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## APPROACHES TO THE MASTER PLAN AS A COMPREHENSIVE STRATEGIC DOCUMENT

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**Statement of the problem.** A new approach to General plan of the city in a complex strategic design in conjunction with the system of settlements is studied.

**Results.** A methodology is proposed for the development and implementation of the Strategic program of the Russian city in which the General plan of the city is part of the program, acquiring new interdisciplinary content and guarantee the implementation due to their permanent development and joint implementation.

**Conclusions.** Deficiencies are identified in the existing methodology of designing master plans of Soviet cities inherited the new Russia point to the need for a new approach to General plan of the city and its Metropolitan area and new direction in Russia, i. e. Strategic planning. The implementation of the principles of Strategic planning requires a different approach to professionals. A model of mechanisms of professional urban and agglomeration management is suggested.

**Keywords:** general plan, city, urban system, agglomeration, strategic planning, urban management.

### Introduction

A general plan of a city has been and is a basic project since the reign of the prominent forerunner of urban management, urban legislation and state design of cities – Russia's strongholds - the Empress Catherine the Great [2] Its legal foundations date back to 1762. A general plan boomed in the 1930s when the USSR saw an unprecedented urbanization growth [1, 6]. Over 70 years there have been about 1600 cities designed. In the new Russia general plans of cities, methodology and methods of their development have mainly been city mayors' responsibility who are elected for 4 or 8 years [16]. Architecture in the advent of scientific advances has lost its millennial central role in structuring cities.

These days world's cities are being developed and served by the total of 23 sciences and general plans are being replaced by comprehensive strategic plans of not only cities proper but their agglomerations as well.

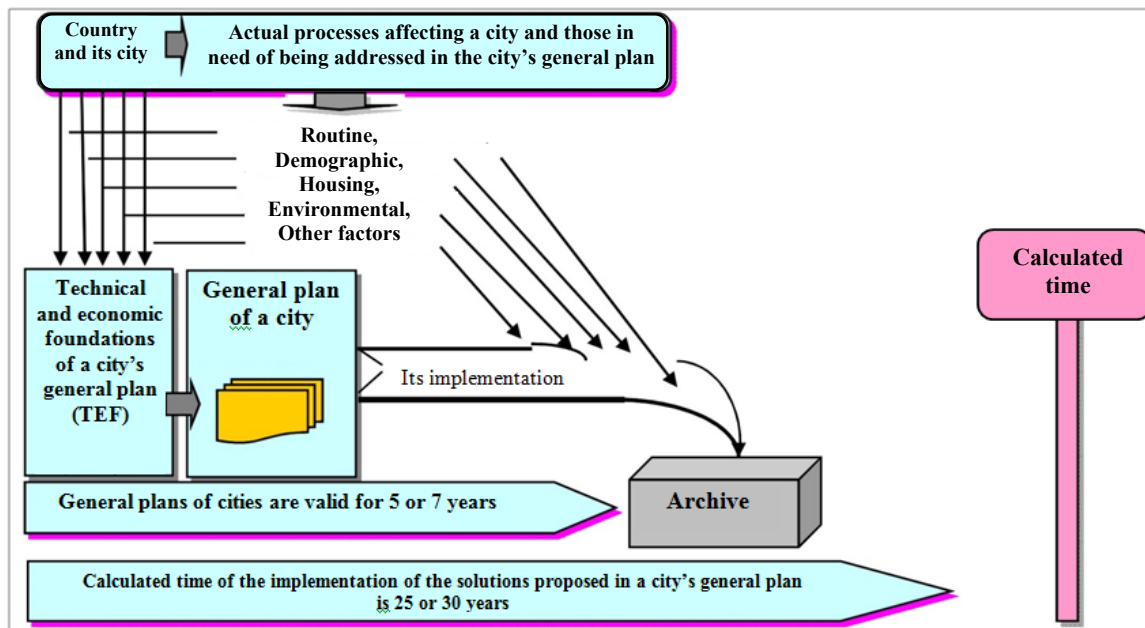
### **1. Advantages and disadvantages of the USSR's and new Russia's general plans**

Soviet cities are a special category. They made history with their unprecedented construction growth and paved the way for a special type of a general plan, its methodology, development and implementation amongst a quite unique historical setting. Historically and politically we have the following:

