

REUSE OF INDUSTRIAL ZONE ALONG THE RIVER DANUBE IN BELGRADE: VISIONS, PLANS AND PROJECTS

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Abstract

The paper is an overview of the planning framework for the location of the ex-industrial zone along the Danube river in Belgrade, a view of individual designs dealing with this location and presentation of competition winners for redevelopment of the zone and mega project for Port of Belgrade. The aim of the research was to indicate the potential of the formed solutions which, following each other, in the form of taking over the best ideas, formed a solid base on which future solutions and proposals for this location could be based as well as critical analyses of their possible positive and negative impacts to the development of the city. The subject of this paper is to consider the possibility of recycling industrial zone which would be te milestone for initiating regeneration of the coast, in order to create a new identity of the city. Belgrade's waterfront which stretches along the historical city core and has got extraordinary geographical position on the confluence of two rivers, is one of the most valuable and attractive places in the city. However, this location is mostly devastated and neglected today. Current state shows inadequate and degraded facilities, along with abounded industrial zone, railway tracks and heavy traffic. Industrial Zone, which was the key element of the identity at the end of the 19th and beginning of the 20th century, finds new meaning in the modern city as cultural, historical and social value of the society, representing at the same time the collective memory of its citizens. The result of this research is establishment the recommendations for future work on regeneration of the Belgrades' waterfront. Despite the numerous plans and projects there are still no adequate solution and imbalance between ambitions of (the city authorities, professional associations) and current economic capabilities (over-scale, not consider phased implementation) is one of the main problem for implementations of the plans and projects.

Keywords: *reuse, industrial zone, Belgrade, Danube's riverfront, planning framework.*

Introduction

The contemporary cities tend to increase the intensity of valuable urban activities and remake their identity in accordance with the latest architectural and environmental trends (Giddens, 2009). The devastated or neglected areas, underdeveloped sections of urban tissue or waterfront areas are in the focus of this intention. The well-known globalization recipe, which included establishment of the spaces emphasizing global initiation, recreated urban identity and a preferred excitation and inhibition logic (Stupar, 2009), has been gradually upgraded by new tools, visions and ideas implemented on different levels and scales.

Industrial zone along the Danube's riverfront in Belgrade, which was a key element of urban identity during the end of the 19th and the beginning of the 20th century, is now abandoned. The initial development of Belgrade industry is linked to the period of the first half of the 20th century. The industrial area was positioned in the central area of the city, primarily due to efficient transport infrastructure. As opposed to 29 industrial facilities registered in 1900, Belgrade had 206 registered industrial facilities in 1941. (Petrovic, 2006). The map of spatial distribution of industrial facilities shows that most facilities were oriented toward the central city zone, followed by area around the banks of the rivers Sava and Danube, while only few facilities were oriented toward southern, peripheral sections of the capital.

After the end of World War II, which was also characterized by a loss of one half of all industrial facilities, the period of establishing the socialist regime brought important novelties to the industrial sector of Belgrade. In addition to the processes of planned economy and nationalization, the industry sector was also formed by the process of homogenization of individual facilities. In fact, most facilities that had developed in the period between the two World Wars were more of an artisan and services nature, while in the period after World War II pooling and enlargement of production was present, as the means of homogenization of individual locations and production facilities (Petrovic, 2006). Thus, the total number of facilities registered in 1950 was 90, which is considerably less than the pre World War II number. The spatial distribution itself, remains almost unchanged, with an increased percentage of facilities along the river banks of central municipalities.

The period of the 1960s was characterized by a constant growth of industrial production, of approximately 14% annually (Petrovic, 2006), with several attempts at displacing facilities to suburban areas followed by attempts at forming special industrial zones, in a new process of homogenization of industrial facilities. The period of the 1970s and 1980s is characterized by a process of displacement of factories from central city areas, but also by the opening of new facilities in those same zones, leaving the process of displacement without an adequate epilogue. It is exactly in this mentioned period that the Yugoslav economy, as well as the economy of Belgrade, were losing contact with innovations and processes of modernization of industrial production facilities. This fact, along with the general processes of disintegration, which can on a global level be registered in the case of the 1980s in the area of the former Yugoslavia, contribute to a reduction of the level of productivity and the rate of the country's industrial growth (Petrovic, 2006).

