

## Network Conference of Spa-ce.net

# “From Smart Cities to Smart Regions in Central, Eastern and South Eastern Europe”

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Societal development in the EU, including its economic development, is closely connected with the transformation from an industrial to a post-industrial knowledge-based society. This transformation can be seen across all spheres of societal life, starting with the production sectors – agriculture, industry, services – via leisure-time activities and tourism, ending with the shift from government to governance.

Not only because the majority of inhabitants is nowadays living in the cities, but first of all because of concentration of economic, social and cultural activities in urban areas, the cities and urban regions are crucial for this development and represent the driving force for innovation based economy capitalising the knowledge and innovation. To fulfil this role, cities and urban regions have to attract and to create proper environment for the creative class, for knowledge based economic activities (research as well as enterprises), for the development and spread of innovations. They have to be smart and their smartness became to be one of their crucial competitive advantage.

The smart city concept has been developed and implemented in several cities of the EU – in the capital cities of the EU member states as well as medium and small cities. Smart development concepts are only rarely developed for regional systems or even urban regions, although growing intensity of interactions between cities and their periphery as well as growing complexity of urban socio-ecosystems cause fuzzification of urban borders and lead to the process of growing together between the core city and its suburban area.

Smart strategy is not smart if it does not reflect the fact that sustainability, efficiency and competitiveness depend more and more on the use of potential of cooperation between the core city and its gravitational area. It means that a smart strategy should give a clear definition of the position of the city in this space. This should be mirrored in the strategy looking for smart use of complementarities, synergies, for joint values, interests and cooperation potentials, but in the same time looking for the possibilities for a smart use of competitive advantages.

## **Book of abstracts:**

### **From smart city to smart region – from an expertise towards political conceptual documents**

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Smart City as understood by the Slovak Smart City Cluster under participation of the STUI is first of all the concept integrating different innovative approaches focusing on solving partial problems of a city and region more interactive, sensitive, reflective city and regional governance, more safe public spaces and satisfaction of the needs of all citizens, entrepreneurs and other stakeholders across different age and social groups. Smart City is a place, where traditional service networks serving the city and region are more efficient in satisfying the citizens and entrepreneurs thanks to broad use of information and communication technologies (ICT). Slovak Smart City Cluster support the transformation from the smart city towards smart region concept, which should be able in the collaboration with its functional region to react flexibly to current and future challenges and adaptation to the needs resulting from other external and internal impulses like climate change, development of the global economy and its volatility, forthcoming globalisation and internationalisation and others.

### **Changing geography of the creative economy in Hungary at the beginning of the 21st century**

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The Hungarian economy has gone through rapid transformation and modernization since the political changes of 1989-90. One of the signs of successful economic restructuring and re-integration to the world economy was the growing role of creative economy. In the presentation we analyse the changing geographical pattern of creative economy in Hungary, based on longitudinal statistical data. Our findings suggest growing core-periphery relations in the spatial pattern of creative economy, especially since the recent financial crisis. The relative weight of Budapest and its urban region has been continuously growing and even major regional centres are unable to keep pace with the Hungarian capital. We also found that cities in the Hungarian urban system became highly differentiated according to their attractiveness for

creative firms and labour, and there is a growing competition among secondary cities for knowledge based and creative activities. The growing geographical concentration of the creative economy (especially the knowledge intensive industries) is partly the result of previous neoliberal regional and urban policies.

## **Urban and urban-regional communication: in slow motion – or how else?**

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Traffic congestion, diesel dupe, shaky bus rides, old, slow trams, endangered cyclists, four modal transfers to reach the next small town, and last-mile walking: Have we seriously given up to allowing and encouraging citizens to meet with each other as freely as possible? Have we put engineering and problem-solving on hold to endlessly repeat the promotion of cycling, walking, and public transportation? Is this the future that allows creative citizens to be creative – or will it restraint to operate only in a small neighborhood? In this short teaser I'll at first point out some traffic-related impressions from Central and Eastern European cities and confront these impressions with the current political and planning paradigms for traffic infrastructure. Then, I'll present an overview of more visionary solutions and open the discussion for a reflection on what would fit our Central and South-Eastern European cities and regions.

