# CAN PUBLIC PARTICIPATION CONTRIBUTE TO SUSTAINABLE MOBILITY? THE EXPERIENCE OF BULGARIAN CITIES

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#### **Abstract**

This paper examines the existing practices of public (civic, citizen) participation in urban development in Bulgaria, specifically the processes of planning and implementation of sustainable urban mobility plans. For this purpose, the paper examines public participation in the preparation and realization of Integrated Plans for Urban Regeneration and Development (IPGVR) in the four largest Bulgarian cities. The analysis seeks to answer whether and to what extent the goal to promote public participation is achieved and whether this actually contributes to enhancing the level of sustainable mobility in the cities studied here. Civic participation is examined at the main stages of planning, with respect to the phases of citizen participation and the direction of its initiation, that is, whether it is top-down or bottom-up. The paper concludes that the level of public participation in the development of Bulgarian cities is low, but two factors may lead to its improvement: the influence of policies and management methods introduced through the operational programmes of the European Union and the active position of citizens' groups and associations. Regarding the impact of public participation on the sustainability of urban mobility in Bulgarian cities, the research finds no evidence of any tangible impact thus far.

**Key words:** Public participation in urban planning, sustainable urban mobility, planning methods, public interests and public involvement.

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#### 1. INTRODUCTION

Public participation is an issue of ever growing importance in urban development. Cities and settlements are the living environment of society, and urban planning has to organize it accordingly. This emphasizes the importance of public participation in urban planning. Whereas many planners believe they know what kind of environment people need better than the citizens who live there, in practice, only public participation can help define objectively and in detail the needs of society. The professionalism of planners cannot be a substitute for the direct involvement of city residents; therefore, urban planning should start and end with public participation (Arnstein, 1969; Innes & Booher, 2004; Lindenau & Böhler-Baedeker, 2014). This is also of primary importance for the management of urban mobility.

Urban mobility is one of the greatest challenges that modern cities face. Urbanization and urban growth are major drivers for socio-economic growth, but they also have a substantial negative environmental impact. Urban transport is a critical factor for both the positive and the negative attributes of urbanization. Thus, it is vital for cities to provide growing mobility while avoiding the associated problems and drawbacks. What modern cities need is sustainable mobility that minimizes the negative environmental and social impacts. Public (civic/citizen) participation is a key factor for all aspects of urban development in general and for urban mobility in particular. Yet public participation has a specific meaning in this area due to the increasing complexity of urban processes and the functioning of cities as complex systems (Portugali, 2011; Moroni, 2015; Slaev, 2016a). This is obvious if we compare sustainable mobility planning with the traditional approach, which considers only the main forms of transport, each one as a simple system. Mobility today should be regarded as a complex system involving a number of modes of transport with a large variety of effects, typical of complex systems. Complex systems, however, cannot be managed without mechanisms of self-regulation and feedback connections, which, in urban development, require bottom-up planning and high levels of public participation.

This research contributes to the study of the specifics of public participation in the planning of urban mobility systems. For this purpose, we explore civic involvement in the development and implementation of Integrated Plans for Urban Regeneration and Development (IPGVR) in the four largest Bulgarian cities. We seek answers to the following questions: What is the level of public participation in the planning of sustainable mobility in the preparation of these IPGVRs? Does public participation contribute to enhancing the level of sustainable mobility?

# 2. PROBLEMS OF SUSTAINABLE MOBILITY IN EUROPEAN CITIES AND THE ROLE OF PUBLIC PARTICIPATION

### 2.1. The Meaning of Sustainable Mobility in European Cities

The growth of European cities by number, territory and population is a never ending trend. The urban population is almost 75 percent of that of the whole continent (Eurostat, 2017), which is 20 percent higher than the world average (United Nations, 2014). This is a primary factor for the economic and social progress in the continent. 85 percent of the EU's gross domestic product is generated in its cities (InfoRegio, 2017). Enhanced mobility is a major factor for the development of cities and their role in the European economy. Today, 64 percent of all trips in Europe take place in cities, and according to forecasts, by 2050 the total length of journeys will triple (Van Audenhove et al., 2014). But in the majority of cities the share of private cars in the modal split exceeds 60 percent (EPOMM, 2017), while public transit and pedestrian traffic are declining. Due to traditional modes of travel, the congested transport systems of many European cities are a major source of carbon dioxide emissions, particulate matter pollution and worsening environmental conditions. This is also one of the causes of the deterioration in the health of Europe's population.

