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The broad scale of the problems in the spatial development in central European space is a big challenge for spatial planning practice, theory and education. New tasks and new frameworks, brought by current development of the formation of knowledge based society, require the implementation of new approaches, new methods and new instruments in the spatial development management, new understanding of the role of planning. Those challenges are addressed by SPA-CE-net, whose members present their papers in this issue of TERRA SPECTRA Planning Studies.

Spa-ce.net is well established Network of Spatial Research and Planning Institutes in Central, Eastern and South Eastern Europe. Initial meeting was held in December 2006 in Dresden at IOeR and was a result of various cooperation and collaboration activities of the educational and research institutions focusing on spatial planning and regional development in Central and Eastern Europe. The network promotes unique values related to spatial development and is focused on integrated (horizontally and vertically) socio-cultural-economic-ecological courses of action that overlap the focus on traditional land use planning.

The effort of the Spa-ce.net research work is to contribute towards sustainable development and the processes of economic, social and cultural integration in Europe as well as towards its territorial cohesion with the interdisciplinary research and education emphasizing the integration of landscape-ecological, economic, social and technological aspects. Research and the proposals, focused on optimising of spatial structures contribute to the fulfilling of the criteria of sustainable spatial development to balancing the regional disparities and at the same time to preserving cultural and ecological diversity, to improving the quality of life and to strengthening of social cohesion in Europe.

Spa-ce.net network develops its transnational, transregional and crossborder dimensions by forming partnerships between spatial research and planning institutes. Sharing of common vision, the development of trust and an interest in cooperation, the motivation and mobilisation of relevant people and the encouragement of research activities are the primary long-term targets.

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Prof. Maroš Finka

Note:



Prof. Maroš Finka, PhD. from the Institute of Management, Department of Spatial Planning and Management at the Slovak University of Technology in Bratislava (SK) has been elected as the President of AESOP at the AESOP Annual Congresses 2019, held in Venice in July 2019.

Association of European Schools of Planning (AESOP) was founded in 1987 planning to gather planning schools in the EU member states that adhere to the curriculum of planning and promote the dissemination of planning at the European level. to ensure that planning education in the European member states follows the core curriculum, giving due account to local and national differences in cultural and institutional setting. AESOP is member of Global Planning Education Association Network (GPEAN).

Prof. Maroš Finka, PhD will act as Vice-President of AESOP for one year in the period of July 2019 till July 2020, and then in the period of July 2020 till July 2022 as AESOP's President.



Borislav Stojkov

REFLECTIVE PLANNING AND POLICY MAKING IN SEE COUNTRIES

Abstract:

In a wider context of the reflective planning issue, this article is dealing with the problem of strategic planning in transitional South East European (SEE) countries and its relation to policy making. The dynamic change in post-socialist political system, with planning as important political instrument and developed professional practice, has generated a new relation between planning and policy making. Standing in their ivory towers, and communicating only administratively, reflections from policy making to planning, and vice versa, are at the low level. That is one of the reasons for non-efficient plan implementation and for the low position of planning generally. The plan in majority of SEE countries is often used as an instrument for promoting developer's, sector or group interest, with investor and his demands in the main role. Corruption and bribery are some of strong tools for satisfying appetite of (foreign) investor. Some difference is with EU member countries of SEE, with planning in slightly better position, and the rest of them where planning is in the subordinated position. Policy makers have no trust in planners and don't understand their products (plans, strategies, studies, etc.), and planners do not grasp policies and, in many cases, political ideas that have to convert into a planning form. The neo-liberal concept, without a new value system established in a transitional society, makes a large gap between policy making and planning. Reflective planning exists in formal administrative form only. In the second part the author defines a set of key messages suggesting substantially different mode and methodology of open and reflective planning, with more efficient bridge between policy making and planning, necessary evidence-based decision making and planning proposals defining, within transparent and participative procedure. The article is the result of long experience of the author, and has been supported by answers and statements of eminent planners from 7 SEE countries.

Key words:

strategic planning, policy making, reflective planning, communication, SEE countries

Introduction

The policy making is delivering one of crucial reflections to planning, and opposite, planning could have significant reflection to policy making. That is in theory. In practice, the power of planning to influence policy making is noticeably less than the power of policy making with its impact to planning. In his introductory letter to SPURS newsletter Bish Sanyal pointed that technocratic planners did not want to disrupt the political status quo in which they enjoyed political power [1]. It means that planners would rather stay in their ivory tower and remain untouchable by policy making. The history of planning proofs that relation between planning and policy making is life-long problem for both activities. The main consequence is that planners and policy makers often don't understand each other. This makes plans ineffective, and policies as an obstacle for generating planning ideas and innovative concepts.

On the other hand, policy making is treating planning as an obstacle for their plan-free activities. The deregulation in liberal political system is one of clear attempts to diminish significance and power of planning. On the other hand, new European and World documents support planning as one of the mightiest instrument for providing territorial sustainability and resilience. The actual global document points that out of the 150 countries with national urban policies (NUP), 57 (38 %) have a specialized urban agency and 83 (55 %) have a general national planning authority to oversee the policy. This underlines the importance of co-ordination mechanisms at national level to successfully implement NUP [6]. The new European document on science and policy making points two conflicting issues: (a) science (read also: planning) is more important than ever, due to critical global challenges (safety, dynamic transition, demographic and climate changes, immigration), and (b) growing general public distrust to experts (planners) due to lack of clarity and openness of their documents [2].



The planning is at the crossroad, at the European tier in general, and over its transitional countries in particular, since at the beginning there was widespread belief that democracy and free market would bring the solutions to all urban problems [3]. Afterwards, the stunning number of development strategies and plans compared to poor ex-post results, is launching a huge dilemma in these countries about the sense of planning in general. The globalization with the concept of neoliberal radicalism has dramatically rushed, threatening to expel planning from the practice of unprepared transitional countries, due to: (a) hampering the market economy and developers with their performances, (b) blaming it for poor practical outcomes, and/or (c) connecting it to the socialist ideology. The problem is generally growing in transitional societies and their new political ideology.

Three lines in European transitional countries are in permanent, usually latent confrontation or, even worse, ignorance; professional, governmental and public. Planners are preparing plans as concrete outputs, with weak governmental and a bit more administrative/institutional, and formal public participation. Government in some of the countries has its daily priorities and current policies confronted with long-term planning vision and ideas (more active in Bulgaria and Romania under EU auspices), administration is strictly following legal duties, and public is ignoring long-term and mid-term strategies and strategic plans, confronting its actual private interests to general public planning guidelines. Some planners in Romania estimate that planning is becoming more and more a matter of private interest [7].

The final result after planning procedures and a plan approval is oblivion or total ignorance during the implementation of particular strategies or plans, and decision making.

The planning situation in SEE

The countries of South-Eastern European (SEE) sub-region have typical situation nowadays. In Albania one needs a strong public sector in order to do good planning. However, this depends on the state's ability to collect funding through taxation, and channel that funding to where it is needed after some rational deliberation. All that is lacking at present due to corruption and major political interference in planning processes.

The comment on Bulgarian planning situation is a bit more optimistic, with some exceptions: Sometimes there is more or less pressure on planners from decision makers to meet new investor needs. This is largely explained by the willingness of local authorities to provide suitable zones for new investors in view of the development of the municipality. Romania is the country where transition is ahead of other SEE countries but the situation with planning is similar:

Planning is in a regression process due to the lack of interest from authorities and the lowering of the professional level. Planning become more and more a matter of private interest. The public (general and professional) has a weak relationship with the plans and the planning process. Their role in the process is rather formal. On the other side in Moldova, small and rather lagging country, planners are trying to fight political structure with professional authority:

The national and local political factor is strong and often influences the views of the urbanists (ex: modern buildings in the historic center of Chisinau, transport arteries in reserved and sensitive areas). Urbanists, however, are sufficiently socially active and they associate with each other to promote balanced urban planning or to fight unauthorized building in parks and historical areas promoted by some local political authorities. In Croatia voluntarism in policy making is evident: The plan making is primarily matter of public interest, however under a pressure of private interest that varies in continental and Adriatic parts of Croatia.

Profession of planning is autonomous to a certain extent during production/elaboration of spatial plans until its adoption. In its implementation, when investors occur they usually try to put pressure on decision makers to make necessary changes in spatial plans. In Northern Macedonia situation with planning follows the principle of deregulation, i.e. legislation succumbed under the pressure of private interest: Private interest dominates the initiatives for making and adopting urban plans.

The worst consequence has been the frequent intervention in the regulation (the Law on spatial and urban planning, together with the corresponding bylaw, had 3 changes in a year, for two, or three consecutive years). Finally, Serbia, with a very long planning tradition and rather developed planning skills, is in position where the neoliberal concept is dominating in an extreme form. Plan making in Serbia became more bureaucratic than it used to be in its initial phases. Contrary to its aim, procedure of plan adoption and its amendments can easily support private interest which is opposed to public interest, although there is a lot of other opportunities to make better balance between private and public interest... Investors can be very aggressive and besides their needs, there are often their wishes which are not always based on needs, but on requirements which can be an issue of discussion. Planners are critical with priorities focused to private investors and public interest in a shadow: Planning in Serbia today is in an unsettled situation. It falls between an expert/careful attitude towards space and settlements and a strong pressure from investors and political leaders in the direction of realizing their own needs. This (un)equal relationship of forces in the planning process leads to serious conflicts on the ground. There are less and less spatial plans, while the urban plans are mainly significantly subordinated to particular interests. So, planning is generally marginalized, except when they do not disturb the realization of, hastily devised, development priorities.



Generally, planners are confused and disappointed with such a destiny of their planning endeavors, and sometimes just expecting the chance, for existential reasons, to make a new plan with the same destiny. On the other hand, policy makers and public are doubting in planning power, planning science and planner's capacity to solve spatial problems and see the future perspective [2]. Reflections of both sides, planning to policy making and opposite, are without strong rules, confidence and rational system. The result is decreasing quality, efficiency and reliability of plans.