## **15 years of CENTROPE region: critical reflections and future perspectives for smart development**

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Competition and cooperation of European regions and cities has become one of the most significant variables influencing European spatial development. Searching for competitive advantage of any given region or city is key element of strategy of any successful region or city. Regional spatial and societal structures are influenced by pressure from international markets, unfavourable demographic shifts, environmental risks and many other forms of uncertainty. Multiple stakeholders are heavily striving to reach consensus and the processes of steering the vision are sometimes blurry and unclear. All these factors represent risks not only for regional planning, but also for sustainability of any model of successful spatial development. Idea of CENTROPE (Central European Region) was launched in September 2003 with aim to profile the Central European Region as a framework for increasing wealth and sustainable growth in area of living and working space for about 6 million people. Cities, counties and other territorial subjects in Austria, Hungary, Czech republic and Slovakia took a part in this initiative. CENTROPE Vision 2015 is considered as one of the leading strategic directions for this region. Innovative solutions based on cross-

border cooperation in all the fields including economy, politics, culture and education are included in this vision. Special attention is paid to the role of both largest cities of this region, Vienna and Bratislava and their mutual cooperation as well as their role for the region as whole. Regional cooperation within the CENTROPE, its marketing communication and Place Branding, as well as overall current state of art of region and its future perspectives are focus of our critical revision, presented in this paper.

## **From Smart Cities to Smart functional region in Lower Danube Area**

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The role of European cities is approaching to the top level of importance in the age of crisis and anxiety, due to their immanent power. Dynamic changes are being spurred with centripetal forces directing flows of population, finances and investments oriented towards large cities, with smaller ones lagging behind in many cases. The city is becoming key actor for increasing regional competitiveness and for strengthening regional, state and even continental territorial cohesion, as some of critical and challenging issues nowadays. The largest cities in Lower Danube Area (LDA), thus getting opportunity to shift from the former functional matrix, with important role of industry, more or less limited within its building area, to soft (ideas, information) or hard (infrastructure) networking, with either its rural neighborhood or with other towns or cities, by common interests or functional reasoning. The analysis in paper tries to find a way how to improve mutual understanding among large cities along LDA, and their institutions responsible for cooperation and networking by smart governance models in MAs along LDA, using horizontal links and cooperation of MAs along LDA towards organizing a LDA functional region with emphasized economic-ecological appeal.

## **Assessing growth management strategy: A case study of the largest rural-urban region in India**

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Urban growth as sprawl remains a serious challenge in the global South, cutting across various geographic and municipal boundaries. At the core of steering this development are growth management strategies aiming to secure economically, socially and environmentally sustainable growth. This paper evaluates the performance of the growth management strategy in the National Capital Region of India based on a conceptual framework covering programme design, institutional setting and market interactions. It uses a mix of qualitative and quantitative methods to evaluate policy performance across multiple scales (city, metropolitan, state and region). This research reveals the limited success of policies, the failure to combine policy with regulatory and non-regulatory instruments, and insufficiencies in the institutional environment, all of which hinder effective growth management. To curtail sprawl, the paper recommends moving towards flexible growth boundaries, introducing self-contained communities as policy component, integrating and enforcing land-use and transport planning, and empowering lower-tier authorities.