- rigid monopoly of the industrial state management where corresponding USSR departments were the major decision-makers and resource-holders;
- the USSR State Construction Department was the leader of the planning policies that since the 1950s have dominated the methodology of the spatial arrangement of cities and applied science, i.e. architecture and urban construction;
- urban self-management founded by Catherine II has gone. Residents of cities are no longer involved in managing urban environments and effectively true self-government;
- the authorities used to be largely manipulated by the policies of the Soviet Communist Party pertaining to the industrial departments;
- cities were and are designed with no consideration of ethnic lifestyles and perceptions of urban environments;
- the strategy proposed to act upon was 25 years or 30 years long with periods of 5 years for overseeing the primary relevant plan in settling the working class rather than in implementing the project (Fig. 1) [8].

On the one hand, the strategic time of a city's development included its future spatial arrangement as well. On the other hand, the primary tactic solutions set forth in the general plan were dictated by the ongoing problems throughout the assigned five years' period that were determined by the current issues that had to be addressed at this particular point of a city's development.

These solutions were to be adhered to and strategic aspirations and issues were postponed for an indefinite future and were then either corrected or neglected altogether. The reality was that urban construction science did not engage in studies of the contradictions between the strategy and tactics in a city's development. The situation remains the same these days as no new methodology, methods or procedures are emerging.



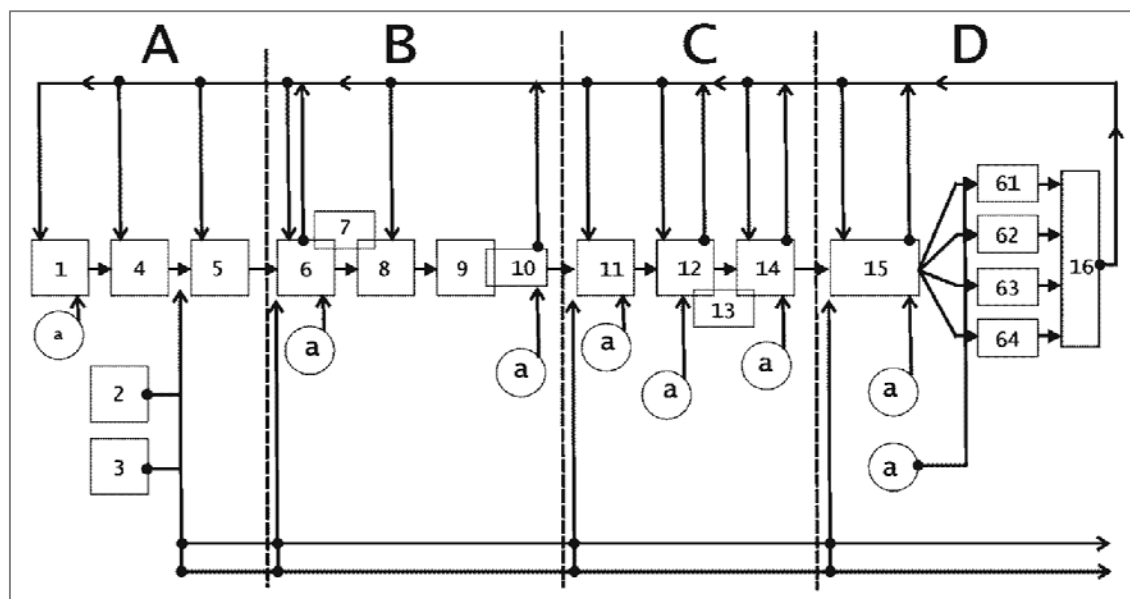
**Fig. 1.** Legacy of the methods of development and implementation of the general plan of a Soviet city that was retained in the new Russia

## 2. Foreign experience of city planning

The general plan of Paris took another path of development. In 1930 in their pursuit for a spatial solution for their capital city, French people completed their work only 40 years later (in 1982) using the seventh project [19]. As a result, a new type of both planning, designing and implementation emerged into a strategic program. Later on the British people had the same endeavor but it was Margaret Hilda Thatcher who interfered. Then the Belgian Catholic University (Leuven) completed this new type of planning after they got a team of British professionals on board and called this a method of optimizing solutions (DOT) [21]. The results of the work were published around the world including the USSR (Fig. 2).

