

SUPER – Sustainable Urbanisation and Land Use Practices in European Regions

Applied Research

Annex 3.10: Case study PL-ITI

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This applied research activity is conducted within the framework of the ESPON 2020 Cooperation Programme.

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.

This delivery does not necessarily reflect the opinion of the members of the ESPON 2020 Monitoring Committee.

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Acknowledgements

We thank our interviewees for their cooperation and insight.

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Contact: info@espon.eu

ISBN: 978-2-919795-39-0

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Version 06/11/2020

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Abbreviations

AESOP	Association of European Schools of Planning
ARTS	ESPON Assessment of Regional and Territorial Sensitivity
CEMAT	Council of Europe Conference of Ministers Responsible for Spatial/Regional Planning
CLC	Corine Land Cover
COMPASS	ESPON Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe
EC	European Commission
ECP	ESPON Contact Point
ECTP	European Council of Town Planners
EEA	European Environmental Agency
ERDF	European Regional Development Fund
ESPON	European Territorial Observatory Network
ESPON EGTC	ESPON European Grouping of Territorial Cooperation
EU-LUPA	ESPON European Land Use Patterns
EU	European Union
GVA	Gross Value Added
ISOCARP	International Society of City and Regional Planners
ITI	Integrated Territorial Investments
JRC	EU Joint Research Centre
LCC	(Corine) Land Cover Change
LUE	Land Use Efficiency
MCA	Multi-Criteria Assessment
NUTS	Nomenclature of Territorial Units for Statistics
PCG	Project Coordination Group
SCBA	Societal Cost Benefit Analysis
SDG	Sustainable Development Goal
SPIMA	ESPON Spatial Dynamics and Strategic Planning in Metropolitan Areas
SUPER	ESPON Sustainable Urbanisation and Land Use Practices in European Regions
TANGO	ESPON Territorial Approaches for New Governance
TIA	Territorial Impact Assessment

1 General introduction

In ESPON SUPER, the case studies contribute to the objective of unravelling how different interventions in diverse social, environmental and economic settings have transformed land-use development practices. In particular, the aim is to analyse, understand and learn from the successes and failures of practitioners and decision makers over the last three decades in their search for more sustainable land use. All case studies are based on close observation and direct contact with each territory and with the people involved in the design and implementation of each intervention. To this end, each case study was assigned to the project team with the greatest local knowledge of the territory, institutions and language.

The methodological framework used for all case studies consisted of three groups or basic sources of information and knowledge.

1. **Context:** each intervention addressed or influenced a particular land-use development practice which had emerged within a specific territorial and institutional context, which is crucial for understanding and interpreting the results. It was also important to know the objectives related to the sustainability of land use that had been set for each territory, albeit on paper, at the regulatory level. These tasks were based on desk research, even though, in some cases, local stakeholder support was valuable to locate the most relevant pieces of information.
2. **Developments:** the second source of data was the quantitative land use changes in the form of maps and graphs. This allowed each case study team to consider to what extent the underlying contextual factors and the studied interventions had transformed the territory and the rates of urbanization. This information was essential for evaluating the effects that each intervention had on land-use sustainability and, more indirectly, on culture and spatial planning practices.
3. **Stakeholder interviews:** each case study held over ten in-depth interviews with stakeholders involved in one way or another with the intervention. At these meetings, they were asked about the reasons for and the perceived urgency of the intervention, how its objectives were defined and by whom, the experience of implementing each intervention, the pitfalls encountered, as well as the benefits it had brought in terms of improving the three thematic dimensions of land-use sustainability: ecological, economic and social equity. In addition, stakeholder maps were produced that present the type and intensity of the relationships that some stakeholders had with the rest in a visual way.