The standard, traditional, methodology of spatial/regional plan and other strategic plans making, practically and theoretically elaborated with small variations, has been practiced in SEE countries for decades. Three key actors are involved: planners, governments (policy makers) and citizens (and other stakeholders). The balance between them has been disturbed during transitional period, and policy makers are riding over planners and planning, but still using plans when they find it formally useful and viable

for implementing their ideas, in compliance with large developers and according to their bill and not the public one. There is far more a situation where a clear-cut / subordinate relationship is clearly set and planning is actually done according to the directive or through a soft form of influence on the planning process. At the same time there is often insufficient qualitative and professional planning team, or it is prone to corruption and satisfaction of the mutual interest [7].

This asks for serious responses to few actual queries: (1) Is the standard planning methodology and procedure reflecting the new economic matrix and in accord with expected social and political options? (2) Have strategic planning been an exercise generated by planners and rooted in their wish to be long-term visionaries and prophets, or reflecting current political ideology, with proper link between planners and policy makers? (3) Is planning in harsh contradiction with development actors, financial power over, supported in many cases by incompetent governmental offices, with clear short-term



Fig. 1 South-Eastern European territory



financial or political interests and priorities, (4) Is planning expected to reflect a leading party interests with planners' professional ethics at stake? And finally, (5) have general public been properly educated and prepared to take responsibility in active, participative decision-making process needed to direct a mutual reflection to both plan and policy making?

The Serbian experience during the last period (after the new Planning Act, 2015), with planning in acute and deep crisis, shows some weaknesses listed in sequel:

- (1) The standard methodology and technics of strategic planning is not reflecting the new matrix of economy development, and current social and political expectations, due to its linearity. The main reason is planner's wish to anticipate the future based on his ideas of better future after transition, with unreliable prognosis and projections of real economic capacities and societal capital for the short-term and mid-term future of the community, and poor interest of actual stakeholder's objectives (government, institutions, developers, general public) for long-term vision, goals and guidelines. They react only when notice some guideline opposing to their interest. The planning procedure in many cases is not, properly reflecting economic, socio/cultural and political circumstances, thus losing its actuality on one hand, and its roots within history, local/regional mentality and socio/cultural embeddedness. The confrontation of two intentions, either long-term and short-term or vision-based and pragmatic, is devastating planner's endeavors and explicitly defined goals often in conflict to each other. Second is the problem of planning discourse: long, unclear, dim story-telling, with many objectives and planning solutions in conflict, thus missing reflection to public aspirations. For such a situation the UN study points that more collaboration in spatial and urban planning in many cases will require deep restructuring linked (reflective-B.S.) to actual political and economic realities [3] Third is the public participation as formal act, with unreadable papers and maps prepared by planners in advance, and without continuous and active collaboration with stakeholders (except for sector plans) and general public in particular situation. Therefore, the planning is the non-reflective way of plan making, i.e. not reflecting important circumstances in policy-making system, emotional approach of wider public, administrative limitations and legislative instructions [2]. It is as much the problem of legislative as of planners. Fourth is the sector-oriented involvement of authorized offices and institutions, with no needed care to multi-functionality of spatial resources (soil, water, forests, patrimony or environment protection,

etc.) and usually without integrative and reflective methodology instead of sector particularity. Final is the complicated procedure and dubious amendment possibilities where planning commission dictates terminate decisions.

- (2) Generally, making strategies and strategic plans is still planners' exercise, as in majority of SEE countries, and their permanent wish to be visionaries and even prophets for the future of a community. With their planning ideas as more ambitious as longer time horizon, planners are often forgetting that ecological, societal and economic systems are suffering numerous unexpected exogenous and indigenous impacts, trajectories and interventions, changing political options, policies (legislative) adaptations, lack of stable value system, alternate social and individual intentions and attitudes with unexpected irrational pressures, and even physical change (climate, demography, ecology, etc.). It seems too pragmatic statement, but it opens the key planning dilemma and challenge to planners, policy makers and general public: does over-pragmatic or one-way reflective planning let planners to have their visions, creativity and innovative approach, embedded into a plan, and to which extent?
- (3) Planning as exercised by planners is sometimes in contradiction with the hidden wish of stakeholders to make plans for themselves, or just to smuggle via long-term strategic plans. Governmental offices and institutions often understand plan making as a formal duty, ordered by law, and not as essential document for promoting private interest in harmony with public interest and citizens' needs and aspirations, as their responsibility. Long-term visions and goals, likewise planning solutions, are not in the focus of their priorities. Offices have their acute, even daily political priorities, and short-term changeable ideas pursued by private developers. Governments (local, regional) care how to satisfy their electorate or private investors, institutions how to satisfy their subordinates and sector policies, and the public how to live better tomorrow and not after 10 or 20 years as promised by planners. Actually, the governance quality is severe challenge in Serbia and a large number of other SEE countries [3].

Answering these queries brings us to the basic dilemma if strategic planning and plans in this part of Europe, as being prepared to-day in the planners' ivory tower, need some reconsidering and serious changes (methodology, technology, communications, etc.). The crucial misunderstanding lies as in, for example, the difference between an army and a society (or community).



A closed system of army, is rationally oriented to solving concrete and time-limited task, changing strategy promptly if necessary, followed by adequate tactics and logistics (problem of implementation?). On the other hand, a society is flexible and often irrational, with no given and time-limited tasks, with unexpected trajectories cutting the development. So, proper tactics (implementation) in problem solving is generally missing, with implements usually not adequately connected to strategic ideas, if at all. Besides, the plan is read and properly understood by few qualified experts only. In such a situation, open and multi-reflective planning is indispensable taking into consideration not only current concrete environ but some soft and irrational elements too, in many cases with "enemies" in a compromise.

Not to forget, developers have their ideas and their key instrument – the money. A government, especially in lagging SEE transitional countries, with scarce resources and funds, and with not yet established a clearly defined a new value system, usually looks urgently for any developer, due to its short-term mandate, and not to a plan with its long-term focus. The mutual connection between planning and policy makers is in many cases missing in such a situation, and Investors can be very aggressive and, besides their needs, there are often their wishes which are not always based on needs, but on requirements which can be an issue of discussion [7]. If exists, the connection is burdened by many powers (feasibility constraints, historic and cultural criteria, public aspirations, social problems, environmental hurdles, etc.) and cut with unexpected trajectories. The present situation is moving from normal to post-normal science where scientist (or planner-B.S.) does not deal with certainties but with probabilities or even phantasy [2]. The planning situation in Serbia, and some other transitional European countries, is now confronted with policy makers at the edge of irrationality, often pursuing political ideas or visions without any evidence of reality at the table.

Therefore, the current planning methodology has good reason to be substantially reconsidered and changed if its viability is needed, and if strategies and strategic plans should be better understood and accepted by governments, institutions and general public. Also, the relation between floating policy making and heavy, linguistically non-transparent and over-serious narrative of plan makers, asks for some kind of brokerage. European concept is now suggesting introducing brokers between policy makers and scientists (read: planners) to explain not only a certain planning solution or evidence but even processes that precede it.

New technologies, smart governance and smart people are key factors nowadays that could help more efficient and reasonable communication between planners and interested stakeholders, including general public. The situation can be corrected through: an absolute respect for the laws and postulate of the profession; better education of decision-makers and population; professionalization of

administration and public planning institutions; encouraging active participation of the population in the process of planning and implementation of plans by introduction of IT into administration (smart cities) [7].

Open and reflective planning brings us to the concept of open planning where conservative public and partially educated policy makers, cancel their mistrust and fear of innovations, creative ideas and new technologies. The open and evidence based planning, with methodology of properly selected reflections introduced into the planning process, presses planners to avoid perpetuating illusion that their plans will solve all local or regional problems only if politicians would be ready to read and understand their plan [2].

Reflective planning and policy making as a challenge in SEE countries

Reflective planning has been and is being practiced in SEE countries but in different forms. Generally, it depends on local or regional governance, but also on national policy-making system. Analyzing the Southern European sub-region (SEE) the conclusion is that urban governance is as much an issue of public expenditures as of effectiveness and reliability. Traditional decision making in closed circles of government offices is now confronted with a need for more transparency, participation, strategic know-how and reliable decision making [3]. Planning is one of issues concerning local, regional or national governance. The usual planning methodology is directed to some reflective criteria: history, culture and nature patrimony, environment, administration. The weakness is the lack of reflective links with policy or decision making. Politicians who make decisions, often out of a planning context, do not communicate with planners: either for voluntarism or autocracy, or neglecting the role of planners. Planning is an unbalanced process, and the dialog between authorities and planners is ineffective [7].

Generally, politicians do not read plans due to the weak transparency, complicated and not readable text and maps. Also, they doubt that planners can solve some complicated development problems. On the other side planners are not ready to simplify their planning language, and in many cases behave arrogantly with their planning proposals or solutions. Planners do not understand motifs and reasons of political behavior, and processes preceding decision making. On the other side politicians are not interested and have no feeling to understand the planning language and the mode of professional or scientific thinking.

Reflection is associated with "looking back" and examining the past in order to learn from what happened and perhaps not repeat mistakes. However, it is also increasingly associated with reflecting on action (Schön, 1983) and encourages an exploring of thoughts and feelings [4].