Sustainable urban mobility is thus "one of the toughest challenges that cities face today" (Van Audenhove et al., 2014, 6). The problem for European cities is how to improve the level of mobility while reducing pollution, congestion and accidents. For this purpose, the concept of sustainable urban mobility in the EU seeks to ensure the introduction of alternative and sustainable forms of mobility such as cycling, walking and stimulating the use of public transport. Since the start of the 2000s, a number of EC documents (e.g., the 2001 Transport White Paper, the 2007 Green Paper and the 2011 White Paper) highlight the main directions and guidelines for enhancing the sustainability of urban mobility.

### 2.2. Sustainable mobility systems as complex systems

Important for this paper is the perception of sustainable mobility systems as complex ones. Complex systems comprise great numbers of elements which are subject to complex relationships and interactions. Forcasting the development of complex systems is particularly difficult, and so is their governance. Table 1 shows a comparison between key aspects of traditional transport planning and sustainable urban mobility planning (SUMP). It clearly demonstrates that in traditional transport planning, the modes of transport function as simple systems, while the features and components of SUMP are much more complex in their structure and, even more so, in the system of interactions.

Table 1. Comparison of the main approaches to planning for traditional and sustainable forms of mobility

Traditional Transport Planning	Sustainable Urban Mobility Planning
Focus on traffic	Focus on people
Primary objectives: Traffic flow capacity and speed	Primary objectives: Accessibility and quality of life, as well as sustainability, economic viability, social equity, health and environmental quality
Modal-focused	Balanced development of all relevant transport modes and shift towards cleaner and more sustainable transport modes
Infrastructure focus	Integrated set of actions to achieve cost-effective solutions
Sectorial planning document	Sectorial planning document that is consistent and complementary to related policy areas (such as land use and spatial planning; social services; health; enforcement and policing; etc.)
Short- and medium-term delivery plan	Short- and medium-term delivery plan embedded in a long-term vision and strategy
Related to an administrative area	Related to a functioning area based on travel to work patterns
Domain of traffic engineers	Interdisciplinary planning teams
Planning by experts	Planning with the involvement of stakeholders using a transparent and participatory approach
Limited impact assessment	Regular monitoring and evaluation of impacts to inform a structured learning and improvement process

Source: Wefering et al. (2014) – Directorate-General for Mobility and Transport of EC. GUIDELINES – Developing and Implementing a Sustainable Urban Mobility Plan

### 2.3. Public Participation in the Management of Urban Development

Public participation is considered in different aspects of managing urban development, e.g. as a tool for planners to improve the relevance of plans or as a means for citizens to take part in governance. In this paper we focus on the latter aspect, because it is of particular importance for the specific topic of our research. Clearly, the main reason for public participation in the management of urban development is that the people are sovereign in their states, regions and cities, and that is undoubtedly a fundamental principle of democracy (Moser, 1989). Accordingly, the citizens of a city, a village, or a territorial unit are sovereign in their urban and regional governance. The function of local authorities is only to serve society by performing entitlements delegated by citizens. Unfortunately, these fundamental democratic principles are often forgotten by local elected officials, public servants, and even by urban planners. Planners emphasize the benefits of civic initiatives as a reason for public participation (e.g., Bickerstaff et al., 2002; Franceschini & Marletto, 2015), but civic initiatives do not have to be

beneficial in order to be obligatory (Arnstein, 1969). Even if administrators and urban planners are convinced that certain civic initiatives are misguided, their constitutional duty is to strictly follow the directions defined by the sovereign. Applying democratic principles in managing local development is, of course, a basic principle of the European approach.

On the other hand, however, the management of every common/public resource (e.g., infrastructure) requires the construction of a system that is more or less centralized. Citizens have to delegate some of their management rights to the centre (Demsetz, 1967; Slaev 2016b), which also inevitably means granting certain coercive powers to the central body so that it is able to fulfil its assigned mandate. In this way the local authorities are able and often tend to exceed their rights, support lobbyist interests, engage in schemes of corruption or implement "professional" misconceptions, thereby not serving the public interest. All this underscores the importance of the balance between the top-down and bottom-up mechanisms of social and urban governance (Cvetinović et al., 2016). The establishment of effective rules for public participation is a guarantee for the supremacy of the sovereign – the community (Moroni, 2010; Slaev, 2016b).