This report on the case study of PL-ITI presents a synthesis of all three outputs in order. It is structured as follows. This introductory section provides a summary of the main characteristics of the case study (Section 1.1), the scale of analysis (Section 1.2) and geographical scope (Section 1.3). Section 2 contextualizes how urbanization occurs in the case study area. It contains descriptions of typical urban developments, how this is regulated,

who promotes it, how it is implemented and emerging challenges regarding land-use development. Keeping with this contextual approach, Section 3 discusses how the studied intervention addresses the challenge of sustainability in its three thematic dimensions (Section 3.1) as well as in its temporal dimension (Section 3.2).

Section 4 presents the main results of the case study research in three parts. Section 4.1 analyses how the priorities of the intervention were configured based on information collected from the interviewed stakeholders. In particular, it seeks to know how a perceived problem was identified or constructed to justify the intervention, the extent to which land use sustainability was a consideration, and whether these elements tended to unite the community in favour of a collective interest or whether, on the contrary, they were a source of tension and conflict. Section 4.2 discusses in more detail how seven organizational and institutional aspects may have influenced the relative successes and failures of the intervention. Section 4.3 combines the analysis of land use changes, the opinions of the consulted stakeholders and, where relevant, the stakeholder maps, to make an assessment of the actual results of the intervention on the planning and development culture and the different thematic dimensions of sustainability. Finally, Section 4.5 explicitly answers questions posed to the ESPON SUPER team, thus reflecting the direct contribution of each case study to the project's objectives.

While each individual case study contributes to answering the questions posed, its true value lies in the possibility of combining and contrasting the outputs of the eleven cases. This choral work is presented in Annex 3.13. The triangulation of results allows for the formulation of generalizable conclusions and recommendations that can contribute to the design of new plans and policies better aligned with the objectives of sustainability and land take abatement at the European level. In this way, the case study presented in this report also contributes to this other broader objective.

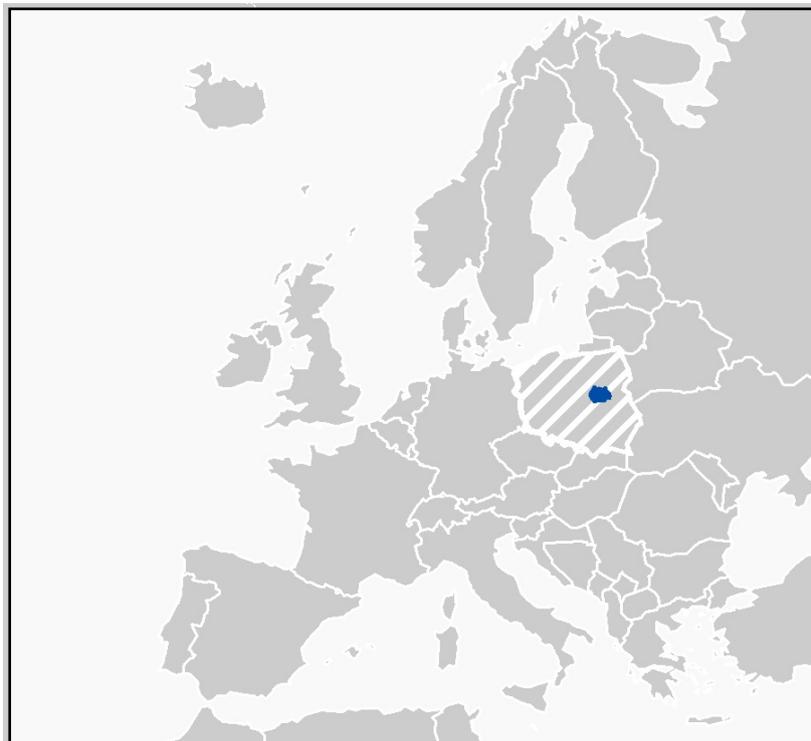
1.1 Case study PL-ITI

This case study concerns selected actions to facilitate and stimulate cooperation between local governments in functional urban areas in Poland. Currently, there are no effective development management mechanisms in the functional areas of the largest cities in Poland. As a result, unfavourable processes of uncontrolled suburbanization occur. One of the tools that can improve this state of affairs is Integrated Territorial Investments (ITI, in Polish: Zintegrowane Inwestycje Terytorialne – ZIT), which on the one hand enforce and on the other hand facilitate cooperation between various territorial self-governments in functional urban areas.

