### XXV INTERNATIONAL ECO-CONFERENCE® 2021 XIV ENVIRONMENTAL PROTECTION OF URBAN AND SUBURBAN SETTLEMENTS

22<sup>th</sup>–24<sup>th</sup> SEPTEMBER 2021 NOVI SAD, SERBIA

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PROCEEDINGS 2021

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### ECO-CONFERENCE® 2021 ECOLOGICAL MOVEMENT OF NOVI SAD

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# SOCIAL ASPECTS OF URBAN SAFETY – AN OUTLINE OF RESEARCH UNDER THE U-SaFER PROJECT

#### Abstract

Science Fund of the Republic of Serbia has launched in 2020 Program IDEAS for which the evaluation of the project proposals is not yet finished. One of the project applicants which successfully passed the preliminary stage of the evaluation is entitled Urban Safety as a Qualitative Factor of Cohabitation Under Enhanced Risk (U-SaFER). The research proposal is in the field of urban planning and design, and it is also closely associated with the social context and the theory of safety. Although the actual research on this project has not started, the aim of this paper is to present the concept and planned methodology of the U-SaFER and to demonstrate the significance of the role of people's perception and evidence in the process of enhancing urban safety in public spaces through effective urban planning, design and governance. Many parts of the world, including Serbia, are in the infancy stage of research of this topic. Therefore, the U-SaFER project proposal may attract additional attention in scientific research community as well as with the decision-makers.

**Key words:** urban planning, safety, scientific project, Serbia

### INTRODUCTION

Science Fund of the Republic of Serbia was founded in March 2019 and in spring 2020 it launched the public call for scientific research projects under the Program IDEAS. High-level scientific excellence, quality, and innovative ideas represent the fundamental values of all projects supported by the Fund. The Program IDEAS supports basic and applied research in all fields of the scientific research within a period of 36 months, with an envisaged budget of 24 million euros in total. There is a shift in comparison to the previous scientific research projects that were contracted by the

Ministry of Education, Science and Technological Development of the Republic of Serbia in a way that now there are no predefined topics for the projects under this call (Petrić, Vujošević, 2020). Researchers have been encouraged to propose research outline, engage teams of experts and potentially form associations with labs, research centres and companies in Serbia or internationally, somehow mirroring the structure of the EU scientific research project applications. Deadline for application of projects under this call was 7th October 2020 and the call's current stage is the first phase of projects' evaluation.

In reference to this call, the Institute of Architecture and Urban & Spatial Planning of Serbia – IAUS (Participating Scientific and Research Organization – SRO) from Belgrade applied with several project proposals under the Sub-program: Engineering and technological sciences. One of the proposals is focused on urban planning and design, social context and theory of safety. This project is entitled Urban Safety as a Qualitative Factor of Cohabitation Under Enhanced Risk (U-SaFER). Urban safety is crucial for the quality of life, and absence of it causes distrust and fear, as well as reduced mobility, and it creates serious negative effects and distractions in the neighbourhood community. This research will provide a contribution to understanding, locating, expressing, preventing and reducing those negative impacts. Its starting position is the notion that it is important to identify the reasons for the personal feelings of (a lack of) safety among citizens and their communities in order to understand the patterns of use of public spaces and mobility. This also affects development of urban governance practices for quality cohabitation under the enhanced risks of crime and anti-social behaviour patterns. The U-SaFER project, which is novel and unique in Serbia, brings a methodological blueprint for empirical research in diagnosing urban safety, based on the information provided by the relevant institutions and a poll of citizens, as well as an analysis of the condition of spatial urban elements from the aspect of safety. The findings of the analysis are further checked with the application of an urban living lab approach.

The research will be set in the capital of Serbia, Belgrade, due to its emblematic features of complexity, intensity and diversity, and display of different urban morphologies (spatial areas of intervention). By analysing the theoretical hypothesis and case studies, and by collecting and combining of all available information for specific pilot study areas (a central city zone; an open urban block; peripheral settlements; and open green spaces), with numerous comparative evaluations, the general image of the level of safety in public urban spaces will be created. From the practical application viewpoint, the project will lead to the development of the U-SaFER interactive web platform and implementation of an 'Urban Safety Impact Forum' for Serbia. The impact of the project relates to creating an information base and guidance materials, upgrading of the cognitive aspect and opening the possibility for new research, recognition of the process, monitoring changes, promoting the urban planning and architectural design that will contribute to better, more pleasant and more frequent use of public spaces, the development and maintenance of public places and creation of the legal framework that will enable policymakers to implement effective practices by means of a multidisciplinary approach of the U-SaFER project.