The forms of public participation should first be classified according to the form of democracy – direct or indirect. Acts of *direct* democracy can be initiated by decentralized bodies (citizens, informal groups, businesses, professional associations or NGOs) as well as by the local authorities. In order to ensure and facilitate such initiatives, the local authorities must have established practices of publicity and accountability, follow a coherent "open door" policy, and have internal structures specifically designed to facilitate citizen control and participation. Alternatively, public involvement through forms of *indirect* (representative) democracy is realized only by means of the local authorities or other state institutions. In these forms, the effective functioning of a system of rules of co-operation and public participation is essential. The Code of Best Practice for Civil Participation in the Decision-Making Process (Council of Europe, 2009) identifies different instruments and mechanisms of involvement that provide different levels of protection for public interests. These tools can be classified into four groups:

- o Information providing free access to up-to-date, accurate and timely information. In this form, the flow of information is one-way and there is no direct opportunity to protect the interests of the citizens.
- o Consultation The purpose of consultations is to gather suggestions from stakeholders. However, this form does not guarantee a high level of interaction as local authorities consider citizens' proposals at their own discretion.

- o Dialogue Public discussions to determine the interests and opinions of different public groups. In this form, public groups have the opportunity to defend their interests and rights.
- o Partnership Working groups formed on a permanent or ad hoc basis to express public opinions and to actively protect the interests of citizens.

Consultations, dialogues and partnerships take place in various forms, such as focus group meetings, round tables, public forums and conferences. The first two forms are suitable for a smaller number and the latter two for a larger number of direct participants. The number of participants is an important issue because public participation should reflect the interests of all social groups and yet should be feasible. Therefore another important problem crucial for protecting the interests of public groups refers to the technology of representativeness (Bickerstaff & Walker, 2005; Mullen et al., 2011).

The level of public participation can be evaluated by different indicators that measure participation either directly, or indirectly – through the performance of civil society. The Citizen Participation Index (Forum Citizen Participation, 2015) includes two components – a) one assessing the legislation which regulates the forms of citizen participation (information, consultations and dialogue) and b) one referring to the existence of institutions, networks and media that create participation prerequisites. Anther indicator is the Civil Society Index (CSI) (Heinrich, 2004) of the international CIVICUS alliance. This indicator is a combined measure of a) the structure of civil society, b) the external environment in which civil society functions, c) the values promoted in the civil society arena, and d) the impact of activities pursued by civil society actors. A third indicator is the Civil Society Organization (CSO) Sustainability Index (BNCL, 2016) that evaluates a) the legal environment within which civil society organizations exist, b) their organizational capacity, c) their performance through advocacy activities and their ability to provide services, as well as d) their public profile/image.

## 2.4. Public Participation in the Development of Urban Mobility

The issue of civic (public) participation in the development of urban mobility is, in fact, extremely important because it is not just about planning the development of transport systems but making cities highly productive and attractive. In the case of traditional transport planning, the transport system can be regarded as a relatively simple combination of a few forms of transport, each of which in turn is a simple system comprising a limited number of elements/factors. Transport engineers optimize the functioning of those systems by technical methods. However, sustainable forms of mobility consist of a larger number of sub-systems, including networks of pedestrian and bicycle traffic, and many other factors (such

as social and environmental effects), and they are characterized by much more complex interactions between these factors. Such a system of urban mobility should be regarded as complex. We once again emphasize that complexity is a factor of particular importance for our study, because of the different principles of management of simple and complex systems. Whereas the management of simple systems is entirely based on the top-down methods of rational planning, the governance of complex systems requires the establishment of multiple feedback and self-regulation mechanisms. In complex social and urban systems, centralized planning is inefficient if it does not employ bottom-up approaches (Portugali, 2011; Moroni, 2015, 2010).

Specifically in the area of sustainable mobility, planners draw a clear distinction between ineffective (traditional) and effective sustainable forms of traffic. They thus prescribe a clear and simple solution to the problems - less car traffic and the wider use of mass transit, walking and cycling. In practice, however, solutions are much more difficult, as we have to establish a balance between various forms of traffic, acknowledging that the advantages and the drawbacks of each of these forms vary in different cities and neighbourhoods. Therefore we cannot determine the optimal, "ideal" mix of traffic modes (modal split) by employing a "purely rational" top-down planning method, as the optimal mix is dependent on the preferences of local residents. Thus the modal split relevant to the preferences of the residents from neighbourhood A is different from that of neighbourhood B. Without public participation providing information about the preferences of local residents and how they value the expected results, planners cannot identify the appropriate modal mix for each neighbourhood and for the city. And after all, any plan, even the best one, and any modal mix, even the most sustainable one, will fail if not supported by the citizens as key participants in local development. Public participation, providing such support, is an indispensable instrument of planning.