The subject of the case study is the Integrated Territorial Investments (ITI) instrument implemented in 24 functional areas, including 17 areas surrounding regional capitals (joint ITI for Bydgoszcz and Torun and two separate ITIs for Gorzow Wielkopolski and Zielona Gora)

and 7 functional areas of subregional cities in four voivodeships: Silesia, Lower Silesia, Greater Poland and West Pomerania (see the map below). A total of around EUR 6.2 billion is earmarked for implementation of ITIs in the period 2014-2020 (the total includes national operational programs—under which support for the so-called “complementary projects” are provided). It is apparent that ITI is a very complex and extensive initiative. As a whole, it is not suitable for analysis in a case study. Therefore, two zoom ins were made as part of this analysis. The first zoom in is the ITI of the Warsaw area and ITI of the Lodz area – in relation to these two areas interviews and analyses of stakeholders were conducted. The ITI area of Warsaw was chosen for the second zoom in – cartographic analyses of land use changes were carried out for this area.

Map 1.1: Location of case study “PL-ITI”.

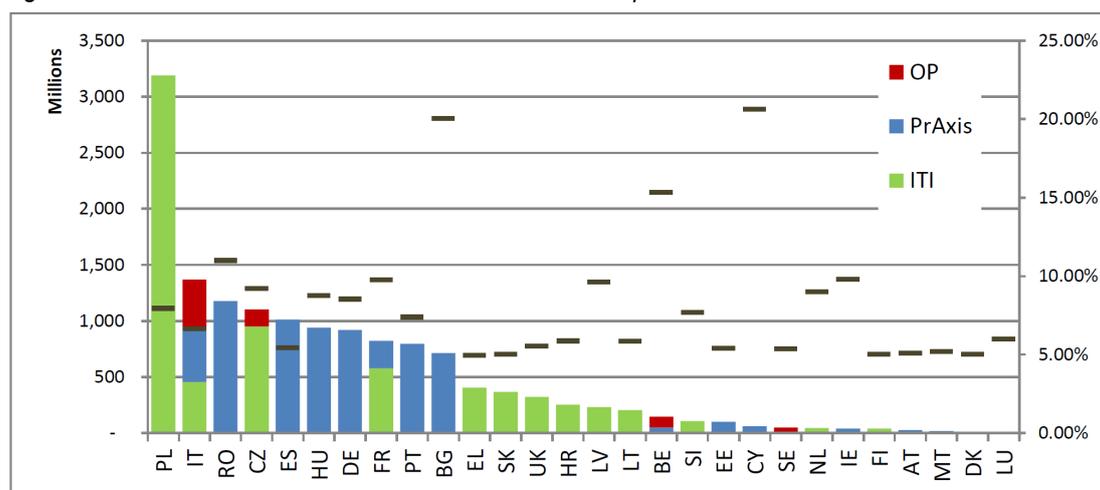


Integrated Territorial Investments allows EU member states to bundle funding from several priority axes of one or more operational programmes to ensure the implementation of an integrated strategy for a specific territory. It is important to underline that ITIs can only be effectively used if the specific geographical area concerned has an integrated, cross-sectoral territorial strategy. The key elements of an ITI are:

- a designated territory and an integrated territorial development strategy;
- a package of actions to be implemented;
- governance arrangements to manage the ITI (European Commission, 2013);.

Article 7 of the ERDF regulation requires that at least 5% of the ERDF resources allocated at national level under the Investment for growth and jobs goal shall be allocated to integrated actions for sustainable urban development where cities, sub-regional or local bodies responsible for implementing sustainable urban strategies (“urban authorities”) shall be responsible for tasks relating, at least, to the selection of operations (Tosics, 2017). However, “most member states go beyond the minimum of five percent and often also implement ITIs outside of sustainable urban development, thereby committing additional non-urban funding to territorial development”, see figure below (Ferry, Kah & Bachtler, 2018).

