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Spatial Planning of Sports Infrastructure

1. Introduction

Completion of the research project took a few yeaSlovenia. Planning of sports in space was carried out, as part of the Spatial Plan of the Republic of Slovenia, with the aim that free-time activity should gain the role and meaning given to it by the constitution and law. The Network of Sports Centres is very important for the Spatial Plan and for Municipal Spatial Plans, as well as the cartographic material which defines the hierarchy of towns in Slovenia and their role for the development of sports in space.

The legal formal basis is important for the shaping of a start-up point and aims for the sports infrastructure planning, as defined by law, drafts and recommendations of the EU. Some of the start-up points were also shaped on the national level [1].

2. Situation Analysis and Evaluation

The situation analysis and the spatial development trends are important strategic elements for planning sports. It's very important to perform the situation analysis in a manner where the methodology can be compared with previous time periods and with analysis in other countries of the EU. Compa- ritivity of information in time and space gives this analysis the character of relevance and actuality. For quality analysis and situation assessment the most important basis are cartographic and a computer supported database, that can be kept updated and can assess any situation in any particular cross-section of time.

To reach this aim it was necessary:
- to prepare the methodology for written, numerical and spatial evidence of sports spaces, buildings and exercise grounds with pertaining equipment;
- to prepare the situation analysis and to spatially define the sports areas, centres, buildings and exercise grounds;
- to build a database for the above spatial categories intended for sports activities for the whole Republic of Slovenia

The collected information relates to: the name of the municipality in which the sports space is based, the name of the map to the scale of 1:25000; the consecutive number and name of the sports area, building or ground, the cipher of the exercise ground from the register, the number of similar grounds or lanes, the address of the sports place, the cipher of the settlement from the Cipher of the Settlements of Slovenia, the definition of major user and co-ordinates of the centroid of the sports space.

The suggested methodology has taken into consideration the collection, sorting, assessment and presentation of the information about sports spaces, buildings and exercise grounds in the built-up environment, that consist of covered and un-covered sports buildings and other special sports buildings.

Separately listed was the information on sports spaces, buildings and exercise grounds that serve education (A), top- class sport and recreational sport (B), tourist organisations (C), army (D) and healthcare (E).

The information collected in the municipal areas was suitably categorised and cartographically processed to be shown as the indicators. The processed information in this way shows illustratively the situation of sports buildings and grounds in individual municipalities and regions of Slovenia. The material is specially processed to show both the needs of all population and separately the needs of the population active in education. The presented maps with indicators clearly show 'white and grey patches' in space - showing the areas where the government should invest heavily in order to reach harmonic spatial development of sport.

3. Development tendencies in the environment

Analysis of the development aspirations in the area of sports planning in Slovenia shows some similarities with other, economically more developed countries and also some peculiarities typical for sports development in Slovenia.

The share of privately owned sports centres, buildings and grounds in Slovenia is much smaller compared to EU countries.

The Republic of Slovenia doesn't have high quality sports centre facilities for training of top-class sportsmen of Olympic or similar standard, though it has a relatively well developed network of sports buildings aimed at primary school education. The situation is worse in secondary schools and is completely unsuitable for University level of education. Characteristic is the shortage of more demanding (specialised) buildings that could be used for international events and could facilitate organisation of international competitions (sports halls, stadiums).

In Germany and Italy the government still greatly participates in the development and building of sports centres, buildings and exercise grounds and it encourages, above all with standards and norms, their standardisation, rational construction, use and maintenance.

The development trends in the area of sport and recreational activities are:
- changing patterns of working hours and free-time;
- radically changing sports and recreational habits of Slovenians;
- more recreational areas are needed in 'green-belt' areas close to big towns;
- individual forms of spontaneous recreation that supersaede the organised sports participation are increasing;
- new forms of sports are emerging all the time;
- development of a traffic system that provides better access.

Spatial problems of the existing sports and recreational buildings and areas are as follows:
- there is a shortage of sports and recreational buildings and areas in Slovenia, the layout is uneven, its structure and hierarchy incorrect.