The period of war events and international sanctions, during the 1990s, considerably increased the negative trend in the industrial sector. Constant mobilizations, the breaking down of markets into smaller segments, as well as global lack of efficiency of the industrial strategy, accompanied by the serious problem of corruption, resulted in a drastic decrease of industrial production of 20%. Thus, the negative trend which started in the 1980s, culminated in the NATO bombing, which was to a considerable extent oriented toward industrial facilities in Serbia and Belgrade (Petrovic, 2006).

Those trends have got implications on urban planning of Belgrade city and metropolitan area. A several urban plans and studies which include regeneration of Belgrade's riverfronts have been done during the last three decades. Modern development strategies for Belgrade (Regional Spatial Plan for Belgrade, General Plan for Belgrade 2021) are fully oriented toward growth and redevelopment of riverfronts toward the new city centers (Djukic at all., 2010). Although, the unbonded area of Belgrade's riverfronts is fully covered with all scales

of plans, from regional to local, and the process of privatization of the area is finished at the beginning of 21st century, there are still no adequate results for solving the problems.

Belgrade`s riverfronts in urban plans

According to the General Plan for Belgrade, industrial development is based on a minimum growth of employment, on transformation and modernization of the industrial sector, as well as on dislocation of industrial facilities from central city municipalities. The strategy for urban development of Belgrade implies, among other things, accelerated development of cultural institutions and parts of the city with a pronounced identity, balanced ecological and economic development, while from the aspect of industry, development implies the defining of new zones, where locations in the central zone are regarded as inadequate (General Plan for Belgrade 2021). Objectives of future development of industrial zones are: revitalization and modernization of existing capacities and development of new capacities; minimal increase of employment in the industrial sector; transformation from industrial capacities to business and housing capacities, removal of industrial buildings from central zones and securing locations for a sustainable industrial development. Recent plans and projects were created with the goal of rehabilitating and reconstructing the industrial areas in the central Belgrade municipalities. Implementation of these plans is sporadic, and connected to significant disputes about land - ownership (Djukic at all, 2014).

Projects for locations on the left bank of the Danube (Marina Dorcol and the port Luka Beograd) imply displacement or abolishment of industrial facilities. Instead of these facilities housing and commercial zones were planned. The location of the port Luka Beograd is presently the subject of dispute between city authorities and the owner of private company Luka Beograd, relevant to land ownership and the right to rehabilitate the site. One of the rare examples of successful revitalization of industry facilities is the area of Beton Hala, which was regenerated from warehousing facilities to a mixed – use facility, with cafes, discotheques, restaurants and shops. The issue of implementing solutions, which implies modern state strategies for the development of Serbia and Belgrade, remains open, because these very strategies were only recently defined. Recent interventions in industrial zones of central Belgrade municipalities are slowed down by insufficiencies of the legal framework (Djukic at all, 2014).

Urban plans and strategies for Danube`s riverfront in Belgrade

The most valuable locations for future development of waterfront along historical urban core of Belgrade are Sava amphitheater and Danube port. Port of Belgrade is located on the right river side of Danube, and covers about 200 Ha. It was founded in 1961, and sold in 2002. Until the present days, It is a part of devastated and abandoned industrial area.

Project for regeneration of industrial area along Danube waterfront has been done by Daniel Liebeskind in 2008 (Figure 1). The main goal of the project is sustainability. Although project includes large urbanization (it is a new city designed for 100.000 people), the large public park is planned along the riverfront. The entire project includes number of different venues that will ensure function and quality of the neighborhood. The water basin inside the Port will be used as a marina with a variety of contents provided in the buildings surrounding it. The library and Performing Arts Centre are also planned. The contents of the neighborhood should attract users to come to this area, in an attempt to return this riverfront to its supposed function. The new marker – Icon Tower at the end of waterfront Plaza, 60 to

70 floors high will dominate the waterfront and entire city. Distribution of the neighborhoods in the Master Plan leaves the possibility for their development in phases. Since each neighborhood can function as a separate unit, the complex can be developed according to the needs and time parameters. Neighborhoods themselves are flexible and can be adjusted to future requirements in terms of purpose, size and building height.