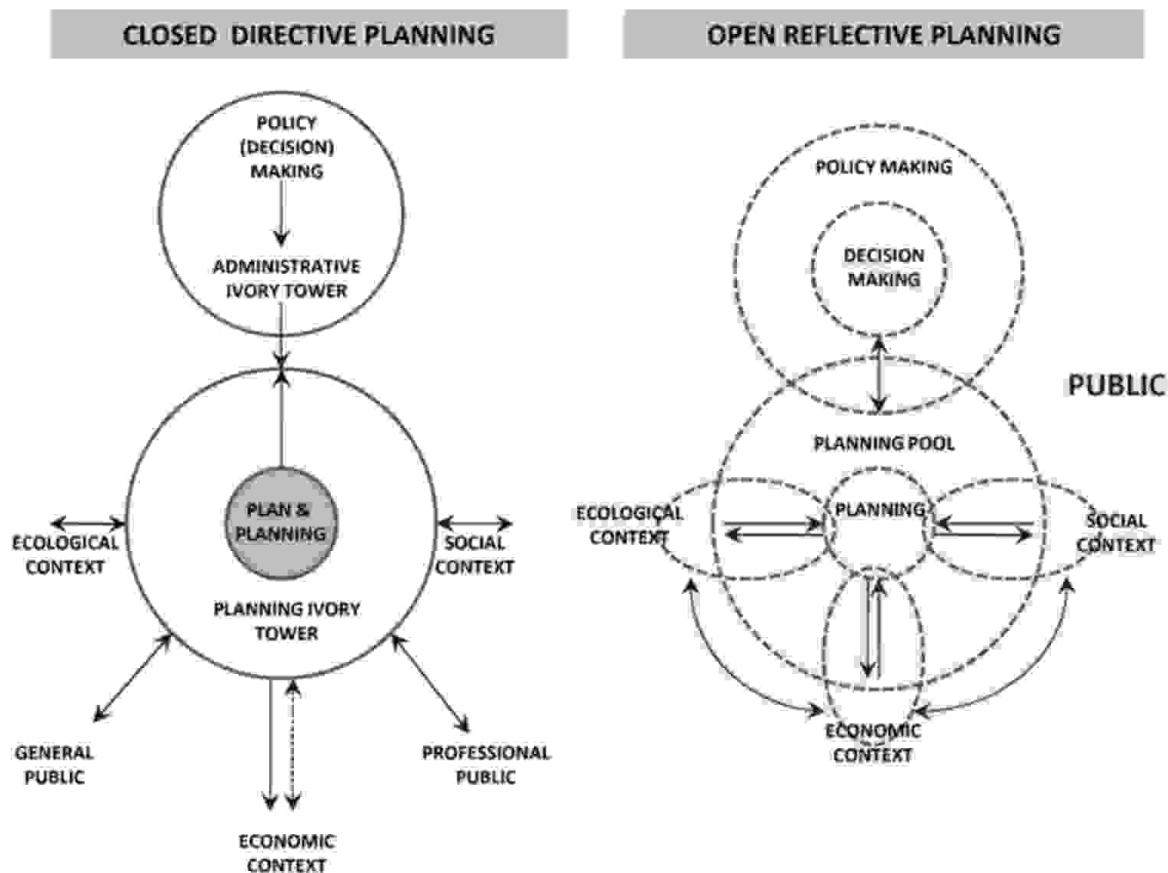


Fig. 2 Two planning methodologies: *directive and reflective*
Source: B. Stojkov

The thoughts and feelings of both sides, planners and politicians, are dark side of planning practice in some of the SEE countries so far, with EU countries (Romania, Bulgaria and Croatia) being a step ahead. The mutual understanding between them does not exist, thus making gap with serious consequences in many cases. Therefore, if used effectively and purposefully, reflection facilitates ongoing personal and professional learning, and creates and develops practitioners capable of demonstrating their progression towards learning outcomes and required standards [5].

The better communication between planners and policy makers, but also with wider public and diverse stakeholders, asks for more plan transparency and easier language of a text and other presentations. The reflective and open planning also means organizing a planning pool (a sort of a "cloud" with all data, information and planning ideas) for effective and readable contacts with citizens and other stakeholders, from the very beginning of planning process, with emphasized societal, environmental and economic topics in focus. On the other hand, evidence-based decision making would be a proof of a good will on the side of policy makers. For this purpose, planners should be educated with additional skills to collaborate on evidence-based policy making [2].

Reflective planning and policy making – the key messages

The new methodology in transitional SEE countries needs to be founded on key principles of open and reflective planning, i.e. the concept of permanent mutual reflections between planning and policy making. The UN Habitat suggestion points that more collaboration in spatial and urban planning in many cases will require deep restructuring linked to actual political and economic realities [3]. Three substantial elements of national and local economies are: national macro-economy policies, attractiveness for foreign investments and the dynamism of resulting social changes [2]. Reacting to the global principle of free market and priority of foreign investments, and how local policy making often victimize inherited local natural and cultural values and assets, planners and a large part of general public in SEE countries try to define "red lines" opposite to policy makers' offers without or with minor limitations to foreign investors (free land in the most attractive central parts of large cities, change in inherited image of urban identity, neglecting natural or cultural patrimony, changing social structure and forgetting aspirations and needs of local citizens, etc.).



Problems with disintegrating cultural heritage in non-EU countries have remained unaddressed and are matters for attention...[3]. Such offers have some short-term financial effects to city budget plus some corruption threats, but also some potential negative long-term effects to city functioning, social disturbances, urban culture and identity, etc. The most challenging issue in SEE countries is with corruption and bribery. The one of answers, repeated from a few countries, points that the major problem is corruption. Because a level playing field cannot be established (due to favouritism, nepotism, and bribery), it is difficult to apply any rational planning principles [7].

In such a situation the final result is: (a) immediate oblivion since government has its daily troubles, fresh ideas or particular interest, (b) institutions have their sector policies, usually based on mid-term programs, (c) public promptly forget the document, interested in their day-to-day problems and fighting with their government on solving them, and (d) developers don't understand the government if the plan is an obstacle to their investment offers, therefore asking for its amendments. This great challenge could be overpassed by the model of open and reflective planning where both sides, planners and policy makers, would reflect their ideas to each other, from the very beginning of a planning procedure.

The 9 key messages - instead of a conclusion

1. *Implementation from the very beginning*

Usual applied theory and practice in SEE countries is: implementation takes off in the post-planning period. It is too late, as many examples of unsuccessful plans proof. The reason is in late including of policy makers and other stakeholders, and the lack of policy reflection during the plan preparation. Planning commission or administration does not have deep introspection into large planning document and possibility to react on time. The large number of different planning issues, often contradictory, complicates the implementation process. With experiences in SEE countries some advices could possibly be of use if successful plan is a social priority:

- First, planners have to discuss with top governmental policy makers in the given planning territory (state officers for national strategy, regional officers for regional strategy or local officers for local strategy) about territorial development problems, their political aspirations and policies, potentials and limitations of resources (human, natural, financial, institutional, etc.), in the initial phase of plan elaboration. Planners need to approach to the territory in an integral, systemic way, deeply understanding sector based policies and their mutual interdependences. Policy makers must take the essential responsibility in strategy or strategic plan making since he/she will be the one who will sign it and respond to public expectation in problems solving and guiding them to the

measurably better future, with step-by-step movements towards achieving it. The discussion should be a sort of planner's and officer's legal duty, taking a short time, with planners deeply prepared for it with referent laws, policies, structural and sector development, and concrete problems acquainted in the pre-discussion period (a few months of reading, interviewing, analyzing). Officer should be properly acquainted with the role of particular plan and possible meaning of it as a political, social and economic instrument. The planner should start thinking on legislative formulation of some possible new or amended act for realizing some sensitive idea (for example: regionalization) in the ex-post phase.

- Second, the discussion could be resumed in short paper with quick responses to the problems but through 3-7 key elements of the system (state), connected and mutually interfered in a dynamic system. Responses need to be short-term oriented with possible negative externalities after first steps but with arguments for improvements afterwards. The following short discussion would be concluded with the statement signed by planners and top officers. The statement will be official base for making goals and the plan or strategy concept with important instruments included. The paper should be addressed and understandable to different generations (from young to old generation).
- Third, the stakeholders' forum would be organized by the government, involving all relevant actors of development: banks, developers, institutions, experts, representatives of local communities, NGOs etc. The forum will be acquainted with the statement, proposing suggestions if discussed and agreed by majority. In the sequel planners will be servants of the forum, and of the government, offering them their professional know-how in defining and transmitting the statement into the preliminary draft of the plan. During its preparation several meetings with top officers and the forum will take place, organized by the government. The official web-site should be installed (in planning office and local, regional or state administration) from the very beginning and open to all interested parties during plan preparation, registering their remarks, questions or suggestions.
- Fourth, the wider professional and public control will follow after preliminary plan draft, with discussions and conclusions defined by the forum. The conclusions will be guideline to the plan finalization, with wide public hearings organized around given territory with open possibility of private or public interests protected through the regular court (not only the



Constitutional court as in Serbia for a long time!). The whole process 1-4, excepting possible final legal interventions, will be no longer than 6 months, if well prepared in the preceding phase. The plan would be accepted by the government (local, regional or national, depending on the planning territory) or by the parliament depending on their constitutional rights and duties.

2. Look as much as you can see

The time horizon is one of planner's conundrums. Either 10, or 15, or 30 years' time horizon? What could be the criteria of defining the horizon? Usually, there is no clear answer to that and nobody is worrying about it because the time is usually too long to raise any interest or to see anything so far, and changes happen almost daily. After approving the plan or strategy it is the next year or next years when planners will silently move the horizon year by year, waiting the moment after approximate 10 years to start making the new plan in a new economic, political or social situation. Sometimes the moment comes after 20 or 30 years depending on the change dynamic. Administration and developers, confronted with a changed situation, often forget the strategy or the plan and continue on their own.

Instead of that, the strategy or strategic plan should be directed to the time horizon of 4+1 years, e.g. horizon of government's 4-year mandate, and horizon of the signed statement of responsibility. In that period legal, financial or institutional system is expected to be stable, with some possible changes pursued by the government and anticipated in the statement. +1 year will be the year of adapting to the new government or reelected old one with some fresh ideas amended. The planner should try to define some non-binding ideas, but not longer than 10 years approximately, supported by some anticipated legal, institutional, political or economic changes, but with continuing planning (the permanent monitoring the situation, registering pressures, changes or problems of some meaning to the plan) as the prerequisite. The strategy or the plan reevaluation would be compulsory duty of the new or reelected government with the whole procedure repeated. The financial (budget) capacity is temptation to the government if it is annually defined. The mid-term budget for capital investments (3 to 5 year) is suggested as an instrument for keeping plan in the focus, where transitional countries with unstable economy have permanent problems (clash between plan and budget or capital investment budget missing).