- a shortage of sports buildings and grounds is evident, particularly for the specialist sports, in the countryside and for water sports;
- big sports areas of seasonal nature are still based in the town centres, where they occupy valuable space;
- some of the sports buildings and areas are worn out and badly equipped and are in need of renovation;
- traffic access and parking are mostly badly and unsuitably organised;
- owneship and the maintenance of sports and recreational buildings and areas are mainly not settled (or managed properly).

The following problems are occurring in dealing with sports and recreation in planning documents:
- despite the growing needs and number of users the share of sports and recreational areas is decreasing in comparison with other activities
- in planning documents the sports and recreation areas are shown together with the green areas, despite the different method of planning, different content, inner structure and use
- potential recreational areas in nature, especially near the waterways are not aimed at sports and recreational activities.

The trends analysis for the development of sports centres must be comparable with the functionality of the settlement in a region or the Republic. Suitable to the rank of the settlement, it should also be equipped with modern sports buildings and grounds. That's why in the preparation of The Network of Sports Centres for comparison the network of settlements in Slovenia was taken into account. The changed functional role of the place or settlement fundamentally influences its role in the spatial planning of sports.

4.The purpose and aims of the project

The main purpose of project was to gain professional basis for execution of the spatial planning of sports on the national, regional and local level, and also to monitor the situation and simultaneous direction of the anticipated and wanted development.

The purpose and aim of the project didn't interfere with market oriented sport, because for this segment it's necessary to render the principles of flexibility, spontaneity, demand and offer. The systematic approach to planning and design of sport and recreational areas in Slovenia have the following aims:
- to find and reserve on a long term basis enough space, necessary for new sports and recreational grounds in Slovenia, in the existing areas of daily recreational activities
- to assure the structure and layout of sport and recreational centres in a sense that all inhabitants of Slovene towns will have daily access to basic sports and recreational activities (sports minimum)
- assurance that the recreational areas are accessible throughout the year
- to assure spatial conditions for the activities of specific categories of the population (youth, women, elderly, disabled)
- assurance of spatial conditions for daily recreation in the nature
- assurance of spatial conditions for sports education in secondary schools and for university students
- assurance of spatial conditions for the development of top- class sports and the organisation of international competitions.

All of these aims should be realised by taking into account the needs of the population, spatial characteristics, the current situation and existing planning documents, following European criteria, standards and norms.

The goals can be achieved if the following principles are taken into consideration:
- intensivication of the sports and recreational grounds in built-up areas
- transformation of some areas for the use of top-class sports only and in this way provide a solution to the spatial shortage
- design of the new recreational centres in the so-called 'natural environment' in the influential areas of the cities
- formation of the 'green route' aimed at linking-up of bigger agglomerations and recreational hinterland (walking paths through greenery, cycling routes and paths).

5. The Planning Methodology

The methodological basis for spatial planning of sports and recreational buildings is the application of the Steinitz-Ro- gers model of planning. The mentioned model reconciles **human needs and aims** with the capabilities of **the society and state** on one hand, and **the supply, attraction** on the other, as well as the capacity of a place for recreation in nature. If one pole of the model is defined by the sports buildings and grounds in built-up areas, then the other pole is defined by the recreational buildings and grounds related to conditions of the natural environment.

For better understanding of sports space it's important to define its individual elements. Definition is very important since it compares the information inside Slovenia and also compares the situation and development trends with EU countries. The standards and norms are directly connected to the **competition area** ensuring normal and secure execution of a game or competition and is also the basis for calculation of efficiency and gravitational influence of the sports buildings. The gravitational radius or influence areas for sports buildings and grounds to a great extent depend on the density of population in the particular area; the higher the density, the lower is the influence area of the sports space and vice versa.

The sports space can be divided as follows:
- **playing area (PA)** - an area where game and competition rules apply
- **security area (SA)** - next to the playing areas for secure progression of the game or competition
- **competition space (CS)** - necessary for execution or organisation of a competition or recreational event CS = PA + SA
- **accompanying internal area (AIA)** - next to the competition space for organisation of a competition (service areas for the active participants of the game, equipment and preparatory work, without areas for the spectactors)
- **functional areas (FA)** - necessary for the game security, execution and organisation of a competition FA = CS + AIA

- **accompanying public space (APS)** - necessary for human and aesthetic positioning of the functional areas in space, without the parking areas
- **planning area (PLA)** - necessary for secure game execution or for the organisation of competition in human or aesthetic environment PLA = FA + APS

6. The Network of Sports Centres

For the Spatial Plan of the Republic of Slovenia it was necessary to prepare a Network of Sports Centres for the needs of top-class sport, sports recreation and sports education and also for the general spatial planning of sport.