The author as someone who has been involved in the development of the General Settlement Scheme in the USSR argues that the USSR cities lack a consistent scientific and theoretical approach. In 1976 a team of scientists launched an in-depth study of the above experience and concluded: Russia as a country of unique land and political and ethnical civilization should come up with a science of its own to sustain the city growth. The key concepts should be as follows:

- elaborate development of the unique environment for the peoples of Russia as the starting methodology of the humanities that address urban development [13];
- identification and establishment of those activities and sciences that contribute to the future of the cities presented in the model (Fig. 3) [5, 11, 13].

**A — preliminary stage:**

- 1 — preliminary statement of a problem,
- 2 — existing data on a planning object,
- 3 — external conditions (factors),
- 4 — characteristics and analysis of the elements of the object,
- 5 — suggested tendencies of the development of the objects (extrapolation process)

**B — stage of standardized solutions:**

- 6 — standardized goals,
- 7 — statement of a problem,
- 8 — standardized conditions for the implementation of the goals,
- 9 — suggested outcomes of the prediction,
- 10 — selection of the major parameters

**C — stage of strategic solutions:**

- 11 — strategic goals,
- 12 — analysis of the alternatives,
- 13 — evaluation of the legitimacy of the alternatives,
- 14 — selection of the optimal alternative

**D — stage of the working solutions:**

- 15 — development of the programs and their implementation,
- 16 — information on the implementation of the program and its working solutions (management blocks)

a — participants of the stages of the program development (researchers and developers),

b1, b2, b3, b4 — blocks of rapid solutions (management blocks)

**Fig. 2.** Procedure model of the development strategy of an urban construction system – method DOT (method of optimizing solutions)

Ways of shifting from the administrative and industrial to the professional development of cities, villages and their systems were presented at the International United Nations Conference “Habitat II” (Istanbul, 1996) [9]. The idea underlying the strategic planning is that it consistently addresses a number of issues facing development of cities and their systems [10]. Largest cities have already embraced the development of the strategic programs. While analyz-

ing the programs for 18 cities developed as part of the Federal Program “Development Strategy for the Russian Federation up to 2020” published in 2011, we can conclude that the methodology and methods are identical and indicative of the planning proposed by the USSR Construction Department and neglect the approaches and methods developed globally and set forth for Russia and Moscow in particular [8, 10, 14].

<b>THE PROGRAM SHOULD INCLUDE EIGHT TASKS AND SUBPROGRAMS</b>	
Task:	<b>DELIMITATION OF MANAGEMENT OBJECTS:</b> identification of <u>actual</u> city boundaries, its agglomeration, their zones and structures as <b>objects</b> of the overall urban and agglomeration management
Subprogram:	<b>DESIGNING SELF-MANAGEMENT STRUCTURES IN MICRODISTRICTS AND QUARTERS</b> of cities and villages
Task:	<b>REORGANIZATION OF THE INSTITUTIONAL MANAGEMENT STRUCTURE.</b> They should be formed following the solution of the two previous tasks but not the one by the mayor as wonderful as it could be
Task:	<b>PROVIDING PROFESSIONALISM IN URBAN MANAGEMENT.</b> Possible solutions: arranging training of the staff
Subprogram:	<b>DESIGNING AND RECREATING A RESOURCE FOUNDATION OF A CITY’S DEVELOPMENT.</b> Includes promotion of the city and its role domestically and on the global scene; strategy of the city’s interaction with corresponding institutions; residents’ involvement into making it a more livable place; comprehensive policies concerning land and object use
Subprogram:	<b>DESIGNING OF THE URBAN LEGISLATION OF THE CITY – THE CITY CODE.</b> Each city should have its <u>own</u> city code and legislation as part of it
Subprogram:	<b>DEVELOPMENT AND IMPLEMENTATION OF THE CITY’S STRATEGIC PROGRAM.</b> It includes a permanent prediction of the city’s development rate; development and implementation of the city’s general plan
Subprogram:	<b>DESIGNING THE INFORMATION BASE OF THE AGGLOMERATION AND CITY.</b> Includes the development of the working and subsequently integrated models of the city including agglomerations and conurbations
<b>KEY CONDITION:</b> all the tasks and subprograms are developed and implemented while being mutually corrected and controlled by the city’s mayor till the program is <u>completely</u> implemented	

**Fig. 3.** Program of designing the foundations and mechanisms of professional city and agglomeration management (approved by the Organizing Committee of the International United Nations Conference “Habitat II”)

### **3. City's general plan as an integral part of its strategic development program**

A strategic program as a new foundation of development of cities and their agglomeration that have become the major form of the settlement of Russia's peoples is presented by the following model.