Yet we should acknowledge that due to the high level of centralized investment in transport infrastructure, even highly sustainable mobility systems require a relatively high level of centralization. Even with well-developed bottom-up methods, the management of complex systems is inherently problematic (Slaev, 2017). It is not strange, therefore, that citizens are often sceptical about whether they can effectively influence the management of the processes. Bickerstaff and Walker (2001) found that public participation is hindered on one hand by the very limited forms of participation and on the other because of the public's scepticism and reluctance to participate.

Public participation is a social mechanism, and as such, it depends on traditions, social knowledge and established (i.e., working, effective) social rules. The

CH4LLENGE project, which has examined 34 European cities in terms of mobility planning practices, observes that a number of European countries have extensive experience in providing active civic participation in urban mobility planning and its implementation. Positive examples include the UK, Germany and France, whose legislation sets out essential requirements for public discussion in the development of transport plans. However, CH4LLENGE also observes that few European cities allow citizens to participate actively in the planning process and to directly contribute opinions, ideas, and knowledge. Furthermore, the project highlights the lack of political will and developed policies as key issues concerning civic participation. The so-called "participatory dilemma" (Callahan, 2007) reflects the low interest of citizens in the early planning phases when the processes are largely open and significant flexibility opportunities are present. When planning in the next phases develops into a more specific outline, citizens' interest increases since they feel that they are directly affected. Thus an important challenge for urban planners is to find ways to ensure civic participation at all planning stages, especially in the mature phases of planning and implementation. Gil et al. (2011) set out six stages of public participation in the development of a sustainable mobility plan (SMP) and its implementation: 1) identification and invitation of stakeholders, 2) definition of the vision, mission and general goals of the plan, 3) development of the SMP Logframe draft, 4) discussion, approval and ratification of the SMP, 5) communication and promotion of the plan, 6) supervision and monitoring of the implementation.

# 3. EXPLORING THE LEVEL OF PUBLIC PARTICIPATION IN THE EFFORTS TO ACHIEVE SUSTAINABLE MOBILITY IN BULGARIAN CITIES

### 3.1. Methodological approach

Building on the principles of public participation in sustainable mobility planning already mentioned and the analysis of the European experience, we explore the level of public participation in the development and implementation of urban mobility plans. As examples, we examine the preparation and implementation of *Integrated Plans* for *Urban Regeneration and Development (Integrirani planoeve za gradsko vazstanovyavane i razvitie - IPGVR)* for the four largest Bulgarian cities – Sofia, Plovdiv, Varna, and Burgas. These plans are relevant examples, because they are developed under the Operational Programme "Regional Development" (OPRD), and are therefore in line with basic European planning principles. The IPGVR methodology has set rules for required civic participation. These plans serve as a basis for further plans and measures for the development of sustainable forms of mobility such as public transport, pedestrian and cycling (bikeway) networks.

Our methodology is based on the understanding already explained in section 2.4 that a sustainable mobility system is inherently a complex one and, as such, it can be properly planned and managed only if bottom-up planning methods are used. This emphasizes the unavoidable necessity of genuine public participation. In the absence of public participation, it is impossible for planners to properly define the optimal modal mix and promote each specific form of mobility. Therefore, we explore the processes involved in the preparation and implementation of the IPGVRs in order to assess if public participation was indeed realized and if it was effective, i.e., whether it contributed by making meaningful proposals that have been integrated into the plans. We thus answer our first research question about the level of public participation in planning. We explore citizen involvement at each of the stages of development and implementation of the plans by comparing the planning stages, the forms/phases of public participation and the direction of initiation:

- regarding the stage of planning we identify three stages: first stage initiation of the plan, second stage development of the plan and third stage implementation,
- regarding the phases of participation we irecognize: A identification and involvement of stakeholders, B identification of problems and dissemination of information, C discussion and dialogue and D input and the integration of civilian contributions,
- regarding the direction of initiation, we identify top-down and bottom-up approaches.