## **Sofia functional area's sustainable mobility patterns and intelligent transport system in the air quality, liveability and recreation perspectives**

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The functional urban area (FUA) of Sofia covers vast area and the compact city attracts many commuters from the region. It returns many weekend visitors out of the city that reach far beyond the FUA predominantly by car trips. The mobility patterns in space and time have changed rapidly due to many drivers. The quality of the air in Sofia has been influenced dramatically by the growing motorization. The study is partially based on literature review and qualitative data about the electric mobility foci in the Horizon 2020 project ECHOES. The paper further conceptualizes the wise and smart transition in the accessibility and mobility patterns that can guarantee the livability and recreational opportunities for all citizens of the FUA in an environmentally just manner. This includes among others the introduction of low emission zones, new electric fleet and incentives at the demand side in order to change lifestyles and choices.

## **'Smart' tourism destination management - territorial quality and territorial governance**

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Tourism in CEE develops as an important economic sector. The expressions of 'smart tourism' and 'smart tourism destinations' have entered the tourism field, incl. (academic) tourism studies.

EU started the European Capital of Smart Tourism campaign, with four criteria: - accessibility, - sustainability, - digitalisation, - cultural heritage & creativity (the winner receives a marketing boost).

*Smart*: the concept is fuzzy according to many, evolved from smart cities (increased digitalization) to broader applications (Koo et al., 2016). This evolution seems realistic, as digitalization becomes an integral element of modern life.

*Regional dimension*: Tourism is place based – in varying scales. It can be one beach resort (a micro scale), or an object for religious / medical tourism, or a city (for city trips) but often it is a tourism region (say Tuscany) or a network (a tour that tourists undertake, by road or by sea). The regional dimension differs, but much tourism has typically a regional scale also city trips since visitors are offered what is interesting in the surroundings of the destination city, tourist move across juridical (municipal) borders and the hinterland is a service area for the tourist city.

*Question* for this paper is twofold:

- How does smart relate to territorial quality and territorial governance?
- How is 'smart' used in the real-world of tourism destinations?

*Dissimilar cases*

Four cases will be structured along criteria derived from the theoretical notions of 'smart' plus an examination of the regional dimensions, as follows

1. city + regional dimension (is tourism to the city extended to the region?)
2. IT / digitalisation (use of smart devices / tools for tourism flows etc.)
3. sustainability (attention [aid to sustainable tourism])
4. socially smart (citizens involved, tourist as guest to be welcomed?)
5. competitive destination – territorial identity
6. destination governance / collaboration (stakeholders involved in destination management?)
7. smart use of cultural heritage
8. creativity (are creative solutions development for destination management / marketing etc.?)

Local policies, policy and public discussions: is the concept of 'smart' used? What is prominent in the local discourse?

*The conclusions* of the paper will present 1) a summary of the cases, 2) observation of the use of smart in local tourism discourses; 3) point on smart in territorial governance.

## **Social media as a tool for Smart City marketing: possible future implications for regional development.**

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Paradigm shift in the spatial planning after millenium and acceleration of the spatial development has generated many positive as well as negative effects. Spatial planning faces the problem of increasingly higher uncertainty of the framework conditions of spatial development, crisis of „trust and authenticity“, increasing level of the social system complexicity, progress of science and technology, social changes, geopolitical situation etc. These changes in spatial planning theories and practise essentially modified as well the role of spatial planner in the planning processes. Recent development has shown that hard factors are becoming less and less important and the cities are learning to search for soft factors and they are strategically managing their marketing activities, fostering social participation and involvement of the public. Main feature of any SMART solution in urban milieu is nowadays the networking, participation, inclusion and connectivity. The main goal of our contribution is to review the potential and perspective of social media with regard to city identity, place attachment and community building. Connection to target audience, immense variability of target groups, mutual information exchange and willingness to communicate are hallmarks of smart city communication via social media. We investigated the case study of Bratislava’s Facebook page regarding its activity and the role of its followers. Important conclusions from the city/municipal level are drawn and possible future implications for regional scale and regional development are entirely discussed.

