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Maroš Finka
Dagmar Petříková

POLICY FRAMEWORK RELATED TO FUNCTIONAL URBAN AREAS (FUAS) IN TRANSNATIONAL CONTEXT

Abstract

The Interreg Central Europe project “Implementation of Sustainable Land Use in Integrated Environmental Management of Functional Urban Areas (FUAs)” is focused on creating common methodology for elaborating plans and instruments dedicated to sustainable development and environmental resilience by land management in FUAs. The project started on May 1, 2016 and its first task was to review the status-quo on FUAs in national spatial policies in the partner country states (PL, DE, SK, CZ, SI, IT). The paper brings the summary of “Transnational report on policy framework related to FUAs” to clarify the problems and shortages of the FUA definition and implementation approach in each of the partner countries.

Key words: functional urban areas, environmental management, urban/peri-urban territorial systems

Introduction

Interreg Central Europe project “Implementation of Sustainable Land Use in Integrated Environmental Management of Functional Urban Areas (FUAs)” acronym LUMAT which runs in the period of May 1, 2016 to May 31, 2019 is the project focused on development of instruments to integrate environmental management in functional urban areas (FUAs).

The objective of the first activity of the LUMAT project was reviewing of status-quo on functional urban areas placed in national spatial policies, the output of which is this Deliverable D.T1.1.1. Transnational report on policy framework related to FUAs. The aim has been to provide comparative analyses of the status-quo, policies and instruments related to the management of the development in functional urban areas as the basis for the know-how transfer and elaboration of joint strategy for the management of FUAs development with the focus on environmental and especially land-use management.

The deliverable was prepared based on common template for the presentation of the framework of the national spatial policies regarding the place and role of FUAs in the planning systems with special focus on integrated environmental management with the component of land and soil in the urban/peri-urban territorial systems (FUAs).

There is a harmonised definition of urban areas developed by the OECD in collaboration with the EU (Eurostat and EC-DG Regio) as “functional economic units” choosing as building blocks for the functional urban areas smallest administrative units for which national commuting data are available (LAU2 in Eurostat terminology). The methodology for the identification of the FUAs based on this definition was approved by the OECD Working Party on Territorial Indicators in 2011 and consequently applied to 29 OECD countries.

The definition of functional urban areas uses population density to identify urban cores and travel-to-work flows to identify the hinterlands whose labour market is highly integrated with the cores. The methodology consists of three main steps: identification of core municipalities through gridded population data, connecting non-contiguous cores belonging to the same functional urban area and identification of the urban hinterlands. The methodology makes possible to compare functional urban areas of similar size across countries. A classification of functional urban areas into four types according to population size is proposed

- Small urban areas, with population between 50,000 and 200,000
- Medium-sized urban areas, with population between 200,000 and 500,000
- Metropolitan areas, with population between 500,000 and 1.5 million
- Large metropolitan areas, with population above 1.5 million

Each functional urban area is an economic unit characterised by densely inhabited “city core” and “commuting zone” whose labour market is highly integrated with the cores. The geographic building blocks to define urban areas are the municipalities (e.g. LAU2 in European countries). The city cores are defined using the population grid from the global dataset Landscan, referred to circa year 2000. Polycentric cores and the hinterlands of the functional areas are identified on the basis of commuting data (travel from home-to-work) referred to circa year 2000 (Census year).



OECD Metropolitan Areas Database

The list of functional urban areas takes into account the results of the consultation with the European National Statistical Institutes launched by Eurostat in June 2011 on the definition of cities and by the OECD with Delegates from the Working Party on Territorial Indicators. This list of functional urban areas may be reviewed on the basis of additional comments provided by Countries.

The OECD Metropolitan Areas Database which provides a set of economic, environmental, social and demographic estimated indicators on the 281 OECD metropolitan areas (functional urban areas with 500 000 or more inhabitants). Additionally, interactive maps, histograms and summary profiles of each metropolitan area are available on the MetroExplorer tool.

Functional Urban Areas (FUAs), as labour market basins, are perceived as the key drivers of European, national, regional and local economic performance and important territorial structures in delivering on the Europe 2020 targets. But their definition and identification based on this definition in many countries does not reflect reality as they are based only on limited criteria not mirroring real centrifugal interrelationships between core city and its functional area.

