Constructing an Urban Future: The sustainability and resilience of cities – infrastructures, communities, buildings and housing.

• Paper / Proposal Title:
Smart lighting system as the sustainable integrator of smart city

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• Abstract (300 words):
The goal of this paper is to present the smart lighting system (SMR) as one of the approaches for providing the massive deployment of Smart City services to compete with existing solutions. The SMR is an essential part of the implementation of the Smart City agenda, as it is the general base for all Smart City and social progress index (SPI) services without which the Smart City agenda cannot be launched into the real life. The main drivers of mass implementation are large energy savings for lower ROI sufficient for the interest of investors. Investors prefer investments with low-risk and long-term returns. However, only economic logic is not sufficient in this case; in addition to investors' interests, the interests of users and the public must also be taken into consideration. Therefore, in addition to the low cost of implementation, such systems
must provide the ability to provide various services for its users. Next to best economic utility, the system has to provide a multitude of useful services for the benefit of public users addressing so-called –SPI (parking detection system, snow detection system, street damage detection, environmental data harvesting, future drone post services, support for drivels vehicles, electric charge services for electrical vehicles, visual communication services, etc, services there are improving lives of the citizens). Implementation of the smart lighting system must have an effect of reducing the ecological footprint. In the R&D process selection of low carbon impact components is one of the important priorities. The presented system is embedded idea that is constantly adapted in its implementation, nothing is definitive, and the development is the constant of this smart lighting system. Disadvantages of SMR comply with disadvantages of IoT and Smart City agenda in general. According to one of best experts in this field Natalie Allen cyber security weaknesses threaten to make smart cities costlier and dangerous than their analogy predecessors.

• Author(s) Biography (200 words each):

Vasja Roblek, M.Sc., is a research assistant and PhD student. He is cooperating in scientific research work within Italian NGO Business Systems and he is a project consultant in technological company in Austria. His current research areas are digital economy, knowledge management, organizational changes, health management and sustainable development. He is the (co)author of number of articles in national and international scientific journals. He is a co-author of the two book chapters in scientific monographs published by Springer and book on sustainable development.

Mirjana Pejić Bach is a Full Professor at the Department of Informatics at the Faculty of Economics & Business. She graduated at the Faculty of Economics & Business – Zagreb, where she also received her Ph.D. degree in Business, submitting a thesis on “System Dynamics Applications in Business Modelling” in 2003. She is the recipient of the Emerald Literati Network Awards for Excellence 2013 for the paper Influence of strategic approach to BPM on financial and non-financial performance published in Baltic Journal of Management. Mirjana was also educated at MIT Sloan School of Management in the field of System Dynamics Modelling, and at OliviaGroup in the field of data mining. She participates in number of EU FP7 projects, and is an Expert for Horizon 2020.

Boris Bukovec, PhD, graduated at the Ljubljana Faculty of Mechanical Engineering, got his Master's and PhD at the Faculty of Organizational Sciences Kranj researching organization and management. He started his career in the automotive industry (IMV, TPV Novo mesto), followed by 10 years in higher education (Associate Dean, Dean). Dr. Bukovec is Full professor and holder of courses in the field of organization and
management. He authored several articles on change and quality management. He consults companies on management systems and educates their leadership, leading staff and expert profiles. Dr. Bukovec is a member of the American Society for Quality (ASQ), the Academy of Management (AOM) and the Slovene Society for Quality and Excellence (SZKO). His research focuses on modern paradigms, approaches, models and tools for managing organizational change. He combines his research with more than 20 years of experience working on various expert and leading positions in the automotive industry.

Maja Meško, PhD, holds a position of associate professor of management at University of Primorska, Faculty of management. Since 2013 she has been registered by European association for aviation psychology as a certificated human resource specialist. Her work, which includes around 200 bibliographical items, has been published in professional and academic journals.