today knowledge is produced in a context of application, in the context of the usability of knowledge, and not in a context governed by the interests of a specific community. It is characterised by ‘heterogeneity of skills’. Mode 1 is hierarchical, whereas in Mode 2 ‘the preference is for flatter hierarchies using organisational structures which are transient’. (…) The ‘knowledge society’ itself is ‘transdisciplinary, application-oriented and diversified’ and socially accountable. As well as profit-making. The ‘new paradigm of knowledge’, discussed by Gibbons in his 1998 study, implies a new view of university relevance where ‘economic imperatives will sweep all before it (…) if the universities do not adapt, they will be by-passed’. (Deyanova, 2007, p2)
One of the many assertions made by “Mode 2” supporters in this debate is that the shift from “reliable” towards “socially robust” knowledge has been made many times in the past. In the most frequently quoted book in this discourse the authors argue “…that under contemporary conditions the more strongly contextualized a scientific field or research domain is, the more socially robust is the knowledge it is likely to produce.” (Nowotny et al 2004, p167). However, these assertions ought to be questioned.

We would argue that what we mean by knowledge and what we mean by knowing or know-how needs to be clarified. For instance: What are the conditions that constitute and guarantee the production of (scientific) knowledge, which ones have to be fulfilled by knowing? And, consequently, which rules have to be considered when (scientific) knowledge meets knowing and know-how? If urban development policies and urban planning basically intend to increase the certainty (and predictability of the outcomes) of the measures taken to achieve their goal, and if it is agreed that knowing and knowledge is a cognitive product with a (variable) degree of certainty, then the terminological debate becomes extremely important in the process of decision making, particularly if mutual respect and acceptance is to be achieved.

Questions such as these are not asked from the perspective of social problems urban development normally faces, at least not to date. In academic circles debates about different kinds of knowledge occurred in the mid-20th century. The debate mainly took place on a science-theory level and it was not exposed to societal issues such as (economic) added value, applicability, utility for society etc. Even today a great number of authors step into this theoretical debate by discussing the notion of “implicit knowledge”, a term for which Michael Polanyi is acknowledged as the creator. One of the problems is how to define “implicit knowledge”.

For example Baumgartner argues: “There are basically two different kinds of knowledge: (a) knowledge that can be presented proposition ally, and (b) knowledge which precedes or defies (linguistic) utterance.” (1999, p315, translation by Peter Moser). Antweiler (2000), using a similar approach towards defining implicit knowledge, has sought to make use of what citizens know in order to develop urban development policies in a manner that reflects citizens’ wishes. As “opposed” to (scientific) knowledge, Antweiler uses terms such as “local knowledge” or “indigenous knowledge”, which are defined as consisting of knowledge, skills, and capabilities (excluding resources), a definition which can also be applied to the notion of “know-how”.

Fischer (2005) describes “implicit knowledge” by using notions such as “capability” and “competence” and refers to Polanyi, who “…emphasizes the power of judgement of the expert, of the skilled person who intuitively realises what is essential in a professional situation.” (ibid, p2). Fischer goes on to define knowing – in the sense of competence or skilfulness – as a form of implicit knowledge; but he adds critically that “…somebody who knows is not necessarily skilled and – in other words – knowing does not automatically induce competence” (ibid, p2). We would contend that this is not contradictory to notions of learning and teaching, given that many participants in the debate believe competence can be furthered by the enhancement of knowing. Competence is often described as the ability to apply knowledge gained through experience: You think first and then you act. But, according to
Fischer, competent acting is also possible on the basis of implicit knowledge that is demonstrated empirically. “Implicit is thus the opposite of conscious or able to be articulated. Polanyi’s core thesis is that all knowledge is either implicit or, if appearing in explicit form (e.g. in the form of scientific knowledge), can be lead back to implicit knowledge. This is why knowledge cannot be completely explicit.” (ibid, p4)

What this brief discussion illustrates is the complexity and range of positions that surround the debates over what constitutes knowledge, its different forms and their relationship to one another. This is an arena of long standing, and ongoing, dispute.

2.3 PRODUCING AND USING URBAN KNOWLEDGE

Much of the debate discussed in the previous section has remained largely confined to the academic world. However, the question of the usefulness of knowledge for society is not one purely for academics, recently it has been raised more widely during any period of scientific production, such questioning has always been more or less intense depending on the particular historical situation that knowledge production allowed or prohibited, supported or left to wither. The particular power relationships in the wider society of the time associated with these activities determined the conditions under which scientific production was able to develop (or not develop). Knowledge and knowledge production cannot be isolated from such wider societal forces.

In contemporary societies the rapid pace of change and the nature of power relations in our societies mean that the dialogue between producers and production sites of knowledge on the one hand and the demands and needs of the society on the other hand are also changing. This phenomenon and the specific forms it has acquired have been extensively described by Nowotny. Nevertheless, the “novelties” she writes about are not equally new (or true) for each knowledge field and every form of knowledge. Looking at different fields of interest in society and society’s hegemonic powers or classes and layers may help to explain powers’ changing closeness and distance to certain realms of knowledge. History provides us with many examples of these interrelationships. For instance the pace of development of metallurgical knowledge cannot be explained without considering the powerful position of military interests within a society; the same applies to nuclear energy. The history of societal discourses on natural sciences and technological science is quite different from the discourse within the humanities and the social sciences. There is an inclination to argue that the latter “naturally” follow their own distinct paradigms and develop their own specific discourses; within the social sciences the problems of knowledge terminology have to be confronted quite differently to the way they are discussed in the general science theory debate.

As for urban knowledge (i.e. the knowledge about urban development and change) concerning the possibilities and needs for shaping the city and parts of it, the toolkit that is applied to transform knowing into science has always been different to the one used by natural scientists. The problems of terminological distinction between tacit, implicit, and explicit knowledge – as described earlier – is a problem urban knowledge production faces in a practical sense every day. The interaction and interdependence of the types of knowledge discussed earlier is reflected not only in the fact that social science paradigms and tools are
different; the practice of urban development policies itself is the best example of the encounters, of inclusion and exclusion, of overlapping and penetration of differently qualified kinds of knowledge. In this sense, urban knowledge has always been exposed to the need of having to be “socially robust”.

In the case of urbanism it is evident that scientific knowledge production depends in part on the urbanists’ ability to tap into implicit knowing. The borderline between explicit and experience-bound implicit knowledge is a ‘grey area’. Rather than viewing it as a source of problems we need to consider this ‘grey area’ as a source of useful implicit knowledge. With regard to urban knowledge this border- and overlap-area between forms of knowledge makes the question of how to transform implicit, experience-bound contents into explicit knowledge, appear in a much clearer manner than it is the case with other knowledge areas.

Bearing this in mind for us it seems useful to start from a differentiation between knowledge and knowing and to address, according to the specific situation, questions of the following type:

- How is the making of knowledge and know-how of urban issues, urban life, and urban design supported?
- What are the relevant factors that determine the production of urban knowledge?
- What are the criteria that promote the pursuit of investigation into issues relevant to urban development?
- How is knowledge spread in urban society?
- Who are the bearers of urban knowledge?
- How is urban knowing organised?
- Is there a clash between institutions (knowledge bearers) and casually gathered individuals who know about urban issues?
- How do they communicate?
- Is there a problem, a shortcoming of mutual understanding and respect?
- Can knowledge management bridge the gaps between different sorts of knowledge and between disciplines?

We need to acknowledge that it is futile to either stick to the methodological procedures of social scientific evidence or uncritically praise the “wisdom” of local inhabitants and mutually expel one or the other from “truth” or “proof” in the context of urban development decisions. Instead, one should appreciate the strengths of different approaches and be aware of the weaknesses of different modes of knowing. What we should also acknowledge is that integrating implicit, experience-bound knowledge requires an extraordinary effort for the development of such integrative theories and methods.

Much of the contemporary debate around the use of knowledge concerns the quality and reliability of knowledge; the extent of its contribution to the reduction of uncertainties in the decision making process is often brought down to a cost-benefit-analysis. Seen from this angle expertise appears increasingly as a welcome solution, it serves to legitimate decisions and depoliticise them. Also to pay a couple of experts is usually cheaper and quicker than commissioning a team of scientists to carry out a comprehensive research project. Even
under the (ideal) assumption that the experts would communicate among each other and were able to present their findings to the politicians and the other stakeholders in an understandable manner - which has to be regarded as the basis for the development of a consensus – the outcome of such a procedure is still unlikely to meet the requirements of “reliable knowledge”.

Moreover, what is missing from all of these approaches is any consideration of the role of power and the relationship between knowledge and power. As Flyvbjerg (1998, p226) has clearly shown in his study of planning in Aalborg:

…not only is knowledge power, but more important, power is knowledge. Power determines what counts as knowledge, what kind of interpretation attains authority as the dominant interpretation. Power procures the knowledge which supports its purposes, while it ignores or suppresses that knowledge which does not serve it.

The determination of knowledge by power has to be considered not only in the discussion about the conditions and constraints of knowledge production; focussing on how knowledge is utilised and exploited will reveal even more evidence of its dependence.

Increasingly the debates outlined above have become entwined with issues of the utility of produced knowledge. The (estimated) contribution of knowledge to achieve a (societal, politically formulated) goal appears to marginalize critical approaches that might seriously question the envisaged objective. Scientific and non-scientific knowledge have become exchangeable goods: goods of a political and/or commercial kind.

The cost-argument contains some truth, but only some. The actual motives and reasons why and when and what knowledge will be made use of in urban development decisions are more complex than market-based approaches allow and cannot be explained by reducing all the procedures to a matter of monetary interaction. Practical experience provides evidence that in this context a very selective use of knowledge and knowing is made in urban policies or decision making processes in general. The reason why this is the case cannot be explained through reference to a scarcity of financial resources. As a first step we need to recognise that to push through political intentions or to realise political goals provides public financial investment which is usually limited by politically agreed upon budgets; but which tools – e.g. research, scientific knowledge, know-how, local knowledge - would be applied and for which instrument the (earmarked) budget would be used ultimately depends on political opportunism and political calculations.

Weiler’s (2002) notion of the “politics of knowledge” captures this phenomenon that is widely known in urban politics. Discussing the utilisation of knowledge in the political process Weiler emphasises that “Knowledge and power are bound to each other in a relationship of mutual legitimisation – knowledge is legitimising power and, vice versa, knowledge is legitimised by power.” (Weiler, 2002, p7). This, according to Weiler, “…does not mean that the traditional, sublime principle of freedom of research and teaching is being discarded or sold, but it should be acknowledged as an obvious societal reality where this symbiotic relationship of knowledge and power manifests itself over and over again.” (ibid, p7)
Both utilisation as well as its opposite, non-utilisation of knowledge, are not only evident in urban development, but also relate to wider political context, as Weiler (2002, p8) argues:

*Increasingly often political decisions – whether it be waste-management- and allocation-considerations, or redistribution- and investment-decisions – they are being justified and legitimised with reference to various knowledge-bases. Knowledge and science have become a highly favoured instrument to legitimise state power in contemporary complex societies.*

As an example we will briefly turn to the increasing importance of evaluation in urban development. Over the last twenty years there has been an increasing emphasis on the use of ‘knowledge’ in urban regeneration to inform the implementation of policies/initiatives and to understand ‘what worked’/’what did not work’ and why. Evaluations have increasingly been commissioned by organisations (both governmental and non-governmental) responsible for implementing urban policies/initiatives. This has been part of what in English is termed developing the evidence base. Indeed a whole ‘evaluation industry’ has grown up across Europe (and beyond), provided by private consultancies, academic researchers and assorted foundations. In a sense this represents ‘official knowledge’ as it is largely produced for organisations implementing policies/initiatives.

It is important to recognise that the use (or non-use) of evaluation, and the specific form(s) of evaluation adopted, were not (and are not) ‘innocent’ developments; they are related to and situated within a wider context constituted by societal and state based interests that given the forms of evaluation utilised have a particular focus and determine the type of concepts used to inform evaluation and the (selective) use of the knowledge generated. Given this we think it is fair to say that evaluation is part as a ‘political process’.

More recently the situation described in the previous paragraphs has changed somewhat as a wider range of actors have become involved in both implementation and evaluation (i.e. increased public participation); most notably local or neighbourhood based communities who are directly affected by these policies/initiatives. An increasing emphasis has been placed on involving these actors in the development, implementation and evaluation of policies/initiatives. The introduction of these ‘new participants’ raises new questions regarding their involvement in evaluation, the types of knowledge included in implementation and evaluation and the use made of the ‘end product’.

Given that urban regeneration processes involve numerous actors we need to recognise that this will (often) involve interests and positions that come into conflict with one another. A key aspect of such processes is the power relations between the various participants. This leads to questions such as: Who has power? Who are in positions to define what should be counted as relevant knowledge and to decide what forms of knowledge should be included or excluded in urban regeneration processes? What forms of (urban) knowledge are regarded as authoritative and legitimate? What forms of knowledge are merely regarded as “lay-opinions”?

We need to take into consideration that some of what constitutes ‘urban knowledge’ (and knowledge more generally) can be understood as ‘tacit’, ‘implicit’ and shared by groups who
speak the ‘same language’ (e.g. members of professions or others with specialised knowledge and experience in urban planning/regeneration). Moreover, knowledge (and the control of the production and use of knowledge) may serve as a shield and “front” against objections and debates regarding how policy should be developed and implemented. For instance when particular forms of knowledge are not made explicit, but are implicit and shared between some stakeholders in regeneration processes and other ‘urban knowledge arenas’.

This increased public participation in planning processes reflects developments that may broadly be termed a ‘collaborative approach’ (e.g. communicative planning), and requires governmental organisations (such as local authorities) to enter into dialogue with their citizens, local organisations and local enterprises. How ideals like these actually function/operate in a field consisting of many stakeholders, multiple, and often conflicting, interests needs to be examined more closely in terms of its impact on regeneration processes and the use and generation of knowledge. There may for instance be divergent opinions and judgements between different actors regarding “urban qualities”, protection of distinctive features versus development of urban areas in new ways (for instance of an architectural nature or related to the activities to be located/retained in an area), owing to for instance different interests, positions and professional background. The ability to define the form and nature of a regeneration project (determined in part by finance and positional power) and communicative capacities structures the extent to which different participants are able to enter into strategically important power structures – clearly these abilities are not equally distributed between different participants in urban regeneration processes.

One important dimension of the developments outlined above is how particular discourses interact and shape the understanding of participants and those who evaluate regeneration. In this context discursive conflicts/disagreements may unfold between stakeholders to define the problems being addressed, how they should be addressed and what are the desired outcomes. In part this is a question of ‘power relations’ and the way(s) in which particular points of view are articulated (through language); this has an important impact on the ability to define what counts as ‘knowledge’ and should be ‘listened to’ and form part of the relevant urban knowledge arena.

Another aspect of these issues can be seen if we turn to another area, referred to above, the widening of public participation in urban development decisions. It has now become almost conventional wisdom (common sense) that the participation of non-established actors in urban planning will create greater levels of legitimacy of the outcome of the development process. Allowing more voices to be heard and interests to be considered is generally regarded to be more democratic. Integrating a variety of opinions, interests, and voices appears to make the produced decisions “socially robust”, broadly accepted, and even somehow more sustainable (or at least long lasting). But this view can be deceptive, and we should be sceptical about it. Obviously, it is not simply the sheer number of (different kinds of) inputs that make the way in which a decision making process is conducted (and the outcome itself) more democratic. To achieve a sound democratic, widely accepted social basis depends also on the structure of the process; i.e. how these voices and interests and opinions are organised, how they are weighed against each other, how their impact is measured, what
is taken further in the process and what is left aside, all this has significant importance not only for the democratic quality, but also for social acceptance and practical usability. Who are the spokespersons for the silent and politically marginalised? How does the planning system and the democratic process take on board such opinions, wishes and visions especially when they are often not directly transferable into technical solutions, but imply changes in social and political views?

These aspects – democracy, legitimacy, and acceptance - must not only be considered when thinking about increasing levels and numbers of participation, opinions, interests, wishes etc. It also applies to knowledge itself, its quantity and its quality. We have to question whether widening the spectrum of participation in urban development processes necessarily leads to the integration of more and better knowledge. In urban planning history scientific knowledge and research findings have always been introduced by powerful stakeholders and political authorities in order to provide them with supportive arguments. In the case of participatory planning processes, with additional actors who traditionally are seen to lack the resources and capacities available to established stakeholders, a potential for the entry of new types of knowledge come into play, or have a chance to do so. Considering the changing roles of knowledge within such new arenas of urban politics it is worthwhile to have an analytical look on how knowledge and different kinds of knowledge are used, implemented, included, and excluded. Knowledge – expected to be a significant, influential factor - finds itself in an arena of opinions and interests, facing competition and political power plays.

What determines the chances of these new forms of urban knowledge having an impact in arenas of participatory planning processes? How is knowledge generated and organised under differently structured planning processes? What new sorts of knowledge appear? What quality measures are taken? Does the influence of particular knowledge forms and holders only depend on the power relations, on the relative strength of the stakeholders? Do certain process designs favour the chances of knowledge to be appropriated and to influence the process?

2.4 CONCLUSION

Based on the above urban knowledge can be viewed as an attempt to point to the value of combining different perspectives (i.e. practice and theory) with different approaches and disciplines. This approach accepts that knowledge is also produced outside university departments and other research institutions. In particular, it recognises the importance of non-institutionalised forms of knowledge and the need to be open to changes at 'street level' as well as the existence of ‘tacit’ knowledge. Knowledge, therefore, should be conceived as a social product, which implies that someone (or some process) decides what is and what is not acceptable as “knowledge”, under which circumstances knowledge is produced and who the producers of knowledge or truth are as Foucault would put it. Thus, urban knowledge cannot be isolated from the conditions of its production and concepts must be related to specific circumstances in order to make sense of them. Here urban knowledge is action-oriented (all action involves knowledge of some form), multidisciplinary and contextually defined. It is about bringing about practical improvements for cities and their citizens.
3 Innovation in Urban Projects

This chapter comprises two sections which explore the nature of innovation and its applicability within the development process. The first part, The Nature of Innovation, is focusing on the essential properties which initially create an innovative situation, namely those conditions which are most conducive to innovation and the nature of innovation as distinct from design or creativity. The following part, Innovation Applied to Urban Projects, explores how innovation can be both encouraged, and exploited, within an Urban Project.

3.1 THE NATURE OF INNOVATION

A definition which seems particularly appropriate is the following:

‘Innovation is fostered by information gathered from new connections; from insights gained from journeys into other disciplines or places; from active, collegial networks and fluid, open boundaries. Innovation arises from ongoing circles of exchange, where it is not just accumulated or stored, but created. Knowledge is generated anew from connections that weren’t there before.’ (Margaret J. Wheatley)

Issues raised by this definition will be addressed consistently throughout this chapter.

Perhaps the most commonly used definition used is the following: [innovation is] the successful exploitation of new ideas. This embodies two concepts which are found throughout the literature on innovation one being new and the other exploitation. Often there is another sub division employed which separates the ‘process’ into two distinct characteristics namely;

1. Radical innovation– which involves completely new ideas.
2. Incremental innovation– where something is adapted, or modified. This might be where an old idea is transferred to a new setting or that existing ideas are embedded in a new setting.

In discussion, we have explored these two aspects, particularly when we encounter ‘transferred technology’ which may identify a technology commonly used in, say, the shipbuilding industry, but be radically innovative when applied to the construction industry. The thesaurus provides a range of alternative words for innovation which suggest an interesting range of uses – novelty, modernism, modernization, improvement, advance and originality. They clearly indicate that new is a necessary component, but not sufficient in itself, for innovation. For an object to be innovative, it must embody a sense of uniqueness.

When the company Google was examining the nature of innovation in their business strategy, they identified three basic types:

1. Incremental - e.g. evolution (biological)
2. Incremental – with side affects – (evolution with tools!)
3. Transformational change – fast-tracked/short cut, but rare.

All of these tend to be behavioral approaches to innovation in that they define it as a process which contributes to the quality of a ‘product’. Undoubtedly this is due to the origins of the
word which can be traced to Schumpeter’s ‘Theory of economic development’ in 1912, a study focused on product, production, and marketing. Clearly the concentration here is on the exploitation of the new ideas (or, by definition - new product) and the following are the stages he identified:

1. Introduction of a new product or qualitative change in an existing product.
2. Process innovation new to an industry
3. The opening of a new market.
4. Development of new sources of supply for raw materials or other inputs.
5. Changes in industrial (sic) organisation.

This commercial approach however was found to be appropriate for many different industries, professions, and indeed almost all aspects of modern life. It was in the 1992 Oslo conference, that the OECD adopted it, and adapted it, to produce a model for international economic growth across a wide range of their membership countries. It stated that a successful innovation system is fundamentally dependent on the interaction and shared knowledge between different professions such as engineers, business executives, academics, and politicians.

In further studies, this list has found to be almost inexhaustible, and that the basic ‘truth’ is that innovation is most prevalent when different disciplines and knowledge arenas interact and potentially generate new solutions not obvious within the original discipline.

The Oslo conference produced a Manual on innovation (subsequently revised in 1997) which provided both a textbook on the nature of innovation and national systems of innovation, and a compendium of socio-economic questions on the nature of innovation in the free market economy. This is the current internationally recognized standard and while these major developments in internationalization focus predominantly on increasing the functionality of innovation, they do not help us identify the actual nature of the innovatory process.

