



Places and Technologies 2015

KEEPING UP WITH TECHNOLOGIES TO MAKE HEALTHY PLACES

Nova Gorica, Slovenia, 18.–19.6.2015

PT2015

BOOK OF CONFERENCE PROCEEDINGS

*A healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and developing to their maximum potential.
Health Promotion Glossary (1998)*

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RESEARCH

Restruktuiranje studijskog programa Arhitekture u program sa integrisanim
Masterom, uskladen sa standardima Evropske Unije



European Grouping of Territorial Cooperation
Gruppo europeo di cooperazione territoriale
Evropsko združenje za teritorijalno sodelovanje

CIP - Kataložni zapis o publikaciji

Narodna in univerzitetna knjižnica, Ljubljana

614:711.4(082)(0.034.2)

INTERNATIONAL Academic Conference Places and Technologies (2 ; 2015 ;
Nova Gorica)

Keeping up with technologies to make healthy places [Elektronski vir]
: book of conference proceedings / [2nd International Academic Confer-
ence] Places and Technologies 2015, Nova Gorica, 18.-19. 6. 2015 ; editors
Alenka Fikfak ... [et al.]. - Ljubljana : Faculty of Architecture, 2015

ISBN 978-961-6823-68-5

1. Gl. stv. nasl. 2. Dodat. nasl. 3. Fikfak, Alenka
279986432

Places and Technologies 2015

**KEEPING UP WITH
TECHNOLOGIES TO MAKE HEALTHY PLACES**

BOOK OF CONFERENCE PROCEEDINGS

Editors:

Alenka Fikfak, Eva Vaništa Lazarević,
Nataša Fikfak, Milena Vukmirović, Peter Gabrijelčič

Nova Gorica, Slovenia



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INSTITUTIONAL CHALLENGES IN THE URBAN PLANNING WATER SENSITIVE PLACES

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ABSTRACT

Last few years cities in Serbia witnessed a number of problems with small urban streams and an inappropriate sewer systems. Traditional approach of solving these problems, using underground pipes and concrete revetments, is inefficient and expensive. Instead, it is increasingly becoming common to use “soft” approach based on the natural processes and use of the existing landscape elements and plants for water treatment. Thus, water becomes the featured element in the urban landscape, the new resource for the creation of public green spaces and improvement of community health.

Planning the city zones surrounding small urban streams and old sewer systems became challenging, as the number of experts from different fields, stakeholders and citizens that should be involved grew. If such approach is to succeed, it is critical to create appropriate institutional framework.

In this paper we are exploring appropriate institutional arrangement for planning of these zones. We are basing our research on the already proven and successful examples from Europe. Finally, we are discussing the institutional constrains and opportunities for implementation of these arrangements in Serbia, taking into account the specific Serbian context, in order to make cities in Serbia more water sensitive.

Keywords: *water, soft approach, institutional framework, urban planning, Serbia.*

INTRODUCTION

City zones situated around small city watercourses and deteriorated sewer systems, often flooded and polluted, became a commonplace in Serbian cities. Resulting from inadequate care and changes in city dynamics – rapid development and

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changes in the market intensified by global issues such as the climate change – they now pose as a serious challenge to the future development of cities.

These zones are usually located in city centers and, due to their position, amount of vacant space and open areas, they present a significant potential for improving the quality of life in central city areas.

Renewal of these areas is a very current issue in Serbia. The modern „soft” approach – return to the natural processes and naturalized problem-solving – is a method increasingly in use due to its comprehensiveness, but it requires a special approach to planning. A range of new, innovative, complex multidisciplinary projects needs to be integrated into existing plans. There have already been attempts, pilot projects, which have either lost many important and innovative characteristics during the planning process, or have not been implemented at all. This is why the main issue is how to go about the planning in order for plans to truly be implemented.

CHARACTERISTICS OF PLANNING THE CITIES’ WATER SENSITIVE PLACES

The modern approach to river revitalization and addressing the problem of rainwater drainage completely changes the concept of regeneration of these areas. Devastated zones with polluted rivers that flood the surrounding areas, deteriorated sewer systems, cultural and industrial heritage, and often low quality residential areas needs to be planned for and turned into the lively and holistically functioning city zones.

Rainwater is not considered a waste, but a resource present in the environment. Water is becoming the central element of the urban environment and important social and aesthetic factor. It can be used for recreational areas, which become new gathering places and contribute to the character of the environment they are situated in. In addition, small decentralized open systems for collection and purification of water use existing plants and landscape elements. They are alive and unpredictable, requiring constant maintenance whose jurisdiction must be regulated as early as during the planning process itself.