## CONTEXT OF STUDY ON SOCIAL ASPECTS OF URBAN SAFETY

There is a wide-spread understanding of urban safety as an integral domain of urban development, planning, design and local governance practice. It is a cross-cutting concept within the fields of public policy, security, health, disaster risk management, planning, and other disciplines. The achievement of citizen safety in public urban spaces critically balances between the two extreme concepts – the idea of equality between all people (including the racial, gender and economic balance) on the one hand, and the need for control, monitoring and surveillance, on the other (Danilović Hristić, 2013). Urban safety is, in most societies, assessed via the trends and good practices of cities in response to threats (UN-HABITAT, 2007, UN-HABITAT, 2015). The recent practices of some European countries testify to the emergence of local governance initiatives and bottom-up community-based programs, through which citizens, communities and the voluntary sector have become more engaged in tackling societal problems (Home Office, 2005). Despite the endorsement of local governance instruments for enhancing urban safety in international planning policy, Serbia can still be considered to be at the starting position in this matter. The local setting is characterised by conditions of economic transition and the process of European integration, adjustments to planning in an unregulated market environment, as well as institutional capacities and regulations which do not follow these challenges at the same speed (Čolić, 2015). The threats to urban safety in public space such as crime and violence, and natural and human-made disasters are in these conditions, still mostly dealt with in a top-down manner via central government strategies, and sectoral and security policies. Measures are identified and implemented within the decisional (and operational) arena of policy-makers and experts, being insufficiently integrated in urban planning practice.

Here, the research on the social aspects of urban safety becomes enriched by the U-SaFER project, primarily because it employs a citizen-centric maneuver (Bătăgan, 2011), and relies on stakeholders' practical knowledge (Flyvbjerg et al., 2012) to obtain real-time, bottom-up data to enhance the subsidiarity and transparency of the decisionmaking processes in the field of urban safety. The U-SaFER project's methodology involoves the empirical knowledge as a crucial element of the co-production of socially innovative practices. The method applied aims to translate the specific, tacit experiences of local users to inform stakeholders' practice. Additionally, this will decode the robust, practical experience of professionals and policy makers to provide a contextual understanding of urban safety in designated pilot study areas. Being able to understand how urban safety is subjectively experienced and interpreted by the people in pilot study areas can work to produce change. These are priority areas of spatial intervention (a central city zone; an open urban block; peripheral settlements; and open green spaces), all set in the capital city Belgrade which is elected as the most complex, intense and diverse Serbian city. Bottom-up input into planning policy is expected to enhance decision makers' responsiveness to citizens' needs and increase their quality of life.

### METHODOLOGY APPLIED IN THE U-Safer PROJECT

The project consists of eight work packages that have mutual dependence and synergy. The first work package WP1 is integral and generic in character, oriented to provide smooth and easy organisation, monitoring and reporting about the progress of the project. The purpose of the second work package WP2 (Vigilance base) is to construct the knowledge and test the methodology details and its appropriateness. The core of the project is in packages WP3 to WP7, with four timely parallel in-field pilot study areas with strong spatial orientation, followed by wide horizontal and vertical participation, and then the revision and drawing sublimation of conclusions. The pilot study areas are based on different typologies and patterns of Belgrade's urban tissue. The goal is to obtain data from different environments in order to generalise the conclusions at the level of the urban community, as well as to recognise the risks and other aspects of the use of space. The objective is to compare the results of professional in field research of the targeted space unit, and perception of individual safety based on a questionnaire survey. A methodology is created for three-step data collection and research, comparison and overlaying of the results of expert scanning of the spatial characteristics, observations, experiences and opinions of the users (citizens, neighbourhood residents, visitors) and official data about the subject obtained from the Police Department, Communal Police and various NGOs. The goal is to achieve a realistic diagnosis about the state of urban safety in the pilot studies, as representatives for the overall city of Belgrade. The WP7 Urban living lab (ULL) will test and implement the major products (outcomes) of WP2 (Vigilance base) and integrate the project's methodological framework within the four pilot study areas (WP3, WP4, WP5 and WP6). The finalisation of the project in WP8 has the purpose of dissemination, presentation, and extension of the project results.