**The nature of the innovative process**

The nature of innovation, particularly in the field of knowledge management or the organisation of innovation, is explored in areas which have become prominent in many fields of study such as, sociology, social science, psychology management, etc., often building on the theories of people such as Marx, Mead, Stern, Foucault, Durkheim, et al.

Hubert Hermans, a Psychologist at the University of Nijmegen, in a paper written in 2000, addresses the ‘innovation of values’ and develops an argument based on the work of W. Stern and G.H. Mead in which they both recognise the existence of a duality of personality defined as the self, and the other. Stern identifies the existence of centered and excentered values in which ‘the I (within the self) achieves the most particularised and complete reality as a self-valuating person’ (Stern, 1924). Subsequently Mead takes this concept a stage further by introducing the distinction between the ‘I’ and ‘me’ as different phases of the self in which ‘...the me answers to the organised attitudes of the others which determine consequently our own conduct so far it is a self-conscious character. The novelty (Sic. innovation) comes in the action of the ‘I’, but the structure, the form of the self is one which is conventional (Mead
It is in the ‘me’ that social rules and conventions exist, whereas innovation is derived from the ‘I’.

The ‘I’ can therefore be seen to be the essence of individuality, evolving a highly personalized set of values, and attitudes to the ‘other’, namely the ‘outside world’. It is in the interplay and interaction between these two perceptions that formulate the individual values, with the ‘I’ generating uninhibited ideas, and the ‘me’ moderating them in terms of social rules and conventions. He provides an example which effectively takes us on the concepts of creativity and originality, two principles often discussed in the context of innovation.

Artists are traditionally expected to defy conventions, but their values are a function not only of the ‘me’ but also of the ‘I’. The values of the ‘me’ are considered to be those of the group, but the values of the ‘I’ are:

‘....in the immediate attitude of the artist, the inventor, the scientist in his/her discovery, in general in the action of the ‘I’ which cannot be calculated and which involves a reconstruction of society, and of the ‘me’ which belongs to that society’. (Mead)

This dual interaction between centered and excentered (Stern) and ‘I’ and ‘me’ (Mead) is supported by the literary scholar Mikhail Bakhtin who re-enforces the innovative potential of the dialogue process. He considers that innovation occurs when self and other take up opposite positions in a spatial structure. All three assume the existence of an objective, social reality, yet at the same time acknowledge the innovative potential of the individual (Hermans).

In discussing the innovative or creative thinking process in the individual, it would be interesting to consider the work of Edward de Bono and his concept of ‘Lateral thinking’. He defines this in the following ways:

1. **You cannot dig a hole in a different place by digging the same hole deeper.** Namely; trying harder in the same direction may not be as useful as changing direction.

2. **Lateral thinking is for changing concepts and perceptions.** For example; the game of chess is based on a predetermined range of possibilities of movement by the ‘pieces’ with fixed properties. Lateral thinking examines not simply the basic properties of the existing pieces, but seeks to change those very pieces.

3. **The brain as a self-organising information system forms asymmetric patterns.** In such systems there is a mathematical need for moving across patterns.

4. **In any self-organising system, there is a need to escape from a local optimum in order to move towards a more global optimum.**

This concept of lateral thinking is complemented by the development of ‘parallel thinking’ in which he seeks to replace the Socratic tradition of ‘adversarial’ thinking (argument between two or more opposing views) with a form of discussion in which the participants are thinking in parallel directions. There does not have to be conflict as there does not have to be a ‘winner’. All statements or thoughts are laid out and the way forward evolves by considering all possibilities.
Context of Innovation

It is recognised that innovation can be influenced by different contexts or environments. William Miller, Stanford Office of Technology Licensing, California, describes how innovative regions have a favourable environment, or ‘habitat’, for innovation and entrepreneurship. This would imply that innovation and entrepreneurship emerge from the complexity and quasi-randomness of an ecological system, rather than being a product of a well-oiled factory machine.

Clearly environments such as that found in Silicon Valley have influenced such conclusions, and this was reinforced by a presentation given by one of Google’s senior staff to students in Stanford University. She identified the following ‘ideas’ on the desired properties of innovation ‘habitats’:

1. Ideas come from everywhere.
2. Share everything. Expose maximum number of people to maximum amount of information and let people collect, and prioritise themselves.
3. ‘Play with the best players’ suggesting that if you are surrounded by high quality people, you will raise your performance.
4. License to pursue dreams. They operate a policy of each worker having one day per week to work on something totally self generated.
5. Innovation is not instant perfection. Constant mistakes will be made, but ‘getting out’ on one’s own is required, Acceptance of user testing, and concepts such as ‘positive failure’ are part of a successful innovation culture.
6. Data is a-political. Reliance on data diminishes political activity.
7. Creativity loves constraints!
8. Let users drive innovation, not money. Money follows users/consumers.

We can consider this as a formula for exploiting the ‘I’ dimension by controlling and optimising the ‘me’ or ‘other’, however they focus on a personal context for supporting innovation. Debra Amidon proposes the following framework of levels of innovation in a global context:

1. Technology Transfer.
2. Knowledge exchange.
4. Knowledge innovation systems.
5. Knowledge innovation networks.

These have been adopted as providing an effective framework at a macro level however there have been some recent attempts to narrow down the definitions of innovation. While the original one still holds good, it now appears that a more focused classification would be helpful. One such classification separates innovation into domain and scope as from an analysis of definitions of innovation within different domains (or disciplines) they are not all identical.

This approach offers the opportunity to incorporate a new discipline into innovation which might be called ‘innovation mapping’. Until recently, the bulk of definitions of innovation have
been industry based, however as the potential growth in this approach is substantial, it might be more relevant to mention the domain when discussions on innovation take place.

Innovation in Knowledge networks
The above framework takes the concept of innovation into knowledge networks, hence an increasing focus on the non-linear model of innovation would seem to offer more potential than the earlier linear progression from R&D, through to development to new product/process and eventually to implementation or production.

In order to stimulate innovation, the DTI (Department of Trade and Industry) in the UK has set up Knowledge Transfer Networks (KTN) which initially established a wide range of Knowledge Transfer Network Communities – 22 in total. Their aims were to encourage the active participation of all networks currently operating in its field and to establish connections with networks in other fields which have common interests (Dept. For Business Enterprise and Regulatory Reform). Another model being explored in China is the National Innovation System (NIS). A diagram suggests a model for illustrating the relationship between invention/discovery and production within a Knowledge innovation framework.

This diagram comes within the framework of a national approach to the development of a knowledge information network and incorporates the following four stages:

1. Scientific discovery
2. Technological invention.
3. Knowledge creation.
4. New knowledge – first application
This clearly reflects the domain fixed approach discussed earlier in the report, however by substituting different domain topics where illustrated above, the process can be adopted for other domains

Summary
In essence, the urban development ‘industry’ spans an infinitely large number of disciplines, each of which is both pursuing a policy of developing innovation within its domain, while continuously collaborating with other disciplines to generate cross discipline innovation. Simply working on large, multi-disciplinary projects, stimulates innovation in product, technological systems, management systems, political systems, and many others, with new knowledge being produced constantly, much of which is fed back in the form of ‘best practice’. It should be acknowledged, however that the mere achievement of innovation cannot always be taken to mean *good*, or *successful*. These are separate concepts, often associated with innovation, but not automatically causal

*Innovation is cited as the single most important benefit of knowledge management, well ahead of the benefit cited in the second placed – flexibility*
(Business Intelligence / Ernst & Young Survey 1997)

3.2 INNOVATION APPLIED TO URBAN PROJECTS

"That task (of the city) is to provide the maximum number of favourable opportunities for large populations to intermingle and interact, to interchange their human facilities and aptitudes as well as their economic goods and services, to stimulate and intensify by frequent contact and collaboration many common interests that would otherwise languish" wrote Lewis Mumford in 1967 in his essay entitled "The Urban Prospect" (Harcourt, Brace, and World, Inc., New York). Because it creates multiple venues for exchanges and interaction, the urban milieu is a stimulating setting for innovations, which testify to its vitality. For cities competing with one another, this is not so much the key to winning as it is a means of developing their own collective dynamics in order to take up new challenges.

To various degrees, European cities are currently in the process of changing in both rapid and fundamental ways. As they seek a new balance in social, environmental and economic areas, they tentatively establish new procedures, new structures and new ways of sharing knowledge and decisions. Where previous modes of management fail to meet their standards of effectiveness, they are transformed into new apparatus whose complexity and systemic features depend on the degree to which agents and knowledge interact. In some cases, these transformations take the form of gradual improvements; in others they evolve through a series of discrete ruptures.

Within the framework of our studies focusing on "innovative initiatives" and as a follow-up to the discussions that have centred on the grids for analysis and approaches of the selected cases, we propose to raise four general questions pertaining to innovation in order to learn from these experiences. These questions should be taken as useful reference when comparing cases and recommending good practices.
1. What motivations lead to innovation?
2. In what context does innovation arise?
3. What is the nature of innovation?
4. How important is innovation?

What motivations lead to innovation?
A first consideration is that what produces innovative initiatives in the management and understanding of urban phenomena is people's explicit or implicit dissatisfaction regarding what previous modes of intervention could achieve. In order to gauge the relevance of innovation, one ought to first understand what was previously in place, and why it failed, and/or was perceived as having gone awry.

It might be of interest to compare how various types of change operate and what direction they take when they share identical premises. Likewise it would be useful to compare similar innovative initiatives meant to resolve differing dysfunctions and thus bring to light the influence of new thought patterns.

In what context does innovation arise?
Various circumstances can give rise to innovation. It is possible to establish a continuum of contexts leading to innovation, whether it takes the form of an evolution of modes of intervention that is both the product of a consensus, and supported by the leadership or whether it arises as an experimental, autonomous contestation. To give an example: a process of participation can take on a different aspect and lead to different results accordingly as it is either prescribed by the authorities to citizens who are expected to comply, or obtained by citizens after several refusals from and requests to these same authorities. In urban projects, the social transactions between divergent interests often bring into conflict the forces of change and the forces of inertia.

When it is institutionalized, innovation can either run out of steam as citizens' response or their involvement fade away, or it can become permanent thanks to the force and the convergence of the means that are put into play. As for informal and spontaneous experiments, they can either lead nowhere and be remembered only as a moment in history or, on the contrary, sow the seeds of change and give birth to a genuine social movement as they demonstrate their ability to anticipate new phenomena.

The diversity of European cultural contexts should not be ignored by anyone wishing to understand the political situations of the various cities under study, situations in which the movements going from the bottom-up and those going from the top-down exist in a state of tension or equilibrium.

What is the nature of innovation?
The theme of COST C20 action "Urban Knowledge Arena" suggests a complex reading of the many interactions that occur when problems are being resolved and urban potentials realized. To locate innovations, it might be interesting to consider the type of interactions that can shape them. In academic terms, one can dissociate interactions that happen among
disciplines, fields (environmental, social, cultural, economic and political fields) and knowledge (whether formalized or implicit) from those which occur among agents. The process is much harder, however, when it comes to the various types of urban apparatus; there, indeed, in the midst of power struggles between intervening parties, issues of status or symbolic positions interfere with the implementation of knowledge.

Let us take the example of an innovative measure tending to reduce the environmental impact of a public waste management policy: if such a measure gets justified by a wish to improve technical efficiency, the locals might very well lose interest in the question of garbage disposal. On the other hand, if it is made part of a campaign to raise citizens' awareness, it might produce a change and lead them to reconsider the issue of trash reduction and the many ways in which it can be recycled.

**How important is innovation?**

The degrees of transformation produced by innovation are not all equally substantial. Innovation can take the form of an incremental evolution, a gradual improvement, or of structural change in a product or a process. As a general rule, incremental innovations aim to maintain existing systems, hiding from view their ineffectiveness in resolving new problems. As for structural innovations, they raise the questions of economic adjustment and social acceptance.

As our societies enter a period of transition (a post-petroleum era, limited natural resources, global warming, and a financial economy in crisis), their leaders face the challenge of difficult choices as they envisage innovation options. The duty to anticipate, which is all but unavoidable, demands that we pursue research and the implementation of solutions both intermediate and reversible, capable of rapidly yielding more enlightened answers.
4 Urban Knowledge Arena – Exploring a Conceptual Innovation

This chapter introduces and explores the conceptual innovation of an Urban Knowledge Arena (UKA), developed in response to the more and more emphasized need for new approaches in combining urban knowledge and capacity building with innovative practices in urban policy and action. More precisely we have looked at what constitutes a Local Urban Knowledge Arena (LUKA), and what distinguishes a LUKA from various types of networks for urban knowledge. The process to characterize the UKA concept was collective, cumulative and incremental, departing from a hypothetic list of characteristics of a UKA, and a general understanding of urban knowledge as ‘action and task oriented, multidisciplinary, contextually defined and focused on a changing object’ (see Chapter 2). The chapter summarizes the research findings and attempts in COST C20 to answer what is a UKA, how may a UKA be established and what are the factors affecting the success/failure of the implementation of this innovative approach/tool. It emphasizes management and leadership styles, and the developed roles of the main participants in urban development and urban knowledge processes, and tries to reach a consensus about success and perceptions as regards the concept of an Urban Knowledge Arena at the local level.

4.1 WHAT IS AN URBAN KNOWLEDGE ARENA?

The characteristics of urban knowledge and innovation discussed in the previous chapters represent urban knowledge as more than a simple body of facts and principles accumulated over the course of time by tackling urban issues and/or by integrating ‘pure’ science and tacit knowledge. Successfully applied to the complex and dynamic processes of urban development in a number of actions for urban governance, urban knowledge calls for a wider partnership that goes beyond the experts’ circle. Its generation and application aims to support major decisions in the most appropriate and democratic way.

The strong complexity of an urban project and the necessity to rely upon a large diversity of expertise and experts, none of them alone being able to bring acceptable solutions to citizen’s present requirements, requires new instruments allowing a more collective and creative approach. On the other hand, coping with the incomplete nature of strategic planning and the uncertainty of its future evolution due to the fast changing context, requires the development of innovative knowledge and more efficient management systems. The introduction of a conceptual innovation called an Urban Knowledge Arena tries to address this twin challenges.

What then is an Urban Knowledge Arena – a modern tool for urban governance or a platform for the generation of new urban knowledge? Is this an abstract concept or an alternative innovative and democratic approach for achieving the complex social, economic and environmental goals of urban transformations? A method by which politicians, elected to take decisions, could work together with professionals and civil representatives?
Basic definition
An Urban Knowledge Arena is a multidisciplinary multi-stakeholder structure with the objective of generating, managing and implementing urban knowledge. It is formed by a team of experts and stakeholders, who agree to work together in partnership to carry out a joint programme. The team should involve different backgrounds and expertise to be able to conduct multi-disciplinary work. The size of the UKA can vary according to the type and scale of the problem which has to be tackled (in our case studies size varied from 10 persons to more than 50); it may evolve over time, according to the necessity of the work.

A UKA can be viewed from different perspectives:

- As an **Activity**: the UKA is a process of collective urban knowledge development
- As an **Instrument**: the UKA is a modern tool for urban governance
- As a **Setting**: the UKA is a platform for generation of urban knowledge
- As a **Social Organization**: the UKA is a group of individuals, it is a part of the environment/setting
- As a **Partnership**: the UKA is a relationship
- As an **Agreement**: the UKA is based on an agreement.

Objectives and tasks
The main objective of an UKA is to develop a common theoretical and practical understanding of an issue to support decision making processes on urban policies and projects. At a local level an Urban Knowledge Arena can have the multiple tasks of promoting awareness, strengthening knowledge, supporting capacity building for urban development, and disseminating best practice.

UKAs are usually formed because:

a) a cause (problem, challenge) arises (or exists) in a location (place and time);
b) a core group begins to articulate at least parts (mostly problematic aspects) of a larger complex issue;
c) various key actors become involved;
d) a wider process for awareness building is developed;
e) a set of (new) rules is adopted; and
f) a new situation is identified.

Despite the reasons behind the formation of a UKA, the general aim is usually a similar one – the transformation of existing knowledge to create new knowledge.

Ethos and Working Culture
An arena should not function through ordinary hierarchical structures and methods. Working in a creative arena requires the suppression or mitigation of hierarchical structures among participants, and to achieve its goal it should:

- Be an arena where partners are peers, they all are supposed to express significant opinions that need to be considered openly and respectfully by the group.
• Recognize the right of any actor to cast doubts, to question the validity of projects and decisions and to suggest revision of the agreed rules and procedures.

• Recognize the right of ‘free actions’ and initiatives for each individual, under the collective control of all. Individual actions should be regarded as being part of strategies to reach an objective, which in the present situation is shared between the different individuals.

• The collaborative work in an arena requires a “co-authoring” structure, if innovation and creativity is sought.

The most significant feature is probably the UKA’s “explication capability”. In other words, the UKA should be driven by the effort of the partners of questioning issues and reformulating together proposals, through argumentations and possibly through conflicts resolution and negotiation.

**Structure, organization and legal status**

The structure of a given UKA depends on its aims and culture, as well as its scope, functions and main activities. Furthermore, it depends on the processes of knowledge accumulation and transfer, the needs of people, targeted by the urban project/process, and finally – on the skills, knowledge and experience of the leading players and participants and the targeted audience. Organizing a UKA is seldom a rational, coherent and straightforward action. Also, it is a community rush job!

A UKA usually does not have a specific legal status. What makes the UKA strong, meaningful and real cannot be found in its contractual or legal features. It is an agreement among free actors. It needs however a formal status: it has to be formally created with specific objectives, rules and structures. What is important is its capacity to provide urban actors with the opportunity to build, co-ordinate and organise themselves and their respective behaviour. The cement linking the partners is that, after a certain period of common activity, they actually become a collective organisation sharing a common purpose. In other words, the actors involved in the UKA would lose more by moving out of it than by trying to change agreed rules and processes from the inside.

**Space and time limit**

An Urban Knowledge Arena has the following spatial and territorial limits:

• It limits its activity deliberately to a specific domain, the territory on which it operates as localization, geography and administrative unit. An urban area is here defined as a physical area directly related to a city, an urban district, a neighborhood and/or a specific urban development/renewable process/project or emerging problem.

• It recruits certain actors and excludes others on specific criteria that most often are quite vague at starting.

• It is limited, either in terms of geography (a specific well defined territory) or in terms of scope (specific type of actions or policy).
• It is limited in time: it should not be a permanent structure, but a temporary structure linked to a specific action/project. The general structure of a knowledge arena can then remain fairly constant over time with changing memberships and mandates based on the issue (problem) of the day.

The time structure is different from rational planning or engineering projects. The process cannot be organized in a pre-defined sequence that would lead to a form of “corrective engineering” that would progressively reduce the creative capacity of each contributor.
THE ARENA METAPHOR

Starting from the basic dictionary definitions of arena as a “space in the centre of an amphitheatre for combats…”, “a field of conflict” or “a sphere of activity, experience, study, or interest” and developed further for the aim of COST C20, an arena is considered to be an instrument of an activity, a limited field where action takes place. An Urban Knowledge Arena provides a frame for all constructive activities and individual expressions. The table below demonstrates the basic elements which may constitute an active UKA, corresponding to the basic arena concept. An essential quality of the UKA is that the line between actors and audience is blurred, creating the participatory act where all are a part of the performed event. This act is their collaborative endeavor to build something unique. As it seems, each ‘performance’ - so called ‘unique product’ of an active arena - is the sum of what was already available (base) and what has been generated by an innovative use of available resources.

<table>
<thead>
<tr>
<th>Elements of an active arena in the traditional meaning</th>
<th>Elements of an active arena of Urban Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLACE…SPACE…STRUCTURE…CONTEXT</td>
<td></td>
</tr>
<tr>
<td>1. Stage and action/event frame</td>
<td>3 optional, fundamental ‘stage-elements’ of a UKA platform:</td>
</tr>
<tr>
<td>Defined elements:</td>
<td>- physically limited site, place, geographic area</td>
</tr>
<tr>
<td>- floor space</td>
<td>- one theme or problem or a number of problems, questions at particular issue</td>
</tr>
<tr>
<td>- theme, motive, character, type of action…</td>
<td>- model of co-operation</td>
</tr>
<tr>
<td>- text, scenario, choreography, music, light, requisites…</td>
<td></td>
</tr>
<tr>
<td>2. Auditorium</td>
<td>Limitation/restriction for a UKA platform:</td>
</tr>
<tr>
<td>Limit for extension of act/event perception</td>
<td>- accumulated facts and principals tackling urban issues</td>
</tr>
<tr>
<td>3. Actors</td>
<td>Actors involved in the development processes:</td>
</tr>
<tr>
<td>- performers</td>
<td>- inside actors</td>
</tr>
<tr>
<td>- audience</td>
<td>- outside actors: clients, observers, receivers…</td>
</tr>
<tr>
<td>4. Action=Event</td>
<td>Producing and using Urban Knowledge</td>
</tr>
</tbody>
</table>

1 http://instruct1.cit.cornell.edu/Courses/thetr364/images/GreekTheatre.gif
4.2 CRITICAL FACTORS FOR SUCCESS OR FAILURE OF AN URBAN KNOWLEDGE ARENA

Case studies (see Chapter 5) have been reviewed and compared in order to identify critical factors of a UKA, and they give a flavour of the “ethos” of the UKA concept. These factors have been used to profile each case and to specify its integration in urban project development.