Of course, this would be too narrow and pragmatic from the standpoint of territorial sustainability. Planner has to look longer but it is not clever to look longer than he/she can see. A kind of vision and set of goals is indispensable. The main problem for planners would be how to make policy makers and public to believe it without evidence-based arguments. That is the matter of planner's skill and art, and smartness of governance.

3. Make it tangible (evidence-based) and readable

Instead of some several hundred long and unreadable story-telling book, the strategy or strategic plan would be defined through 3-5 comprehensive and non-conflicting goals, set of objectives answering to sector policies and their mutual interference, a set of clear and understandable criteria directed to the goal achievement, measurable indicators for each criterion, and precise instruments to improve indicators and achieve the higher level of quality or quantity within the given territory. The planning results and solutions ask for evidence-based technics, and changing subjective statements with evidence-based objective assessment. This would be followed by sketches, graphs, tables and maps prepared in simplified version for better visual understanding of the document, accessible to few generations. Some short additional explanations will be added for interpreting numbers or measures. Criteria will be defined by inter-sector methodology and indicators will be given in 4+1-year time span with expected and objective annual ups and downs.

4. Avoid unnecessary story-telling

Strategies and strategic plans over SEE countries in pre-transition period had been usually prepared with as many pages as possible, just to proof and justify serious engagement of planners. A short plan was estimated as the poor one. The habit of preparing long text with unnecessary story-telling remains up to date. Huge number of data in long tables, unselected information and long explanations are often result of planning acts where policy maker includes (consulted by some ambitious planner-consultant) whatever is at his hand. That should be one of issues for discussion with policy makers. Plan is not able to reflect policy makers in a proper way, and policy maker will remain in dark, looking into the plan with a huge number of pages, tables, written and prepared in complicated quasi-professional language. Different ages of interested people (from children, adolescent, mature, to old ages) ask for simplified and adapted versions of strategic document with underlined and understandable key-guidelines and planning ideas for their use. The main targets have to be clearly visible and focus has to be directed primarily towards acute problems with carefully presented solving in the first ex-post phase, if possible. Everybody expects it thus offering great chance for developing relation between open and reflective planning and policy making.

5. Responsibility of institutions emphasized + referent policies exposed and controlled

The planning reliability ask for multidimensional orientation of planners. It means that reflective planning is not just looking back on past actions but taking a conscious look at emotions, experiences, actions and responses, and so reaching higher level of understanding [8]. Out of this list the link of communication between planner and policy maker (administration) is of utmost meaning for efficient and reliable planning. The newest UN Habitat document emphasize the role of local governments in policy making



correlated to professional evidence-based diagnosis. The advantage of subnational governments lies in their knowledge of local contexts and their ability to adapt policies to it; their closer proximity to citizens grants them democratic legitimacy...

Their local knowledge (planners-B.S.) is important for a truly evidence-based diagnosis, undertaken at the beginning of the development of the new urban policy [6]. The very sensitive issue of governance (at all tiers) is especially expressed in SEE countries due to the long political experience with the obsolete socialist mode of centralized governing. This mode has been seriously improved in some of the countries (Romania, Bulgaria, and partially Croatia), while the rest still substantially practice the old one with minor technological improvements. The answer to the question of mutual understanding between planners and policy makers in Bulgaria is illustrative: Because there is more mutual understanding in the majority of cases, there is: (1) clearness and transparency of the plan, (2) the interest of decision makers, and (3) communication between planners and decision makers. The responsibility for the proper plan implementation is therefore split between planners and territorial government, and probably much more effective and reliable than before.

6. Stakeholders as relevant partners in the plan making + public forum included from the beginning, with public hearing advanced

The role of stakeholders and civil sector is growing as much as planning improve its meaning in a society or community. To be successful, a new urban policy must be accompanied by an institutional framework and governance processes that will allow for the coordination and collaboration of urban actors [6]. General or professional public, civil sector and other interested stakeholders should be included in the planning process and procedure from the very beginning by an improved mode of dialogue. New technologies (web-site) should be installed at the very beginning of plan elaboration, and be open to comments, proposals, remarks or just questions to planning team or referent administrative body. Each comment should be carefully checked and answered to the given address.

The promotive programs via public media (TV, social networks, newspapers, bulletins) is indispensable. The public hearing asks for active participation from the very beginning with several critical points: preliminary draft, draft, and final version. The presentation of the plan has to be clear, understandable, and open to each comment with relevant planner's answer. In some cases, due to wider public interest, the hearing could be prolonged or even repeated. Many technical and organizational elements have to be enhanced and adapted to the public. Different forms of public hearing or debates have to be applied just to raise interest of professional or general public.

7. Responsible governmental officers involved actively

Responsibility is the key test for any government in SEE countries. It is a very rare case that any officer gets responsible for some negative consequences of wrong decision to community. Planner is responsible by default. The French experience with the Contract on Plan Implementation, introduced in the Serbian planning act 2003, did not succeed because nobody in administration or government wanted to sign it afraid of responsibility. Ever since all plans are pure responsibility of planner, with the slight role of planning commission. The conclusion is that some of professionally qualified regional (state) body or office is needed to be involved in the planning process actively, as a kind of broker between planner and his/her ideas and solutions, and policy maker with his concept open to planner. The language of both must be clear and transparent. Planning proposals and solutions must be evidence-based in the plan and, vice versa, policy statement and decision making must be evidence-based, too. The final document must be signed by both with responsibility shared. Some variations of this concept have been practiced in a number of countries but the responsibility is always on the side of planner in spite of evident policy reflection in the plan.

8. Plan open to amendments (rights of any new government and their priorities in the planning system)

Each new change in policy making, due to some new concept of economy, social development, environmental risks, hazardous situation, new developer or investor with his demands, asks for careful evaluation, cost-benefit analysis and evidence-based viability analyses prepared by local experts. That is indispensable step needed for controlling or harmonizing new situation or strategic interest to regional/local public interest. In the situation with new developer, the government usually use and look to the study prepared by consultant of the developer, checking his/her interest but not the interest of a community. The plan should therefore be open to new amendments, after governments changing in particular, if the analyses proofs that community or public interest would not be damaged or endangered. Also, the new government with his new political concept, has the right to ask for amendments or even complete change of the plan if this does not endanger continuity of some capital investment project or some basic principle of territorial sustainability, resilience or patrimony protection.

And last but not the least,

9. Keep plan's and planner's ethical integrity

If planner consider some political decision or policy maker's order harmful to the Nature, people, community, public good, environment, protected patrimony or other item of public interest, he/she has to firmly keep professional integrity and authority.



The same is with decisions. If ordered without necessary evidences planner will insist to get or check it. As a document of public importance, a plan must be clean of voluntary solutions or any kind of improvisation dictated by policy makers. And vice versa: the planning commission as a monitoring and reviewing body, organized by policy maker, should keep plan of planner's proposals or ideas without objective and tangible criteria. Mutual reflections between planner and policy maker have to guarantee the ethical purity of a plan and planner for the sake of a community. Actually, that is the reason of reflective planning and its coordination with policy making.

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NOTA BENE - *The experts from 7 countries participated in my interview (7 questions) 2018: Prof. Dorina Pojani PhD (Albania), Prof. Julia Spiridonova PhD (Bulgaria), Constantin Chifelea (Romania), Viorel Miron PhD (Moldova), Suzana Slijepčević PhD (Croatia), Lidija Trpenoska-Simonović PhD (Northern Macedonia), Siniša Trkulja PhD (Serbia), Prof. Velimir Šećerov PhD (Serbia).*



Angel Burov

SOFIA FUNCTIONAL AREA'S SUSTAINABLE MOBILITY PATTERNS AND INTELLIGENT TRANSPORT SYSTEM IN THE AIR QUALITY, LIVEABILITY AND RECREATION PERSPECTIVES

Abstract:

The paper conceptualizes the perspectives for smart transition and wise transformation of the accessibility and mobility patterns. The concept is directed towards the liveability and recreational opportunities for all citizens of the region of Sofia in an environmentally just manner. It considers the expected future impacts from an array of solutions that can shape smaller nested transitions among the current and next generation, including the introduction of low emission zones, new shared and light electric fleet and incentives at the demand side in order to change lifestyles and choices with the help of appropriate information and communication technologies.

Sofia municipality has different agendas and mismatch between the plenty of planning documents – General Spatial Development Plan and its transport schemes, General Plan for Traffic Organization, Municipal and urban development plans, Programs for development, construction and rehabilitation of transport infrastructure and services, Environmental and air quality programs. Sustainable Urban Mobility Plan (SUMP) and also Vision for Sofia are under preparation. This paper is to support more holistic approach, reimagining the integrated urban design models.

Key words:

functional urban area (FUA) of Sofia, spatial/transport development model, mobility patterns, modal split, sustainability and resilience

Introduction

The functional urban area (FUA) of Sofia covers vast area of about 5717 km² and the compact city attracts many commuters from the nearby town of Pernik and other smaller mountainous towns and villages in the region (Lavallo et al., 2015; NSI, 2012). It returns many weekend visitors out of the city that reach far beyond the FUA predominantly by car trips. The mobility patterns in the regional and city space and time have changed consecutively and often rapidly due to many drivers. The quality of the air in Sofia has been influenced dramatically by the new hundreds of thousands of pipe sources of emissions on the streets substituting the industrial sources of pollution from the past. The existing mobility patterns diminish and threaten the livability of many public spaces and predetermine or constrain the opportunities for outdoor recreation in times of high demand.

The distinction between smart and wise in the case of Sofia is symbolic in relation to the fact that the city is named after the Saint Sofia Church meaning 'Holy Wisdom'. Here wisdom is related to the long term decisions in response to drivers that can transform consciously the environment of socio-ecological systems throughout their lifecycles. Smartness is related to short- and midterm choices in reaction to estimated recent pressures, the understanding of the current state and the foreseeing of impacts that can

shape smaller nested transitions among generations.

A conceptual framework for sustainability and resilience evaluation developed by a team from the UACEG, Bulgaria (Dimitrova et al., 2017) is used here in order to systematically assess the mobility patterns of Sofia. The framework is considered as appropriate to question how smart and even wise are the choices regarding mobility.

