SECTION 4

LATEST ACHIEVEMENTS IN ENGINEERING, ECOLOGY AND ARCHITECTURE

RESEARCH COMPONENTS OF SPORTS AND LEISURE COMPLEXES

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One of the important features of the life of urban areas population in the developed countries is a growing importance of sports leisure. Government and social institutions note a positive impact of sports on health, as well as the importance of sports for social cohesion. Researches on healthy lifestyle emphasize the importance of a regular balanced physical activity. Therefore, sport, as a special form of physical activities, is becoming a normal weekly or monthly exercise for a growing number of people. Sports require a special organization of space for different types of activities and a regulated number of participants. This leads to the formation of a variety of sports and leisure complexes (SLC) in the structure of the city having the form of outdoor areas, buildings, or their combination.

The purpose of this work is to determine the components of the study of SLC for the development of such complexes in the cities of Ukraine.

The analysis of spatial organization of sports and leisure complexes in European cities of such countries as the Netherlands, Germany, Denmark, Portugal, Spain showed that the studied objects occupy significant areas (Fig. 1). Thus, in Amsterdam the complexes occupy the territory of 0.54 and 3.86 hectares, in Berlin - 0.66 hectares, in Copenhagen - 0.16 and 0.5 hectares, in Valencia – 2.27 hectares. All cities have a distinguished sports policy at a municipal level, which defines the conditions for projecting sports and leisure complexes [1].

In the cities of the post-Soviet countries, a significant number of sports grounds were projected in the structure of residential areas in green territories of a limited use. However, as the result of the concentration of the existing urban building-up during the development of the city, many outdoor sports grounds feel the "spatial pressure".

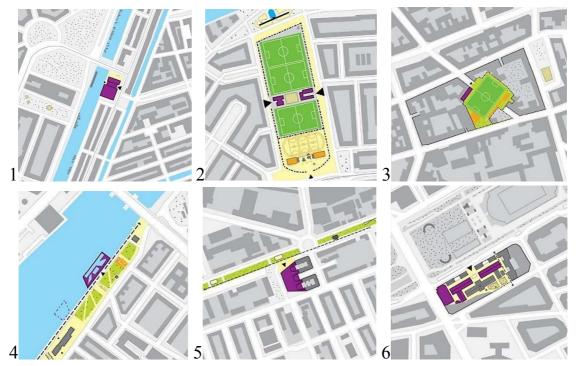


Fig. 1. Examples of SLC [1]:

- 1 Swimming pool and sports center Het Marnix, Amsterdam, the Netherlands;
- 2 Sports area with a skate park Olympiaplein, Amsterdam, the Netherlands;
- 3 Sports ground Auguststrasse (Kleine Hamburger Strasse), Berlin, Germany;
 - 4 Public baths in the Grand Canal harbor, Copenhagen, Denmark;
- 5 Sports and Culture Center Prismen (The Crystal), Copenhagen, Denmark;
 - 6 Sports and Culture Center La Petxina, Valencia, Spain.

Another factor causing the reduction of open green spaces in residential areas is the increase in the number of parking spaces for private cars. This leads to the relocation of sports and leisure activities to city parks. New sports grounds and facilities are appearing there. For example, in recent years in Kharkiv, open type SLC have been built in the following parks: in Sarzhin Yar, which is connected by a bike path and a pedestrian path with Gorky Park and Forest Park; in Youth Park; Victory Park; Shevchenko Garden; Kholodnohirsky Square.

It should be emphasized that the placement of SLC occurs spontaneously, without a preliminary plan at the city and district levels. Qualitative characteristics of many of the complexes often do not meet the requirements of the urban development conditions and needs of the population. A visual analysis of these objects revealed a lack of their proper functioning and planning organization, including planning links with the surrounding areas, a low level of architectural and design solutions, and urban landscaping. These problems can

be solved through a collaboration of designers, architects, representatives of the city government and the public.

A positive example of solving the problems of effective formation of SLC in the structure of the modern city is Copenhagen (Denmark). The efforts of various professionals are consolidated in this city, which allowed to realize a new and innovative approach to the spatial organization of sports constructions in the city environment. The authors of the project considered sports, leisure, and urban development in close interrelation. A multipurpose sports complex in Copenhagen's developing area, Erestad City, is a cluster of timber objects that diverge from the central point forming different functional zones. The building is located alongside with the famous Mountain Dwellings complex. In comparison with its neighbor, the sports complex designed by NORD Architects appear as a multipurpose construction designing a vibrant urban space, creating new communities and social sustainability within the giant structures of the big buildings and long boulevards of Erestad City [2]. Another good example is the KU.BE House of Culture and Movement in Frederiksberg (Denmark) designed as a coordination center for the local community, as well as for a larger area of Copenhagen. The project combines the functions of a theater, sports and learning into a united space where body and mind are activated and the connection is set up regardless of age, ability or interest [3]. Thus, innovations and experiments in the development and realization phase of projecting become possible due to new knowledge, inspiring sports examples and specific means of sports and leisure activities organization.

Based on the conducted analysis, the components of the study of sports and leisure complexes are identified. Firstly, due to generalization of best practices, the main trends in the development of sports and leisure activities are to be identified. Secondly, it is necessary to determine the typological characteristics of the studied objects, which are dependent on a variety of urban conditions of their location (neighborhood unit, and/or urban green spaces of public use), as well as the needs of the population. Thirdly, it is necessary to define the principles and develop techniques for architectural and urban planning of sports and leisure space, creating an attractive and safe design of this important type of public space of the modern city.

References:

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