Europe is characterised by a polycentric network in which the FUAs as defined by the OECD and EC are only part of its structure. Reflecting the diversity and density of the European urban system, different size of the core cities and urban areas and broader scale of functions the FUAs in majority of the EU member states have not become the real instrument of the national spatial development strategies, although often used as the framework for the definition of the target areas for the investments form the European Structural and Investment Funds in the programming period 2014/2020. Functional urban areas defined based on proper definition and used as the instrument for spatial development management can be important territorial assets for Europe because they can frame for integrated approaches in the cities and their suburbs representing critical mass for development, strengthening urban-rural linkages and encouraging cooperation between cities belonging to a cross-border area, macro-region or even a global integration zone.

FUA's (Functional urban areas) are not institutionalised in Czech Republic, Italy, Slovakia and Slovenia, nevertheless evidence on equivalent spatial arrangements based on different criteria can be found in academic work or in other country specific materials.

The only analysed country where FUA has been institutionalised is Poland as a new category in spatial planning system, resulting from the territorial aspect of regional policy presented in the strategic documents like National Spatial Development Concept 2030 and National Strategy of Regional Development 2010-2020.

Regions, cities and rural areas. As the division of the functional urban areas into sub-types shows even Polish institutionalisation of the FUAs did not follow the OECD/EC concept of FUAs. The Polish typology refers to the functions of urban centres in the settlement system of the country. A functional urban area is a spatially continuous settlement system consisting of units separated in administrative terms. It covers a compact urban area with a functionally linked urbanized zone. Poland has well balanced urban structure with several large FUAs (the biggest are Warsaw agglomeration and Upper Silesia conurbation) and many medium-size cities.

The needs in relation to integrated approach at the level of FUAs differ from country to country reflecting the problem situation and availability of the instruments supporting integrative land use and environmental management at this level, supporting proper arrangement of urban structure according to the principles of spatial order and environmental functioning rules.

The common denominator for LUMAT partner countries is the need to link economic benefits derived from commercial development to the other aspects based on integrated point of view and the need to deal efficiently with the threats between different interests – contradictions.

In Germany the FUAs could benefit from the changes towards an integrated approach in the process for determining what land is used for natural compensation measures. Not only could the appropriate parcels of land be identified for compensation, but this may be determined with view towards other existing types of land demand present in the area, as well as various other aspects. The food production at the regional level and its impacts and contributions to the social, environmental and economic well-being of the region could be further investigated.