The retrospective assessment of mobility patterns is made by analysis of the drivers, pressures and the state of the urban environment of Sofia and answers to a set of questions oriented towards the tensions between the environmental, societal and economical aspects and choices for development, namely:

- Where, when and who bears the load from the changing (spatial / transport) development model?
- How resource and energy efficient are the modes with their infrastructure and means of operation?
- What level of accessibility is provided?
Further on the evaluation stresses upon the questions around the common choices, policy and power relations:
- How public resources and private spending are redistributed in the name of mobility?
- Is democratic choice about the balanced modes of travel achieved, are major groups neglected by their 'representatives'?



- What values are incorporated in the political discourse, are there specific distortions?

It is in the time frame of more than half a century of long term transformation of the city and in the midterm of the last 20-30 years of transition from Socialist to Capitalist economy.

Finally the paper conceptualizes the perspectives for smart transition and wise transformation of the accessibility and mobility patterns. The concept is directed towards the liveability and recreational opportunities for all citizens of the region of Sofia in an environmentally just manner. Thus it considers the expected future impacts from an array of solutions that can shape smaller nested transitions among the current and next generation. This includes for example the introduction of low emission zones, new shared and light electric fleet and incentives at the demand side in order to change lifestyles and choices with the help of appropriate information and communication technologies.

Assessment of the mobility patterns of Sofia and its FUA and concept for response

DRIVERS BEHIND THE CHANGING MOBILITY PATTERNS AND LIFESTYLES

In the physical built environment of the city of Sofia there is a complex material legacy from the second half of the 20th century and other fragments added during the so called Transition period. This combination strongly determines the choices about the city development. The shift from monocentric and radial-concentric towards more polycentric and linear development of the city was not well envisaged in terms of property market and urban design regulations as well as transport infrastructure and mobility modes in the last three decades. Two construction booms around the accession of the country to the EU and in the last three years add to that complex and fragmented landscape new mass and heights which are rarely evaluated with their controversial impacts under the umbrella of the compact urban development concept.

Yet, the weak national or local policy for urban development, growth and regeneration provides ground for all sorts of internal and peri-urban speculation on the basis of far from perfect legislation and planning practice. Long term oriented modelling and planning is not at the heart of usual political decisions in Sofia. Urban development politics in the city are much more reactive than proactive with poorly informed expert and political decisions about their impacts. This has its logic in the current political paradigms but such an attitude to planning and scientific knowledge input can be attributed to the longer path of cultural development. There have been many internal controversies in the Bulgarian society with its rapid modernization, industrialization and urbanization in the mid-20th century along with its rapid political-economic

regime shifts driven by external relations. Sign for this is the preference over populist and least resistance solutions now leading to simplistic throwing of past achievements away along with the slow uptake of promising ideas and stubbornness to innovation (Lettmayer et al., 2018).

Except these negative drivers there are also positive ones, connected with the growing importance of bottom-up efforts of citizens especially in the spheres of air quality protection, urban planning, mobility management and other urban policies which put pressure on the established interests and try to induce change despite the polluted media environment (Burov et al., 2019). The answer to the late automobile revolution after the 1990s and the high demand for car ownership combined with shift from industrial to service, knowledge and creative economy has intensified and redistributed traffic flows in and out the city space and times of the day.

The spending of enormous part of the State and municipal budget for supply of new capacity for roads and streets has diminished the chances not only for alternative means of transportation. It blocks alternative spending of the scarce resources and leads to discouraging quality of the public space and other public goods. Some of them are the basic pedestrian and cycling spaces in the streets, the smaller public green spaces and the access ways to outdoor natural spaces. The gradual entering into the vicious cycle of car dependence and loss of public transport ridership from the early 2000s has brought many negative externalities. Some of the major ones include air and noise pollution, district and neighborhood low internal and external connectivity.

PRESSURES FROM THE CHANGING MOBILITY PATTERNS AND LIFESTYLES

i. External pressures

Pressures which come from trends at higher levels can be put under the umbrella of lifestyles. Changes in the mobility related lifestyles are provoked by economic relations in the light of the Single European market, the free trade and free movement of goods. Along with the relatively improved purchasing power of the population in comparison to the 1990s, the import of second hand cars has become possible and easily accessible becoming symbol of the limitless consumerism in contrast to the scarcity or various hardships to access goods in the second half of the 20th century. The uncontrolled steps of large commercial chains and leisure investments at the internal and external urban peripheries have provoked the general changes of the way people started to go to work, to buy and to rest.

Very helpful in this regard is not only the possibility to freeride the public space for parking but also the low level of taxation for ownership, fueling and driving in the city along with general or specific unreliability of public transport services. The last has to do altogether or partly with access,



price, time and comfort of the services. In that way citizens are nowadays forced to use the car and to do it more often than really needed. It is important to mention again and to stress upon the phenomena that the car is a major status symbol among Bulgarians which can be said that reached its peak in the recent years and certainly is here to stay for long as such.

ii. Internal pressures

The changes in property ownership through restitution and privatization from early to late 1990s and the more free market led to the emergence of offices for great number of micro, small and medium-sized enterprises. Initially these localized in the historic part of the center but then they decentralized their location towards secondary corporate service and leisure spots mostly at the south-east and southern parts of the city. Such centers started to shape during the previous and the current construction booms as quasi-public ones. Initially and up to now these facilities are poorly accessible with few lines of the public transport system and lack of appropriate conditions for non-motorized means of movement at the district and neighborhood scale. The slow entering of effective parking regulation and control has led to wider occupation of public or semi-public space. It is either abundant in the mid-20th century modernist and socialist complex type housing estates or scarce in the early 20th and late 20th/ early 21st century capitalist attached housing quarters. That availability doesn't change much the general effect. In most of the cases the uncontrolled parking is discouraging not only the local non-motorized trips but also the longer door-to-door trips with participation of the public transport.

STATE OF THE ENVIRONMENT DUE TO THE CURRENT MOBILITY PATTERNS AND LIFESTYLES

i. The current mobility patterns and the livability and recreation

The Bulgarian context of moving which is important for the commuting and recreation related trips includes a fast motorization rate reaching 443 passenger cars per 1000 inh in 2017 (Eurostat, 2018). This rate in Sofia almost doubled for 10 years after the accession to the EU. The national modal split includes 2,3 % of the trips by train, 83,2 % by passenger cars and 14,5 % by motor coaches, buses and trolley buses. The very small amount of train trips is compensated by bus trips and there is very significant dissatisfaction with the train services for the last 25 years and more. The slow reforms in the passenger train

services have led to the risk of their extinction although they could have been an efficient alternative for inter-regional trips around the big cities in Bulgaria.

The monocentric development of the capital city of Bulgaria in more than half a century has led to the formation of a very big functional urban area of the city (Lavalle, 2015) which is surrounded by mountains and semi-mountainous landscapes. The definition of FUAs considers proportions and spatial relations of commuting and it can be used as important reference about mobility. Further on the estimation of weekend 'migration' out of cities is also a very important perspective along with other more specialized purposes of movement of people and the basic and specialized movement of goods.

The everyday configuration of trips along the transport networks in, at the edge and out of urban areas and cities is of major concern of a growing number of authorities and knowledgeable bodies. The city of Sofia attracts tens of thousands (around 50 000 (NSI, 2011)) commuters in usual weekdays and returns even more visitors out of the city at seasonally attractive weekends depending on weather and recreational practices. There are differing numbers and patterns throughout the seasons inside and outside the city and there is no sufficient data to describe that variety and trends which seems to be much more important in quantitative terms than the commuting. The information gap is due to scattered and infrequent studies along with lack of interoperable accessible data. Some of the exceptions are recent studies with focus on the pedestrians as part of the 'Sofia - City for People' (Gehl et al., 2017) and the 'Vision for Sofia' initiatives (Vision for Sofia, 2019). Thus the livability of streets and their ecology are already part of the public discourse but the actions are still in their very early stages, especially outside of the city center.

The modal split in Sofia has been investigated by several studies in the last 10 years. They show varying numbers (Table 1) which are by no mean positive for the public transportation and seem to be biased for the non-motorized modes due to statistical errors and methodological differences.

There is insufficient data about the passenger kilometers traveled in the city by the various means. About the car fleet it is well known that there are many old cars with average age above 11 years (OPUS RSE, 2017) due to the second hand cars and car parts market. There are many old petrol and diesel cars with removed catalyzers and some of the cars have been modified for gas fuel but there is no reliable data about the number of these. One of the

Source	Year	Public transport (% of trips)	Passenger Bike (% of trips)	Walking (% of trips)	Other (% of trips)
EPOMM, 2018 (CSDS research under BENEFIT project)	2010	32	51	3	14
Mott Macdonald, 2011	2011	44,1	30,2	0,1	21,7 3,9
Inframobilplan, 2017	2017	37,1	30,7	1,8	29,7 0,7

Table 1 **Modal split in Sofia city** (Stolichna obshtina) between 2009-2019



phenomena recently in the agenda of the legislators was the intensive individual use of company cars beyond the working days which provoked the introduction of weekend taxation. Currently there are few electric cars and one e-car sharing scheme in place but no serious (e-)bike sharing except a service with a single spot of renting e-bikes for the weekend which is available seasonally at the foothills of Vitosha mountain. In the recent months the e-scooters have arrived in the agenda of experts and policy makers after their accelerating uptake in the last 3 years.

ii. State of the physical environment

The built environment of the city dedicated to transport and mobility means is constantly growing in surface (EC, 2016). Yet parts of the transport network are underdeveloped or lack maintenance and represent surfaces of sealed soils and remnants of infrastructure which don't serve well their purpose, especially in areas of urban decay or under construction. The modes that are mostly affected are all except the automobiles. All-terrain vehicles are more often present in such areas because they can overcome the usual physical and seasonal meteorological and hydrological challenges. The streets and public and semi-public spaces in the housing estates are very far from being livable in a healthy, safe and well-arranged way. Although some of the places are intensively used it is rarely the case for them to be livable and distinctive due to attractiveness and it is more of a necessity to pass by.