The U-SaFER project will be activated on two levels – the local level, with local users: residents, neighbourhood gatekeepers, tourists, visitors; and the expert level, with stakeholders: representatives of professional associations, planning agencies, public enterprises in the field of security, policy-makers, the private sector, non-governmental organisations, etc. It is expected that changes in entrenched practice may occur only if stakeholders (including decision makers and professionals) recognise the contribution of local users' experiential knowledge in relation to business-as-usual. Local users and residents of neighbourhoods will be engaged in a questionnaire survey in all four pilot study areas in order to provide robust, reliable and cross-cutting data. In addition, local users and stakeholders will take part in an ULL to provide rich narrative data for an in-depth consideration of the research problem.

The questionnaire survey will be tailored to serve in the pilot study areas, addressed to inhabitants and frequent users of the space, but also applied as a part of the U-SaFER internet opinion poll and spatial mapping of remarks, dedicated for use in all urban settlements in Serbia even after the project's lifetime expiration. The personal feelings of the citizens about safety in open public spaces are very important, and it is necessary to explore those using different methodologies, such as collecting data in surveys and interviews, and then analysing the answers. There is a standard procedure for collecting data about personal observations, which is applied in other studies about urban safety

and crime impact issues worldwide. It is planned that questionnaires will be sent by post to the residents in the chosen neighbourhoods and the questionnaire will also be carried out among local residents in person. The basic questions about age and gender should indicate the focus groups and interest for specific spatial or social problems. The most significant finding will be the 'overlapping of layers', with the compilation and comparison of expert remarks and user experiences. All collected data will be processed and presented in graphical charts and (GIS) maps.

Setting up the ULL through U-SaFER project will involve local users and designated stakeholders in an open process of co-designing and visioning, but also co-testing and co-implementing measures, solutions and new models of governance to enhance urban safety. Given that local users and stakeholders possess different kinds of expertise and/or experiential knowledge in the field, the ULL will be organised in the form of flexible, fluid sites to facilitate the co-creation of knowledge. Initially, the ULL will run sequentially through the four different pilot study areas across Belgrade at the local level (WP3, WP4, WP5 and WP6) (Figure 1). Local-level ULLs will comprise story labs, or learning sites in which local actors' stories are seeded through an interpretive approach. Local users' stories are combined with mapping in order to designate a spatial narrative. It is expected that creation of a baseline map of community sentiment in relation to particular areas of the case studies will provide comparable data between case study areas. In the second stage of the research, stakeholders are introduced to ULL to cross-check the applicability of the solutions identified and to coordinate the integration of measures in the priority areas of spatial intervention, as well as to

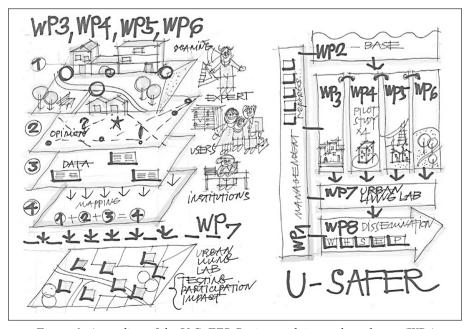


Figure 1. An outline of the U-SaFER Project with its work packages (WPs)

Source: Design by Nataša Danilović Hristić, Principal Investigator of the project

increase the local users' sense of agency and governance capacities. Stakeholders' narratives will be gathered via open-ended one-to-one interviews. The ULL will convert informal archives of the local users' and stakeholders' stories into a narrative infrastructure tool to build in local authorship as a core functionality of the U-SaFER website. This tool is designed for informing future policies and practices in the fields of public safety and security, town planning, social wellbeing, tourism, design, real estate, etc. Finally, the ULL will develop an Urban Safety Impact Forum to bring together related networks of local users and stakeholders. This activity will also mediate different actors, associations and innovators to feed in and exploit the U-SaFER website. Additionally, it will derive a set of measures and solutions for enhanced urban safety in priority areas of intervention, co-designed by local users and stakeholders.

### DISSEMINATION OF RESULTS

Communication, dissemination and education about the project will be organised within its WP7 and WP8, but also through pilot study areas WP3, WP4, WP5 and WP6, via the Urban Living Lab, the U-SaFER website, surveys, meetings, the publication and distribution of flyers, posters, handbooks/manuals and storytelling, exhibition and open public competition for students, as well as through scientific publication containing the methodological models used and the results obtained (Figure 2).

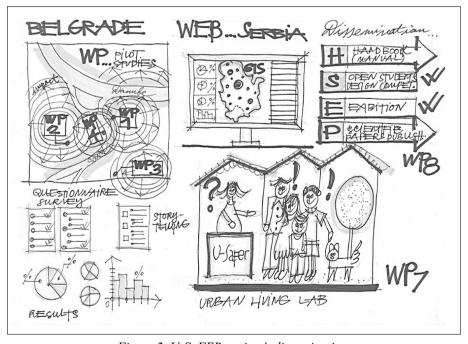


Figure 2. U-SaFER project's dissemination.