The Luka Group, owner of the site Port of Danube, has taken an innovative approach by requesting input from experts in many fields. Planning authorities, traffic consultants and architects from Belgrade; Studio Liebeskind from New York creating Master Plan for Belgrade's riverfront; Gehl Architects from Copenhagen; Aristotle University in Thessalonica; the University of Belgrade; and others have all been asked to submit their proposals for the new development. Town Planning Institute of Belgrade, one of the members of a team, is a public town planning company, founded by the Assembly of the City of Belgrade in order to elaborate planning documents concerning construction and development of Belgrade. It organizes and takes part in expert public forums, workshops, seminars, including public presentations and public insight. Smart Futures, another member of a team, is an international consultancy specializing in sustainable development and corporate social responsibility for governmental, banking and corporate clients. Smart Futures made two studies for Luka Beograd entitled "Strategic options for the company of Luka Beograd". The purpose of this study is to define strategic options which will help developing initial Master Plan with respect to investors and all interested parties. Furthermore, this study formed mutual basis for analyses which precede master planning, carried out by consultancies Smart Futures, Colliers and Scott Wilson. In accordance with the best international experiences Smart Futures organized workshops in Milan and Belgrade in 2007. The aim was to reach consensus about important issues regarding development and revitalization of Luka Beograd's industrial heritage.



Figure 1. Present situation of Danube`s waterfront and Liebeskinds` project for future development

Besides planners, advisers, land owners, citizens, and public institutions, the Municipality is one the stakeholder. The development of the project is very conditioned with infrastructure growth and some of the area could even start development soon with existing one, but the rest of the project should be followed by substantial infrastructure investment on the side of local government. Relations between stakeholders are formal, horizontal within the city and vertical between different scales.

The location of the port Luka Beograd is presently the subject of dispute between city authorities and the owner of private company Luka Beograd, relevant to land ownership and the right to rehabilitate the site. One of the rare examples of successful revitalization of industry facilities in Belgrade's riverfront is the area of Beton Hala, which was regenerated from warehousing facilities to a mixed – use facility, with cafes, discotheques, restaurants and shops. Another successful example of regeneration of industrial zone along a riverfront is artistic district SOHO BG, which was given to international affirmed artists (Figure 2.). Adaptive re-use of former “Srbijatex” building has been done in 2010. The quarter was

inspired by SoHo districts in London and New York and has potentials to grow into the most exclusive city parts, rich in cultural and artistic contents.



Figure 2. Adaptive re-use of former “Srbijatex” building

Conclusions

Despite the fact that Danube's amphitheater has been in the focus during the last decades (several competitions international and national, planning decisions defined in General and Detailed urban plans, urban projects and construction plans for specific buildings), we still do not have adequate results. Imbalance between ambitions of the city (authorities, professional associations) and current economic capabilities (over-scale, not consider implementation in phases) is one of the main problems for implementations of the plans and projects as well as an absence of integral solutions for urban re/development.

Considering the Danube's theatre only as a mega project (one author, one idea, one project) makes a difficulties to the implementation. Solutions that focus on large-scale investments are usually less effective development strategies than small-scale investments. Furthermore, the scale of the project might cause serious difficulties during implementation, but also after completion because the lack of participation of all interested parties always has very negative effects on new spaces and their acceptance by the public. Also, for solving such a complex problems, local communities need support from national level. Considering the fact that Serbia is still in a period of transition, it is important that process of land-use transition is clear and transparent, which could decrease the obstacles during the process.

Rehabilitation and re-use of vacant, boarded properties in the neighborhood maybe needs more investments at first but brings more value on the long term goals – increasing

neighborhood's quality of life and the value of the property and improving the image of the city.

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