The non-built environment outside of the city in the FUA is under various patterns of urbanization. There are many new developments of various functions around and in proximity to transit roads, depending on the specialization of the different directions. The territories south from the city are generally attractive for leisure and recreation facilities and services as well as second homes but they are hardly accessible. This is due to the fact that most of the attractive points of interest for recreation are situated in the rugged mountainous landscapes around the dominant mountains Vitosha and Rila and the smaller ones in between and around.

The enormous inherited and envisaged by the General Spatial Development Plan supply of transport infrastructure (OP Sofproect OGP, 2018) induces additional demand especially because of the poor conditions for alternative mobility options which are lagging behind. For instance the fragmented cycling network is estimated to be around 50 km in length compared to 428 km primary and 3400 km secondary street network (Vision for Sofia, 2017).

IMPACTS ON THE AIR AND THE ACOUSTIC ENVIRONMENT

The state of the environment related to air quality and noise can be summarized as follows:

- Air quality – particulate matter (PM) smaller than 10 micrograms for all of the points of measurement with annual concentration between 40-60 µg/m³ slightly or 1,5 time above the limit, 59-139 days with PM10 exceeding the daily limit values for the period 2011-2014 for all points of measurement and modelled contribution of the urban traffic to the average annual concentration of PM10 being 57% for 2014 (SRS-UCTM, 2017), all of the population is potentially affected due to the dispersion and mixing of traffic emissions with other sources especially in times of inversion.
- Noise – the modelled population exposed to noise above 55 dB from traffic 24 hours a day is 48687 and above 45 dB in the evening is 116569 (GIS Sofia & Spectri, 2012), and more than 84% in 2009 and 71% in 2017 of the citizens are affected from the noise in the city;

The modelled numbers can have significant error due to the low quality of the input data used for both models. Nevertheless they provide idea that the traffic has significant contribution to the low environmental quality in the city of Sofia.

OVERALL ASSESSMENT

Several tensions between the imperatives for sustainable mobility can be outlined in Sofia and its FUA for the last half of a century which can serve as reference for smarter and wiser decisions. The first tension is between the center with its concentric impacts and the periphery with the impact of its growing secondary center(s) in the line south to south-east which is unbalancing the different sectors of the city, especially the north and brownfield regeneration is the remedy to equipoise. The second tension is related to the initial scarcity of cars which later led to the contrary, the abundance of such and the city is up to be turned to indispensable diet with the help of public, shared and light individual means of transportation. The third tension is between the virtual ideas for very fast movement solutions and the actual realization of very slow transport modes where the pendulum should come to the middle point where traffic calming is not only staying on paper and non-motorized and light electric mobility are being safe enough.

The fourth tension is related to the redistribution mechanisms by the authorities through comprehensive and complex construction of the public good at once which proved to be utopic and later was substituted by selective and clientelistic redistribution with the golden environment



Levels / Issues	Wise and smart approach	Prevention of air pollution and other nuisances	Livability and safety	Recreation and play
Regional / EUA / Municipal	Studies and Integrated macro model; ITS for transit and commuters & regional smart grid	Equitable and efficient access and mobility coverage, incl. taxation	By passes and park & ride, rail and bus, car pooling	E-mobility infrastructure, flexible mini, e-car pooling and sharing, e-bike
City / District	Transport-land use-air meso models; ITS for deliveries, commuters and dwellers & city smart grid	Low emission zones, right mix and balance between mass, group and individual options	Dynamic traffic re-routing and kiss & ride, Reconsidered fixed mass and flexible mini, e-car pooling and sharing, e-bike, introduction of healthy green corridors	
Neighborhood / Street	Transport-air pollution micro models; personal route advisors & quarter micro smart grids	ITS Pedestrian, bike and light vehicle friendly design and public works, incl. greening, ventilating and absorbing		

Table 2 Conceptual approach about the accessibility and mobility patterns in response to air quality, livability and recreation provisions.

lying somewhere in between and possible by truly strategic and tactical urbanism and feasible mobility policies, programs and projects. The fifth tension is related to the hardly heard voices distorted by the layers of noise from the hammers of social engineering and the buzz of market promotions under the extremes of the Communist and Capitalist regimes. At the final sixth tension the mix of strongly superimposed values in the past versus the weakened by tilting at windmills ones at present have led to hesitant choices with preference over conservative small steps in mobility policies, lack of well controlled technological experimentation and social innovation.

CONCEPT FOR RESPONSE

The last decade of responses from the side of Sofia municipality has shown that it is possible to have different agendas and mismatch between the plenty of planning documents – General Spatial Development Plan and its transport schemes, General Plan for Traffic Organization, Municipal and urban development plans, Programs for development, construction and rehabilitation of transport infrastructure and services, Environmental and air quality programs, etc. The recent attempts of Sofia municipality during the last three years to respond in a more integrated manner to the outlined state and to some extent to the pressures in the mid to long-term perspective include the preparation of Sustainable Urban Mobility Plan (SUMP) with a horizon up to the year 2035 and also Vision for Sofia with a horizon up to 2050. Both documents are in a process of elaboration and are not finally approved. The preliminary content of the SUMP is predominantly transport infrastructure supply oriented and the demand side is much more marginal in its content.

The reduction or more precisely the prevention of the travel demand has been explicitly promoted by the Association of Bulgarian Urban and Regional Planners (ABURP, 2018) in the process of elaboration of the SUMP but was not included among its objectives at later stages of

its presentation. This is a good example of the lack of demand management thinking among the established transport experts.

The Vision for Sofia with its preliminary analyses gives a lot of attention to the transport theme and the links between the different mobility means that reach private and public ends. Some of the exemplary studies are about the pedestrian network in the whole city, the transit traffic through the city center and the access to the major work places from all neighborhoods in the municipality. The set of objectives in the preliminary content of the Vision for Sofia includes among others the “mobility as a service” (MaaS) as a long term one. In the strategic planning part of steps four and five of the process this goal has evolved from ‘innovative’ and ‘sustainable’ mobility towards this formulation. It can be said that the Vision for Sofia provides broader space for alternative approaches towards the mobility sphere. On the ground of everyday politics where the operationalization of the vision and its strategic goals are landing the struggle is about to happen. It will be a struggle between the more conservative traditional transport planning and design approach and the more innovative sustainable urban mobility planning and design framework.

The concept described in Table 2 does not try to answer comprehensively and chronologically to these challenges but presents interpretation of the multilevel approach to the three topics in focus related to accessibility and mobility – the air quality, the livability and the recreation. It synthesizes the approach towards transition and transformation of the accessibility and mobility patterns needed to guarantee the livability and recreational opportunities for all citizens of the region of Sofia in an environmentally just manner.

The electric mobility has a key role in the envisaged concept. The major accent at the base of the transition is put on the light electric vehicles but also on the shared e-bikes and e-cars all of which can contribute significantly to the three necessities - of clean air, livable public space and



access to urban and peri-urban open space for recreation. Stronger accent on the conditions and confidence for using these can prevent enormous amount of the demand for car possession, solitary car driving and parking space and thus the city can be unblocked for the human scale activities. Enormous amount of resources can be preserved with the help of the various ITSs and grids that can direct and balance the mobility patterns of the citizens.

Another important issue in regard to the multiple spatial levels is the need for addressing the multiple actors at these levels. The choices of formal decision-making units, collectives or individuals have to be taken into account in a differentiated way. An example of policy guidance for such sensitive approach can be found in a recent study with e-mobility focus (ECHOES project, 2019). Starting from the trust and acceptance by the individuals and their awareness and knowledge, passing through the influencing and communication among the bigger collectives and reaching the funding, support, predictability, procurement, incentives and regulations of the formal institutions are some of the major sets of policies to be implemented.

The implementation of these guidelines and the concept in the case of Sofia has to rely on shared wisdom. At the base of it is the knowledge, shaped by information produced by data. If we look again to the questions for assessment of the mobility patterns, many gaps can be found even at the level of public data availability. One of the biggest gaps that remain is in relation to the load from the changing spatial and transport model of the city in retrospective but also in perspective. Another one to be addressed in order to have more smart and wise solutions is related to the democratic choice and the neglected groups with their representativeness in the decision making process. Especially important is to speak about the latent demand beyond the currently revealed modal choices that are based on the existing conditions. The representation and attraction of the citizens through their envisaged future should become more important part of the local politics.

Conclusion

One of the major opportunities for Sofia's sustainable mobility is the holistic thinking that can combine the energy transition, climate mitigation and air pollution issues at one place having in mind the social costs. The EU policies, targets and limits act as a factor that pushes towards some important advancement in the recent years. The smart and wise handling of the EU, national and local agenda calls for higher quality of the implementation. The operational flexibility, the expert capacity and the process of action learning through monitoring and evaluation should have more significant role in order to have safe and smooth landing. The programming of soft (demand oriented) and hard (supply oriented) measures should be better specified at every milestone along the local path of development for

Sofia. At one hand the demand side measures should not be reduced only to awareness raising. At the other hand the supply side measures have to step on more holistic reimagining of integrated urban design models as the longer term development of the city should encompass more diverse flows in the multiple scales of the urban morphology and space – from the street and neighborhood, towards the districts, the city and beyond. The future is uncertain but Sofia certainly needs more balanced and profound change in its mobility patterns.

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Monika Kuhn

SMART SOLUTIONS FOR HIGHER QUALITY URBAN ENVIRONMENT IN BRATISLAVA

Abstract:

Bratislava is classified as the 3rd most greenest city in the world. But in reality the city's "green identity" is untapped and lacks a smart and sustainable approach for higher quality urban environment. We are dealing with the phenomenon of urbanisation just as every other city, therefore sustainable city vision has to involve an equal ratio between built-up and unbuilt "in between spaces" such as city squares, streets and parks.

This project's challenge is to find different solutions for public spaces' main issues by focusing on management and better usage of such unbuilt spaces. A case study from the densely built-up area in Old Town Bratislava proposes a solution applicable in a larger scale for the whole Bratislava region.

The participatory approach used in this case proves that such an approach could be beneficial for both the municipality and engaged public participants. Park Škarniclova is one of the bottom-up solutions in the city of Bratislava where an active citizenship - represented by the local community - addresses one of the public space's biggest challenges- its liveability.