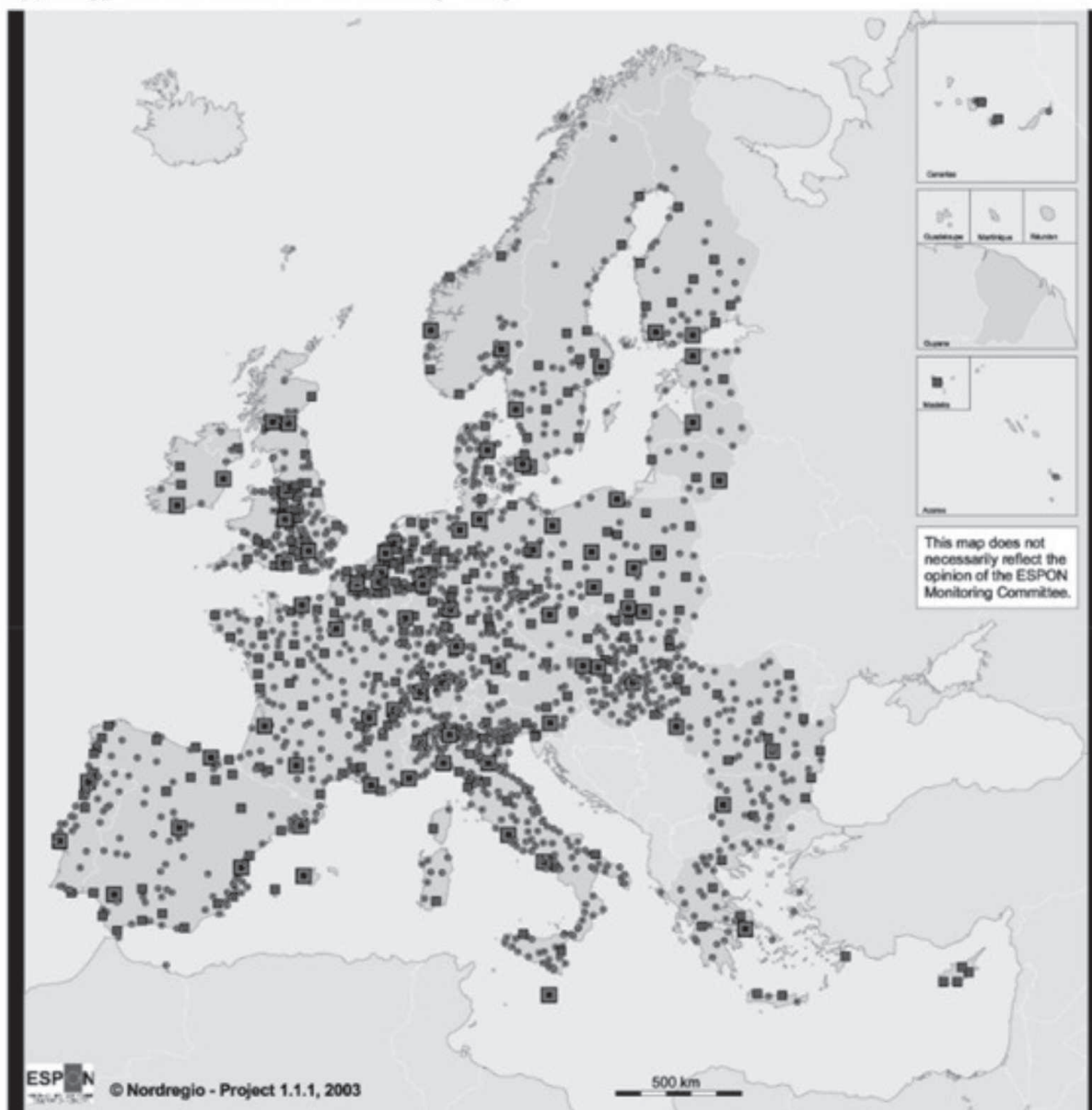
In Czech Republic can see the need of integrated approach across the FUAs (even independently from the national borders) in the field of air quality management. Czech legislation is tackling the situation comprehensively and also provides grants to reduce emissions from local sources. The main problem, which is currently the most difficult to deal with is the impact of pollution resources from abroad - Moravian-Silesian Region is recording that at least 1/3 of pollution is originating from abroad.

The second problem of special importance for Czech Republic but for Slovakia as well as is effective transport and coordination in the integrated transport system. The level of FUAs is absolutely essential for effective travelling to the workplace and higher motivation to work. The second positive impact is a reduction in individual traffic when public transportation will be set up so perfectly that it will be more effective than individual transport. The benefit would be a reduction of PM10.

Among the problems requiring integrated approach across FUAs appears several time (Czech Republic, Slovakia) the problem of water management. Water - has essentially two problems: water resources and water supply management and floods risk management and prevention including the water natural cycle restoration.



Typology of Functional Urban Areas (FUAs)



- Metropolitan European Growth Areas (MEGAs)
- Transnational / national FUAs
- Regional / local FUAs

Origin of data: EUROSTAT, National Statistical Offices, National experts

Source: Nordregio

Source: ESPON 1.1.1 - Potentials for polycentric development in Europe, 2006, Luxembourg

With the floods risk management the problem of integrated rescue system is to be mentioned incl. the cooperation between rescue services - firemen, emergency medical services and the police (Czech Republic).

With the land use management in the FUAs is closely connected the problem of social inclusion/exclusion and (un)employment, which cannot be effectively addressed in the city borders excluding suburbs as it does concern employment-related efficient transport, access to the road and rail transport as well as location and efficient use of

existing real estates for new industries, production halls, infrastructure.

The second aspect is the common denominator for all the LUMAT partner countries and it is the balance of direct economic and other effects connected with the development in the city and its functional area influenced by e.g. ignorance of the loss of ecosystem services related to land, soil, green, water. In order to achieve the change it is necessary to standardise the indicators for comprehensive ecosystem service monitoring as the most of the



environmental indicators are monitored only on national level (e.g. in Slovenia). Sufficient development and provision of practice-relevant data and information bases seems to be the challenge for land management and environmental management in the FUA's.

In this context the suburban areas are under the pressure of extensive development and in the same time there is the need for the brownfield regeneration.

Another field is the coordination and efficient use of social infrastructure e.g. in Czech Republic as well as Slovakia for educational infrastructure with the strong need for a unified strategy so that pupils and students are not discriminated against disproportionate traveling for educational purposes on one site and existence of underused buildings and other amenities on the other site.