The set of critical factors can be used as a tool for assessing the successes and failures of UKAs, thereby identifying the important features in the implementation of a UKA. Therefore, it is necessary to specify on which levels the achievements of a UKA are assessed, considering that the various actors involved can expect very different results from a UKA. At least four levels may be considered, depending on the function assigned to the UKA:

Table 1 – Evaluation levels

<table>
<thead>
<tr>
<th>The level of evaluation</th>
<th>The success criteria</th>
<th>Advancements for the project/action</th>
</tr>
</thead>
<tbody>
<tr>
<td>UKA as a tool for <strong>generating knowledge</strong></td>
<td>Level of exchange and/or integration of knowledge</td>
<td>Mutual and/or common understanding has increased (conflicts/oppositions may remain)</td>
</tr>
<tr>
<td>UKA as a tool for <strong>improving the design</strong> of the project/action (i.e. the outputs)</td>
<td>Quality of the project, innovation</td>
<td>New ideas have emerged, mistakes have been corrected, improvements have been brought to the project/action</td>
</tr>
<tr>
<td>UKA as a tool for <strong>building adherence</strong> to the project/action</td>
<td>Several kinds of adherence can be achieved: agreement, consensus, absence of opposition</td>
<td>The process goes on, but it does not necessarily means that the project/action has been improved</td>
</tr>
<tr>
<td>UKA as a tool for <strong>solving urban problems</strong> (i.e. the final outcomes)</td>
<td>Solutions to territorial problems, improvement of urban situation</td>
<td>The ultimate goals of the urban project/action have been reached (these goals determine the relevance of all the previous levels)</td>
</tr>
</tbody>
</table>

These levels do not develop in a linear manner, as each level can show various successes and/or failures. If we consider a UKA as an iterative, self-generating process, outputs/outcomes are reached not only at the end of the process but they are built in a continuous and circular way.

The first level is the basic one that any UKA should reach; it is not easy to assess apart from using a qualitative approach (e.g. interviews with the actors about their perception of the knowledge gained). The simplest level to evaluate is probably the third one, i.e. the fact that a project/action is not stopped by opposition. The critical factors will be relevant for the three first levels, but not for the last one (outcomes), which can only be assessed in the future once the project/action has been implemented.
Groups of Critical Factors of UKAs

Most of the factors refer to problems of **communication**, **organisation of work**, **authority structures** and **leadership**. Generally speaking they address mainly social problems and organisation, inside and outside the urban project, and less technical aspects. External factors, such as the political context, have also been identified, but they are in most cases far from easy to influence from within the UKA. The identified critical factors can be grouped in five categories:

**Rules of the Game Factors**
The set of rules that guide the UKA process. For transparency, these should be explicit and agreed by all actors. This set of factors “give direction” to the UKA and provides the actors involved with a clear definition of their “field of operation”. It is nevertheless extremely important for these ‘rules’ to remain flexible so as not to preclude the UKA’s evolvement.

- **Explicit goals:** in the process of the UKA, its goal and scope should be made clear to all participants in order to avoid exaggerated expectations. These goals may be altered during the process, provided these changes are explained.
- **Agreement over success indicators:** it is often advisable that within UKA processes qualitative indicators are agreed upon, in order to give a sense of direction and answer the question: “What does success mean?”
- **Specification of roles:** an agreement should be reached on what rights and obligations different players or stakeholders have within the UKA.

**Governance Factors**
Refer to the ways in which voice and power is given to, or taken by the heterogeneous actors.

- **Inclusion of relevant stakeholders:** all relevant stakeholders should be identified and properly involved with a distribution of power that is, as far as possible, considered fair.
- **Flat hierarchies:** The governing and management structure and the “rules of the game” within the UKA should allow for all actors to participate – despite formal differences, differing resources etc. at an “equal level”. A flat hierarchy can foster multiple forms of interaction and participation (i.e. across levels and in different directions).

**Information Factors**
Refer to the instrumental and cognitive dimensions of knowledge representation and processing. In order to achieve the main task of the UKA, and to exchange information in a

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2 The three first types of factors (rules of the game, governance and information) are currently being analysed in the Swiss C20 research project entitled “Concerted action for planning by information and knowledge sharing (CAPIKS)”, with case studies in Geneva and Lausanne, http://www.sbf.admin.ch/htm/dokumentation/publikationen/international/cost/cd2007/cost/C05.0130.html

3 In some cases, e.g. the Liège-Guillemins district planning, the rules of the game have been developed incrementally, without any formal decision in the beginning of the process. The modes of operation have rather been formed by the necessity of the situation and each actors’ relation to the “common good”.

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way that is helpful for all the actors involved and for the process, attention is to be given to the tools used to guarantee the quality of the information exchanged. A basic sharing of data and experiences, if not correctly structured, is not necessarily sufficient to accomplish the objective.

- **Relevant knowledge provided**: the urban issues at the centre of the UKA should suggest the need for communicating, integrating and using heterogeneous knowledge, be it in the sense of bringing together different professional disciplines or integrating “street knowledge” into the planning processes and political decision making. Knowledge on relevant aspects of the urban issues as well as from diverse sources should be exchanged, if not integrated.

- **Understandable language**: the language used in the communication processes within the UKA and the way of presenting information need to be understandable for all stakeholders. This refers not only to a literal understanding of the information, but also to an understanding of its wider and deeper meaning.

- **Appropriate systems of knowledge-management**: a solid and clear structure for knowledge-management, methods and tools for knowledge-management support. The knowledge-management system should foster multi-direction and multi-level interaction.

**Management Factors**

Refer to the organizational, financial and logistical means supporting UKAs.

- **Sufficient resources**: appropriate human and economic resources need to be in place to ensure the work of the UKA (closely linked to the issue of management structure).

- **Management structure**: organizational capacities for facilitating the UKA process need to be in place.

**Subjective Dimensions**

Refer to ambiances, feelings, attitudes that influence the UKA process. Some features that can be considered “internal” to the UKA are more related to its “human” components. Relations between people, common understanding, identity of views, can all be factors with a strong impact on the potential of the Arena.

- **Leadership**: refers to the capacity of some individuals to facilitate the operation of the UKA by their charisma, personal authority, and efficiency. It is not necessarily based on a formal position, but more on the capacity of moderation or facilitation.

- **Momentum**: a strong feeling of a common goal, passion for fulfilling the common task that fuels the integration of different professions, expertise and stakeholder groups. The fact that the UKA is by definition limited in time, space, size and number of actors should help to maintain the necessary momentum. Conversely, a UKA can strengthen the momentum of the project/action at stake (in this case momentum is also an output of the UKA).

- **Respect and trust**: respect refers to an open-minded and respectful attitude that encourages listening to other points of view, whereas trust is about the mutual confidence of the actors of the UKA in each other. Respect and trust are not only
preconditions for a productive UKA, they are also built during the UKA process (i.e. they may be outputs of the UKA).

It is obvious that there are close interdependencies between the factors listed above. There is, for instance, interdependency between leadership, management, goals and momentum of the UKA.

For each group of factors, hypothesis can be developed about their supposed impact on success or failure. For instance, the clearer the rules of the game, the more efficient discussions are likely to be.

The set of critical factors does not cover all aspects of a UKA, and likewise not all of these factors were present in all of the cases studied, e.g. thematic focus, issues at stake, local context or resources available for UKA processes will also be of importance. Hence, one might set up something similar to a UKA without taking these factors into consideration and still be successful, by intuition, personal experience or just pure luck. Nevertheless they can serve policy makers and planners as a source of inspiration. The set of critical factors can be used as a check-list of some critical factors we have identified as being important to consider when setting up an arena.
DISTINCTION BETWEEN URBAN KNOWLEDGE NETWORKS (UKNs) AND UKAs

For reasons of clarity and to avoid oversimplification, it is useful to contrast the Urban Knowledge Arena with three other instruments of the urban project based on their close similarity with it: Urban-Networks, Forums, Observatories. All share many features but they are used for different purposes by different people or groups at different stages of the urban-development processes and projects.

Urban-Knowledge Management: Structures and Urban Project Development

All four instruments are, more or less directly, linked to urban projects. These structures run parallel but separate from the project; however, they are closely connected to it. In fact, they are simultaneously ‘autonomous’ and subordinated to it and all finally deliver (directly or indirectly) their findings to the project.

Such a dependency is not without consequences. Any urban project is unique: it varies significantly with its geographic and human localization; it varies with time and space and is based on a peculiar collective intention. It has an aim and a purpose and it is framed by a social act-guidance adjusting its specific functions to the changing context.

It should come as no surprise that in parallel, the associated urban-knowledge management system needs to successively create new instruments that it is expected to improve the project when seen as an on-going process. It is probably most useful to directly compare their respective capacities. This will allow us to understand each instrument in its global nature while bringing out possible overlaps.

All four instruments can be called “meeting places”, providing that the word “place” is taken in the broadest meaning and includes also virtual places. They seek to provide the urban project with relevant knowledge and, in order to carry out that objective; they use different approaches with the project’s constraints. Two main approaches can be identified: the first two instruments (UKN and UKF) are mainly communication tools, they are commonly used and close to applied research. They try to collect, store and reuse existing knowledge that is usually not easily accessible and not validated. They can be highly efficient in ordinary urban situations, even in complex ones, where political authority and technical expertise are still recognized and accepted by lay people and Courts.

Urban Knowledge Networks (UKNs) are the places for exchange of information and experiences among urban scientific and professional communities or sub-communities. They facilitate an increase in the scope of available knowledge and expertise; making comparison between different situations and experimental solutions. Analogical reasoning can be applied in the transformation and customization of solutions while benchmarking is an excellent practice for ranking the information. Limitations of time and space are not significant.

Urban Knowledge Forums (UKFs) usually offer a public place for meetings and are open for public discussion. For example, TV and Internet are accepted forums for the discussion of public affairs. They are close to UKN but less open. Most often participants are experts, political authorities etc. They act as representatives of their country or organization and are often empowered to take decisions. Discussions are pre-competitive and pre-normative and
their outcomes are reached by consensus. Objectives are quite diverse. For example, a UKF can provide certified professional knowledge, fixing the “state of the art”. Conclusions of a forum are locally valid regardless of how large or small the “local” may be.

The last two instruments exemplify the second approach. Both try to cope with the present decline of the local-communities’ capacity to carry on their own actions in a concerted way. This results from individualization as a consequence of a liberal market logic that leads to isolated individual responses to problems (i.e. a decline in social solidarity and social cohesion) and the subsequent break down of human groups and weakening of political and administrative systems.

An Urban Knowledge Observatory (UKO) tries to capture the “historic dimension” of the ordinary urban project by utilizing an “observation post” that collects and records information throughout a project’s production and operation. It is intended to generate an “experimental” urban knowledge associated with the project development and its changing social and physical context. The UKO can also be very useful in transforming an urban situation into an actual urban problem.

While retaining a ‘scientific distance’ between the observer and the observed situation and using all available urban knowledge (UKN and UKF) the UKO aims to limit the incidence of an uncertain, complex and risky future or to provide the decision-maker with early diagnosis of failure(s).

An important characteristic of the UKA is that “Successful collective actions are not necessarily those who gather all the competences needed by the problem resolution, but those who are able to articulate and co-ordinate the various actors’ contributions”. A significant benefit of using UKA in a collective action is that it assists in the maintenance of the three systems (values, rules and knowledge) and helps to control their balance as well as the coherence of their basic arguments in a local urban place.

It is quite difficult to determine the distinctive boundary between different structures and to summarize the similarities and differences between network and arena, between forum and observatory. Networking itself is one of the tools for information and knowledge communication and an important element of all four types of knowledge management forms. One could argue, for instance, that a forum is considered in the present pages as less open, mainly dealing with ‘pre-decisions’. All four types of UK have the primary goal of sharing-generating-fostering the use of knowledge. However, the main distinctive characteristics of an UKA, apart from its openness to a wide variety of forms of knowledge (scientific, technical, ordinary, etc) is its explicit and direct link to decisions that are to be taken by urban designers/planners and political bodies as part of a concrete project/action.
4.3 DISCUSSION

The strong complexity of an urban project and the necessity to rely upon a large diversity of expertise and knowledge, none of them being able to bring acceptable solutions to citizen present requirements, forces to consider using new instruments allowing a more collective and creative approach. On the other hand, to cope with the incomplete nature of strategic planning and the uncertainty of its future evolution due to the fast changing context requires developing freely innovative knowledge and more efficient management systems.

As this report shows, the concept of Urban Knowledge Arena as a response to these challenges is difficult to grasp, as new concepts usually are. By a *progressive* common work tackling several key aspects we have made some observations in order to capture the nature of UKA.

**Knowledge Generation and Distribution**

Distributed knowledge is basic in every urban context. Contrary to more simple and straightforward knowledge and decision-making environments, in which the actors share large parts of the same knowledge (but may have different viewpoints), in the UKA knowledge is asymmetrically distributed among individuals and organizations. Moreover, UKAs hold collective knowledge that is more than the simple sum of the members’ competences. No single member has a thorough understanding of it or encompasses it, or even knows all details of that articulation, and taking the best decision often requires a transparent contribution by everyone involved.

A UKA should never be responsible for making the final choice among the proposed alternative “knowledge solutions”. Most often, causality is not an important criterion for selection; contextual relevance to an urban situation (problem) is more significant.

**Discerning Communities for Collective Action in Societies of Individuals**

According to Reynaud (2004), what defines a social group is not the fact that several people live and act together. It would be a mistake, according to him, to think that social groups are able to “spontaneously” generate the rules specific to the required domains. In the society of individuals (who don’t necessary share the same vision) it is an aim, a purpose, and an orientation of acts (all that we have called “a project” that constitutes the collective actor. The term community is also associated with sharing, participation, and fellowship.

Thus the first social reality, as Reynaud notes, appears to be, not the society and the community in a general sense, but a group of collective actors linked by a project. Moreover, each has his/her personal view of the project. But a community is neither a simple addition of citizen nor people faced with a specific problem; it is composed of a certain number of partners associated in a project. They intend to carry out that project in spite of (or thanks to) all their initial oppositions and contradictions. This definition explains why in collective actions, positive conflicts are central to the management of multiplicity, in terms of situations, context and problems, in space and time. It is not surprising that conflicts and conflict-resolution are essential in managing collective actors. In fact, they help constitute the collective actors’ attitudes and enable them to address the project together. This is called the problemizing of
an existing situation. It is the necessary starting point of solution finding in a collective action context.

A conflict is not just a confrontation of two human beings in strong opposition. It is mainly a disposition of mind that “allows thinking in terms of multiplicity and equivalence instead of identity, in terms of function instead of essence” (Benasayag and del Rey, 2007, p.).

Successful collective instruments (including UKA) are not necessarily those which gather all the competences needed by the problem, but those which are able to articulate and coordinate the various actors’ contributions (Reynaud 2004). The UKA can be understood as an instrument for collective generation and management of knowledge; it must be regarded in a broad sense: it is, of course, an assembly of partners. But, it is also constituted by the written documents, procedures, networks and communication protocols, the furniture arrangement in the meeting room, etc. in other words all that can be identified as the specific UKA culture and ethos.

**Importance of the UKA Context**

Important factors, such as the political and economic context are external to the actual UKA, but nevertheless of considerable importance. They affect the configuration of the arena, the actors involved, management style and decision-making process, as well as knowledge communication. In a number of case studies the contexts have been determined as political, social, commercial and professional. The larger the urban project, the more complicated were the links and elements of the different contexts. The integration of the social and professional contexts is discussed in the cases of the Gothenburg Urban Dialogues initiative and Vienna Gürtel area, in the latter as a successful professional response to the political pressure in the physically and economically declined central urban zone.

Conservation of the Can Ricart factory site (as a focal point of alternative development model for Poblenou district in Barcelona) has a significant social context, which seems to be a feature of many cases in limited urban areas such as Ciutat Vella, Barcelona (housing regeneration and upgrading, new public spaces, new public facilities, gentrification, and settlement of foreign immigrants) and Sassuolo with its safety issues and attempts to reduce the social tensions in the Braida neighbourhood with high proportion of migrants.

An arena creates specific articulations with its environment, it cannot develop in isolation. Keeping close contacts with numerous surrounding groups and institutions is essential to assure its efficiency in urban actions. However, in order to carry out its work it often needs to be protected from the direct influence of the project environment (not secret but discreet). In fact, it would actually be difficult to carry out negotiations in the middle of an open public space. An arena can be separated but not closed from its context and then controlled articulations must be set up. Usually, there are a limited number of articulations. Translations are needed for communication with external actors according to their multidisciplinary character. For instance, the same project can be expressed in different ways and with different emphases for local authority communications, in forms and functions for urban planners and architects, while the citizens would be more concerned with symbolic aspects and social impacts.
The context of the UKAs in cases like London Kings Cross and Liege Guillemins TGV station is even more complicated. One could trace the links between the scale of the arena with the scale of the urban transformation sites in both cases, the impact on the number of actors involved, representing almost all target and affected groups, the impact on knowledge communication and dissemination extent through the number of publications, seminars and workshops, scientific and professional discussions, even through the number of successfully developed PhD thesis and place marketing events.

**Historicity**
The historicity of any urban development is recognized. More and more urban actors behave intentionally as producers of urban futures. The past is less and less taken as a model and reproduced identically. Innovation and change seem to be the main factors. The past is most often considered in a future perspective, as a starting point in the transformation dynamic. A UKA draws upon ‘pieces’ and ‘parcels’ from the past and re-weaves more or less common social fabrics to support new links for new purposes, which increases the confusion. Its creativity thus depends on the local history, material and immaterial, tangible and intangible.

**Leadership**
Do we actually need leadership in a UKA? The answer is probably yes, at least for a large part of the time. However, as has already been argued, institutional leadership could simply refer to creativity and innovation. On the other hand, expert leadership, particularly if the leader is an expert in the relevant domain, can drive the UKA action to ordinary solutions under the cover of “technical necessity”. Then, a kind of headship - that does not necessarily mean control - on the action can be most effective in many examples of arenas. Certainly, the presence of a facilitator (motivator, inspirer, and catalyst) in the arena is critical.

**Authority**
Beyond leadership, nobody benefits in a UKA from a position of “institutional” authority (political, administrative, and social). Individual authority has to be “demonstrated” by the experts themselves. This can also be built-up in the course of the UKA development. Most often this “natural” authority results from interactions between members.

Authority in a UKA necessarily draws on the essential ‘power of knowledge’, by the “force of the better argument”. It does not mean, however, that there are no conflicts of interest or power plays taking place in a UKA. It may well be the case that certain kinds of knowledge or expert groups have the hegemonic and dominant role in the field. Nevertheless, knowledge innovation may often be the outcome of such power struggles, e.g. in a Popperian perspective of knowledge growth due to the ‘struggle between alternative views and arguments”. In short, innovation (in a UKA) needs knowledge conflicts – or knowledge pluralism.

**Decision-making/taking**
In collective decision-making contexts, the myth of rational decision-making makes no sense. Collective approaches require articulating oneself to situation-forces that are in permanent
transformation, and acting in a collective action, the individual needs to relate to the common objective rather than just aiming at satisfying as much as possible one’s individual requirements, which would be counterproductive not only for the collective process but also for the individual. Individual requirements are obtained indirectly through the collective objective achievement and under the constraints of the instantaneous situation that cannot be fixed beforehand.

UKA partners have to consider themselves as actors in the situation and not on it. Decisions in collective actions are taken by adherence of all partners and not by a simple consensus. If no decision is required from UKA activities, production of alternatives becomes the best way forward. Of course producing alternatives requires then replacing “causality” by “relevance” as the selection criteria. In creative committees such as a UKA, where knowledge is distributed among several individuals, the proper decision results from a sequence of partial decisions ordered in an unpredictable manner.

4.4 CONCLUSION

As a conclusion an Urban Knowledge Arena can be defined as

- a time-limited (i.e. temporary) multi-stakeholder collaborative partnership (i.e. not mere cooperation) of varied backgrounds, professions, expertise and skills;
- with the task of generating, managing, preserving and implementing new and applicable knowledge relevant in addressing an issue (i.e. providing a solution) of a geographically-defined immediate urban concern;
- a UKA typically includes actors from government, industry, academia and the citizenry;
- a UKA is a managed activity with agreed upon rules and structures of governance, it may emerge from a top-down or bottom-up approach, and may not necessarily be an independent legal entity (indeed it usually is not);
- Intellectual property of a UKA should be freely available and easily-accessible.
- A UKA is a collective activity, based on partnership and specific relations;
- It should be relevant to the local urban situation and for the development process in a collective action, and have recognized impact and to this end might include elements of benchmarking, monitoring, evaluation and/or assessment.
REFERENCE: IMPLEMENTING THE CONCEPT OF UKA IN URBAN RESEARCH INITIATIVES

During the course of C20, the concept of UKA, and the so-far findings of the Action has been directly implemented in some urban knowledge initiatives, which are described below.