For spatial planning of sport on the level of The Spatial Plan of the Republic of Slovenia it is necessary to take into account the following:
- sports centres on the local, regional, state and international level for the needs of top class sport
- recreational centres on the local and regional level
- school centres on the local and regional level
- the university sports centres

The National Level

On the national level, in accordance with the defined role of the individual planning levels and design, for the purpose of the national spatial planning, the network of regional and national sports centres (centres for top-class sports) is defined as follows:
- regional sports subcentre (gravitation of 30,000 - 75,000 habitants)
- regional sports centre (gravitation of 75,000 - 150,000 habitants)
- national sports subcentre (gravitation of 150,000 - 300.0 habitants)
- international sports centre (gravitation over 150,000 habitants)

The needs of sports recreation are defined as follows:
- regional sports centre (gravitation over 50,000 habitants)

The needs of school sports education are defined:
- regional secondary school sports centre (gravitation over 1,200 students)
- university sports centre

The Regional Level

The needs of sports development on the regional level for **top-class sports** are defined as:
- municipal or local sports centre (gravitation 10,000 - 30.0 habitants)
- regional sports subcentre (gravitation 30,000 - 75,000 habitants)
- sports centre of higher rank, as per spatial plan of Slovenia

The needs of **sports recreation** are defined as:
- municipal or local sports centre (gravitation 10,000 - 20.0 habitants)
- autonomous local recreational sports centre (gravitation 10,000-20,000 habitants)
- regional recreational subcentre (gravitation 15,000 - 50.0 habitants)
- recreational centre of higher rank, as per spatial plan of Slovenia

The needs of **sports education** are defined as:
- local secondary sports centres (gravitation upto 1,200 students)
- secondary schools and university sports centres of higher rank, as per spatial plan of Slovenia

The Local Level

On the level of the Municipal Spatial Plan the following centres are defined for **top-class sports:**
- municipal or local sports centre (gravitation 10,000 - 30.0 habitants)
- sports centres of higher rank, as per Spatial plan of Slovenia

On the level of the Municipal Spatial Plan the following centres are defined for the needs of **recreational sports:**
- municipal or local recreational centre (gravitation 10,000 - 20.0 habitants)
- recreational centres of higher rank, as per Spatial plan of Slovenia and Spatial Plan of the region

On the level of Municipal Spatial Plan the following centres are defined for the needs of **sports education:**
- local secondary school sports centres (gravitation upto 1.200 students)
- secondary school and university centres of higher rank, as per Spatial plan of Slovenia and Spatial Plan of the Region

For planning on the level of Municipal Spatial Plan the indicators, criteria, standards and norms are abstracted from the guidelines and recommendations used for the preparation of The Spatial Plan of the Republic of Slovenia.

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Explanation

The article summarises basic findings of the research project 'The Spatial Planning of Sports', prepared in 1998, commissioned by the Office of Slovenia for Spatial Planning and the Ministry of Environment and Physical Planning. At the same time it is an announcement of a new publication with the same title.

Endnote

[1] The basic documents:
Directives of the EU in the area of sports direction and planning of sports buildings The Constitution of the SLOVENIA The Law on Protection of the Environment The Law on Management of Settlements and Other Spatial Interventions The Law on Natural and Cultural Heritage The Law on Stimulating Development in Demographically Endangered Areas in Slovenia The Law on Local Communities Proposlas for the Sports Law
Proposals for the National Development Programme for Sports The Law on Associations
Guidelines of The Spatial Plan of the Slovenia with regard to the development of settlements and the functional role of settlements in Slovenia

Standards and norms for spatial planning of sport, that are already in force in developed countries of the EU Standards and norms for spatial planning of sport, that are already in force in Slovenia

Tables and illustrations:

Table 1: *Statistical indicators about Slovenia - census 1995*
Table 2: *Indicators on shares of sports areas per inhabitant and pupil*
Table 3: *Comparison of sports afcilities and exercise grounds in 1975, 1982/83, 1991 and 1995* ***Table 4:*** *Comparison of the 'Golden plan' (Germany) from 1980 and the situation in Slovenia in 1995* ***Figure 1:*** *The share of all covered and uncovered sport buildings and exercise grounds per inhabitant in Slovenia in 1995*
Figure 2: *The structure of sports and recreation spaces* ***Figure 3:*** *Application of the Steinitz-Rogers model for planning of sports and recreational buildings* ***Figure 4:*** *Sport in School - Secondary Schools, the hierarchy of sports centres*
Figure 5: *Sports recreation, the hierarchy of recreational centres*
Figure 6: *Top-class and quality sport, hierarchy of sports centres*
Figure 7: *Top-class and quality sport, influential areas of the sports centres in Slovenia*

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Aleš ŠAREC

Building of the Slovenian Urban Village along Public Transport Routes

1. Introduction

The settlement of Slovenia is becoming more and more dispersed and inconsistent with the public interest, as well as the principles of sustainable development. Nor it is in compliance with the directions adopted 25 years ago by the Resolution on Major Purposes and Aims for Urban Planning defining that in the future new urban areas, production and other facilities should be developed mainly in concentrated settlements, connected by public transport, while revitalisation was to be limited primarily to the existing building stock. There are many reasons for the dispersed development of residential buildings and other structures in such a small and valuable territory as Slovenia. The same applies to the wasteful consumption of natural resources and aimless functional organisation of the settlement in our space. Such cases have been excellently presented and analysed by Mr. V. Drozg and others: undeveloped real reality market, deficient land policies and regulatora mechanisms for directing urbanisation and urban management, urban design focuses on placement of particular buildings, rather than designing wider areas, incompatibility of taxation and financial policies, etc. One of the most important reasons is the "automobilization" of Slovenia and traffic policy, that allows unlimited use of individual cars.

The main objective of this article is to present recommendations/guidelines and best practices to manage these trends, more effectively and consistently, in compliance with the policy instruments of spatial development for settlements and traffic, on the basis of proven facts about the impact of mo- torisation, i.e. the effect of the use of cars on the settlement, and the impact of spatial development in Slovenia on the use of cars, and all related consequences resulting from the (un)sustainable development of Slovenia.

2. Automobilisation and the urban village

Since personal cars started to be used as a rather inexpensive and main traffic mode for the purposes of commuting, "the delivery" of children to schools and kindergartens, shopping, and other uses, it is no longer essential to live in a town or settlement just to be in the vicinity of a work place, school or department store etc. A personal car and a relatively well-developed road network allow us to live anywhere in the countryside providing good conditions to travel quickly and comfortably, to run errands to the nearest town or settlement. The number of people building houses on a plot inherited or purchased at a very low price outside the town has been increasing. If the documents are not obtained legally, then the construction is completed without a building permit since the liberal policy of spatial planning and market economy permit this irregularity. A personal car makes a dream come true to the majority of Slovenians (approx. 85 %): to live in their own house in the country, far from the hustle and bustle of a town. On the other hand the decrease, by the same percentage, accounts for the development of towns and settlements that have been foreseen by the polycentric development policy of Slovenia as the centres and main pillars i.e. the generators of a more co-ordinated economic and social regional development. As a rule, these towns and settlements have stagnated in development and growth. However, in their place, the gravitational rural hinterland is being anarchically urbanised. Slovenia is becoming an "urban village" or a "rural town".

Some believe this does not cause any harm since the living conditions are better than in town, and the landscape is not "ugly when dotted with nice houses". However, analyses based on common, public interest and demand indicates that the consequences of such a laissez-faire development of dispersed settlements and towns may be fatal (Drozg). With a dispersed settlement not only valuable land/space, energy and time (for commuting), unpolluted environment (due to traffic pollutants, inadequate facilities of communal infrastructure and long transmission lines) are lost, but also valuable potential for the development of a socially effective network of urban centres as well as development poles of individual regions.

The tendency of people to live in their own house in the countryside, or in the suburb, and not in the town itself (especially not in blocks of flats or multi-storey buildings) will