This is no longer solely a matter of hydro-engineers, but requires participation of experts from other fields as well, a number of stakeholders, institutional arrangements, and numerous organizations, i.e. a comprehensive approach to planning.

Successful planning of integral urban projects requires political, economic and civic action. In cases when projects include new concepts, a pending question is how to organize and conduct them. The global practice has indicated that the main challenge in implementing these solutions is the inertia of institutions themselves, which are accustomed to the traditional practice, existing routines and cultural



patterns. (Brown, et al., 2013) Understanding the process of institutional transformation is very beneficial for planners, as institutions pose as the critical aspect of everything that the planners do. (Alexander, 2005) It is necessary to understand the necessity of changing the planning structure, i.e. to understand how institutions adjust in order to be more successfully designed (Beauregard, 2005).

A large number of institutions and organizations represent a heritage of a far simpler past and are often too rigid, hierarchical, and sector-oriented to accept the challenges of complexity, unpredictability and change. (Alexander, 2009) This problem in Serbia is very pronounced.

In a situation where Serbian institutions are only beginning the process of decentralization with the existing hierarchical system, it is necessary to plan, implement and execute complex transdisciplinary projects, which pose as a major challenge. Physical and urban planning, within the existing socio-economic and legal framework and in circumstances of the non-functioning market and interest crises for all stakeholders including the government, is trying to accept the challenges brought about by the world practice. (Lazarević Bajec, 2009) This is usually solved by copying the experience of other countries, which proved to be a very unsuccessful practice. Therefore, transformation of the planning process requires a comprehensive reorganization of institutions. (Lazarević Bajec, 2009)

INSTITUTIONS AND PLANNING

Any changes in the model of planning require the adjustment of institutions as the main infrastructure supporting the planning process (Alexander, 2009; Healey, 2005; Connick and Innes, 2001). Institutionalization and organization pose as common ways of adaptation to unpredictability and innovation, caused by limited knowledge and the constantly increasing and changing complexity (Alexander, 2009).

The term “institution” used to include only formal structures, while today this term expands to various relationships created along the formal structures. According to Patsy Healey, there are two aspects to institutions: The “hard” infrastructure of the social structure, and the “soft” infrastructure of collaboration. “Hard” infrastructure serves the function of preventing and modifying the dominant centers of power, while the role of the “soft” infrastructure is in the building of connections which serve the purpose of mutual learning and strengthening of the political, social and intellectual capital, that promote coordination and flow of knowledge, experience and expertise through various links existing on the local level (Healey, 1997).

Today, the emphasis is increasingly shifting from coordination mechanisms to the social constructions and relationships, as well as to coordination without formal procedures. (Healey, 1997; Connick & Innes, 2001) This changes the rational framework which is now abandoning the concept of command-and-control, and



leads to coordination of the process of turning the knowledge and values into action (Healey, 1999).

A common global practice nowadays, when it comes to multidisciplinary, complex projects, is for institutional arrangements to be implemented through informal processes and then work them further towards formalization. Formalization is very questionable when it comes to the subject of project innovation, as it is consisted of the regulated planning processes and there is a good chance of destroying any creativity along the way. This is why the process of institutionalization is very important, and how it later becomes a part of formal procedures.

Experts differ in opinions on the process of institutionalization and institution adjustment. While one group of planners and experts such as Stefano Moroni, Willem Salet and partly Patsy Healey believe that institutions should change gradually through the process of maturation of thinking and awareness - as per principles of evolution - and gradual changes that would follow the established fine links and intellectual capital acquired through knowledge and experience, others, such as Ernest Alexander, believe that institutions should be shaped in accordance with project requirements, especially in cases of complex, multidisciplinary projects.

According to Alexander, institutional design must be present at all levels of decision-making and action, including legislation, policy creation, planning, design and implementation. When it comes to multi-organizational projects, this author believes that it is necessary to design institutions of all levels of management, and coordination within the formal and informal processes (Alexander, 2005). Healey views institutional design as the two interactive levels. The first level deals with the construction of the social, intellectual and political capital, occurring during the development stages. The second level is concerned with the shaping of political, administrative and legislative systems, which structure the context of the local community. The second level is the area suitable for institutional design (Healey, 1997).