Swedish International Development Agency (Sida)
The concept of Local Urban Knowledge Arenas (LUKAs) was developed for the Swedish International Development Agency (Sida) in 2007 (Nolmark 2007) as a way of addressing shortcomings and constraints within urban research, knowledge and capacity building, with a particular focus on cities in developing countries. The conceptual work was a response to conclusions and recommendations from the so-called Sida Urban Research Discussion, a dialogue process which was carried out in 2006. The LUKA concept is currently under consideration for programme funding by Sida, and by UN-Habitat. Local capacity building for urban development was identified as one of the crucial issues for the success of development action. Many participants in the dialogue highlighted the complex character of cities as systems and urban development as processes of change, and underlined the necessity to provide opportunities for urban research with a holistic, cross-disciplinary and integrated approach, also involving local actors and policy-makers. Local Urban Knowledge Arenas are multi-stakeholder partnership teams with the multiple tasks of promoting awareness, strengthening the local base for research and knowledge, helping build capacity for urban development, and to disseminate policy options and best practice. These local partnerships all seek to carry out a programme, with the aim to generate relevant knowledge and know-how for present and future activities in order to reduce urban poverty and improve the conditions for life in the partnership city. The programme should also include sharing and comparing results and lessons learned with others, thereby contributing to a more general upgrading of urban knowledge and capacity for urban development.

The LUKA uses an integrated approach to studies, experiments and education/training, by considering the interrelationships between technologies, social, economic, environmental, demographic and cultural aspects of urban life. The methodology is also characterised by a participatory approach that incorporates sound gender and social analysis. A joint knowledge base, emanating from these different sources, including research, practical experience, lay judgement etc will be developed throughout the programme. By pooling their resources, the members of the partnership team will have better access to a knowledge infrastructure, such as technical equipment, laboratories, libraries, databases, field study facilities etc. By being involved in, and combining a multitude of diverse activities (e.g. applied and participatory action research, university education, professional training, seminars and debates) the partnerships develop synergies between the different activities. They help to develop closer and deeper communication between researchers – professional practitioners – policy makers – private enterprise and community groups, which in turn will underpin the integrated approach.

The Swedish Foundation for Strategic Environmental Research, Mistra
Mistra is a Swedish foundation, funding and organizing research aimed at solving strategic environmental problems and at promoting the development of robust research environments of the highest international class that will have a positive impact on Sweden's future competitiveness. The recently proposed Interaction Platform includes a multi-stakeholder partnership team with the multiple tasks of strengthening the local base for research, knowledge and education; helping to build capacity for urban development; and promoting awareness and best practice. One of the main features of a Platform is that it is an instrument for bridging the gaps between generating and absorbing knowledge, on the one hand, and disseminating and using knowledge in policy-making and practice on the other. It can thereby consolidate the system for building knowledge and capacity.

Typically, this kind of partnership may consist of a balanced mix of one or more universities, cities, municipalities, urban regions and businesses involved in ‘shaping, producing and managing cities’. Examples are housing companies, infrastructure suppliers (energy, transport, water and sewerage, etc), construction companies, consulting and architectural firms, urban development agencies and businesses. Non-governmental organizations and community-based organizations with urban development on the agenda can also be partners in an Interaction Platform. The same applies to representatives of the individuals, companies and organizations that populate the city and ‘consume, explore, experience and give life to the urban landscape’.

The URBAN-NET Project

URBAN-NET was developed with the financial support of the European Commission’s 6FP under the European Research Area Network initiative (ERA-NET). The project integrates the research potential of 16 partners – national research forums and networks, from 13 countries. Under the priority of urban sustainability in Europe and through jointly funded research schemes, the selected projects address such issues as urban governance and management, integrated spatial planning, smart economic growth and competitiveness, environmental quality, human health, accessibility and equality. What makes the URBAN-NET project a valuable tool for urban knowledge communication is the integrated approach and its inter- and trans-disciplinary nature.

A major common characteristic of these initiatives is the priority area within the fields of integrated spatial planning and environmental management, dealing with complicated problems, which could not be solved by tools and knowledge from a single discipline. The greatest advantages of internationally and interdisciplinary integrated projects are the potential intellectual synergy, joint financial support, better thematic selection and wider dissemination of findings with multiple effects.
5 Case Studies of Innovation and Knowledge in Complex Urban Projects, viewed as Local Urban Knowledge Arenas

This chapter contains brief presentations of the selected Case Studies used for analysis in COST C20. Case study methodology has been successfully used in many international research projects for bridging theory and practice and supporting research with inputs from a variety of disciplines, professions and countries. In this Action, we have based our analysis on a number of case studies. They were selected and examined using criteria evolved in the ongoing discussions throughout the Action. Those criteria ranged through Social, Economic, Financial, Cultural and Technical aspects of Urban Projects, where each of these might be seen both as an element in its own right, and also as part of a process. These were contextualized within the framework of Research, Policy and Implementation in order to enable a framework within which innovation could be identified, and to some extent, located. In the group’s discussions, it was considered that innovation might be most likely to occur at the interface of such aspects. Furthermore, referring to innovation theory, where ideal conditions were created to enable the seeds of innovation to be generated (see chapter 3 on Innovation theory), then the need to exploit them often required additional skills as it was all too easy to lose the essence of their innovation in the implementation stages.

The first six cases studied were by their very nature, ambitious and complex urban projects, and perhaps any one of them might have served to generate a wide range of innovative practices on many different levels. This approach was rejected as we felt that the intrinsic policy of a Cost Action should address issues in a cross country context, thus allowing for the widest set of multi-national values and project conditions to be incorporated. The second group of eight examples – Referred Cases – was cases in which significant, and unique examples of innovation were identified.

Most of the selected cases were based on broad partnerships. They were multilevel and involved different representatives from various professional fields, from government bodies, local authorities, different business organizations and NGOs. In cases like London Kings Cross St. Pancras and Liege Guillemins station international companies were also part of the arena. These partnerships were created usually as a result of a top down initiative, but in most of the cases, also supported by bottom up activities, thus involving the participants in a coherent multilevel organizational structure for problem solving, ideas generation, creation and implementation of new knowledge. The complex relations between public, semi public and private sectors were managed in an innovative manner, and sometimes (London Kings Cross St. Pancras and Guertel Vienna) by established new type of organization for better communication and implementation of knowledge and ideas – ‘integration agent ARUP’, Guertel Council and Advisory Board etc.

In terms of their location and place of operation, most of the examples were centrally located in an urban setting with a great potential for regeneration and further development, establishing important links with regional and local level functional structures and networks.
The primary objective in most cases was to combine functional upgrading with enhancing the perception of urban quality in the area, through a widely spread economic, social, aesthetic and political impact. These positive impacts, spread far beyond the arenas’ formal ‘edges’, have also had a significant effect on the local modes of operation in planning and urban governance, adapting the traditional methods and approaches to the current requirements for transparency, accountability, public participation and adaptation to local needs. This is why these cases, even if not all of them fully accomplish their ambitious outset, can be considered innovative in terms of urban governance and symbols of iconic complexes. This is also why the Action has used these examples to explore the concept of a local urban knowledge arena (LUKA) in the development of critical factors for a LUKA.

### Case Studies and Referred Cases

| Case Study 1: | Liège-Guillemins District Planning – Decision-Making Process and Urban Connections |
| Case Study 2: | The Southern River Bank Dialogue, Gothenburg – A Participatory Process for Urban Development |
| Case Study 3: | Target Area Guertel, Vienna – Multi-Level Participatory Planning Process |
| Case Study 4: | Kings Cross/St. Pancras, London – Complex, Multifunctional Urban Regeneration |
| Case Study 5: | Barcelona – Contested Top-Down Projects |
| Case Study 6: | Sassuolo – Constructing an Urban Knowledge Arena |
| Referred Case 1: | Local Initiatives for Strategic Development: Oeiras Municipality – A Portuguese Innovative Urban Territory |
| Referred Case 2: | Pez-Luna Integrated Regeneration Area, Madrid |
| Referred Case 3: | Shared Use of Public Space (Several Cities) |
| Referred Case 4: | Participation in Urban Revitalization – the Neighborhood Contract, Brussels |
| Referred Case 5: | Urban Sustainability Indicators – The “Urbanguard” Project, Cyprus |
| Referred Case 6: | Neighborhood Master Plan – Based on Civil Society and Environmental Knowledge for Conversion of Agricultural Land into Residential Use, Geneva |
| Referred Case 7: | Intensification of Single-Family Housing Areas – Gaining Building Land without Expansion, Salzburg |
| Referred Case 8: | Intergovernmental Cooperation to Plan a Sustainable Agglomeration, Geneva |
5.1 CASE STUDY 1: LIÈGE-GUILLEMINnovation DISTRICT PLANNING
- DECISION-MAKING PROCESS AND URBAN CONNECTIONS

Liège-Guillemins is the name of the Liege main railway station in Eastern Belgium. It is one of the three HST stations in the country. It connects Liege to Brussels, Paris, Aachen, Cologne, Frankfurt etc. The station is used by 36,000 people every day, while the population city itself is around 600,000.

The Liège-Guillemins station is part and parcel of the European HSL (High-Speed Lines) network. The HSL linking Brussels-Liege to the German border has been built by TUC-Rail, a public-private company, when another one called “euro-liege-tgv” (a holding of the Belgian Railway Public Company SNCB) has built the station itself. The co-ordination of the two developers and the city of Liege has never been easy. Local planning activities were considered as subordinated to the railway-system development. Then the railway builders have actually spent little efforts to take into consideration the impact such a significant building may have on the surrounding area.

For instance, the HSL developer has decided (on disputable technical reasons) to move the new station 120 meters away from the old one’s location. Its is not necessary to express in details the effect such a decision has had on the pattern of the district streets and on the distribution of activities (shops, offices, bus transportation, etc) in the whole district.

A second example concerns more specifically the railway station construction. The SNCB didn’t consider itself as responsible for any impact on the surrounding. Then, they refused to financially contribute to the public open spaces and streets reorganisation and decided to strictly limit the compulsory-purchase precinct to the area needed by the building construction.

The local district development plan of 2000 has been completely ignored in spite of the “polluter-pay” principle. The two parallel planning processes and the lack of vertical and horizontal urban-planning coordination were pointed up as incomprehensible by local authorities regarding the importance and the declared ambition of the project. Furthermore,
the rigidity of the used tools (PCA, local allocation plan) appears irrelevant to face the inherent unpredictability of the process, to anticipate and catch the future opportunities in the best coherent urban development scheme.

Let us limit the scope of the case to the “district-development-plan” of the Guillemins project. The Town-planning Department of the City was responsible for the readjustment of the Local Development Plan. This project started very modestly. The objective was just to transform the immediate surroundings of the station and peculiarly to create a large public open space in front of the new monument (consent to build in 2004). As usual, the Town-Planning Department set up an accompanying structure simulating a sort of minimal legal participation (lay peoples, cyclist and shop-keeper associations, district committees, different advisory groups, etc.) and some limited expert’s contributions.

However, the most significant constraint lying heavy on the district development team was still the destruction of the street pattern and the alteration of plan of the plots. The disrespectful railway station setting has mainly resulted in a large fragmentation of non-adjacent, flimsy real-estate structures, distributed among a significant number of owners. No wonder if the solution came from these last urban actors.

Three owners (Belgian Railway Company, City of Liège, Wallonian Regional Society for Public Transports) set up an informal multidisciplinary group aimed at re-evaluating the actual real-estate potential of a larger area located from the station to the Meuse River. This was also an opportunity to involve a private investor, owner of a large office building situated on the same site.

The regrouping of their individual land properties (and expectations) in one single project on one single land allowed distributing the urban functions in a quite efficient way, more logic and realistic, as well as improving each individual actor’s benefit in the operation.

What is more, this has also been the occasion of enlarging the scope of the project considering, not only the public space re-qualification, but the buildings themselves, blocs and urban equipments, and some articulation of the district with the City.

Three main objectives had been progressively stated and promoted to the citizens, the Wallonian Region and abroad:

1. Enhance the presence of an important railway station and try to use it as a highly visible “gate to the City”. The Bilbao syndrome could be rightly evoked here.
   The project of creating a triangular place in front of the station was enlarged to become an esplanade welcoming a sort of straight urban axis (or a perspective) supposed to link the station to the new Media City built across the Boverie-Island Park where the Museum of Modern Art and the Congress Building are located. Such a prestigious project was introduced as a way to regenerate that part of the city and provide it with a better international legibility as an ensemble.

2. In order to avoid possible speculative drifting an economic analysis had been carried out and the conclusion was that a clear delineation of the intervention zone should be imposed and a compulsory purchase area precinct defined.
3. The UKA was aware of the difficulty to work in a dynamic context when all the tools you have at your disposal are rigid, slow to manage and sometimes incoherent. Soon they were conscious of the necessity to develop new planning tools and approaches.

The project can (at least in Liege context) be considered as innovative and groundbreaking. However, what is actually innovative is the process itself. And, what is more, it has been informative about urban knowledge production and management. Especially the specific role played by the select group members (the four real estate owners) forces us seeing that group as foreshadowing an actual UKA (Urban Knowledge Arena), even if the Guillemins district actors have never used that terminology and, probably, have even ignored its existence.

It was a sort of temporary partnership of multi-stakeholders with a large variety of background and expertise who decided to produce and implement commonly, missing knowledge that has been useful to the Guillemins-district urban development process.

This was a closed partnership (discrete but not secret) working with a high reciprocal respect, on a peer egalitarian consideration for all actors and propositions.

It has developed specific articulations with the other groups of actors. For instance, they have worked with local ruling institutions creating a new group called “executive committee” to make their propositions opposable. And they have organised actual communication with advisory groups and NGO’s.

In terms of knowledge development, the select group has produced methods aimed at:

- Define strategic alternative objectives with argumentation and not simply “innovative solutions” coming from abroad and just adapted to the local situation;
- Delineate the temporal and geographical limits to be given to their urban action;
- Produce an assessment methodology to help local authorities in comparing urban proposals with strategic objectives;

They have also created a new dynamic tool called “Urban Development Area” that has been accepted by local authorities and later adopted by regional authorities and proposed by them to be used in any other urban place in Wallonia (the South French part of Belgium).
5.2 CASE STUDY 2: THE SOUTHERN RIVER BANK DIALOGUE, GOTENBURG

- A PARTICIPATORY PROCESS FOR URBAN DEVELOPMENT

Dialog Södra Älvstranden was an open ended attempt to establish a new “Urban knowledge Arena” engaging ordinary citizens, NGO’s, laymen and a wide group of professionals to take part in a very early stage of a large urban renewal project. The ambition was to find wishes and visions for a good future urban life rather than proposals for new buildings, streets and other artifacts in the area.

The innovative contribution of the “Dialog” was the use of new interactive public arenas, both real and virtual, the establishment of temporary working teams built on combinations of a variety of laymen, professionals, artists and others and the adaptive management by a transdisciplinary steering group. The outcome of the Dialog is manifold. An unexpected large and constructive interest from citizens to take part in generating ideas for the urban future contrasting to the earlier more frequent protests against planning proposals. The provided ideas were not only type intense mixed urban environment with lots of meeting places, public swimming pools and parks, but also ideas about ownership of land, affordable housing with priority for immigrants and minorities from the urban fringe. Those kind of innovative, non-physical, proposals were labeled “political” and were not taken into account in the ordinary planning process. The idea of public swimming pool still exists in the plan but the implementation is uncertain due to the innovation that all investments in public space has to be financed by those that get the right to build in the area.

Motivation and context for the experiment

Swedish citizens have, due to the Swedish Planning and Building Act, the right to take part of and react to every detailed plan before political decisions are taken. Written reactions and comments shall be put together and officially presented to the municipal Building permission commission. These reactive procedures give legitimacy to the final decisions but there are public demands for a wider, proactive, influence on the urban development. The critiques mean that there is too little influence from knowledge about human and environmental aspects of urban development other than what is delivered by architects, planners and developers. The aim of this extraordinary process was to give citizens a possibility to be proactive and to gather their knowledge before the ordinary programming and planning processes started.
Knowledge is here used in a very wide sense meaning giving information for planners and decision makers of what citizens’, laymen as well as various professionals, wishes, dreams, opinions and meanings are. The knowledge can be qualitative as well as quantitative, simple and/or very complex. Beside the inputs from citizens all other economic, technical and other data, regulations and rules were fed into the process and integrated during the subsequent programming phase of the planning process.

The process started as a top-down initiative after a political deadlock and as a result of a growing positive citizens’ interest for the area in the central part of Gothenburg. The Dialog started January 2005 and has gone through several steps towards the first detailed plan for the area which exhibited for public consultation, severely delayed, October 2009. The setting up of the organisation and a process evaluation of the first part of the Dialog was carried out by Urban Laboratory Gothenburg. ULG is an independent, non-for-profit platform for cooperation among academia, public sector, business, NGO’s and other interests for development of urban knowledge for promotion of good urban life through applied urban research and development.

**Ambition of innovative effort: A qualified dialogue for vision building**

Due to previous political deadlocks between political parties concerning the future of the area local politicians were asked to keep out of the first part of the public dialogue process and let the citizens independently formulate and provide their knowledge, opinions and visions. There were five distinguished steps in this gathering, structuring, production, integration and evaluation of knowledge before, during and after the visioning process before the ordinary started. This innovative process was called *Dialog Södra Älvstranden*.

1. In the first step a public call in media with an invitation to all citizens to bring their memories, ideas, wishes, dreams and visions to two common arenas which were established for this very occasion. There was one open arena at the municipality museum where also debates, exhibitions and other inspiring activities took place. There was also an interactive website, www.alvstaden.se, for debate and dialogue where lots of historical and other information could be reached. All input from citizens was structured, catalogued and put in a databank in the museum. The citizens took part in debates, seminars, city walks, theatre sketches and many other activities. The public interest and the gathered material were huge. In fact the input was overwhelming and in order to take care of all the material in a creative way a second step was invented by the steering group: the setting up of parallel working teams made up of a mix of professionals and laymen developing cohesive visions for the future life at the river bank using citizens input as starting stimuli.

2. In the second step an open call was published in media inviting anybody to apply for either becoming a member of a citizens’ team or to become leader for a proposed mixed team of experts. In both cases the mission was to develop further the visions for the area. The citizens’ teams were to be composed in a way that each team, concerning gender, age, profession and ethnic background, in some sense could be “representative” for the
citizens of Gothenburg. The citizens were to be paid a fixed sum for compensating loss of working time. The interest was great with a good distribution among age groups, gender and professions. Applicants were also asked to give a motivation why they wanted to take part. Anyhow, special invitations had to be made before the mix of ethnic groups was in balance and the six teams finally were composed.

The invitation to become leader for a mixed team of professionals also generated a lot of application and finally six teams were chosen. During the selection process the ambition was to create a mix of teams as different, in terms of professions and experiences represented, as possible. The final six teams were composed by novelists, artists, PR-consultants, architects, industrial workers, young people and children a. o. The teams were provided with a sum of money that could be used in the way the team decided, salaries, travels a. o. Finally one citizens’ group and one professionals’ group were put together in six visioning teams and asked to take step two in the visioning process—Parallel urban analyses. The visioning teams worked in two phases.

3. In the Structuring and interpreting phase all the material that had been collected in the first step of the Dialog. The teams should also get acquainted with all former plans and investigations that had been produced for the area earlier. The teams structured and interpreted the material and presented their findings and ideas for how to proceed to the steering group and got feedback before taking the next step.

4. In the second phase the teams should integrating and coordinate these knowledge inputs together with the teams’ own ideas and in a creative way build visions of the future urban development. Six visions were delivered.

5. In the analyses and evaluation phase the visions were handed over to the evaluation team before the ordinary planning procedures with the ordinary planners and architects started. The evaluation team was constituted of representatives from the municipality’s planning department and two representatives from the development company, Älvstranden Utveckling, which was commissioned to carry through the urban development. The team made an analysis and an evaluation of the six visions and delivered a report.

The criteria for ideas and knowledge that were taken on board for the subsequent work with the planning program were those that were “appropriate” and “important to test”. Other questions, for example “political” were sorted out and commented but not taken further into the ordinary programming process. The purpose of the evaluation phase was to deliver recommendations for the subsequent programming work. During this process there were consultations with various experts that checked the content and gave advises concerning environmental and other aspects.

The planning program was exhibited and citizens were invited to give their views and opinions on the program. The public interest was not overwhelming. All written comments were reported, commented and taken care of before the political decisions in the political forum. The planning program is not a legally binding document. The coming detailed plan will be.
Connecting the innovative phase and the standard planning procedures

The critical phase in the public dialogue process was the linking between the public dialogue phase and the standard programming and planning procedures. The leading politicians in Gothenburg all agreed to run the public dialogue. They were initially asked not to take part in the dialogue process so as to minimize political deadlocks. But neither was anyone else from the “official side” of the municipality. That might have been a mistake since the dialogue in that way became too one-sided. Anyhow, the rules of the game were not clear enough to the public.

There were complaints concerning the process from some professionals, architects and planners, which meant that this was waste of money and time and just “playing for the galleries”.

In the evaluation phase there were conflicting views about what ideas should be taken care of and what should be left aside. The process was behind closed doors and the conflicting views were between representatives from the development company and those from the planning department. This delayed the presentation of the evaluation report several months and during that period there was a disturbing silence in the dialog. The evaluators meant that there were many good ideas that had stimulated and given valuable input for the work with the planning program and many references to the visions are made in the planning program so it is possible to trace some effects of the dialog. Anyhow, it is easier to sort out what was not considered “appropriate and important to test” and not taken further in the programming phase. It was those that concerned housing segregation, land ownership, citizens’ representation in the board of the development company. These were questions that were not taken further in the programming phase but neither were they structured and gathered for being taken care of in any other forum. And there have been no responses from politicians - yet. This generated complaints from those that made the proposals.