1. The object of a strategic program of development of a large city should be its agglomeration even if it is still in infancy as well as a conurbation: conurbations of Moscow, Yekaterinburg, Rostov, Vladivostok, Samara and 32 others.

2. A strategic program:

- does not eliminate but opens up a variety of opportunities in the state, regional and urban management at the stage of transition in the development of the new Russia,
- presents the city with the role that it plays domestically and internationally,
- secures the city's stability.

3. The key condition and advantage of a strategic program of a Russian city is that it takes on the interindustrial prediction and interdisciplinary provision of a city's development. It should strike a balance in addressing the development of a city's basic industries.

4. A strategic program should address a combination of social, ethnical, economic, environmental, political, religious and planning issues. These goals should be crucial throughout all the stages and procedures of a program but not declarative factors. If a city, subject of the Russian Federation or Federation is in need of an environmental or any other program, it should rely on the corresponding stages of a strategic program.

5. The key condition of a strategic program is permanent development of strategic, tactic goals and their implementation as a single technological unit. This makes the entire program more flexible as deadlines are dependent on each particular goal and priority.

6. Strategic and tactic goals are not homogeneous but commonly dichotomous. A strategy and tactics are normally in the "goal — means — goal" disposition. This approach is missing in "Development Strategy of the Russian Federation to 2020" and 12 developed strategic programs of urban development – federal centres. These programs are analogues of the Construction Department of the USSR.

7. Each stage of development and implementation of a program is achieved exclusively by a series of subsequent procedures that lead up to the development and implementation of a program and urban management development continuously and permanently.

8. A strategic program is an integral part of designing a professional management of cities and agglomeration (see Fig. 3) [10—13]. Its methodology and organization were developed as a

result of 20 years' work (1976—1996) to implement the General Scheme of the Settlement in the USSR and presented to the organizational secretarial board of the United Nations "Habitat II" that recommended that it should be called a program of regeneration of urban and agglomeration management. Existing urban management is in fact administrative, authoritarian and adaptive to state management.

Professional management involves scientifically grounded statement of goals and tasks, their implementation by means of resources and mechanisms that are described in the procedures.

9. Information provision of strategic programs and urban management in Russia as inherited from the USSR is not advanced, thus one of the stages of a strategic program is to arrange the development and implementation of an extremely integrated system of indicators to ensure there is a strategy of a city's development. Ways of creating them as a fundamental issue of the 21<sup>st</sup> century were elaborated by the world-famous system researcher William Ross Ashby [18, 20].

10. Management of a city's development, development and implementation of a strategic program of its development will be viable provided there is a basic industry — informationology — that originated in Russia. Applied information science cannot provide the development of the indicators for a city's strategic development as an interdisciplinary object. Informationology included in the basic industries of a modern city is becoming a fundamental science that is capable of providing a sustainable development of modern cities and their agglomerations as concluded by the forerunners of the field academicians V.E. Yevreinov and I.O. Yuzvisihin [3].

## Conclusions

1. The historical analysis of designing cities in the USSR and modern Russia showed the limits of a general plan as the major document regulating urban development. A large modern city particularly one that formed an agglomeration cannot be developed sustainably using a general development plan, which was proved by similar examples of Rome, Paris, Athens, London and Brussels where a lot of years of effort and dedication were spent in pursuit of a new methodology of development and implementation of a general plan. These fifty years led to a new type of predicting, designing and implementing — to a strategic development of cities and their agglomerations as a whole. The strategy of the methodology of a strategic program of urban construction developed in the Central Scientific Research Institute of Pedagogics with the participation of the author reported at the [9] was implemented globally in Seoul (South Korea).

2. A multi-aspect approach to a city is gaining importance in strategic planning and thus there is more pressure on those in charge of predicting and planning. The author and colleagues have come up with a program of professional training of new specialists who are involved in the management of a complex system of cities and agglomerations on par with architects. Therefore there is a growing need to create universities for strategic planning training.

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