## **Smart regeneration strategies for former provincial cities in Poland**

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In 1999, as a result of the administrative reform, 31 cities in Poland lost the status of a provincial city. In subsequent years, these cities experienced particularly serious problems related to systemic

transformation, the collapse of traditional industry, the degradation of the city centre and the suburbanization process. As a result, most of these cities are shrinking. The aim of the presentation is to analyse and evaluate the specificity of the urban regeneration programming process in former provincial cities in the years 1999-2017, on the example of 4 cities with different characteristics: Kalisz (an important cultural centre), Legnica (a former Soviet base in Poland), Przemyśl (an important religious centre and border city) and Wałbrzych (a post-mining city). On this basis, smart regeneration strategies will be presented aimed at social inclusion and sustainable local development.

## **Monika Kuhn: Smart solutions for more quality urban environment**

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Bratislava is classified as the 3rd most greenest cities in the world. Even though the city's 'green identity' is idle and lacks of smart and sustainable approach for better and more quality urban environment. We are dealing with phenomenon of urbanisation as every other cities, significant in the form of urban sprawls and lacking sustainable development of compact city vision. Quality compact city has to involve equal ratio between built-up and 'in between spaces' as city squares, streets, parks... This project's challenge is to find a different solutions for solving public space's main problematics by focusing on management and better usage of such unbuilt spaces. Case study from the densely built up area in the old town propose a solution applicable in larger scale for the whole Bratislava region. Participatory approach being used in the case proves that such approach could be beneficial for both municipality and participants. Park Škarniclova is one of the bottom- up reference in the city where active citizenship solves one of the public space's biggest challenges.

## **SMART Cross-border Governance - Polycentricity in Practice?**

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Many of complex problems and challenges develop across different jurisdictions in administrative and political units and they are demanding for cooperation across national borders. Better coordination of decision-making platforms which go beyond current hierarchical governance systems and enable flexible cross-sectoral interactions is needed to address such cross-border issues. Many SMART solutions aims towards more effective coordination of cross-border activities were developed thanks to the support of EU territorial cooperation schemes. Analysis of two Central European cross-border regions brings empirical



evidence that polycentric governance as such a SMART solution seems to be suitable for overcoming key institutional challenges in cross-border governance. SMART solutions are usually based on self-organization of regional or local actors, well-defined common problem. On the other hand, there is no systematic promotion of these institutional innovations which hamper their long-term sustainability and therefore polycentric governance is an exception rather than a regular practice in cross-border cooperation in Central Europe.

## **Urban Infrastructure in Serbian Towns: Constraint or Hidden Potential for Territorial Development**

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The paper analyses perceived quality of urban infrastructure in Serbian towns in order to assess its real and potential role in territorial development. During socialism Serbia had many medium-sized towns which were strong industrial centres, but in the period of post-socialist transformation all of them lost their previous power and competitiveness due to the economic decline in the 1990s. Lack of financial resources has prevented restoration of the urban infrastructure, thus constraining future development of the town and its surrounding area. The paper made use of data collected between 2013 and 2015 from inhabitants and local elites in eight medium-sized towns in Serbia. Respondents perceive many problems in the local community or the town, and they are very critical about the state of urban infrastructure. They also recognise endogenous resources and unexploited potential of urban infrastructure in the town, which may contribute to the territorial development in Serbia.

## **Economic impact modeling in the prioritization process of smart specialization**

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Contrary to what is a common practice in the evaluation of traditional cohesion policy instruments (e.g., R&D, human capital or infrastructure investment subsidies) economic impact modelling has not yet found its place in the evaluation of smart specialisation strategies. Though the necessity of economic impact assessment is emphasised in the theoretical contributions of the smart specialisation literature (e.g., Foray 2015) the practical methodology is still an open issue. In this paper we study the local and national impacts of a selected smart specialisation strategy for Pécs, a Hungarian city-region. We follow the steps in prioritisation suggested by the smart specialisation literature. Accordingly, we start with the analysis of the novelty of discoveries followed by the assessment of their embeddedness in the economic structure of the region, their spillover potential and the likely impacts of different supporting policies.