How important was the innovation?

The Dialog Södra Älvstrand is by far the biggest urban development dialogue process carried out in Gothenburg and the final effects of the Dialog are difficult to measure. The opinions vary among participants. In general were people, which in different ways took part, very happy over the process until the visions were delivered but the long delay of the delivery of the evaluation report and the lack of feedback and acknowledgement made some participants both angry and disappointed. Others, mainly architectural consultants, meant that this was the common way of handling “parallel assignments” which is a standard way for municipalities to get input from architectural firms instead of competitions in Sweden.

The biggest complaint on the process is the silence from municipality – neither politicians nor officials made any comments or took part in the “Dialogue”. This is one of the important points where there are different opinions among participants. What was the role of the municipality of Gothenburg? Who could be the spokesman? Is the municipality a partner in the Dialogue or a purchaser of knowledge, opinions and ideas?

Here comes the question in whether Dialogue Södra Älvstrand is an example of what could be called a form of deliberative planning process or is it a traditional consultation. Teams in
Parallel urban analyses were paid for their participation and the development company means that the dialogue ended when the visions were delivered. Many participants expected a continuous dialogue during the subsequent phases of the planning and the urban redevelopment. The planning department wanted to work in peace and without further input during the planning phase.
5.3 CASE STUDY 3: TARGET AREA GUERTEL, VIENNA
- MULTI-LEVEL PARTICIPATORY PLANNING PROCESS

The regeneration-project “Target Area Guertel” in Vienna is a thriving example of a multilevel innovative Initiative from the kind of local “Urban Knowledge Arena”, which is directly related to a specific urban area crossing several urban districts or neighbourhoods respectably, and representing a complex participatory planning process.

Urban context: A new top-down initiative raising innovative bottom-up activities

Political pressure from local business and residents to improve the traffic situation and regenerate the affected, run-down housing blocks had initially been answered by the City Council with numerous studies and surveys with traditional expertise and “big solutions” which would overcharge the financial capacity of the city.
The classic recommendations, such as tunnels, bridges, flyovers etc., mainly referring to the traffic situation were not to be realised. In contrary, small local improvements were considered by the Viennese authorities to be the most promising way to decrease negative impacts of the traffic and to get the affected people in the neighbourhoods involved in a broad participatory process. Compared to the previous activities of the City Council and the planning authorities, where decisions were made centrally and local residents, business and the district authorities had not been invited to participate, the new policy-making was a real turn-around.

The new initiative for the later local “Urban Knowledge Arena” was in fact still top-down, but it raised many bottom-up activities with innovative outcomes and results. For the city of Vienna the implementation of this kind of arena was unprecedented also unique because of the size of the covered urban areas and complex issues.

What was the difference in terms of “innovative” to normal practice? The arena – interests, decisions, proposals expressed – in the Guertel-project had no “formal” mandate and could not overrule or bypass the established decision-making of the municipality and political power however strongly issues had been supported by the various stakeholders. But it was formerly guaranteed that the ideas, suggestions and decisions of the arena would make their way into the local or central decision-making bodies of the city. In contrast to merely bottom-up initiatives the top-down introduced arena provided a transparent and democratic structure of opinion-forming and channelling of public interests in the target area.

Even on the background of the long Viennese tradition of participation in planning and/or regeneration processes (Gebietsbetreuung, Agenda 21 etc.) the project “Target Area Guertel” was unique and new in Vienna. Because of the size of the urban area the Guertel-project was way beyond the usual dimensions of local agendas and normal participatory planning processes in urban neighbourhoods. The duration of the process, the organisational and managerial structure of the local arena was absolutely new for Vienna.

As a top-down initiative at the start the local “urban knowledge arena” Guertel soon showed many links to local (bottom-up) urban knowledge and many new knowledge areas were “invited” into the arena.

**Contents: Innovative management, methods and tools**

The main issues addressed were regaining public space from car-use, designing new recreation zones, improvement of conditions for small enterprises, programmes for unoccupied real estate, safety and security aspects, public lighting, reuse of the vacant metro-arches, bike-routes, solving traffic conflicts and in general raising the image of the Guertel-area.

The issues focused on the social context, local economic activity, environmental improvements and cultural activities were each in itself not spectacular or innovative. The innovation can be seen in the multilevel management-structure of the urban knowledge arena, the new combination of innovative “nodes” within the participatory process.

Who were involved? All citizens living and/or running a business in the target area were personally invited and had access to the basic level of working groups and meetings.
A limited number of 31 residents (random sample) were invited to join the new “Guertel Council”. It consisted of 63 members altogether and included representatives of the local authorities (district and city level), the central city planning department and delegates of the four political parties, the chamber of commerce and labour. This “Guertel Council” was assisted by the “Guertel Advisory Board” (13 members of the City Council). This new, multi-level structure certainly offered many opportunities for the established urban planning system to gain new insights, to get acquainted with local problems and meet people who are not involved normally, to get a new understanding of conflicts, of lacks and solutions etc.

The top-down-design of the arena determined the political culture inside the local arena and somehow worked as a frame for the non-professionals to formulate their concerns. It also forced the establishment of urban development policies to face and accept the issues and interests that were put forward and delivered along the designed channels. Inside the arena and the different working groups there was no formalised decision-making procedure (e.g. voting), which was reserved for the level of the “Guertel Council”, where proposals from the diverse working groups had to be approved as recommendations or applications addressed to the administrative and/or political body. It was guaranteed that the “Guertel Council” at least had to get a comprehensive answer to all its issues put forward.

What methods, instruments and tools used for generating, managing, communicating and implementing knowledge were “innovative”? A multi-disciplinary organisational team was commissioned by the Vienna City Council to collect, to document, to transfer all sorts of ideas, proposals and comments the participants brought into the planning process. This team prepared and organised meetings, workshops, “market places”, exhibitions and conferences etc. At the working group level the members received organisational and minor financial support to hold their own meetings. It was an absolute novelty to implement such a team that worked as a kind of “expert interface” between the citizens and the administrative political and planning system. This organisational and managerial “tool” can be judged the most innovative approach of problem-solving in the target area. The planning department itself was instructed to provide the members of the working groups and the “Guertel Council” with all information relevant for the particular issues. It was well supported by the organisational team, which in a way was the most important and innovative expertise in the arena because of its outstanding procedural and participatory know-how.

The types of expertise engaged in the Guertel arena were of a wide range. At the working group level practitioners and experts of all disciplines and personal background met. Despite of the formalised way of decision-making (Guertel Council, Guertel Advisory Board) most of the issues were treated very consensually in practice. To summarize, the offered structure (kind of “agora”) outside the established politics and opinion making fields was the most important innovation securing maximum access across a minimal threshold.

**Results: Incremental innovation in a large-scale multi-disciplinary project**

The output and the results were of course judged differently by the lay participants, the established planners, the politicians and the organisational team. Were there really new
solutions for the addressed urban problems and what was the new knowledge? Did it stimulate the public debate and will the knowledge be used for future projects?

This multi-disciplinary participation-project was certainly a means to gain more knowledge about problems and needs in densely built up urban areas and how they are perceived by the local people. The arena made many hidden potentials in the neighbourhood visible and usable for urban regeneration in the target area. An urban expert, who himself was involved in the initiative as a resident, concludes: “It is uncertain though whether the established planning institutions will like to make use of these potentials in the future, since it was quite laborious and time-consuming, and last not least quite costly too.” (See WG-material)

Anyway, a generalised “learning from” the case cannot be seen, because it is too early to answer all the put up questions. There would be an extensive evaluation be necessary. As a result many ideas were used as a basis for more comprehensive actions and at least about 75 new or sub-projects have been elaborated and submitted for financial support.

Link to References > http://www.magwien.gv.at/stadtentwicklung/guertel/
5.4 CASE STUDY 4: KINGS CROSS / ST.PANCras, LONDON
- COMPLEX, MULTI-FUNCTIONAL URBAN REGENERATION

In the mid nineties, the decision was taken to locate the UK terminal for the TGV/Eurostar at Kings Cross/St. Pancras partly to allow for ease of eventually accessing the rest of the country without having to cross the river Thames and partly to avoid subsequent development having to cross central London. It was known locally as the CTRL (Channel Tunnel Rail Link). In order to carry out this project, a management framework was set up.

Management framework for Kings Cross / St.Pancras redevelopment
LCR (London & Continental Railways Ltd.) was selected in 1996, by the Government, to build and operate the CTRL. A property division of LCR called LCSP (London & Continental Stations and Properties) was set up to manage St.Pancras Station in London and to over-see the development of land alongside the Channel Tunnel Rail Line.

A partnership between LCSP, Stanhope plc. (Developers), Multiplex, and Westfield group was established. This is a complex relationship between Public, semi-public and private organisation. A second partnership between LCSP and Argent (Kings Cross Development) Ltd. Was established to create a new ‘place’ in London called ‘Kings Cross Central’ An initial assessment of the knowledge frameworks identified as required for this project could be the following:
Knowledge Arenas

History and evolution of the site in its social, economic and political context, including an understanding of its present role:

- Urban functions, what ‘happens’ in the site before regeneration; housing, employment, ‘street life’ and informal activities; social networks; community structure, deprivation,
- Infrastructure conditions such as drainage, services, public transport, road system & other access facilities, canal system, unused railway facilities (e.g. maintenance sheds, etc.)
- Economic, land values; Property values; income per capita of residents, poverty, inward investment, marketing.
- Technical; bearing capacity of the ground throughout the site; the existence of underground services, such as transport lines, sewerage pipes; the structural quality of existing buildings on site; main statutory services lines, e.g. flight lines, electricity grids, gas pipes etc.
- Political; Local council boundaries within the site area, and their different policies; intentions and policies of adjacent Local Councils; relationship to GLA and its policies; Role of Central Gov’t; Policies of Rail Companies (see other diagram for structure).
- Specialist Design; complex railway station; retail/housing design and provision; education – university; urban design and planning, conservation
- Transportation; International, national and local railway policies; London underground policies; bus services

Type of urban knowledge employed

Innate knowledge held by specialists based on the quality of their particular experience and a track record of successful achievement.

Cross-sector A major feature of this project was the decision to create teams from many different disciplines, both from the private and the public sectors; e.g. specialist Housing developers & agents to do housing, commercial specialists to do retail, both incorporating development skills and marketing skills etc.

Multi-professional approach employing inter-professional working methods. This policy was designed to ensure that those actors who knew what to do, also knew how to do it. If this was not possible, then those actors with complementary skills were required to work in a team.

Urban knowledge sources

A series of studies were undertaken by different organisations in order to develop a body of Urban Knowledge on KCSP. Other publications previously carried out by universities and government departments were incorporated into this body.

These were pulled together in a separate document under the title of ‘The Components of Successful Regeneration’ and published by ARUP who were the overall strategic coordinators.
for the project. These studies covered the following which in this case study is referred to as 'actors' as they all became 'personified' in the project development:

**The Actors**
- Central government: Department for transport through controls of rail companies, and through guarantees of financial underpinning
- Local Authorities – Islington, Camden
- Private developers: different ones for commercial, housing, landscaping, educational, etc.
- Rail companies – as mentioned in an earlier slide
- BCN (British Canal Network)– The company that owns and manages canals
- London Transport – particularly the London Underground
- Greater London Authority
- Local communities and associations including employers, business owners, residents, land owners, property owners and tenants.

**Establishment of arenas**

(a) **Top-Down**
Central government required a complex, multi-professional organisation to oversee the whole project. This resulted in the appointment of an integrating agent (ARUP) who subsequently co-ordinated the wide range of data sources available and also initiated additional work to create a broad knowledge arena

Examples:
- Government policy on National and International Rail service - provision, management, stations and railtrack.
- Greater London Authority: Plans for the regeneration of the site, in an interrelated frame, which places it in the context of the plans for the whole of Greater London.
- Camden and Islington’s Unitary plans for the development of their respective boroughs.
- Urban strategy for site; Public open space, access, safety permeability, aspects which integrate it into the surrounding district of London. Prepared by Landscape Designers and architects, co-ordinated by ARUPS.

(b) **Bottom Up**
As implementation issues evolved, specific knowledge areas were generated to 'localise' the data in terms of both location on the site and subject.

Examples:
- The skills and knowledge about trains and track design in order to lift the arrivals track to the first floor.
- The knowledge about metro design where the new Kings Cross station connected to the present underground system
- The design of that part of the site incorporating the canal
• The demands made by the decision to provide a University campus in the site for the University of the Arts. The conservation of the 19th century steel arches required a specialist knowledge arena.

Complexity of Actors

Integration of Urban Knowledge
The many reports used by, and prepared by, the actors served to initially generate knowledge and subsequently integrate it into what we have suggested might be called a sub-arena. Issues of conflict and confusion at this level tend to be resolved within the 'corporate framework created to prepare the report.

The next level of complexity requires their reports to be taken together with the others, and compiled into an increasingly wide framework, yet becoming increasingly focused on the multitude of problems to be solved in implementation.

The setting up of knowledge arenas
Knowledge arenas can be either 'explored' or 'set up' in order to address a specific issue or solve a specific problem. In this case, the range of issues and problems was extensive, with many of them being directly related to similar projects throughout the country.

Initially, much of the knowledge existed, but rarely in a form either relevant for every possible project, or in a useful form for any application.
It is inevitable therefore, that the knowledge would have to be ‘processed’. Some examples of Urban Knowledge incorporated into this Project are indicated in the following list;

- Urban Form and Grain
- Ground floor land uses.
- Density of development.
- Integrating neighbourhoods.
- Heritage resources.
- Site infrastructure.
- Site Permeability.
- Connections to surrounding area.
- Location of existing Underground services.
- Strategic opportunity areas in Greater London.
- Opportunity areas within site,

**Strategic Innovative policies and intensions**
The Government is investing in this project in four ways, each of which could be said to be innovative, firstly through its partnerships with several of the stakeholders incl. private sector. Secondly fiscal: it has delayed a tax demand due when the land was given to the developers and will not collect it until project is completed. Thirdly Funding: It has underwritten the cost of the whole development in order to make sure it does not go bankrupt and finally by ensuring the upgrading of the existing infrastructure.

1. **Partnership**
The recognition that the private and public sector had complementary skills, and that between them, through partnerships, they could create a more innovative, and therefore useful, knowledge arena, than if they operated independently.

Specialists were used for projects whether or not they were private or public, thus government acknowledged that some skills were simply not in the public sector. The most obvious one being commercialism.

2. **Fiscal**
The innovative decision to delay taxation until an individual project was finished provided considerable incentive for private developers to come in. The site had not been an attractive one for developers before, therefore this unique fiscal policy decision made it more so.

3. **Funding: Security of Project**
The underwriting of the whole project set out the message to would-be investors that the Government considered the project too important to risk it going bankrupt. This was vital in encouraging companies to both invest, and be innovative. It also allowed the mixed use intensions to incorporate more ‘vulnerable’ developments to proceed, when they might have been delayed due to cash-flow situations
4. Upgrading infrastructure
A major decision made at the outset was to use the provision of the terminal for the Euro star Train at Kings Cross, to be the catalyst for a major program of Urban Regeneration in the site, and subsequently in this ‘run-down’ district in central London. It created a need for an Urban Knowledge Arena substantial in size, and complexity. Using a project, even such a large project as this, for such a purpose was truly innovative, and from it many other innovative policies stemmed.

Some innovations in sub arenas
- The technical achievement of saving the 19th. Century steel arches whilst they still remained effective structurally.
- Incorporating housing into the framework of the listed gasometers
- Creating a circulation pattern which satisfied the wide range of users needs including Train passengers, (including international departures and arrivals), Tube passengers, local pedestrian movements, shoppers, etc.

What does the Government expect as a return on its investment?
- Higher tax returns from the new development
- A major part of London improved and regenerated
- A new, modern multi-mode transportation intersection for London and the South East
- A new terminus for the High speed Euro star connecting with the European network

Some types of relationships between Government and private sector, often seen as means of achieving innovatory approaches by the exploitation of previously unachievable synergies.

- **PFI** - Private Finance Initiative, sometimes called franchising where the government appoints a private company to deliver an entire service.
- **Quango** - Organisation in which government is involved in management structure but does not run it
- **Golden share** - Government does not take part in the management of the company, but holds the power of veto in decision-making by retaining a share in the company which gives it a casting/veto vote.
- **PPP - Public / Private Partnerships** - There are few things more complex than managing a Railway System, It can, however be broken down into many different parts, such as the track, the rolling stock, passenger service, goods, stations, etc. It may also be sub-divided on a regional basis, with some aspects being national, others regional and yet others local. National, Regional, Municipal and District Government also provides a range of different members representing the public sector.

*Common characteristics of partnerships*
The public sector represents the electorate, and has therefore, a responsibility to use public money carefully. It will *always be there*, in some form or other, and must see the long term picture.
The private sector is responsible to its board of directors. They must declare profits annually and might not necessarily always be there. This need to create profits is often seen as making them more efficient than the public sector.

A partnership between public and private sectors must recognise that these differences are simply in their nature, and that an effective partnership acknowledges that each has an essential and unique contribution to make.

Partnerships must be win/win for all members and this should take into account their different needs and demands.
5.5 CASE STUDY 5: BARCELONA
- CONTESTED TOP-DOWN PROJECTS
Over the last 30 years, the process of urban change experienced by the city of Barcelona has been well received, even gaining recognition as a successful model of urban transformation (Marshall 2004). However, in recent years there have been growing signs of weariness and dispute, which are perhaps indicative of the limitations of top-down models of urban development (Unió Temporal D'Escribes 2004).

Overall, the strategies adopted in Barcelona have not been very different from those employed by most other European cities as they strive to gain a degree of economic centrality. Cities, in general, have sought to improve their position in an increasingly global world by concentrating as many global flows as possible.

After many years of dictatorship and anti-democratic government in Spain’s cities, at the end of the 1970s major efforts were taken in Barcelona to tackle the social and urban problems that had been ignored for so long. One of the main and most notable achievements of this first period was the implementation of a new public spaces policy that managed to improve substantially the quality of peripheral working-class neighbourhoods.

In a subsequent stage, the emphasis switched to large-scale projects in an effort to adapt urban spaces to global requirements and Barcelona’s urban politics became more and more demand-oriented. Among the main initiatives taken during this period, characterised above all by the city's hosting of the 1992 Olympic Games, were the redevelopment of functionally obsolete areas, the redesign of the historical centre as a cultural district, the redevelopment of the waterfront together with an intensive campaign aimed at promoting the city both abroad, to attract economic movement, and at home, to enhance social consensus (García-Ramon & Albet 2000).

From the mid-1990s onward, the city’s economic health has been marked by the variety and intensity of global flows: tourism, real estate investment and immigration (Benach & Tello 2004). Barcelona’s urban development has gone through another stage with many projects being undertaken in its urban margins (the redevelopment of the eastern section of the city’s waterfront, the expansion of the port and the airport, and the city’s district of economic innovation known as 22@). During this period, new problems and concerns have made themselves manifest (rising house prices, poor maintenance of public spaces, massive immigration, gentrification, loss of the city’s heritage) giving rise in turn to new visions of the city’s urban transformations that have brought to the fore three key features: the lack of any real participation in Barcelona’s “successful” urban model, the self-interested use of the rhetoric of governance and direct democracy to legitimate urban changes, and the great potential of critical thinking for innovative proposals.
Below we describe two cases of urban redevelopment in two districts of the city of Barcelona: Poblenou in the eastern sector of the city, and Ciutat Vella, the old historical core. They illustrate the problems of top-down urban design and the potential of alternative proposals initiated from the bottom.

**Poblenou** used to be the city’s traditional working-class district, with a flourishing textile industry that dated back to the middle of the XIX century. It gained the sobriquet of the “Catalan Manchester” because of its industrial production and landscapes and its combative working classes. However, when the need arose to restructure this former industrial area, it was decided that it should keep its industrial identity with the introduction of new knowledge-intensive industries: new technologies, creative-based and design industries, etc. To attract these activities, however, an innovative but somewhat controversial urban planning instrument was used. Thus, urban density was increased while allowing activities other than the strictly industrial to locate in the district, though the plan did ensure that certain obligations had to be met such as the cession of a proportion of the land for social uses.

This plan, known as 22@, was approved in 2001 and has, since then, managed to attract new activities. The urban landscape has begun its transformation managing to combine carefully restored XIX century industrial buildings adapted for new uses, with newly designed, high-tech buildings that symbolize the economic dynamism of this innovation district. However, the district’s long-term residents quickly began to feel that the identity of their home was being lost in the process and they struggled to come to terms with the pressures brought by the new, competitive economic activities. At the same time they came to fear that the changes being made to their living spaces failed to respect their earlier and pre-existing activities, homes, way of life and, even, memories. A few years ago, when the municipal council announced plans to demolish an old industrial complex, known as **Can Ricart**, these feelings unsurprisingly came to a head. The former factory was of no particular architectural value, but the local residents argued that it was the most valuable example of a complete XIX century
factory. The preservation battle became a rallying point and was joined by local residents, architects, artists and historians, who together published countless studies calling for the building to be preserved (Tatjer 2005). Can Ricart soon became a symbol of Poblenou’s collective memory. The campaign succeeded, in part, and the building was declared part of the national heritage. Today, plans are well underway for restoring most of the original complex, while ironically the building has recently been integrated into the city’s own promotional campaigns with Can Ricart becoming the new symbol of the revitalized neighbourhood of Poblenou.