Before starting on the institutional transformation, it is necessary to understand the dynamics of urban processes and logic of the upcoming practices, as well as the local context in which the complex urban zones and multidisciplinary projects are being planned. This leads to better results in building infrastructure.

The planning system in Serbia is a complex mixture of the conventional hierarchical planning system with a few new concepts and methods. The first one represents a legacy of the Yugoslav-era socialist system, and is reflected in the rigidly defined and institutionalized formal planning. The later one is the "culture" of a non-formal approach to planning with the existing collaborative model of planning (Lazarević Bajec, 2009). Informal system is active and reflected in a series of new strategies, but it cannot be deemed as functional. For now it only



serves the purpose of educating the planners and members of the local administration, but not the purpose of plan implementation. The relationship between the formal and informal systems of planning is still very unclear.

One of the main problems is Serbia's strong hierarchical system of planning. The hierarchical, command-and-control system is difficult to adapt within complex processes (Alexander, 2009), and this is why the integration of multidisciplinary projects poses as a great challenge.

For the purpose of considering and analyzing new opportunities for the integration of multidisciplinary projects into the Serbia's planning system, the next section outlines some examples of regeneration of the devastated water sensitive areas. The example of the Emscher area and regeneration of some city zones in Malmo offer innovative solutions within the framework of institutional arrangement and organization. These projects showcase a number of technical innovation and attempt to rectify the problems of the formal planning systems through informal processes. Special attention will be given to analyzing the path of formalizing these arrangements.

SELECTED EXAMPLES OF INNOVATIVE INSTITUTIONAL ARRANGEMENTS

Rehabilitation of the Emscher River valley – main characteristics

The first example is a project of regeneration of the Emscher River valley covering the northern part of the Ruhr region. Up until 1980, this was a densely populated and highly polluted industrial region, with large open spaces. After the termination of coal, iron and steel industries, the remaining heritage waited to be rehabilitated. This was the start of the economic, social, and ecological transformation of this area.

The initiative for the regeneration started in 1980. Implementation had commenced on a regional level under the name of IBA - International Building Exhibition, initiated by the Ministry of Urban Development and Housing, with a planning lasted from 1989 to 1999. Basic comprehensive goals were set on a regional level and included the urban development, social, cultural, and environmental measures as the basis for economic change in the old industrial region. The main development projects were grouped into five thematic units: 1) Rehabilitation of the river and its tributaries (10 projects), 2) Emscher landscape park (300km² of open space – 19 affiliated projects), 3) Regeneration of the zones used for coil processing (the "Working in Park" project, 21 projects), 4) Regeneration of industrial heritage buildings (6 projects) and 5) New urban development projects: residential areas and associated activities (27 projects) (Shaw, 2002).



Rehabilitation of the Emscher River valley – institutional organization

IBA Emscher Park attempted to regenerate the region using various forms of innovative institutional arrangements and policies. The intention was to circumvent and overcome the problems of the formal planning process and the existing institutional structures, which had hindered the development of this region for years (Knapp, et al., 2004). The result was a large number of decentralized projects, created for the purpose of Emscher area regeneration.

In the beginning of the process IBA Company was established, which later became the new regional stakeholder. It is a state-operative, provincial unit of the North Rhine Westphalia government, but it is not included in the decision-making structure, hierarchy, and the budgeting law (Furst & Kilper, 1995). The main idea was to use the IBA, supported by the state but not being the part of the formal system, in order to mobilize regional forces and improve coordination between the institution, local authorities and the existing stakeholders for the purpose of establishing the collaborative structures (Knapp, et al., 2004). The interaction between the participants was not defined by the formal rules and posed as a learning process.

State government is supporting the IBA by granting priority funding for their projects. Hence, two models of organization differentiated within the IBA Company: a) decentralized, mutually-coordinated groups of projects, b) coordination “from above” via budgeting (Furst & Kilper, 1995). Groups of projects are separate entities, not functioning within the formal, hierarchical structures of institutions, but which are, nevertheless, not completely regarded as informal processes. Local government and other agencies are responsible for each project.

The role of the IBA management is to mobilize ideas by organizing international conferences and workshops, to initiate architectural competitions, and set quality standards for the Emscher Park regeneration. The main advantage and quality of IBA is a depoliticized procedure of project selection. This has been achieved through the regulatory system of quality standards, rules of competition, and a domination of experts with many years of experience during the project preparation phase.