Source: Design by Nataša Danilović Hristić, Principal Investigator of the project

There are four main target groups of the research results' users: a) scientific community; b) young researchers, students and other academics; c) professionals in the fields of urban and spatial planning, architecture and design; and d) citizens, policy makers, decision makers, local authorities, police units, public enterprises, stakeholders, NGOs etc.

Scientific community would benefit of the results of the project which are implemented via the U-SaFER interactive web platform while creating an information/knowledge base and guidance materials, in addition to presenting the data/results beyond the duration of the project, for reuse and comparison in future research. Also, the research results will be available on the U-SaFER project website, with the prior consent that they can be downloaded according to publisher's permission.

Young researchers, students and the academic community will be attracted by the potential to learn and achieve proficiency and broaden their skills since while the duration of the project, the U-SaFER team will organise an open student competition, with tutorials and mentoring, in addition to jury evaluation and decisions, with comments on the level of achievement and publication of the results in a journal, and organisation of an exhibition.

It is expected that the professionals in the fields of urban and spatial planning, architecture and design will benefit from their involvement in the participation process of the U-SaFER project, as well as they will be able to apply the project's handbooks/manuals in order to implement these experiences for preparation of creative and innovative urban plans that will contribute to safer, more pleasant and frequently used public spaces.

Last but not least, citizens, the policy and decision makers, local authorities/self-governments, police units, public enterprises, stakeholders, NGOs, will benefit from the U-SaFER internet site for use and data collection and the manual with the project's methodology. All this is expected to initiate further surveys and actions in various neighbourhoods and cities as well as implementation of effective practices regarding the issue of urban safety. For this group of actors the inspiration for further action would be through the ULL engagement and demonstration of the achievement of a better quality of urban life through visible outcomes of development and maintenance of public spaces.

### CONCLUSIONS

Considering all the challenges which present scientific research is faced with in Serbia and globally, beneficial is the knowledge about research topics that raise awareness among the public as well as decision makers, in order to provide future horizontal and vertical collaboration between citizens, stakeholders and the representatives of local authorities, and finally to set rules and recommendations that will be implemented in the urban planning process.

The novelty of research set up by the U-SaFER project is in the development of a methodological blueprint for empirical research in diagnosing urban safety based on the information provided by the relevant institutions and a poll of citizens, as well as on analysis of spatial urban elements and their conditions from the aspect of safety. The findings will be cross-checked through urban living lab (ULL) approach. As described in the methodology, the ULL will be used for the first time in local conditions, which will be a novelty, too. The manual about the organisation and expectations of the process could also be used for other research in the field of urban studies.

The expected scientific contribution is the implementation of the unique and comprehensive research, the promotion of knowledge and provision of the fundamentals for practical results. By analysing the theoretical hypotheses, pilot study areas and by collecting and combining of all available information for specific spaces, with numerous comparative evaluations, the general image of the level of safety in public urban space will be determined.

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Оригинални научни рад

# ДРУШТВЕНИ АСПЕКТИ УРБАНЕ БЕЗБЕДНОСТИ – СТРУКТУРА ИСТРАЖИВАЊА У ОКВИРУ ПРОЈЕКТА У-СаФЕР

#### Апстракт

Фонд за науку Републике Србије је 2020. године покренуо Програм ИДЕЈЕ у оквиру којег још увек није завршена евалуација пријављених пројеката. Један од пројеката који је конкурисао и успешно прошао прелиминарну фазу евалуације је насловљен [Урбана безбедност као квалитативни фактор суживота у условима повећаног ризика] (акроним: У-СаФЕР). Предмет истраживања пројекта тиче се урбанизма и планирања, а уско је повезан са друштвеним окружењем и теоријом безбедности. Упркос томе што истраживање још увек није започето, у овом раду смо настојале да представимо оквир и планирану методологију У-СаФЕР-а и да прикажемо значај који има доживљај становништва и чињенично стање о процесу јачања урбане безбедности у јавним просторима кроз ефикасност урбанизма, планирања и управљања. Србија, као и многе друге земље у свету, јесте у раној фази истраживања ове теме. Стога, предлог пројекта У-СаФЕР може да привуче додатну пажњу у научној заједници, као и међу доносиоцима одлука.

Кључне речи: урбанизам, безбедност, научни пројекат, Србија

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