### Table 3 - New forms of urban participation: the case of Poblenou

<table>
<thead>
<tr>
<th>Poblenou</th>
<th>22@: the innovation district</th>
<th>Industrial heritage preservation movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN KNOWLEDGE</td>
<td>Knowledge city Innovation, creativity, talent attraction, etc. Cluster model</td>
<td>A city to live in Academics, local residents, artists Horizontal organization Cooperative work</td>
</tr>
<tr>
<td>ARENA</td>
<td>Top-down approach Public-private negotiation Residents’ resistance</td>
<td>Bottom-up approach Residents’ alternatives to public projects Pre-existing threatened economic activities Conflict with private ownership</td>
</tr>
<tr>
<td>INNOVATION</td>
<td>Use of urban planning instruments to attract economic activity Cession of private land for social uses Built heritage preservation</td>
<td>Social concerns: collective memory claim Alternative to institutional participation Creative participation Use of artistic expression</td>
</tr>
</tbody>
</table>

The district of **Ciutat Vella** is the oldest in Barcelona, coinciding with the area that once stood within the walled city. Traditionally, this was one of the poorest and most deprived parts of Barcelona, with a reputation for being home to various illegal activities including prostitution and drug dealing. Since the mid-1980s, urban policies have aimed at upgrading the quality of the old housing which had been allowed to fall into a precarious condition, at creating new public spaces in the most densely populated neighbourhood of the city and at providing new public facilities for its residents (Abella 2004). Since the mid-1990s, however, new and apparently contradictory dynamics have emerged: the gentrification of the more attractive parts of the district and the arrival of new, poor immigrants in the most run-down and cheapest sectors. In this context where impressive urban redevelopment projects (including flagship projects such as the recently inaugurated Contemporary Art Museum MACBA and the totally refurbished Santa Caterina Market) have to deal with social problems and derelict areas, it is of little surprise that episodes of contestation have often broken out.

One such episode centred on the so called “Forat de la Vergonya” (literally the “Hole of Shame”) in the Santa Caterina and Sant Pere area of Ciutat Vella, which became a rallying point for neighbourhood protests and alternative proposals. This was an area that, in the
urban plans, had initially been designated for a park but its use was changed first to a housing project and then to a parking lot. This loss of a green area was seen by local residents as political fraud and so they initiated a participative process of re-appropriation of the public space. The area was transformed into a collective urban garden designed and managed by the local residents themselves and was used as a meeting place and a playground; in short, it became a social space (Mas & Verger). The popular initiative, however, was not tolerated, and the police response to the residents’ actions was one of repression, marked by episodes of violence that were depicted in the media as “riots in the very heart of Barcelona”. Eventually, the parking lot project was abandoned and a new green area was designed, this time by municipal architects. So, here again we find an example of an initiative that was taken at the bottom but which could not be fully accepted. However, thanks to innovative proposals, it managed to change the future of this urban area.

Table 4 - Intervention in Barcelona’s historical city centre and the responses

<table>
<thead>
<tr>
<th>Ciutat Vella</th>
<th>Historical centre plans</th>
<th>Santa Caterina contestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN KNOWLEDGE</td>
<td>Architects’ old vision (de-densification)</td>
<td>Applied knowledge</td>
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<tr>
<td></td>
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<td>Long-term neighbours + New alternative neighbours (squatters)</td>
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<td></td>
<td></td>
<td>Collaborative work</td>
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<tr>
<td>ARENA</td>
<td>Top-down approach</td>
<td>Bottom-bottom approach</td>
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<tr>
<td></td>
<td>Economic investment (rent-gap)</td>
<td>Neighbours contestation to public projects</td>
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<tr>
<td></td>
<td>Low intensity</td>
<td>Open conflict against urban renewal and social expulsion</td>
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<td></td>
<td>gentrification and temporary residents</td>
<td>Riots</td>
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<tr>
<td></td>
<td>Immigrants</td>
<td>Appropriation of space</td>
</tr>
<tr>
<td></td>
<td>Collective nostalgia</td>
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<tr>
<td>INNOVATION</td>
<td>Private-private partnership</td>
<td>Design of public space</td>
</tr>
<tr>
<td></td>
<td>Flexible organization</td>
<td>Creative thinking with no means</td>
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<td></td>
<td>Cultural district</td>
<td>Seeking alternatives from the bottom</td>
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</tbody>
</table>

The cases of Poblenou and Santa Caterina illustrate the conflict between some urban projects designed by the local government and the alternative proposals elaborated by social movements. Although the latter are hardly never accepted in their totality, both cases show that innovative proposals from the bottom can have an effective influence to improve top-down designed projects.
5.6 CASE STUDY 6: SASSUOLO
- CONSTRUCTING AN URBAN KNOWLEDGE ARENA

The Sassuolo case study illustrates a small scale experience of an “Urban Knowledge Arena” established to face a critical situation. The “Arena” was constructed in a pragmatic way, in a short time, sixth month from the beginning of the process to the end results, with low costs, around 20.000 euros.

The context
Sassuolo is a town of 40.000 inhabitants, situated in the Emilia Romagna Region. It is one of the most important centres in Europe for the production of tiles. The industry has attracted since the fifties strong immigration waves from southern Italy. In the last 15 years the Italian immigrant have been substituted by a foreign immigration coming mainly from North Africa. Immigrants have concentrated at the eastern edge of the city, in a sector called BRAIDA, where the situation was favourable for this kind of settlement (an unattractive urban environment, large housing complexes of the sixties not well maintained, an expressway offering easy access to the surrounding industrial areas).

Concentration has rapidly created the situation of urban decay which is typical of many immigration areas all over Europe; Braida was rapidly becoming a slum. Strong tensions opposed the newcomers, the local population and the police.
The City responded to the problems of Braida launching a series of actions. In October 2005, when improvement had just started, a dramatic event pushed the city administration to intervene urgently. An immigrant, who opposed resistance to the police, was savagely beaten by some policemen; the scene was filmed by cell phones, put on the internet, and it became a national scandal.

A strong and quick action was necessary, attacking the roots of the problem. This action required a type of knowledge and financial means which were beyond the capacities of a small city.

Content
It was therefore necessary to look outside the city government for support. This was quickly found in the Regional Administration (Office for Safety and Local Police). An agreement was signed, stating that the Region would support the city in its endeavour to tackle the problem of Braida. The Regional Administration would provide: operational support, knowledge backing and financial means.

It was recognized that to tackle such a serious and complex problem it was necessary:

- to acquire an in depth knowledge of the problems of Braida
- to understand what the different agencies (municipal services and ngo’s) were doing
- to involve a wide range of stakeholders.

The two parties agreed that in order to acquire this knowledge rapidly and in a very practical way it was necessary to create an ad hoc structure, transversal to the traditional divisions of the administration and interdisciplinary. Thus an ad hoc Technical Committee was created. The Tasks of the Committee were:

- to acquire an indepth understanding of the situation in Braida
- to make policy recommendations.

The Committee would be formed by

- representatives of the different sectors of the local administration and of the Local Police
- the Mayor
- “experts” in different fields who could contribute from very different perspectives to understand the problem and orient the actions
- Representatives of NGOs and local associations, which would be invited to participate on specific request of the other members.

The “experts” were in the field of: conflict management, safety oriented urban planning and design, Intercultural relations and immigration, inter-religious relations, immigration and criminality problems. The sectors of the Municipality involved were Local Police, Social services, Personal services, Education, Urban Planning, Budget and Finance.

A short document defined the role and tasks of the Committee were submitted to the Municipal Executive Board for approval and budget allocation.
Meetings were held on a monthly basis and they lasted the whole day. Every meeting tackled one or two basic problems or subjects. Invited speakers reported on the subject. After the reports a round table discussion took place and the experts and other representatives commented, each from its specific point of view, the reported facts. Each underlined the impact that the facts had on his specific sector and how action could be oriented.

A clear example was the session devoted the new mosque:
Facts were reported as well as the reactions of the different stakeholders involved. Then the experts commented

- from the religious (catholic and Islamic) point of view
- from the urban planning point of view
- from the immigration community point of view
- from the safety point of view
- from the police etc.

A specific commonly agreed rule required that every “expert” restricted his comments to his specific field of knowledge: for instance, in the discussion on the location of the mosque the urban planning experts commented on regulations, traffic, noise, density of people etc. and not on the religious aspects; this subject was tackled by the expert on inter-religious relations.

The knowledge infrastructure was based on the knowledge of the participants, especially those working for the public administration. Data were mainly statistics (GIS was not available) provided by the social services and educational services. The local police produced only a small amount of data, but contributed with a precise and deep knowledge of the local situation.

Five meetings were held plus a Final meeting to prepare conclusions\(^4\)

\(^4\) The Subjects tackled in meetings concerned:
- Socio economic development of Sassuolo since the sixties
- Role and functions of the tile industry
- Delinquency and public safety problems (reports from the police)
- Delinquency statistics
- Vandalism
- Public opinion on safety and quality of life
- Immigrant family structure
- Territorial distribution of immigrants
- Housing policy for immigrants
- Immigrants in schools (quantitative aspects)
- Programs for integration of immigrants
- Special programs for youngsters
- Urban Development strategy (structure plan)
- Environmental factor influencing safety in Braida
- Environmental guidelines for improving safety
- Special issues:
- Social concierge
- Location of the new Mosque
Coordination and management of the UKA was done by the Head of the Office for Safety and Local Police of the Regional Administration. He was supported by the office of the Mayor, which was responsible for all practical and administrative matters.

The legal framework was quite simple: a decision of the Municipal Council appointed the members and allocated the budget.
The financing – only 20,000 Euros – was partly from the Region and partly from the City Council.
There was no predefined decision making process: the agenda was set by the head of the committee and he was also responsible for the final recommendation report.
The UKA was hosted in the mayor’s office and participation was restricted to the members designated by the City Council and to the speakers invited by the Committee.
The working method was quite traditional and no non-institutional channels were used.

Results and output
Attendance was continuous, enthusiastic, and - quite unusual for Italian standards - ; the working scheduled was followed quite precisely.
The interest of all persons involved in this procedure of building up a common knowledge of the problem was extremely high and lasted all through the process.
The result was:

1. building of new knowledge:
all parties involved, including the Mayor, acquired a broader understanding of what was going on in the community of Braida and of the many dispersed efforts which were carried out by the Municipality and the Ngo s to support and integrate the immigrants.

2. intra-domain collaboration:
It proved as an useful exercise specially for people working in the public administration who acquired an overall picture of the fragmented sectorial actions.

3. recommendations
The coordinator of the Committee wrote a short Final orientation report highlighting the key issued for future action.
The experts wrote recommendations in their specific field, for long term and short term actions.
After the End of the process the document containing the recommendations was submitted to the Municipal Executive Committee for official approval.

4. Inter-sectorial cooperation
The document was distributed and to all Municipal services and their staff and presented discussed in a seminar. This proved to be very useful as many services were aware of the BRAIDA problem, but did not have a clear view of what was happening and how they could coordinate the action.
As a result of this experience it was decided that regular meetings would be held to report on the specific actions that were undertaken the different services. Braida thus became an opportunity for intersectorial cooperation within the Municipality.

5. External dissemination
A seminar was organised by the Municipality of Sassuolo with the support of ER Region to disseminate the knowledge acquired. It was oriented to the representatives of the local associations in BRAIDA and other stakeholders as well as to local government civil servants of the Region.
Its objective was:
- to inform the local community of the result of the process
- to expose the method and what had been learned about immigration problems and urban organisation in the local context.
5.7 REFERRED CASES

REFERRED CASE 1: LOCAL INITIATIVES FOR STRATEGIC DEVELOPMENT: OEIRAS MUNICIPALITY – A PORTUGUESE INNOVATIVE URBAN TERRITORY

Geographical and Administrative situation
This Municipality is a part of the Greater Lisbon (46 sq. Km that means 1,6% of the metropolitan territory), the Portuguese Urban Capital, and situated in the North bank of the Tagus Estuary, with 10Km of shoreline. The average annual temperature is 16º C. Time travel to Lisbon (average by public transport) = 38 minutes. The population in 2007 was 171.472 inhabitants, mainly living in small size urban centres; nevertheless the average population density is 3.752 inhab./sq. Km, the same year. The Green Area per capita reaches 33 sq m.

Brief picture of the Oeiras Municipality:
- established the 7 June 1759, by decision of the King D. José I;
- some prehistoric human settlements heritage, extremely important ones;
- during the XVI century, Oeiras became the Lisbon cereal provider and was chosen for some important industrial plants as the Gun Black Powder Factory;
- in the XIX century Oeiras became a kind of “small Riviera” close to Lisbon;
- this leisure option was stronger in the early XX century and a new industrial breath happened, as Oeiras started to be served by the train Lisbon / Cascais;
- until the 70’s, last century, Oeiras became an urban Lisbon suburb;
- during the 80’s and 90’s Oeiras developed, against suburban trend, its last profile: a Technological Pole, the most important in Portugal.

The main economic activities are services linked with ICT companies and others in the context of the new knowledge economy: 70% of the employed inhabitants works in those activities; on the other side, there are some other 40.000 people (equivalent to 50% of the employed inhabitants) working daily in the municipality.

The main social/environmental features: Oeiras was the first Portuguese Municipality to propose and to develop a Local Agenda XXI, known as “Oeiras XXI”. This is really a strategy for the local sustainable development. On behalf of “Oeiras XXI”, based on 5 main guide lines, several projects has been achieved mainly: to solve social problems – shelter for all; to strength the economy – new economy; to implement the “green strategy” – green and safe public spaces for all; to qualify and to select the options on urban planning – sustainable towns; to develop new proposals on mobility – more and more sustainable mobility. Nowadays, 2006/07, Local Agenda has been revised and became Oeiras 21+, as a support of the ongoing spatial planning process.

The innovative recent development
The Oeiras recent spatial development (since the 80’s), includes several kinds of spatial functions, emerging in Oeiras at different times, and strengthening Oeiras high performance through different sectors as defense, leisure, manufacture and, more recently, the knowledge economy. The manufacture has been too much important in the first part of the 20th century,
with large and strategic plants, choosing Oeiras close to Lisbon, profiting from the train and the wide land, at that time.

Some of the most prestigious national institutions on scientific research and technology (and some international ones) started to choose Oeiras to establish the headquarters, because of the proximity to Lisbon and the natural landscape and amenities to enjoy, after, because of the local policy facilities promoting the municipality as a prestigious place to live and work. For this purpose, the local authority profited of all the government incentives and, at the same time, promoted a local strategy for development supported, first, by the Master Plan, after, by the Local Agenda 21.

Concerning recent local development policy, Taguspark is the main expression of the options on innovative ways to develop a territory risking suburbanization. After Taguspark, other Office Parks choose Oeiras, all of them looking for the best and prestigious conditions to work, as Quinta da Fonte, Lagoas Park and Arquiparque. The Taguspark integrates Universities, R&D Institutions and Companies and ideas / companies nurseries, marketing and dissemination of the R&D results. Some of the advantages of the Taguspark are: qualified human resources, R&D specialized services, ICT within an innovative environment. Besides, the Taguspark has an unique R&D advanced ICT infrastructure, at national level, linking all the buildings to three digital centres.

Involving Taguspark is an idea of new development centre in Oeiras, winning new companies into or outside of the office parks around. The new concept on developing the Oeiras territory is the progressive integration of different kinds of land - residential, leisure, shopping and green.

**Quinta da Fonte**, another Office and Business Park developed after 1992, Lagoas Park, after 2001, including large diversity of high quality services.

The option for developing new economy in Parks, supported by a spatial development model, facilitates a renewing and innovating moving in another economic areas in Oeiras (and in other municipalities around) and in the whole territory in the way of the excellence for all.

In Portugal this “Oeiras process” is well known and considered as a stimulus for other municipalities looking for better performances.

There are also **results** to assess process efficacy:
## Table 5- Synthetic Development Indicators

<table>
<thead>
<tr>
<th>Indicators 2006/2007</th>
<th>Oeiras %</th>
<th>Lisbon</th>
<th>Greater Lisbon</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Graduation of Inhab. &gt; 21 years old %</td>
<td>23</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>High professional qualification %</td>
<td>3,5</td>
<td>3,4</td>
<td>2,2</td>
</tr>
<tr>
<td>Salary, monthly average €</td>
<td>1.585,60</td>
<td>1.393,60</td>
<td>1.263,80</td>
</tr>
<tr>
<td>Purchase capacity, per capita</td>
<td>173</td>
<td>216</td>
<td>146</td>
</tr>
<tr>
<td>Local Business profit for tax/business €, over 150.000 € profit</td>
<td>132</td>
<td>136</td>
<td>96</td>
</tr>
<tr>
<td>Global Income Tax, per declaration €</td>
<td>4.196</td>
<td>4.540</td>
<td>3.018</td>
</tr>
<tr>
<td>Local Investment per capita €</td>
<td>252,2</td>
<td>246,9</td>
<td>146,0</td>
</tr>
</tbody>
</table>

*Source: National Statistics Institute*

The main strengths of Oeiras development process are:

1. The local capacity on profiting of local/central government partnership for all possible action fields, starting the development process, 20 years ago
2. The local capacity to establish public/private partnerships with the entities choosing Oeiras to work
3. The decision capacity
4. The capacity to do, believing the good results will come
5. The good results will win more investments, public and private ones
6. The development success and the excellence of the results crossing all fields of action – economy, social, environment, building, created a qualified territory calling more qualified and innovative activities

**Referred Case 2: Pez-Luna Integrated Regeneration Area, Madrid**

Pez-Luna is a neighbourhood inhabited by 6,000 people and located in the oldest area of Madrid. Pez-Luna’s housing stock is rather old and in bad condition, and some of the flats are used for informal workshop activities or prostitution. The neighbourhood has a rather heterogeneous population: old residents with middle and low incomes are being displaced by younger middle classes with increasing purchasing power. In parallel, during the last decade,
the area has experienced a substantial growth of immigrant population. Pez-Luna faces severe social and security problems related to prostitution activities, drug dealing and abuse as well as high presence of homeless people. Safety, good living conditions and provision of public facilities are the three main claims of neighbours’ organisations, which are very active in the area. However, the capacity of citizens participating at the district level is possible mainly through informal means, as the neighbours’ organisations do not consider the formal district-level mechanisms to be sufficiently effective to influence policy making.

The area of Pez-Luna has been ignored by the local government for years. However, on 2006 the media had access to some videotaped instances displaying fights, drug dealers and the murder of a prostitute in the neighbourhood. The resulting social pressure made the local government react and as a consequence an urban regeneration plan aimed to improve the urban conditions of Pez-Luna was designed and approved (ARI Pez-Luna).

It is important to remark that urban regeneration policies in Spain have been traditionally focused mainly on physical intervention; a more integrated approach has not been yet fully tested\(^5\) and governmental structures often experienced difficulties dealing with transversal programmes aiming to tackle physical, demographic, economic and social problems in a coordinated way. ARIs\(^6\) are plans launched by the Municipal Housing Corporation of Madrid (EMVS), which is a part of the Department of Urban Planning, and they normally include only interventions upon the built environment (such as housing, infrastructures and public spaces renewal). However, in the case of ARI Pez-Luna, there was a strong commitment by a group of officials to go beyond physical intervention and give the ARI Pez-Luna an integrated dimension including social and economic development programmes (which finally accounted for 13.5% of the total budget). This opportunity came with a call from INTERREG regional funds named PROGRESDEC. A partnership was made with other European cities and a project presented and accepted. The PROGRESDEC Surprise project regarded designing a guide about integrated sustainable regeneration for urban planning practitioners.

The motivation to innovate was the realisation that the problems faced by Pez-Luna had a very strong social dimension, as well as a clear dissatisfaction and mistrust regarding what an exclusively physical intervention-oriented ARI could achieve in terms of transformation of the living conditions in the neighbourhood. The local government concluded that a traditional ARI would not solve the problems of this particular urban area, as this kind of plans do not include fundamental strategies for successful urban regeneration, such as implementing social programmes, fostering economic development and using a collaborative approach in order to involve different actors, which were taken into account in ARI Pez-Luna. Besides, in the implementation of the new plan innovative techniques (Participatory Action Research) were utilized to make a diagnosis of Pez-Luna’s social situation. The main actors of the area (grassroots, non profits working with different groups, urban planners and other municipal officers) worked together in groups for a year and developed a map of problems, needs, priorities and proposals of intervention. Making municipal workers of different departments

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\(^5\) One of the only exceptions is the region of Catalonia, which was the first Spanish region to foster the implementation of integrated urban regeneration programmes in Spain (Disadvantaged Neighbourhood Programme, 2004-2011).

\(^6\) ARI stands for “Area de Rehabilitación Integral”
and backgrounds work together was especially fruitful in terms of coordination, at least at the technical level.

The context in which regeneration arose was one of consensus and leadership by the local government. However, the decision to go beyond physical intervention and give the ARI Pez-Luna an integrated dimension did not initially come from the top decision-makers of the Department of Urban Planning, but from a group of middle-range officials and neighbourhood organisations’ leaders who believed that only by means of an innovative plan design the living conditions of Pez-Luna could actually be transformed.