The structure of this paper is divided into four main components. In the introduction part the local context is described. Paper core proposes a theory background and describes detailed information about the case study - Park Škarniclova, it's priorities and goals. The last chapter concludes benefits of such approach and further vision for different planning approaches and higher quality urban environment.

Key words:

urban environment, smart city, space management, sustainability

Introduction

What comprises a liveable environment? What encourages us not only to survive in our cities, but also to enjoy living in them? The two main components are of course the built-up and unbuilt spaces. But even though there has been recent positive development in the value and quality of built-up spaces, we have not yet seen the same happen for the unbuilt. Why?

LOCAL CONTEXT

Cities in Central Europe have a very specific position concerning public spaces, Bratislava being among the most symptomatic ones. The concept of public spaces was first influenced by some 40 years of wild socialism – the time when public space belonged to everyone, it also belonged to no one. The more people were told to value all environment as a common ownership, the more they cling to their own little private nests, mostly the sanctuaries of their small panel house apartments. And the less they cared for public spaces. This was in stark contrast with the quantity of new public spaces that were created by the politburo in newly planned city districts and outskirts.

Socialism was not known for its modesty, and this also applied to public spaces. The leaders planned for a prosperous public domain, but since it belonged to everyone, nobody took care and the public space was left to ruin.

Secondly, there came some 15 years of wild capitalism. After the political shift, architecture and urbanism have changed accordingly. Since money was suddenly private, it could also be lost. Suddenly, every public space became a burden for the entrepreneurs on which no profit could be made. Developers and urban planners have started avoiding public spaces, instead maximizing commercial and indoor locations, which could always be further monetized.

These two contradictory movements in recent history of the Central European countries have led to several worrying trends concerning public spaces. Most of the vast public spaces in perspective luxurious city districts have been bought up and re-developed into offices or department stores. On the other hand, vast areas of rejected public spaces in lower-income or lower value areas are waiting for their purpose, without any current function. This made us think.

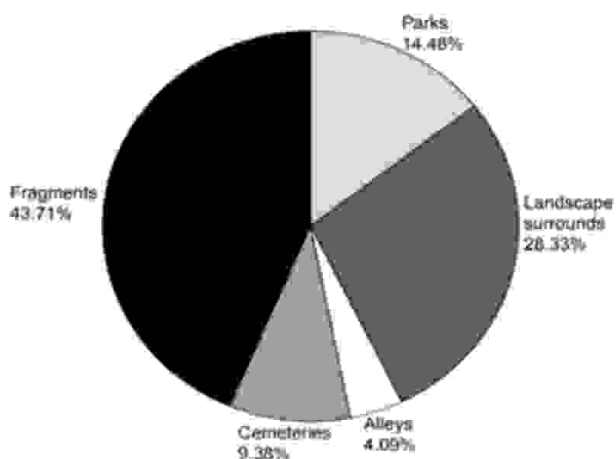


Fig. 1: Evaluation of urban green spaces in Bratislava.

Source: Reháčková, 2004, p. 473

Bratislava is the third greenest city in the world when considering green area per person (Spectator SME, 2018). But if we take a closer look at the structure of greenery, we see consequences of the two contradictory periods we described in previous paragraphs. Quantitative results do not reflect the qualitative outcomes. And because almost half of the greenery is comprised of fragments (Reháčková, 2004), we decided to enrich some of them with a new function and create a new, higher quality public space. But what is a higher quality public space?

Paper core

THEORETICAL BACKGROUND

At this time, urban environments are facing new challenges and questions and need to prepare for smarter and more sustainable scenarios. David Harvey's Right to the city (Harvey, 2008) talks about right to adapt our daily surrounding to our actual need. He emphasizes on adapting what actually exist and describe city as a constantly changing organism, which needs to think smart.

Definition of a Smart City has a broad scale of understanding. First-plan connotations lead to words as digital, intelligent, technologically supported. In 1990s when the concept was firstly named, the whole focus was on a new ICT (information and communications technology) with regard to modern infrastructure (Albino, 2015). Nowadays cities are becoming more sustainable, Kourtit et al. say that smart cities have high productivity as they have a relatively large share of well-educated people, knowledge-intensive jobs, output-oriented planning systems, creative activities and sustainability-oriented initiatives (Kourtit et al., 2013).

Smart cities are cities that have a high quality of life; those that pursue sustainable economic development through investments in human and social capital, and traditional and modern communications infrastructure

(transport and information communication technology); and manage natural resources through participatory policies (Thuzar, 2011).

Strategic planning documents and action plans are focusing on liveability, sustainable urban environment and green infrastructure restoration. In the beginning of the 21st. century, we have considered as the most important fields of interest the ones that focused on combating the climate crisis, dealing with heat island reduction, water absorption and flooding, CO2 capture, air quality improvement etc. Therefore our Case study primary focuses on ecological restoration challenges. Secondary, we tailored the project so it brought value to the whole neighbourhood in several categories -increasing land value, providing leisure function, decreasing noise levels, reducing dust particles, providing opportunities for physical activity and social interaction.

SITE CHARACTERISTICS

The solution was to find and revitalize a derelict area of rejected greenery, which would then serve as a „conscious public space“. The term „conscious“ meant, that because the project would be partly accomplished in cooperation with volunteers living in the surrounding area, it would be more valued by them and perceived as a public space that really belongs to the public and therefore deserves mindfulness and attention. We have found such location at Škarniclova Street, in a dense built-up residential area, with no further urbanisation opportunities. The area of 564m² is belonging to the city, maintained and administrated by the Old Town district. Surrounded by a local elementary school, student dormitory complex and few civic amenities, the green area lacks direct social residential control. The major threats of the lot include safety issues, accessibility and inclusion, aesthetics, comfort and management. Therefore solutions considering threats mentioned above and ecological qualities have been precisely designed with the area in mind.

SETTING PRIORITIES

- Safety. Defensible space theory by Oscar Newman (Newman,1972) describes the necessity of successful public space to be translucent and highly transparent. Therefore the elimination of all possibly chaotic elements and proposal for artificial lightning has been arranged.
- Accessibility and Inclusion. All of the area has been redesigned to provide a highly available and inclusive access to all surfaces. A new inclusive multi-purpose element (a concrete table-tennis table) has been added to provide all-year inclusive activities.
- Aesthetics and comfort. The whole area has been designed in accordance with recent sustainable methods and trends in landscape planning. All



elements have been chosen considering the core locality of the city centre due to its heritage requirements.

- **Management.** The most challenging request of the project was to plan a low-maintenance space with minimal care needed. Consequently a choice of elements, materials and greenery species have been chosen to further advance sustainable development of the project. To better understand and manage the further usage of the space, participatory process including local community has been applied.
- **Sustainability.** To ensure a minimum ecological burden, the majority of materials used on site have been gathered from surrounding local sources. To optimize the amount of waste produced, a lot of the materials have been reused (old concrete pavement, soil, mulch etc.). The goal of the project was to create a maximum of permeable surfaces, and greenery resistant during drought periods.

DEFINING GOALS

The SMART city concept defines five specific guidelines, which determine basic boundaries for more precious and specific approaches. The concept applied for the project consists of five main quality goals: specific (S), measurable (M), achievable (A), realistic (R), time-bound (T). To better define the framework, our priority was to apply this concept to the project at the early stages of the planning process. „ By the end of June, organise two workshops with a local community and revitalise abandoned public space including surface adjustments, planting greenery, adding light, urban furniture and an inclusive playful element).“

APPROACHES TO THE PROCESS

This project has been divided into four planning stages: analysis, preparation, implementation and evaluation.

1. **Analysis-** Research of initial data focused on functional and spatial analysis, ownership inquiry, determination of local stakeholders, program and management at site.
2. **Preparation** – This stage consists of 4 subdivisions of the project: participation, communication, funding and design.

The whole process of participation included public presentations for the active local community at Panenská street, encompassed questionnaires with stakeholders, communication funding and design processes.

Communication served as an important tool for engaging with public to ensure a trusting relationship and transparency during the whole process. Using social media, interviews on site, public presentations - these were the main channels used.

The funding for the project has been received from three main sources. Firstly, the participatory local grant scheme has been obtained, afterwards an online crowd-funding platform was used. Lately a financial and material support from local shops and citizens was provided to co-finance the project.

Using the knowledge base of several active local stakeholders (a volunteer with a background in garden architecture) in landscaping and urban planning, we have designed a spatial simulation of the designed space, prepared detailed project documents and finally realised the whole project on site in the period of two months. On-site approach further attracted individuals and groups from the local neighbourhood to participate in real transformation of the space.



Photo1, 2 **Site Panenská street before restoration and further vision simulated in 3D programme.**
Author: Monika Kuhn, Bratislava, February 2018



Photo 3: **Surfaces restoration by the local community- on site approach.**
Author: Monika Kuhn, Bratislava, August 2018

This on-site approach contributed to a behavioural change in the area, where participants and passer-byes got used to the performative action and slowly changed their anonymous perception of the park's ownership. Consequently after one year period, this public space is naturally maintained by its users and has been used for several community activities, occupied by various social and age groups to play games. This qualitative evaluation proves the success of the SMART bottom-up approach to the process of design.

Conclusion

CONSCIOUS PUBLIC SPACE

In the end, we were able to plan and develop a sustainable, pro-social and DIY alternative to a public space. We call it a "conscious public place" as it stands in opposition to an unconscious public space - it is constantly kept in the mind of the visiting public that the space they are currently in was only able to come into existence because of themselves.

It is a low-maintenance area that sustains itself and offers function to all who look for it - whether it is physical activity, social interaction, leisure or just plain observation of natural aesthetics. The neighbourhood itself was able to benefit from increased land value (the park photos were featured in local advertisement for for-sale apartments), heat-island reduction (60m² of removed asphalt cover replaced by greenery), water absorption (permeable surfaces in the pavement), dust particles reduction, noise reduction and last, but not least - added social value in the form of neighbourhood meetings and activities.