A comprehensive regional development programme, combining the reclamation of industrial wastelands, ecology, cultural policy, housing, and urban renewal with the promotion of economic development is shaped on the regional level. The main responsibilities of the decision making body within the IBA Company - Steering Committee include the selection of projects to be implemented in the Emscher area, and decision making in relation to the strategy content and quality standards (Furst & Kilper, 1995).



In order to be elected, each project has to satisfy two conditions: to belong to one of the five above mentioned categories of the project guidelines (thematic units) and to satisfy the set quality standards. The striving of experts for innovative projects has created an environment where the most appreciated and rewarded projects contain innovative solutions. Over the course of 60 simultaneously implemented projects, the public had an opportunity to become acquainted with the process of reconstruction of the region and its progress and rates of success.

Malmo – characteristics of the project and context of initiation

Regeneration of Malmo is a success story of modern system of collection, storage and treatment of atmospheric water for the purpose of bringing the devastated urban areas back to life and offering them a completely new and different character.

Due to market changes, Malmo had ceased to exist as a solely industrial city and was left with a number of abandoned and non-functional zones. In addition, due to problems with the sewer system and a constant wastewater overflow during the 1980s, some parts of Malmo were left almost completely deserted (Graham, 2009). Facing these challenges, Malmo representatives and experts started creating a new and clearly defined vision of the city, which in ten years' time was supposed to evolve into an eco-town and a center of knowledge, while directing the policies and measures of development in accordance with the principles of sustainable development.

In accordance with the new vision, a set of initiatives, programs and projects came to life. The sewer problem was addressed in a modern, sustainable manner, using new technologies. It soon became clear that the existing planning system and institutional organization were unable to respond to the demands of innovative projects, and that changes were necessary within the process and institutions responsible for tracking the city dynamics and specific characteristics and requirements of innovative solutions.

Malmo – institutional organization and process of planning

The process of regeneration of the Malmo zones affected by the sewage started with an initiative and great persistence of a small group of experts, who wished to draw attention to the importance of new approaches to drainage and treatment of atmospheric waters. They managed to implement the first project – Toftanäs Wetland Park, after which the local government representatives, city services employees, and citizens themselves began to recognize the benefits and importance of this approach to the problem-solving.

The entire process was accompanied with promotion of new technologies, so the whole project was conducted under the principle of parallel planning, design, and implementation of a number of smaller projects and so called “interactive



implementations”. According to Govert Geldof, the main characteristic of this approach is to determine and define the vision understandable to politicians, investors, and the local community, and then commence simultaneous realization of the planning, design, implementation and maintenance. Experts and other stakeholders work together, learn from each other, and creativity exceeds the limits of design and also depends on stakeholders involved in other phases of the project. Large projects are divided into a number of smaller ones and are implemented during the different time intervals, enabling the possibility to learn from the made mistakes, which could not have been foreseen or anticipated in advance (Geldof, 2005). In this way, the local population is gradually introduced and prepared for the final version of the project, with opportunity to fully understand the advantages of these systems seeing an example of a particular, implemented project. This approach provides great potential for change and improvement of solutions during implementation.

A number of public services were included in the process of regenerating the Malmo devastated areas: Malmo Planning Authority, in charge of planning, Malmo Public Works, in charge of parks and urban greenery, traffic and maintenance, Malmo Real Estate Authority which takes care of the property and the Malmo Environmental Protection Authority – responsible for environmental protection (Stahre, 2008). The project initiator and the main stakeholder was the company Malmö Water, part of the regional organization VASYD formed by the municipal services for water and sanitation of four cities in Sweden. In addition to the public services, a number of stakeholders and citizens took part, who were beforehand informed on the new approaches through pilot projects. Some stakeholders became partners in implementation and maintenance, and the citizens actively took part in the process and offered a range of innovative solutions that were later implemented.

Cooperation of these departments was not a common practice, so the whole project was partly an informal process. Forming of a shared vision was a new step for public services. Likewise, it was necessary to establish a detailed and clearly defined agreement on participation in the financing of the project during the planning, implementation and maintenance phases, as well as the clear division of jurisdictions during the monitoring and maintenance, even before the project development. The objectives were changeable and the process flexible, which enabled alterations and improvement of solutions during the implementation of pilot projects. Cooperation of a large number of stakeholders, multidisciplinary nature of the process, and frequent meetings enabled the establishment of new connections and intellectual and social capital, formed over the period of ten years through informal processes.