The degree of transformation (in terms of plan design) produced by innovation was substantial but not definitive. Innovation did not take the form of structural change, but rather of incremental innovation: the type of plan that was designed and implemented was the same as in previous urban regeneration efforts in Madrid (ARI) and the budget distribution shows that social and economic development programmes finally accounted for a limited share of the total budget (13.5%). A substantial part of the amount was used to relocate families which live in substandard housing or whose flats are going to be renewed.

The effectiveness of ARI Pez-Luna in achieving its urban regeneration goals still has to be evaluated. However, there are two reasons why the importance of innovation in the case of Pez-Luna should not be disregarded. On the one hand, the innovative initiative did not directly come from the top decision-makers in the Department of Urban Planning but from a group of officials and grassroots leaders. This shows that innovative ideas coming from inside the government structures can have the chance to be implemented, especially if they are supported by civil mobilisation. On the other hand, it has to be taken into account that shifting to an integrated urban regeneration approach was a pioneering initiative in Madrid. Very often, political leaders face the challenge of difficult choices and uncertainties as they envisage innovation options, so they prefer to implement intermediate and reversible solutions that later can be either further supported and strengthened or abandoned, depending on their outcomes.

**REFERRED CASE 3: SHARED USE OF PUBLIC SPACE (SEVERAL CITIES)**

In order to reduce the ecological footprint left by our means of transport, we have to organize our cities to promote and to sustain walkable and cyclable neighbourhoods.

Even if we can reach a sufficient level of compactness and of mixed use, we still have to face another problem in order to induce people to walk and to cycle. We have to transform the public spaces into truly safe places; in particular, I mean road safety.

In fact, our public spaces are conceived and designed on the principle of physical separation between the different modes of motion with their specific speeds: well separated spaces are intended to produce the best safety. Pedestrians, cyclists, cars in movement, parked cars, all have their own lanes in the public space and their interactions are strictly and locally regulated. Extensive experience has demonstrated that this general organization produces
more accidents, especially for pedestrians and cyclists, than a spatial organization which invites the users to share a unified space.

Shared space principles are based on the idea that the space clearly must express urban social life, which requires awareness, thoughtfulness and a sense of responsibility for each other. To reach this level of social interaction and conviviality, it is necessary to break down the perception of having one’s own separated lane (with exclusive right of way) and to reduce the speed of cars to about 20 km/h by promoting spatial improvements. Public spaces are then improved without kerbs, bollards, road signs and markings. It is a same flat space – ideal for people with reduced mobility - unified from façade to façade: a cleared urban space. Of course, the space is designed and structured with trees, street furniture, and water, inspired by the social, cultural and environmental characteristics of the place. Parking must be carefully located with discreet marking, but stopping (less than 15 min.) is allowed everywhere. In addition, all the roads are, in principle, two-way.

It’s important to note that the number of accidents has decreased quite significantly in the shared public spaces which have been developed mainly in the Netherlands, but also in Germany, Switzerland (“zones de rencontre”), France, the United Kingdom, ...(cfr. www.shared-space.org). In the cities involved, a significant modal transfer from cars to walking and cycling has taken place.

The difficulties that the elderly or blind may have adapting their behavior need however to be met and the improvement must therefore accommodate as much as possible the logic that they use in moving about.

A reduced speed is also better for the environment: keeping speeds between 25 and 50 km/h reduces gas emissions by about 30% and noise levels by 5 decibel. Furthermore, shared use frees up substantial ground, which can then be dedicated to the blue and green network or to other uses.

One may object that what is possible in the Netherlands thanks to the civic and disciplined mind of its inhabitants, is impossible in other cultural contexts. In fact, sharing public space is the experience of most of the countries in the world except in our modern Europe. Putting the
people back in a more civic spatial condition appeals to the basic feeling of human sociability and capacity for negotiation that is independent of any particular culture.

Shared public space is not relevant in urban outskirts where density is too low to generate a substantial outdoor social life and, on the other hand, it will be difficult to transform heavily travelled roads (more than about 20 000 cars/day) into shared public space.

Innovation
With respect to “urban knowledge”, the learning of these experiences and reflections is that we have to consider traffic and mobility matters in public spaces first and foremost as a question of social behaviour, before considering any technical aspects. It replaces the improvement of the public spaces in a more holistic urban knowledge arena.

**REFERRED CASE 4: PARTICIPATION IN URBAN REVITALIZATION – THE NEIGHBORHOOD CONTRACT, BRUSSELS**

As have many other smaller and larger industrial cities, Brussels, in the last few decades, has suffered from deterioration in the quality of housing and public spaces in the city centre and the dense neighbourhoods of the first “crown”. From 1989 on, the Brussels Capital Region has stressed more than ever the importance of improving the overall quality of the urban environment and the living conditions in the city, in order to at least stabilize the number of inhabitants and/or attract even more people to the city centre. The Brussels Capital Region has adopted the ordinance (regional law) of October 1993 on neighbourhood revitalisation, which created the ‘neighbourhood contracts’. This new instrument opened up urban renewal policy to a broader concept for urban revitalisation, including the overall physical regeneration of neighbourhoods (renovation of housing, renovation of public spaces, etc.) as well as the socio-economic and the cultural development of the neighbourhood. In order to ascertain this global approach, collaboration with the private sector allowing private funding within the framework of a public-private partnership was made possible. Efforts are concentrated on disadvantaged neighbourhoods (approximately 20 urban blocks) with a high proportion of deteriorated building stock and public spaces, a high level of unemployed or socio-economically fragile inhabitants, etc.

The municipalities, which take the initiative of elaborating a neighbourhood contract, are given four years with the addition of two more years to finish the operation. The total public investment is 10 million Euros. Various actors, who become partners through the contract and are represented within the local integrated development committee, are involved in the neighbourhood regeneration process: local and regional public authorities and specialists, representatives of the private sector, associations, neighbourhood inhabitants, local shop keepers, SME (small and medium-sized enterprises), ... The local integrated development committee approves the different projects and ensures follow-up on the elaboration and the implementation of the programme. In a very formal way, fixed by the ordinance, and from the very beginning of the project, the inhabitants of the area are invited to become members of the local integrated development committee. The committee meets at least eight times per year.
The postulate of the neighbourhood contract is primarily based on the idea of the correspondence between the spatial structure and the social structure. Actually, experience has demonstrated that enhancing social cohesion and improving the quality of life requires resolving the issues of connections and places outside the limits of the perimeter. Moreover, the places inside the perimeter also concern people who are not involved in their local committee.

The local integrated development committee is a very formal and productive way of assuring the authorities that democracy is respected. However, the lack of representation of immigrants who don’t yet share the local political culture must at least be compensated by other means, namely publicized reports, general studies or informal opportunities such as fairs, markets…

**Innovation**

The experiment of « neighbourhood contracts » is innovative in several ways.

- The exercise in collective intelligence is carried by the dynamics of transversality, which associates material investments with non-material ones. The work accomplished on public space is thus emblematic of this global approach insofar as physical development interacts with the development of forms of solidarity and the reciprocity of resources.
- As it is organized regionally and implemented locally, the participation process carries both a strong legitimacy and a multiplicity of means of expressions that fulfil the expectations of the members of the local integrated development committee.

Both the short deadline (4 years + 2) and strict budgetary limitations (10 million Euros) provide for a responsible process of cooperation.

**Referred Case 5: Urban Sustainability Indicators – The “Urbanguard” Project, Cyprus**

Urban Planning in Cyprus is guided and controlled by Local Plans which are reviewed every five years. The revision process, being a dynamic planning process should be based on an objective evaluation and analysis of the socio-economic, physical, transport and other planning developments, occurring during the last 5 year revision period so that the revised Local Plans respond and take on board such developments. The process should also incorporate public participation so as to identify the real needs and aspirations of the local population. Instead, the reviews of Local plans for the past 15 years were carried out without the use of any substantiated planning indicators and criteria. The revised Local Plans usually served the interests of various pressure groups (developers, politicians etc) and the public interest was not always high on the planning agenda. This situation has resulted mainly in urban sprawl, which encourages the use of the private car and creates low density areas lacking in basic community facilities.

A strong need was thus identified for the creation of objective criteria and indicators which should also incorporate sustainability criteria, to be used in the Cyprus Local Plan revision process. The use of spatial sustainability indicators can play a key role in assisting planners...
and other planning process stakeholders to evaluate urban development issues and promote the enforcement of sustainable spatial policies. Moreover, Local Plans will in this way be more efficiently and effectively monitored, while decision-makers will be enabled to reject unsubstantiated and short-sighted demands, often based on speculation and the drive for personal gain rather than the quest of long-term sustainability and the benefit of society in general, through concrete and substantiated criteria based on urban sustainability factors. Further the availability of indicators will improve the tools that enable a more productive form of public participation which is essential in the whole process. Considering that planning is a dynamic process, the list of indicators should not be considered as a definite list but it should be a flexible tool, which should be continuously modified to respond and adapt to any changing future urban planning developments and conditions.

A total of 100 indicators were selected as the basis for assessing the sustainability of urban policy using the GIS as a tool. Out of this list a core subset of 27 indicators was selected, based on the feedback of various stakeholders and the experience gained by the project team during a pilot study. These Key Spatial Development Indicators which directly relate to national, regional and urban policies are the following:

1. Gross Domestic Product (GDP) at Local Authority level.
2. Public expenditure on basic infrastructure at Local Authority level.
3. Public expenditure on service provision to citizens at Local Authority level.
4. Total potential population capacity within development boundaries.
5. Actual population within development boundaries as a percentage of total potential population capacity.
6. Ratio of the potential population capacity of developed residential areas to their actual population.
7. Percentage of undeveloped land within designated residential zones.
8. Retail and office land use as a percentage of total development within designated commercial areas.
9. Percentage of total retail and office development occurring outside designated commercial areas.
10. Ratio of retail expenditure in Central Business Districts to total retail expenditure at Development Plan level.
11. Percentage of designated tourist zones developed.
12. Residential land use as a percentage of total development within designated tourist zones.
14. Percentage of total population living outside catchment areas of bus stops.
15. Ratio of community services by category (including day-care centres, centres for the elderly etc.) per capita.
16. Percentage of total population living outside catchment areas of health, education and community services by category.
17. Percentage of total area designated as public green space.
18. Percentage of total population living outside catchment areas of public green spaces.
19. Density of basic entertainment establishments (including community centres, restaurants etc.).

20. Percentage of assessed heritage structures designated as Listed Buildings (Town and Country Planning Law).


22. Expenditure on Listed Building and Ancient Monument restoration (including archaeological excavations) as a percentage of GDP.

23. Percentage of total area designated as open space.

24. Percentage of total area designated for nature protection.

25. Intrusion of development into areas of high environmental value.

26. Intrusion of development into good agricultural land.

27. Number of protected landscapes with management plan at Development Plan level.

The URBANGUARD indicators will mainly be used by planners and authorities responsible for preparing and reviewing Local Plans, by local administrators, stakeholder organisations and other special interest groups making suggestions for plan reviews, as well as by the wider public when filing objections against published Local Plans. This will inevitably improve the tools that enable a more productive form of public participation and a higher level of governance, through which decision-makers can be held responsible for their choices. The project also promoted environmental reporting as required by the EU through the implementation of the Sixth Environment Action Programme. The URBANGUARD project is an innovative initiative applied to a planning process for the following reasons:

- It promotes objective and substantiated revisions of Local Plans involving complex planning issues which may have various interpretations according to different interests and pressures.
- It is an easy tool for decision makers who do not always have the time or the ability to comprehend the full depth of planning issues in today’s’ complex urban environments.
- It incorporates sustainability issues in the planning process.
- It facilitates public participation and dialogue
- It is a dynamic tool which may develop and expand to accommodate and facilitate future developments and changes in the urban planning process.
- It is a tool that may be applied in other European countries.

More information on the Project can be found in the following web page:
What did fail in the past?
Since 1990 the Canton of Geneva has experienced unsuccessful projects in urban planning due to local actors’ oppositions and their utilization of direct democratic tools, such as referendum. The project management in urban planning was often conducted by the Canton, in particular by civil servants that worked with professional urban planners. The municipalities related to the plan were not associated enough and when a new plan was published local authority and citizens often decided to act as veto players. Therefore, nowadays the cantonal government should face to the lack of housing within the legal and participative framework. So innovative measures should be taken to implement urban policy and reach cantonal housing policy objectives.

Bridging the gap between local communities and the cantonal government
In 1996 the cantonal government launched a new concept for elaborating local master plans integrating more stakeholders, in particular municipalities, in order to establish a trust-based relationship between local people including the municipality and the Canton. The last cantonal master plan (2001) mentioned a conversion project of agricultural land into residential use in the suburban municipality of Meyrin. The combination of two issues in the project context - the lack of trust between the Canton and the municipality due to recent bad collaboration and loss of agricultural land that remained a taboo act - led the cantonal government to use for the first time a really cooperative design for elaborating the master plan.

The project “les Vergers”: building an Urban Knowledge Arena?
The master plan “Les Vergers” was designed by the Canton that decided all project’s stages. The project organization set up a consultation group for debating the content of the plan (housing, transport, the environment, etc.), from utopia to the master plan. Then, a steering committee composed by the Canton and the commune managed the project, selected actors for the consultation group that encompassed legislative actors at local and cantonal levels and cantonal NGO’s. Local elected politicians were really interested in participating in this process because they could be informed about what was going on in their municipality. As the steering committee did not set up a information system, participating in workshops was the solely opportunity to be informed. Three professional urban-planners groups were mandated to make urban planning proposals about socio-economic and environmental / transport issues. Studies were carried out to determine potentials of the district and housing project’s impact on the environment (environmental diagnostic). Finally, farmers were not included in the consultation group because of their interest that have been evaluated by the Canton as too much oriented toward the agricultural purpose. However they participated to a special

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8 State of Geneva, 2001, Plan directeur cantonal
working group for determining “qualitative” ecological compensations (e.g. promoting biodiversity, special agriculture, farmer market, etc.) for the agricultural loss. Thus diverse knowledge were integrated in the process: environmental information provided by the diagnostic and urban knowledge produced by professional urban-planners on the one hand, and citizen and local knowledge given by elected politician and NGO’s on the other hand.

Is it innovative?
This great diversity of knowledge produced in such project is innovative in the Canton of Geneva. However it is important to distinguish the process and the product. Integrating stakeholders and actors of civil society aimed at promoting adherence to the master plan but the latter was not much co-produced by civil society. Finally doing an environmental diagnostic at the beginning of the project was also unconventional and demonstrated that urban-planners and environmental scientists have different project management cultures (for environmentalist: all constraints must be defined at the beginning and for urban-planners the first stage of the process consists of utopia planning through scenarios making). Consequently they should learn to work together successfully. In conclusion, this project shows the necessity to work more in a collaborative form to promote a learning process among professional and non-professional actors in order to use better all available information.

REFERRED CASE 7: INTENSIFICATION OF SINGLE-FAMILY HOUSING AREAS – GAINING BUILDING LAND WITHOUT EXPANSION, SALZBURG

The overall aim of the research funded by the Austrian Ministry of Transport, Innovation & Technology was to identify and utilise potentials for higher densities and re-structuring in single-family housing areas built between 1950-1980 requiring renewal. The background to this is the situation that about 70% of the housing stock in Austria is single-family-houses. The project launched an innovative initiative that clearly set out possibilities for optimising, renewing and - by means of organic development - increasing the densities of existing single-family-house neighbourhoods. The thesis is that increasing the density of existing settlements could become a specific form of urbanisation for the early twenty first century, particularly relevant for rural communities and the urban sprawl (“Zwischenstadt”).

Context
Rather than enforcing the further development of new building sites and residential areas, it seems more sensible to pursue a course of (re-)structuring and adapting resources already available and to provide a strategy that, with a view to sustainability, must be regarded as ecologically favourable and profitable. The considerable potentials resulting from re-structuring and increasing the degree of density in existing single-family-housing areas have been inadequately recognised and promoted. This applies, above all, to areas with a housing stock which, in parts, requires renewal and improvement and was built in post-war times up to the seventies and early eighties.

Apart from the fact that in most cases adaptation of these structures must be rated difficult, current social tendencies towards the over-ageing of the population, the increasing number of
single households, the introduction of new models of partnership and employment or enterprise as well as the city’s rising attraction for a lot of young people may involve problems for the future commercial exploitation of these peripheral residential areas. In addition, municipalities increasingly feel incapable of coping with all the follow-up costs of infrastructures.

**Questionnaire: changes wanted:**

![Pie chart showing changes wanted: 36% Reconstruction for new family, 24% Expansion of exiting household, 6% Reconstruction for renting, 33% No change.]

**Content**
The project aims were:

- to identify potentials for increasing the degree of density and for re-structuring the stock in single-family-housing areas that require renewal and for their re-structuring,
- to scrutinise the scope of action and
- to provide examples for innovative solutions that promote optimised utilisation under economic, ecologic and energy-related aspects – in short:
- to gain building land without expansion.

To achieve these goals, a catalogue of instruments easy to be applied was elaborated, which provided the basis for the comprehensive analysis and evaluation of the current constructional and social structures with a view to identifying their potentials for re-structuring and for achieving a higher degree of density. Model solutions and a guide facilitating process presentation were to help the municipalities to evaluate their local structures as well as to develop and implement schemes for intensifying the degree of density.

**Implementation & Results**
Three municipalities in Land of Salzburg were selected for case studies: one was located in the Flachgau region, another one in the Alpine region and the third one in the so-called [continued...]

95
“Speckguertel” of the city of Salzburg (the growth belt surrounding the city with new commercial and trading activities). The selected municipalities which differ in topography and regional general conditions ensure generalisation and transferability of the results. Promoted by the regional Government of the Land of Salzburg, a built-up area comprising 15 to 20 parcels of land was investigated in detail in each of the municipalities selected. They served as examples to elaborate and present solutions for achieving a higher degree of density. The studies were performed at an interdisciplinary level including aspects of regional planning, social sciences and architecture.

Link to References > http://www.hausderzukunft.at/results.html/id2894

**REFERRED CASE 8: INTERGOVERNMENTAL COOPERATION TO PLAN A SUSTAINABLE AGGLOMERATION, GENEVA**

What did fail in the past?
Swiss agglomerations are neither administrative nor political structures but can be described as functional areas, which encompass multiple activities such as living, working, social activities & sport entertainment. Therefore such agglomerations are not regulated as a whole system. Agglomeration is composed by many municipalities, being autonomous in terms of land-use. They drive their own strategy for promoting quality of life in their own territory. Thus, there is a crucial lack of coordination between local authorities which impacts on the environment negatively. In the last 20 years Lausanne west region has been confronted to air pollution caused by this chaotic urban planning and increasing use of private forms of transport.

Building a multi-level cooperation to improve regional quality of life
A cantonal plan to prevent pollution in this region was originally the triggering factor to set up a collaborative management structure called SDOL (“master scheme of west Lausanne”). The aim of this new structure consists of regional planning and developing a collaborative process among stakeholders. This kind of regional master plan is not mentioned in the urban planning law which highlights the innovative process. In 2000 six municipalities of this region made an agreement declaring a building moratorium for three years in order to improve as soon as possible the system of transport. Then, they fund a regional urban planning office that elaborated a master plan with the Canton and the related municipalities. The Canton supported this action giving funds and technical resources.

Is SDOL an urban knowledge arena?
The new established structure can be determined as an urban knowledge arena because it consists of elaborating decision-making knowledge provided by multiple stakeholders such as local public authorities, cantonal services, public transport companies, urban-planners offices,

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9 Some cantons have introduced a jurisdiction in urban planning in order to enable the establishment of agglomeration as a multi-purpose association of municipalities. The main feature is mixed activities that must exist in an agglomeration and the density of population living and working in this area.

10 Schéma directeur de l’Ouest lausannois, website: http://www.ouest-lausannois.ch/
owners, NGO’s and inhabitants. All these actors participate in the process according to the participation ladder (negotiation to information) (Arnstein, 1969). The population has been well informed and consulted (public conferences, workshops, up-to-date website) more than really integrated (i.e. co-production / partnership) in the process; but the project associated a regional urban planning office in order to bring local urban knowledge. In addition, one of the main features of this arena is transparency enabling all actors to get information and take part in consultation. For instance, a neighbourhood association launched a bottom up process in order to organize social activities, to promote locally the project and to give the opportunity to improve the interaction between the core of the project and the local people. It clearly shows the open-minded management that adapts the project according to the demand.

What’s innovative?
Because of the lack of resources, many municipalities cannot afford professional urban planners on their own. Thus, the regional structure enables to mandate a professional project manager specialized in urban planning and to launch many urban studies. As such an innovative project creates enthusiasm among urban planners; a lot of urban knowledge has been produced. Decision-makers are satisfied with the output of this project, which helps to improve the image of the region.

This multi-level governance project is innovative in this canton and enables to work better than in hierarchical setting, which means that municipalities have to set up the master plan and the canton to control its regularity. In fact, the canton and the municipalities work in interactive process: the canton gives technical inputs to the plan and does not just act as an oversight actor. Thus, civil servants at cantonal and local levels manage the project and politicians take decision at the end of each stage. A partnership between municipalities and the canton is established in order to integrate this innovative process in the legal framework later.

In conclusion this process is innovative in this Canton because the new arena successfully links local authorities that were in competition before, in order to promote quality of life in the region. It results a keen interest among stakeholders that enables to go beyond self-interest of the municipalities.