Finally, we assess whether public participation has influenced the performance of planning for sustainable mobility. For this purpose, we compare our findings regarding the actual contributions made by the public with the implemented plans. If the level of public participation has been high and its contributions have been integrated into the plans, we would expect better planning results. Then, over time, sustainability would be enhanced, indicated by gradual positive changes in the modal split. If, on the other hand, the contributions of local residents have not been integrated into the plans, that would result in a lack of public support for planning and, even if planners have proposed useful solutions, they are less likely to be implemented. That would lead to lower sustainability and an inefficient structure of the modal split. However, the link between citizen involvement and the modal split is obviously indirect, while the connection between public participation and the success of planning is direct and strong (Beierle and Konisky, 1999; Wouters et al., 2011). Hence, measuring the modal split is a rather inaccurate indication of the level of public participation. Instead, public support and approval of the results are reliable indicators of successful participatory planning. Alternatively, dissatisfaction and criticism expressed by

citizens indicate a failure of planning to improve its performance by promoting public participation.

The IPGVRs were developed only three or four years ago, but due to their nature, some of the planned activities have been realized in just two years. Still, because of the short period since their realization, statistical data about the results are not yet available and we have based our analysis exclusively on media sources.

# 3.2. The Existing Level and Problems of Sustainable Mobility in Bulgarian Cities

Bulgaria's rate of urbanization (73.3%) is similar to the European average (NSI, 2017) and so is the rate of motorization. Between 1991 and 2016 the number of vehicles increased almost 3 times and currently the level exceeds 455 cars per 1,000 inhabitants. Thus the modal split in the largest cities is characterized by high levels of private car transport (about 45-50 percent on average), medium levels of public transit (25-33 percent), low levels of pedestrian traffic (15-25 percent) and very low use of bicycles (3-6 percent on average) (EPOMM, 2012). In Sofia for the period 2010-2014, parallel with an increase of 8.1 percent in the number of cars, passengers trips by public transport dropped by 16.4 percent (NSI, 2017). Yet over 71 percent of the cars in Bulgaria are more than 15 years old, so this contributes to the unfavourable ecological situation in Bulgarian cities (EEA, 2015).

Although with some delay compared to Western Europe, sustainable development issues in Bulgaria have been addressed by some of the main strategic documents in the course of the past decade (Daskalova & Slaev, 2015; Anderson et al., 2012). Following the guidelines defined, for example, by the Green Paper (2007) and the White Paper (2011), some of the largest cities adopted their first Integrated Urban Transport Plans (ITP) in 2011. Under the Operational Programme "Regional Development" all large Bulgarian cities developed Integrated Plans for Urban Regeneration and Development (IPGVR) in 2013. These plans have an important role, because they serve as the basis for major initiatives, e.g., the preparation of ITPs for a new generation, the elaboration of Plans for Sustainable Urban Mobility, and the development of new pedestrian zones and cycling networks.

# 3.3. Public Participation in the Planning and Realization of Sustainable Urban Mobility in Bulgarian Cities

To evaluate the public/civic participation in planning for sustainable mobility in Bulgaria, we first draw a parallel with its overall level for the country.

Participation is a key issue of social governance in the new democracies in Southeast Europe with a major impact on urban development (Kovachev, 2003; Maricić & Petrić, 2008; Slaev & Kovachev 2014; Zeković et al., 2015). In the past decade, attempts have been made to measure the level of public involvement in governance using the three indicators outlined in section 2.3. The Index of Citizen Participation (ICP) was measured in 2015 in a study conducted by the Citizen Participation Forum (CPF) in partnership with the Bulgarian Centre for Non-for-Profit Law (BCNL). This study estimates the level of the ICP in Bulgaria at 3.39 on a scale ranging from 0 (min) to 6 (max). The Civil Society Index (CSI) of the international CIVICUS alliance has been evaluated twice in Bulgaria. The first evaluation of CSI was carried out in 2003-2005, i.e., before the country's accession to the EU, by the Association for partnership and support of civic activities "Balkan Assist" and the second was conducted in 2010-2011 by the Open Society Institute (OSI). Estimates of the level of CSI for Bulgaria are presented in Figure 1 along with the results for Greece, Romania and Germany, for comparison.