The future importance of the project is that it offers itself as a guide to re-adoption of the fragmented greenery throughout our cities. It also serves as a handbook of re-appropriating our forgotten claim on unconscious public spaces. And it also points public in the direction of transforming city landscapes from monolithic concrete colossi into garden city complexes.

The local administration of Bratislava has been recently replaced by a new, progressive generation of city planners. Adjusting the scale of project, it is transferable not only across the city itself, but also to any other city in the region and even beyond. Compact methodology and cooperation between city actors (City council, active citizens, local community), created for citizens with similar intention,



might serve as a guidance and a simple tool to change our urban environment and profit from this free social capital. Further research on developing strategic tools to react on similar win-win strategies should be the next step to implement theory to practice. We hope that the project might serve others, who also feel that their public space has dormant potential and it needs awakening.

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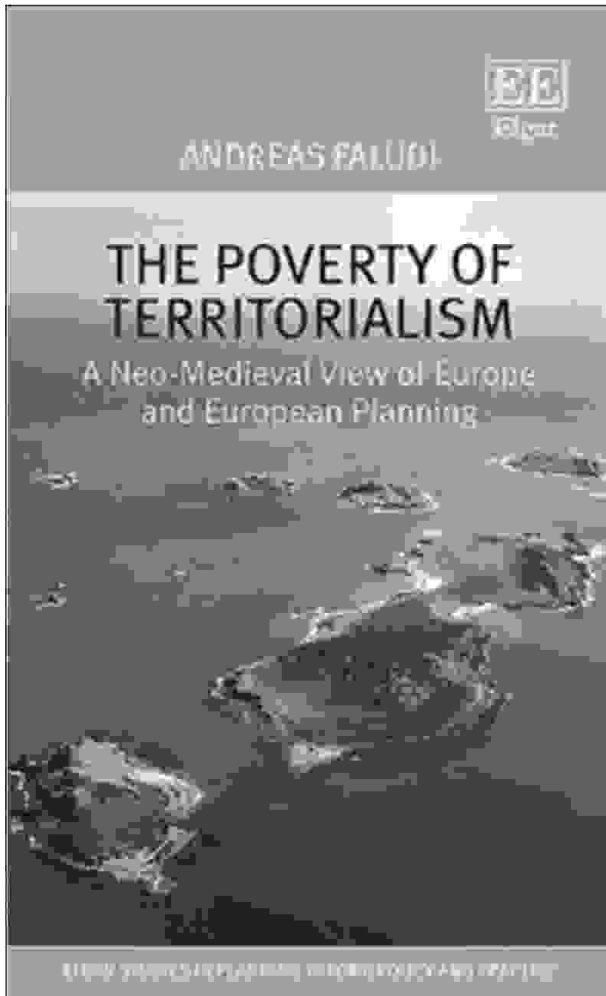


Photo 4: **Local community during the participatory process at the Good Marked Festival.**
Author: Monika Kuhn, Bratislava, September 2018.



Milan Husár

THE POVERTY OF TERRITORIALISM



THE POVERTY OF TERRITORIALISM

Andreas Faludi
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200 p.
English language

The latest book by Andreas Faludi, Professor Emeritus at Delft University of Technology, closes the past two decades of his work in the field of European spatial planning which is characterized by a lack of unity, strong position of the nation states and a big set of challenges to be addressed. Faludi is listing the ideas of space and spatial order from the medieval times until today and is proposing a new way of looking at the borders in the EU. Faludi as a well-established author with his footprint all over the planning literature for nearly a half a century interweaves the closed world of academia together with numerous examples from historical as well as very recent practice rendering the book a great read not only for planners, but also for policy makers and professionals from other fields as it provides an inspiring discussion about the current state and challenges of the planning world.

The key book has at least three key messages. Firstly, space must not be perceived as a set of containers with strong borders and clear-cut defined authorities. Secondly, the control needs to be shared as opposed to centralisation with one strong authority. Lastly, planning is turning soft, i.e. hard borders are no longer significant and soft borders are bringing a new set of complexity where interrelations among states, regions and cities are determining their success. Based on these notions, Faludi is bringing the idea of territoriality as a neo-medieval view of space in Europe with overlapping functional arrangements challenging the notions of sovereignty and democracy which are becoming less territorial i.e. bound to space and hard borders. The book is a must-read for both students of planning as well as senior academic and practitioners as it is proposing a fresh look at the current debates on national borders and how states and planning shall be organized in the 21st century and discusses the prominent role of planning in this reality.



Dagmar Petříková

**INTERREG CE89 LUMAT PROJECT “IMPLEMENTATION
OF SUSTAINABLE LAND USE IN INTEGRATED ENVIRONMENTAL MANAGEMENT
OF FUNCTIONAL URBAN AREAS”**

**FINAL CONFERENCE “TOWARDS THE INTEGRATED ENVIRONMENTAL LAND
MANAGEMENT IN CENTRAL EUROPE”**

**IN THE SILESIA MUSEUM,
KATOWICE, POLAND 15-16 APRIL 2019**



LUMAT Project Final Conference “Towards the Integrated Environmental Land Management in Central Europe” was taking place on April 15-16, 2019 in Museum Slaskie, Katowice, Poland, along with the excursion in the Silesian old mining area. Silesian museum with its modern auditorium rooms is itself an excellent example of brownfield regeneration.

The objective of the LUMAT Final Conference “Towards the Integrated Environmental Land Management in Central Europe” was to present the objectives, main activities and results of the LUMAT project as well as highlight the role of integrated spatial planning and the importance of urban regeneration for the prevention of urban sprawl and reduction of land take. The expansion of built-up areas and the resulting land take have been identified as one of the key development problems in the recent programming period.

Reducing the land take and reaching zero land take by 2050 are goals set both at EU and Member State level. To achieve land take targets by 2050, planning solutions must include compensation measures and introduce effective environmental management tools, already introduced in various European regions.

The LUMAT project has focused on the importance of the actions taken inside FUAs (functional urban areas) and strengthening of spatial planning at regional level in seven countries of the LUMAT partnership (PL, IT, DE, SK, CZ, SI, AT), which is proven practice of many countries. In all partnership countries the focus has been on environmental management in relation to land as a resource, land management reflecting all development goals in urban area.



The conference was intended for professionals and decision makers at local and regional level. The conference went beyond presenting the achievements of the LUMAT project; it addressed the above mentioned challenges in cooperation with other experts, focusing on how to promote faster and timely regeneration and revitalisation of already built-up areas from the point of view of sustainable land use in brownfield transformation and management, promotion of eco-system services and governance tools in FUAs.

The conference was opened by Mr. Jan Skowronek (Director of IETU Katowice, PL – LUMAT Lead Partner) and Mrs. Anna Starzewska-Sikorska (LUMAT project Leader) who presented the objectives, main activities and results of the LUMAT project.

Mr. Christophe Ebermann from the Joint Secretariat of Interreg Central Europe presented the key ideas of Interreg CE under the specific objective 3.3: To improve environmental management of functional urban areas to make them more liveable places, where Interreg CE programme, as European Union funding programme encouraging transnational cooperation in central Europe supported in the programming period 2014-2020 several projects, including the project “Implementation of Sustainable Land Use in Integrated Environmental Management of Functional Urban Areas”, acronym LUMAT.

Ms. Anna Starzewska-Sikorska from IETU Katowice, PL as lead partner of the LUMAT project presented the LUMAT project, its partnership and the pilot actions. Session 1 was then devoted to presentation of the invited projects on similar and related subjects as LUMAT project.

Matteo Tabasso from LINKS, Italy presented the project competition PHOTOCOESTEST which was focused on delicate balance between man and nature. Thirty-eight images participated to the contest, representing five different countries of Central Europe. The first prize was awarded to Lucio Beltrami for the picture “Dotted line: infrastructure can connect and be beautiful”, shot in Cuneo (IT). The second prize was won by Marta Fudala from Poland with “Focus on citizens” taken in the LUMAT project investment area in Ruda Śląska. Miroslav Beňák won the third prize, with “Chemical factory in Horné Orešany”, shot in in Pálfy’s chemical factory in Slovakia.

SESSION I – EU projects vs European policy related to land resources management
SESSION I – EU session
Session I of the final conference was devoted to presentation of EU projects in the frame of European policy related to land resources management.

Projects presented were from Poland and Italy.

- GreenerSites - Environmental Rehabilitation of Brownfield Sites in Central Europe was presented by Grzegorz Boroń, City of Bydgoszcz, Poland
- MaGICLandscapes - Managing Green Infrastructure in Central European Landscapes was presented by Stefania Grasso of Citta d Metropolitana Torino, Italy
- UGB – Smart integrated models for sustainable management of urban green spaces for creating more healthy and liveable urban environments (Urban Green Belts) was presented by Przemysław Szwafko, Krakow Municipal Greenspace Authority, Poland.

Justyna Gorgon from IETU was moderator of session II where the partner countries case studies of their pilot actions and investments were presented.

- Investment of brownfield regeneration in city centre, Ruda Śląska – Michał Adamczyk, City of Ruda Śląska, Poland,
- Investment of „green brownfield” regeneration in Trnava - Tomas Gunis, City of Trnava, Slovakia,
- Pilot program of site compensation in Saxony – Karl Eckert, Saxon State Office for Environment, Agriculture and Geology, Germany,
- Intermunicipal management model with implementation of SDSS Torino – Irene Mortari, Stefania Grasso, Metropolitan City of Torino, Italy,
- Garden show in Voitsberg – Anton Schabl, Energy Centre, Austria,
- „Priority map in Ostrava – Barbara Voivodikova, Institute for Sustainable Development of Settlements, Ostrava, Czech Republic,
- Industrial symbiosis model application in Kranj – Janez Ziherl City of Kranj, Slovenia.



Maroš Finka was moderator of discussion panel afterwards focused on question: "What problems still need to be solved, what issues should the future projects concern in the field of sustainable management of land in functional urban areas?"



The second day of the conference was devoted to the visit of the Silesian Museum and the area of the former Katowice coal mine and to the visit of the LUMAT investment site – heap at 1 Maja street in Ruda Śląska.



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