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11 The first studies were organized in the urban competition Europan 7, http://www.europan.ch
5.8 SUMMARY OF CONCLUSIONS IN REGARD TO INNOVATION IN THE CASE STUDIES AND REFERRED CASES

It seems clear that innovation is occurring both at every level, and in every activity of the development industry. It would appear to be endemic to the various processes, with synergy being the byword for knowledge transfer activities. Some clear types of innovations can be seen to emerge from the case studies and these might be characterised as the following:

1. Some Projects are in themselves innovative in intentions and objectives; the shared space Project is a classic example of this. Supported by many, but still controversial as its innovation is has still to be accepted by groups such as the societies representing the visually impaired.

2. Other Projects are not intrinsically innovative, but employ innovative methods to achieve their goals. Examples would be the Poblenou project and the Cuitat Vella projects in Barcelona.

3. Public authority and community partnership, such as are found in the Vienna Guertel Project with the setting up of the ‘Guertel Council’ and parts on the Barcelona case study and in Madrid, offer unique opportunities for generating innovative methods for identifying urban issues and creating processes for responding to their demands.

4. Links between Local Government and the private sector are also methods of combining traditionally different ways of looking at projects in order to create a more unified, and commercial approach. This is found in the Oeras Project in Portugal, where the Local Municipality formed a partnership with a large Industrial Park organisation (Fagus) in order to create a stronger, more effective regeneration project and thereby a stronger and more resilient Municipal authority. This process can also be found in the Kings Cross/St.Pancras Project, where Central government were also part of the partnership.

5. Institutional re-grouping in order to incorporate a wider range of skills, responsibilities and interests, help to broaden the knowledge arena. This process relates to the concept referred to in chapter 3 (in which the basic principles of innovation are discussed). In cases such as at Liège and Geneva, it is hoped that this method will facilitate the finding of a solution for problems out of the new-found synergies they made possible.

6. Creating a large framework of skills and interests under a single coordinating framework in order to address a multi-dimensional, complex urban project as represented by London Kings Cross St. Pancras project.

7. The Salzburg project is different in that the apparent innovation of the conversion of smaller houses into larger is perhaps, more like professional ingenuity, and the real innovation is the choice of this method to increase the accommodation, and thereby the density of this area.

8. An interesting innovation in the Cyprus ‘urbanguard’ project is that they found that by creating indices of planning change, they enabled the public to have a much greater say in planning proposals.
### 5.9 ANALYSIS OF CASE STUDIES AND REFERRED CASES IN REGARD TO THE UKA CONCEPT

<table>
<thead>
<tr>
<th>GOALS</th>
<th>London, Kings Cross</th>
<th>Vienna, Target Area Gürtel</th>
<th>Liège</th>
<th>Barcelona, Poblenou/22@</th>
<th>Barcelona, Ciutat Vella (Santa Caterina)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case studies</strong></td>
<td>Regeneration of two railway stations and its neighbourhood</td>
<td>Political pressure (residents, business community); physical and economic decline adjacent Gürtel; plethora of studies, recommendations at hand</td>
<td>Building of a new main railway; local planning activities considered as subordinated to the railway-system development.</td>
<td>Conservation of Can Ricart factory site (as focal point of alternative development model for Poblenou district)</td>
<td>Regeneration of Ciutat Vella (housing upgrading, new public spaces, new public facilities); gentrification, settlement of foreign immigrants</td>
</tr>
<tr>
<td><strong>Context (political, commercial, professional)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issues addressed by the project/action</strong></td>
<td>Mainly issues of design, planning, project management</td>
<td>Public space, real estate, safety, design, traffic issues</td>
<td>Readjustment of the Local Development Plan in the surroundings of the station.</td>
<td>Appropriate dev. model (knowledge city vs. city to live in). Preservation of industrial heritage.</td>
<td>Neighbours contestation to public project. Design of public space.</td>
</tr>
<tr>
<td><strong>Objectives of the project/action</strong></td>
<td>Upgrading infrastructure, urban regeneration.</td>
<td>Explicit overall objectives (identification of problems, participation of non-professionals etc.)</td>
<td>Promote the station and its surrounding as a coherent ensemble, clear delineation of the intervention zone, develop new planning tools</td>
<td>Preservation of Can Ricart factory</td>
<td>Preservation of public space; self-determined “design”.</td>
</tr>
<tr>
<td><strong>Expected users</strong></td>
<td>(knowledge transfer was not primary aim)</td>
<td>Generated project ideas used for EU funding</td>
<td>Local authorities, all stakeholders</td>
<td>(not reported)</td>
<td>(not reported)</td>
</tr>
</tbody>
</table>
## OUTPUTS/OUTCOMES

<table>
<thead>
<tr>
<th>Case studies</th>
<th>London, Kings Cross</th>
<th>Vienna, Target Area Gürtel</th>
<th>Liège</th>
<th>Barcelona, Poblenou/22@</th>
<th>Barcelona, Ciutat Vella (Santa Caterina)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Types of outputs</strong></td>
<td>Physical investment</td>
<td>Ambivalent: new ideas but use by planning institutions uncertain</td>
<td>Production of tools &amp; methodologies for local authorities / knowledge gaps filled</td>
<td>Municipality integrates aspects of alternative plan</td>
<td>Public space preserved, “professional” design</td>
</tr>
<tr>
<td><strong>Types of knowledge used and their impacts</strong></td>
<td>Specialist knowledge (mainly “applied” knowledge”)</td>
<td>Too early, evaluation necessary.</td>
<td>Large variety of background and expertise</td>
<td>Applied knowledge (creativity, artistic expression) – ultimate impact unclear</td>
<td>Local knowledge (no lasting impact)</td>
</tr>
<tr>
<td><strong>Main success/failure factors</strong></td>
<td>PPPs; tax incentives, financial guarantees, fair share risks, profits between public and private; exclusion of “local knowledge”</td>
<td>Language and cultural obstacles kept certain groups out (e.g. immigrants)</td>
<td>Motivation, trust, peer egalitarian consideration for all actors and propositions</td>
<td>(not reported)</td>
<td>Residents did not speak “professional language”/ use established channels to make them heard</td>
</tr>
<tr>
<td>CRITICAL FACTORS OF SUCCESS/FAILURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group of factors</strong></td>
<td><strong>Factors</strong></td>
<td><strong>London, Kings Cross</strong></td>
<td><strong>Vienna, Target Area Gürtel</strong></td>
<td><strong>Liège</strong></td>
<td><strong>Barcelona, Poblenou/22@</strong></td>
</tr>
<tr>
<td>Rules of the game</td>
<td>1. Explicitation of the UKA goals</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>2. Agreement on success indicators</td>
<td>YES</td>
<td>?</td>
<td>YES</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>3. Specification of roles</td>
<td>YES (contracts…)</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Governance</td>
<td>4. Inclusion of relevant stakeholders</td>
<td>YES (to large extent)</td>
<td>YES (to large extent)</td>
<td>YES (owners, local authorities, experts, NGOs)</td>
<td>YES: in the end, as a result of struggle</td>
</tr>
<tr>
<td></td>
<td>5. Flat hierarchies</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>NO overall Management structure</td>
</tr>
<tr>
<td>Information</td>
<td>6. Relevant knowledge provided</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>7. Understandable language</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>8. Appropriate knowledge-management system</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>
### CRITICAL FACTORS OF SUCCESS/FAILURE (continued)

<table>
<thead>
<tr>
<th>Group of factors</th>
<th>Factors</th>
<th>London, Kings Cross</th>
<th>Vienna, Target Area Gürtel</th>
<th>Liège</th>
<th>Barcelona, Poblenou/22@</th>
<th>Barcelona, Ciutat Vella (Santa Caterina)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>9. Sufficient resources</td>
<td>YES</td>
<td>YES</td>
<td>LIMITED</td>
<td>YES</td>
<td>LIMITED</td>
</tr>
<tr>
<td></td>
<td>10. Management structure</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Subjective</td>
<td>11. Leadership</td>
<td>YES</td>
<td>YES</td>
<td>SHARED</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>dimensions</td>
<td>12. Momentum(^{12})</td>
<td>YES</td>
<td>?</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>13. Respect and trust</td>
<td>?</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>

\[^{12}\] There is an interdependency between leadership, management, goals and momentum of the Arena: these factors can compensate each other (for example, very strong leadership can lessen the need for strong momentum), but all these aspects are needed up to a certain extent for the UKA to work.
## GOALS

<table>
<thead>
<tr>
<th>Referred Cases (projects, actions)</th>
<th>Sassuolo</th>
<th>Geneva</th>
<th>Lausanne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context (political, commercial, professional)</td>
<td>Safety issues, social tensions in Braida neighbourhood with high proportion of migrants</td>
<td>Preparation of a local master plan (Plan Directeur de Quartier) in one specific commune in the Canton of Geneva</td>
<td>Coordination between six municipalities around Lausanne and the Canton of Vaud</td>
</tr>
<tr>
<td>Issues addressed by the project/action</td>
<td>Safety, social cohesion, urban regeneration</td>
<td>Housing shortage and frequent oppositions to urban projects</td>
<td>Environmental pollution, traffic, chaotic land-use planning</td>
</tr>
<tr>
<td>Objectives of the project/action</td>
<td>In-depth understanding of problems, development of policy recommendations</td>
<td>Design of a new neighbourhood with 1000 flats (2300 inh.)</td>
<td>Coordination, integrated view on the area, preparation of a “master scheme of West Lausanne”</td>
</tr>
<tr>
<td>Expected users</td>
<td>Municipality</td>
<td>Canton of Geneva</td>
<td>Local authorities (municipalities), Canton of Vaud</td>
</tr>
</tbody>
</table>

## OUTPUTS/OUTCOMES

<table>
<thead>
<tr>
<th>Referred Cases (projects, actions)</th>
<th>Sassuolo</th>
<th>Geneva</th>
<th>Lausanne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of outputs</td>
<td>New knowledge (on problems and ongoing projects in Braida); intra-domainal collaboration; Recommendations</td>
<td>The local master plan (a legal instrument that binds the local authorities)</td>
<td>Technical studies + a master scheme</td>
</tr>
<tr>
<td>Types of knowledge used and their impacts</td>
<td>(Impact not yet clear)</td>
<td>Mainly professional knowledge, with consultation of interests groups.</td>
<td>Mainly professional knowledge, with consultation of the population. Common knowledge gained.</td>
</tr>
<tr>
<td>Main success/failure factors</td>
<td>Intra-domainal cooperation</td>
<td>Very well planned and organised process / Little public participation.</td>
<td>Transparency, consultation of all stakeholders / No real co-production with the public.</td>
</tr>
<tr>
<td>Group of factors</td>
<td>Factors</td>
<td>Sassuolo</td>
<td>Geneva</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Rules of the game</td>
<td>1. Explicitation of the UKA goals</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>2. Agreement on success indicators</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>3. Specification of roles</td>
<td>YES</td>
<td>YES for the overall management, less clear for the work during the workshops</td>
</tr>
<tr>
<td>Governance</td>
<td>4. Inclusion of relevant stakeholders</td>
<td>YES (experts, not residents)</td>
<td>YES, through representatives (no direct public participation)</td>
</tr>
<tr>
<td></td>
<td>5. Flat hierarchies</td>
<td>YES</td>
<td>NO: the Canton was leading the process</td>
</tr>
<tr>
<td>Information</td>
<td>6. Relevant knowledge provided</td>
<td>YES</td>
<td>YES, detailed info provided</td>
</tr>
<tr>
<td></td>
<td>7. Understandable language</td>
<td>?</td>
<td>YES, although a little bit complex for non specialists</td>
</tr>
<tr>
<td></td>
<td>8. Appropriate KMS</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Management</td>
<td>9. Sufficient resources</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>10. Management structure</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Subjective dimensions</td>
<td>11. Leadership</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>12. Momentum</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>13. Respect and trust</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix A: References and Bibliography


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CERTU (2007) *Public dialogue on plans for interchange hubs. Encouraging users and residents to get involved in these projects*. CERTU


CERTU (2008) *Quiz to conduct an exercise in local future planning*. CERTU


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Nordfors, David (2004) ‘Why we need innovative journalism’ Paper to The First Conference of Innovation Journalism


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www.u-k-a.eu

www.modernization.com.cn/innovation.htm

ec.europa.eu/eit/mission_en.htm

www.berr.gov.uk/dius/innovation/innovation-dti/page11863.html

Appendix B: Professional Organisations and Bodies

International, European and the significant national professional organizations and bodies, are relevant actors in urban development process and urban knowledge management. Their action domain integrates professional practice, urban education, research and policy. All these organizations and networks have a similar organizational structure in which scientific activities, thematic working groups and scientific committees play a major role. Transmission of knowledge to the younger generations is among the main goals, organized in young researchers/academics and students units. Their human resources have a high professional status and valuable experiences and manage to promote “think-tanks” initiatives on the basis of collective membership. Most of their infrastructural resources among which computer centres, information/communication and training centres, libraries and common databases are open to the general public in order to promote a new urban culture. Their informational resources - foundation charters and documents, political documents, professional documents; proceedings and congress papers, specialized publications and periodicals, trace the way forward the future and are oriented towards main target groups – planning professionals, researchers, academics, politicians, students and general public. These organizations and networks operate with a variety of financial resources – membership fees, congress/seminars/workshops participation fees, publishing, advertising, sponsorship and rents, as well as EU funds for individual and joint projects. Valuable emotional resources are the created commitment and engagement, higher level professional and corporate culture, professional ethic standards and respect for the intellectual ‘heritage’.

These professional organizations use a wide range of knowledge management tools, among which different format and scale forums and events for exchange of ideas and creative thinking inspiration, publications, networking, educational activities in variety of forms for different audiences. They promote research activities, joint programmes and projects, study tours and exhibitions. Powerful tools are different competitions and awards, exhibitions and publications, aiming to promote awareness of good practices.

Professional organisations and bodies generate knowledge, transfer this knowledge to their members, constantly upgrading it, provide information and expert advice to decision makers and general public and promote research in the priority areas, celebrating in an appropriate manner the best achievements. Their annual congresses are focused on the most important issues, attracting professionals from all over the world. They run additional initiatives for politicians, developers, urban managers and policy makers.

Most of the institutions, professional bodies and networks examined in the action combine research policy and practice. They apply transdisciplinary approach and they all call for further expansion of cross national research to a more global scale comparative urban studies.
Examples of international associations, etc

1. Association of European Schools of Planning (AESOP) Université de Reims, Institut d’Aménagement du Territoire et d’Environnement de l’Université de Reims, 57 bis, rue Pierre Taittinger, 51096 Reims cedex France
   Email: aesop.secretariat@free.fr

2. Commonwealth Association of Planners (CAP) c/o Royal Town Planning Institute in Scotland, 57 Melville Street, Edinburgh EH3 7HL United Kingdom, tel +44 131 226 1959, fax +44 131 226 1909
   Email: annette.odonnell@rtpi.org.uk

3. Conference of European Ministers responsible for regional/spatial Planning (CEMAT)
   Maguelonne Déjeant-Pons Cultural Heritage, Landscape and Spatial Planning Division; Directorate of Culture, Cultural and Natural Heritage, Council of Europe, F-67075 Strasbourg Cedex, Tel: +33 388 41 2398, Fax: +33 388 41 2783,
   E-mail: maguelonne.dejeant-pons@coe.int

4. COST TUD COST Office Avenue Louise 149 B-1050 Brussels Belgium Tel. +32 2 533 38 00 Fax +32 2 533 38 90
   web: http://www.cost.esf.org/domains_actions/tud

5. ENHR (European Network of Housing Research) Institute for Housing and Urban Research
   Uppsala University P.O. Box 785 SE-801 29 GÄVLE, Sweden Tel +46 26 4206500 Fax +46 26 420 65 01 Email: enhr@ibf.uu.se http://www.enhr.ibf.uu.se/about.html

6. European Council of Town Planners (ECTP) Secretariat c/o Royal Town Planning
   Institute, 41 Botolph Lane, LONDON EC3R 8DL United Kingdom Tel : +44 (0) 20 7929 9494
   Fax : +44 (0) 20 7929 8199 E-mail : secretariat@ceu-ectp.org

7. European Spatial Planning Observation Network (ESPON)

8. European Urban Knowledge Network (EUKN) CRP HT - P.O. Box 144, L-4221 Esch-sur-Alzette Grand-Duché de Luxembourg, Tel: +352-545580-700, Fax: +352-545580-701, E-mail: info@espon.eu

9. EURA (European Urban Research Association) Secretariat Dorothee Böttcher,
   Fachbereich 2 Residenzschloss Marktplatz 15 64283 Darmstadt GERMANY Tel. +49 (0)6151 16-2045 Fax +49 (0)6151 16-4602 Email: eura@pg.tu-darmstadt.de http://www.eura.org/

10. Eurocities Square de Meeûs 1 B-1000 Brussels
    Secretariat: Tel. +32 2 5520888 Fax +32 2 5520889

11. Global Planning Education Association Network (GPEAN),
    http://www.gpean.org/contactus.htm


13. International federation for Housing and Planning (IFHP) Wassenaarseweg 43
    2596CG Den Haag (The Hague) The Netherlands Tel. +31 70 324 4557 Fax:
    +31 70 328 2085 Email: info@ifhp.org

14. International Society of City and Regional Planners (ISoCaRP) Mailing Address: P.O.
    Box 983, 2501 CZ The Hague, The Netherlands Email: isocarp@isocarp.org
    http://www.isocarp.org/

15. The Network of European Metropolitan Regions and Areas (METREX)
    Lower Ground Floor, 125 West Regents Street GLASGOW GP 2334, Tel: +44 (0)129 231
    7074, Fax: +44 (0)129 231 7074. Email enquiries@eurometrex.org
Appendix C: Targeted Keywords

Capacity Building for Urban Transformation
Collective Action and Decision-Making in Mistrusted Democracy
Development Council
Dynamic Planning
Integrated Approach
Integrated Planning
Integrated Urban Knowledge
Interactive Research-Policy-Practice Collaboration
Interdisciplinarity
Interdisciplinary Collaboration
Interdisciplinary Multi-Stakeholder Urban Planning
Irreversibility Management
Knowledge Based Complex Urban Tasks
Knowledge Communication Methods
Knowledge Production
Knowledge Sharing
Local Urban Stakeholder Involvement
Opportunistic Development
Participatory Planning
Problem Solving and Investigation in Urban Development Projects
UKA as Self-Organizing Systems in The Urban Project Development
Urban Development
Urban Governance
Urban Knowledge Arena
Urban Knowledge Gathering
Urban Policy Integration
Urban Project Appraisal
Urban Regeneration
Urban Sustainability
Urban/Spatial Planning Policy
Appendix D: Conferences and Workshops of COST Action C20

1st COST C20 Workshop “Nicosia Divided Urban Area”, Nicosia, Cyprus, 15-16 September 2005 (C20 members)

2nd COST C20 Workshop “Effective knowledge for urban district re-qualification control”, Liège, Belgium, 9 October, 2005 (C20 members + invited local experts)

3rd COST C20 Workshop “Innovating the Territory of the Oeiras Municipality”, Oeiras, Portugal, 21 April, 2006 (C20 members + invited local experts)

4th COST C20 Workshop “Community involvement and participation in local urban development”, Gothenburg, Sweden, 21 September, 2006 (C20 members + invited local experts)

5th COST C20 Workshop “Integrated urban regeneration in the urban district of Pez Luna”, Madrid, Spain, 15-16 March, 2007

6th COST C20 Workshop “Guertelbeirat – the Vienna participatory project”, Vienna, Austria, 20 September, 2007 (C20 members + invited local experts)

7th COST C20 Workshop “Transportation and urban land use planning”, Brno, Czech Rep. 10-11 April, 2008.


9th COST C20 Workshop, “Urban Knowledge Arenas and Active Intermediaries”, Manchester, UK, 11 June, 2009 (C20 members + invited local experts)

Mid Term Conference of COST C20 Urban Knowledge Arena, Vienna, Austria, 21 September, 2007 (C20 members + invited experts)


Workshop reports written by members of the Junior Network are available from all C20 workshops (www.u-k-a.eu)
## Appendix E: Participants of COST Action C20 Urban Knowledge Arena

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
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<tbody>
<tr>
<td>Albert Dupagne</td>
<td>Belgium</td>
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<tr>
<td>Alicja Jarza</td>
<td>Poland</td>
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<tr>
<td>André DeNaeyer</td>
<td>Belgium</td>
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<tr>
<td>Anna Caramondani</td>
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<td>Bernat Goni</td>
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<tr>
<td>Carlo Bottigelli</td>
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<td>Caroline Jacot-Descombes</td>
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<tr>
<td>Cedric Lambert</td>
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<td>Christer Gustafsson</td>
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<td>Christodoulos Demetriu</td>
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<td>Clara Cardia</td>
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<tr>
<td>Daniel Zwicker</td>
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<td>Elena Dimitrova</td>
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<td>Ewa Bialecka-Colin</td>
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<td>Gerald Leindecker</td>
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<td>Guri Krigsvoll</td>
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<td>Hanna Ristisuo</td>
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<td>Hans Orru</td>
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<td>Hy Dao</td>
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<td>Ivan Tosics</td>
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<td>Ulla Priha (DC TUD rapporteur)</td>
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<td>Victoria Simpson</td>
<td>UK</td>
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<td>Vlatko Korobar</td>
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