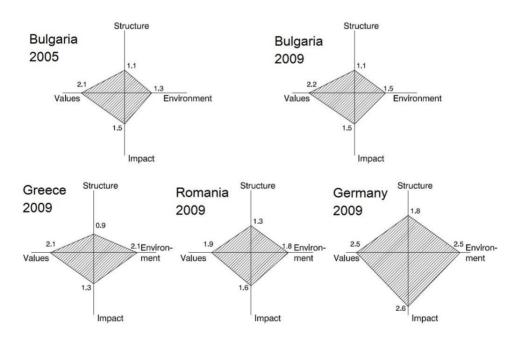


Figure 1. Civil Society Index of Bulgaria, Greece, Romania and Germany. Sources: Balkan Assist (2007), CIVICUS (2011), http://csi.civicus.org/

The third measure, the CSO Sustainability Index has been surveyed on an annual basis since 1997 by USAID in partnership with local NGOs (OSI, BCNL). Bulgaria's 2016 score was 3.3 on a scale ranging from 7 (min) to 1(max) – with no change since 2012 and only minimal change since 2002.

To summarize, Bulgaria's score in all of these indices is about average or a little better than average for Southeast Europe, whereas the performance of the region is the worst in Europe. The two latest surveys, the ICP study by CPI and BCNL of 2015 and the CSO Sustainability Index study of 2016 by BCNL and USAID conclude that the situation is too static - although positive changes are observed, they are too slow. Bulgaria's problems with its institutional environment are acute and the legal framework is insufficiently developed. Serious issues exist with the mechanisms of citizen involvement. Due to a lack of traditions and civic education, public participation is only slowly gaining strength. Still, the study observes positive change in the institutional framework, e.g., more transparency, improved communication and dialogue with citizens, and, as a result, changes in citizens' attitudes and higher motivation to participate in or initiate civic actions. As the BCNL report observes, "...although small and partial, the results of the actions and initiatives of citizens, civic groups and organizations, are a positive sign that civil society in Bulgaria is indeed developing" (Citizen Participation Forum, 2015, p.5).

In the next part of the article, we investigate to what extent these assessments of the level of public participation in Bulgaria are valid in the field of planning and promoting sustainable urban mobility. We explore civic participation in the development, adoption and implementation of Integrated Plans for Urban Regeneration and Development (IPGVR) in the four largest cities in Bulgaria. We focus on IPGVRs because, as already stated, these plans are the basis for such instruments as sustainable urban mobility plans, integrated urban transport plans, the development of pedestrian zones and bicycle networks. In accordance with the chosen methodology, we investigate civil participation at the three main stages of planning. At each stage we analyze the identification and involvement of stakeholders, the dissemination of information, the practices of public discussions and dialogue, and the integration of public proposals in the plans. In addition, we place an explicit emphasis on the direction of initiation of activities: top-down or bottom-up.

• **First stage** – Initiation of the plan: identification of the key problems to be addressed and the affected social groups, dissemination of the initial information

At this stage, planning institutions, i.e., local authorities must inform the public and potential stakeholders and invite them to participate in the planning process. The identification of the parties affected by the IPGVR is a basic requirement set by the OPRD, as the operational programme strictly follows the European approaches in planning. Indeed, the municipal authorities did their best and sought maximum representativeness through a large number of stakeholders –

professional associations, business associations, NGOs and interest groups. 25 such associations were invited to participate in the IPGVR of Plovdiv and 28 in the IPGVR of Varna. Still, as the IPGVR is developed under a centralized programme, the identification is done by the municipal administrations, i.e, the process is typical "top-down" and this allows local authorities to make their job easier and invite organizations according to their own choice.

After invitation, the stakeholders participate in public discussions. At this stage they have the opportunity to contribute to defining both the scope of the plan and the problems to be solved. Stakeholders' proposals have to be integrated into the report regarding the problems addressed by the plan and its targets. Thus, in the next phase of participation, contributions from civic society organizations should be taken into account, but we must emphasize that these are relatively modest contributions as the overall scope of the plan and its main goals are defined when the IPGVR is initiated.

• **Second stage** – development of the plan (vision, objectives and concrete planning solutions)

We emphasize the importance of public participation at this stage, because, if it is insufficient, the end results may differ substantially from the actual public interests. Therefore, sustaining the dialogue between planners and the community through meetings and consultations with public and private stakeholders (e.g., experts, guilds, NGOs, and clubs) is essential. These are in fact the "second round" of public consultations conducted to refine the objectives of the plan and integrate specific proposals by the community into the concrete planning solutions. These consultations too are a mandatory element of the methodology based on the principles of European operational programmes and have indeed been carried out in the course of the preparation of all the IPGVRs studied here. Over 15 months the Sofia Municipality held more than 110 events. They included (according to the organizers) over 60 meetings with stakeholders, four exhibitions, and four sociological surveys with a total of over 1700 respondents, five public debates with over 750 participants, seven presentations at national and international conferences, and ten roundtables.