CONCLUSION AND TIPS FOR RESPONSIVE PLANNING

We analysed ways of implementing the innovative concepts in the process of renewal of urban water sensitive places through examples of regeneration of



Malmo and the Emscher River valley. Both examples offer new models of planning, i.e. new institutional arrangements created within a specific context.

A common characteristic for both is implementation of projects during the planning phases. In case of the IBA Emscher Park, the entire project consisted of a large number of smaller projects, many of which were simultaneously implemented. Planning methodology varied between them and the planning itself carried very few strategic components. Malmo utilizes common planning methodology, except that the smaller pilot projects are being realized over the course of the entire project, for the purpose of enhancing and improving of the process. Objectives kept changing, making the planning process of Malmo very flexible. Plans are adapted on the grounds of new information.

The planning process in Malmo was implemented as part of the formal planning and management. Unlike the IBA Emscher Park, Malmo does not practice the formation of new institutions, but uses the existing ones. The new cooperation and coordination has been established, with special emphasis on division of budget and jurisdictions. After ten years of informal planning and institutionalization of new methods, this process has commenced. During the year 2000, new policies defining direction of development of this area of water management were established. Later on, due to high demand for these types of projects, city created directives for rainwater management, planning and design. The new directives were officially adopted in 2008 and they outlined jurisdictions of each city service, defined by the clear documentation and responsibilities for each phase of the planning and implementation, in order to avoid confusion and misunderstandings (Stahre & Geldof, 2003). Nowadays, the process of planning the water sensitive places in Malmo is a formal part of the planning process. The only remaining question is whether it retained a high level of flexibility it used to have.

IBA Emscher Park also represents an example of informal planning. However, as in the case of Malmo, there is an indirect control by the means of funding provided by the state. On the other hand, this way of venture financing, which enables access to state funds, provides high degree of autonomy. Autonomy is further increased with the establishment of the special institution - IBA Company and possibility of project control though defined quality standards. Also, the presence of a large number of experts and independence from authority of each city lends IBA the ability to implement a highly depoliticized process (Furst & Kilper, 1995). In addition to funding, everything else is organized within a region, where new venues of communication, cooperation and exchange of ideas are being established.

What makes the IBA particularly successful is the informality, as well as the fact that it was viewed as a temporary thing – a series of workshops, and not as a planning process. However, IBA is actually a mechanism for the institutionalization of the new procedures. The resulting networks transcend hierarchy and formal departments and have a role of removing the institutional



barriers towards social change (Knapp, et al., 2004). IBA managed to institutionalize innovation. What is considered responsible for IBA's success is that it was set as something specific, and not a part of a common practice, which has resulted in a different attitude of stakeholders on regional and local levels. Those are some of the reasons why IBA did not rush to the formalization process, as it would have, in that case, lost some of its most important qualities.

The institutional environment differs in every country and depends on many different factors. It is therefore difficult to speak of experiences that can be fully applied to local practice. These findings and examples may serve only as ideas and incentives for organizing the process of regeneration of water sensitive places in a local setting.

What are the messages of these examples and can they be considered as the role models of good practice for Serbia?

Despite great differences in the systems of planning, institutional organization, decision-making processes, and regulations between Serbia, Germany and Sweden, some observations and results may be relevant for Serbian circumstances.

Recent projects initiating urban change in Serbia stem more from the present political moment and opportunism, than a genuine intention to try out the new patterns or introduce innovations into the practice of urban renewal and development. These processes are highly politicized and often lack the protocols of competitions and quality standards, which was the case in the Emscher area. However, informal practices occur that support local initiatives in smaller towns, mostly in cases of small power plants or initiatives related to energy efficiency. These processes offer quality patterns and institutional arrangements that need to be adopted.

In area of this study's subject there are no such initiatives, and the existing good examples do not provide basis for a transfer into the fields of regeneration of the devastated zones around the small urban watercourses and deteriorated sewer systems. In this sense, examples of good practice from other countries are very valuable. The examples presented here suggest the need for understanding the importance of these projects and setting them up on a priority budgeting list, as well as for creation of new opportunities for "soft" strategies and local initiatives. And as it occurs in other areas, e.g. the role of NGOs in the political arena, openness would enable participation of other stakeholders, whose knowledge and experience would have the capacity of creating good solutions. As stated by Charles Landry – it is necessary to view the urban challenges from different angles and perspectives not necessarily belonging to conventional disciplines dealing with the cities. This would initiate the change of planning procedures and their institutional arrangements, as well as the strengthening of evaluation techniques and relationships between urban planning and other disciplines.



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