Strategic cooperation in FUA's

Typical field of necessary strategic cooperation in the FUA's is the proper reaction of differentiated demand on specific living conditions. The efficiency of covering this demand and in the same time safeguarding efficiency of investment and operational cost is not possible in the cities themselves, the optimisation of the financial and extra-financial costs has to content first of all the territory of FUA's. This field is covering across all the LUMAT partner states the broad range of particular problems like:

- Hydrogeological instability and problems (floods, landslides...);
- Soil consumption (especially to high agronomic value) and uncontrolled sprawl in rural areas;
- Reuse of brownfield areas and abandoned, underused buildings;
- Green areas management and evaluation;
- Low integration between transport and polluting emissions policies;
- Lack in policies to incentive the redevelopment and reuse of existing buildings;
- Lack of an integrated environmental management for an efficient use of public resources
- Lack of clear and shared guidance on the mitigation and environmental compensation quantification
- not sufficient protection of ecologically important open spaces (non-fragmented natural areas, habitat corridors, biotope networks) and minimization of further habitat fragmentation

No functioning strategic cooperation is possible without development of awareness about the necessity and benefits from this cooperation among stakeholders as a part of the cooperation capacity building. The lack of proper networking structures, gap in legal environment and responsibility division, insufficient institutionalisation of the governance structures, weak promotion of the benefits from the cooperation seems to be the problem hampering inter-municipal and inter-sectorial cooperation (e.g. between tourism, local agriculture, industry, transport, service providers) between core cities and their suburban areas.

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Dagmar Petříková

BRATISLAVA – TRNAVA PROJECT MEETING 20-22.03.2017



Meeting started with the Project Steering Committee meeting and discussion on the current issues of the project management, communication issues and project reporting. Participants reported the situation with the FLC certification in the partner countries, communication issues have been reported by Matteo Tabasso from PP4 SiTI and the project leader Ms. Anna Starzewska-Sikorska summarized all the main points concerning smooth running of the project.



Photo 1:
Justyna Gorgon from Poland presenting issues of FUAs identity.
Photo by Dagmar Petříková

The meeting has been devoted to WPT1 "Methodology, Trainings and Common Understanding of Land Use in Integrated Environmental management" and to WPT2 "Urban/Peri-Urban Action Plans, Strategies and Tools" issues.

In the frame of WPT1 the key issue was training seminars. First training seminar focused on ecosystem services approach to planning and designing urban areas that has been prepared by PP7 (STUBA, SK). Prof. Maroš Finka explained the approach to ecosystem services in the field of land-use planning and management and during the interactive workshops this approach has been trained with the participants under supervision of the Pp7.

The whole session has been summarized in the discussion on the possible approaches basing on partners' experience and visions. Second part of training has been focused on FUAs identity. Prof. Justyna Gorgoń from IETU presented the approach to FUA in the respective LUMAT countries, based on deliverable D.T1.1 "Transnational Report on Policy Framework related to FUAs" and then interactive workshop and training seminar has started,



Photo 2: **LUMAT pilot area of Štrky in Trnava.**
Photo by Dagmar Petříková

where the main features of FUA have been explained and précised in the interactive workshop. Conclusions on further steps in building FUAs identity have been summarized at the end of the session.



Photo 3: **Discussions in the Slovak team (Maroš Finka, Matej Jaško, Tomáš Guniš) in WP1.**
Photo by Dagmar Petříková



Photo 4: **LUMAT project team.**

Photo by Matej Jaško

Part of the meeting was visiting the pilot site in Trnava. Ing. arch. Tomáš Guniš gave presentation on Trnava city development and the need of greenery for the city future development. Therefore the pilot area Trnava-Štrky as Trnava investment project planned within the LUMAT project is focused on green park development for recreation in the FUA area of Trnava city. This approach was also highly appreciated by Mayor of Trnava, Mr. Peter Bročko during our welcome meeting at the Local Council of Trnava.

In the WPT2 session Bernd Siemer as representative of PP3 explained transnational concept of action plans and opened discussion on transnational format of action plans with the focus on enhancing integrated environmental management

In the ending session of the meeting Ms. Anna Starzewska-Sikorska presented the next steps and deadlines of the LUMAT project and agreed the dates of the next LUMAT project meeting in Torino, Italy 25-26 September 2017.



Photo 5:

Uwe Ferber from Germany presenting structure of Action Plan

Photo by Dagmar Petriková