Yet public participation in the other big cities was obviously not so well organized and probably less effective. Although the administrations seemed diligent in this endeavour, they obviously put less effort in the second stage than in the first. In the city of Burgas, which performed better than Plovdiv and Varna, three public discussions were arranged, an expert forum, two online surveys, and an online questionnaire for prioritizing the proposals of the project. The municipality had

also organized a mailbox for collecting citizens' ideas and suggestions, bringing together over 40 pages of proposals.

Generally, the local authorities of the four cities consider the consultations and discussions a major success for public participation. Although many participants would probably agree, some also point out some essential shortcomings. There is criticism, for instance, that meetings were organized in a formal manner, the main point for municipalities being just to report "positive results". Furthermore, as preparation of the plans progressed the number of meetings and the number of participants declined. Not only were most events organized in the first stage of planning, but also with each new step of the plan's development the citizens' associations seemed less eager to participate.

### • **Third stage** – implementation/realization of the plan

The point with the implementation of the IPGVRs is that they require the preparation of new plans – e.g., area plans, integrated transport plans, sustainable urban mobility plans, plans for bikeway networks, etc. But, in fact, the local authorities did not seek to promote civil involvement in the preparation of these *second* plans. Apparently, the administrations considered that the requirements of the operational programme for public participation referred only to the initial development of the IPGVR and not to the transport and mobility plans. Civil organizations participated in the latter only by their own initiative and almost by chance.

To manage the implementation of an IPGVR, a system of control and monitoring had to be developed. Indeed the plans of the four cities developed such systems, including the organization of Monitoring Committees. These committees have to prepare annual reports on the execution of the plan. To ensure transparency and public awareness, stakeholder representatives should be included in the Monitoring Committees and the annual reports should be published on the website of the municipal council. Furthermore, all reports should also be subject to public discussion before being submitted to the municipal council. However, the formation and, particularly, the final approval of the members of the committee is the responsibility of the municipal administration, and thus ultimate control is exercised by the administration.

Collecting information and statistical data about the implementation of the plans and establishment of the control and monitoring systems proved to be an issue, as this information is scarce. In fact, only the reports about the completion and adoption of the IPGVRs are available online. Official information since then and especially since 2014 has been sporadic and we have not been able to find any

official report or data on the implementation of the plans. On the other hand, the public response is impressive – numerous articles have been published in various national and local media. Virtually all articles deal with the cycling networks. Public attention is drawn to these networks, probably because they are a new element of the urban landscape of Bulgarian cities. Thus they are the first evident product of IPGVRs. A Google search on bikeways in Sofia, Plovdiv, Varna and Burgas (in Bulgarian) on November 12, 2017 produced 6,510 results. 60 of these results are articles discussing the effectiveness of the cycling networks in the four cities. Ten of the articles express positive opinions, 11 are neutral and 39 are evidently critical of the development of the networks – e.g., publications in Dnes, Trud, Nova News, Monitor, and BNT. The articles criticize the high price per km, especially in Sofia and Varna and many failures in the design. Some articles provide evidence that the networks have done more harm than good and can be used only for walking – e.g., Trud, Darik News, Nova News and Burgas City, Figure 2.



Figure 2. Pictures from articles about failures in the design for the bikeways in Sofia, Varna and Burgas.

Sources: a) Trud (2015), b) Darik News (2016), c) Nova News (2015) d) Burgas City (2015).

#### 4. DISCUSSION

The purpose of this discussion is to analyze the facts outlined above in order to evaluate public participation in the initiation, development, and realization of the IPGVRs in this study and whether it can be considered sufficient to positively influence the sustainability of urban mobility. First of all, with regard to the planning methodology we can say that due to the rules formulated in line with the requirements of the European operational programmes, public participation has become a mandatory element of planning. In designing each IPGVR, local authorities have indeed made serious efforts to identify the maximum number of stakeholders that are representative of significant population groups. Thereafter, public consultations are mandatory at each phase of development of the plan and its implementation.

All theses are important measures with the potential to enhance citizens' participation, and therefore the first important conclusion that we draw is about the importance of planning rules and institutions. As researchers have observed, rules and institutions are the basis of all social interactions and determine the performance of any social activity, including urban and sustainable mobility planning (Portugali, 2011; Moroni, 2010; Slaev 2016b). The Bulgarian experience is clear evidence of the positive influence of the European planning principles on the improvement of the planning practice as far as public participation is concerned. On the other hand, however, the practice shows a number of issues concerning citizen participation in Bulgaria. Many of the public participation activities take place formally, with no real concern about the actual results, and this becomes most evident in the implementation of plans - for example, in the realization of cycling networks. The reason for this formal approach is that the work of municipal administrations is assessed on the basis of formal criteria. However, we should note that without such criteria the work of the administration could not be evaluated at all. Hence, to promote public participation, rules and institutions are crucial, but it still depends on the effectiveness of the rules and the performance of the institutions.

Furthermore, our survey has confirmed the observation of researchers (e.g., Callahan, 2007) that the relevance and the effectiveness of public involvement largely depend on the stage of planning. In the examples of IPGVRs in this study, the involvement of stakeholder groups was realized mainly in the early stages of the process of planning. At these stages public participation is welcomed and public proposals are easily addressed. Indeed, the survey has found that the proposals made by citizens' groups and NGOs have been integrated into the plans. Yet at the early stages, the interests of citizens' groups are relatively less well-articulated and public representatives cannot foresee well enough what

consequences should be expected from implementing the plan for the group they represent. One problem is that urban mobility measures are usually described using specialized terminology, which is not comprehensible to the public. Thus, despite the discussions many people remain unaware of the actual implications of the planned measures. Hence, even though many citizens' groups and associations are invited to take part in planning at its early stages, they are rarely able to make meaningful contributions.

However, at the later stages of preparation and, particularly, the implementation of plans, when the interests of all groups are evident, participation is less welcomed by local administrations, probably because the proposals made by citizens are much more difficult to integrate in plans. In general, with the progress of planning and its implementation, the participation of stakeholder groups in planning becomes increasingly problematic. This is evident especially in the planning and development of cycling networks in the four cities. Ample internet sources confirm that cyclist clubs participated in the earlier plans, yet this was before the preparation of the IPGVRs - in 2011-2012 for Sofia, 2010 for Plovdiv and 2012 for Burgas. However, this participation seems to have led to no actual cooperation in planning. In contrast, after the realization of the cycling networks, a vast number of articles by cycling club members criticize the newly developed bikeways, implying that they were never asked about their opinion in the process of actually developing the networks. Indeed, we have not found any source about the participation of any clubs members in planning the networks that took place only three years ago.

Ultimately, regarding our first research question, we conclude that the level of public participation in sustainable mobility planning in Bulgaria is low, despite implementation of the methodological requirements for the operational programme. Because these requirements referred to the early stages of planning, their effectiveness was very limited and the actual contributions were quite formal. Therefore arguably, the level of citizen involvement in mobility planning is even lower than the overall level of public/civil participation evaluated by "Balkan Assist", BNCL and OSI in the period 2005-2016. In view of the active position of citizens' groups and associations expressed in the media, we would expect that this level will improve; however, we have found no actual indications of such a change so far.

Regarding the second research question, our answer is negative again. Clearly, the low level of public participation observed in mobility planning may not influence the level of sustainability of the system. As explained in the methodology section, dissatisfaction and criticism by citizens indicate a planning failure, insofar as public involvement is essential for sustainable urban mobility.

#### 5. CONCLUSION

Sustainable mobility is an essential factor for the development of any city in the world, but for Bulgarian cities its importance is even greater because of the need for these cities to improve the efficiency of their labour markets and make their residential areas attractive, while simultaneously maintaining the favourable ecological characteristics of the urban environment. However, as emphasized in this article, sustainable urban mobility cannot be realized without providing active public participation in urban planning and its implementation. Preparing plans (e.g., integrated transport plans and sustainable urban mobility plans), and developing sustainable mobility modes in practice (including pedestrian and bicycle traffic), is ineffective and unsustainable without the full involvement of the key stakeholders, the beneficiaries and the community.

The study of the influence of public participation on the development of sustainable mobility in the course of the preparation and the implementation of Integrated Plans for Urban Regeneration and Development in four Bulgarian cities has underscored the importance of bottom-up management and citizen involvement. However, crucial in this regard are factors, such as social traditions, public activity and the existence of a system of working and effective legal rules, administrative regulations and institutions requiring and facilitating civic involvement.

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