Figure 1.1: Financial allocation to sustainable urban development.



Source: Matkó M (2016) Sustainable urban development in Cohesion policy programmes 2014-2020, a brief overview. Paper presented at Urban Development Network Meeting, 18 February 2016.

1.2 Scale/s of analysis

The case study concerns Integrated Territorial Investments (ITI) instrument (in Polish: Zintegrowane Inwestycje Terytorialne – ZIT). ITI is a complex policy instrument that exceeds administrative boundaries. ITI is a measure created by the European Commission (EC) for the more effective and efficient implementation of operational programs in the period 2014-2020, especially in the context of achieving the goals of the Europe 2020 Strategy. ITI implementation in individual EU countries is very diverse. The key feature and uniqueness of the ITI instrument is that it is directed to defined functional areas not constituting a separate administrative entity. Member States decided individually on how to implement the ITI instrument. In Poland, ITIs are clearly associated with cooperation between various local government units: rural and urban-rural communes (gminas) (LAU2), cities (urban communes) (LAU2), and poviats (LAU1).

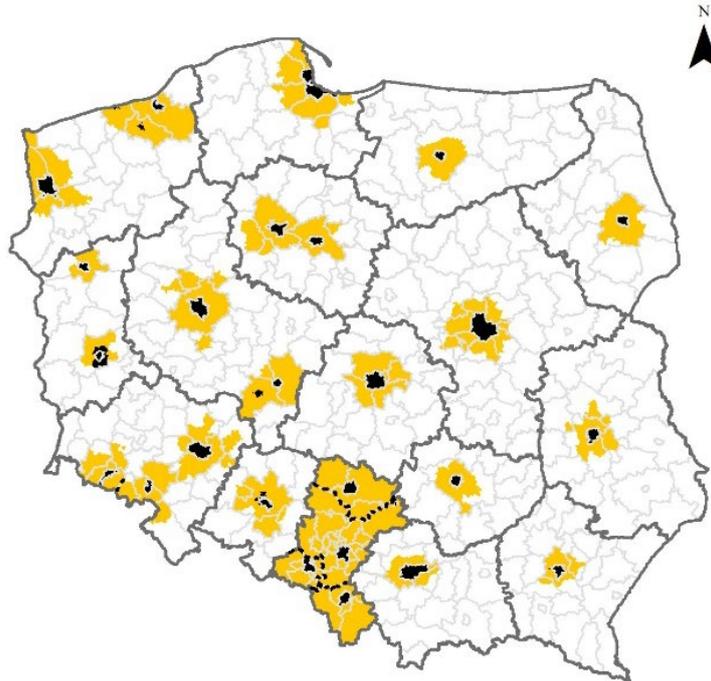
Table 1.1: PL-ITI scales.

Scales	Main scale	Other scales
Supra/Trans-national		
NUTS 0	National level	
NUTS 1		
NUTS 2		
NUTS 3		NUTS3
LAU1 – NUTS 4	Functional urban areas	Poviats (counties)
LAU2 – NUTS 5	Functional urban areas	Gminas (communes)

1.3 Geographical scope

In general, ITIs were created as continuous groupings of LAU2 surrounding core cities (also LAU2). In some cases, functional urban areas (FUAs) defined for ITI implementation overlap with NUTS3 level (but not necessarily). It is worth emphasizing that in Poland only at LAU1, LAU2 and NUTS2 are territorial administration units, while NUTS3 is only a statistical level. ITIs areas do not constitute separate territorial administration units. They can be seen rather as voluntary associations of LAU2 (and sometimes LAU1) created for the specific purpose of implementing ITI.

Map 1.2: ITI areas in Poland



Source: Wolanski et al. 2018.

Because the implementation of the ITI instrument in Poland is very complex, and additionally varied between particular ITI areas, in this case study two ITIs will be analysed in more detail (while other ITIs will be analysed on a general level):

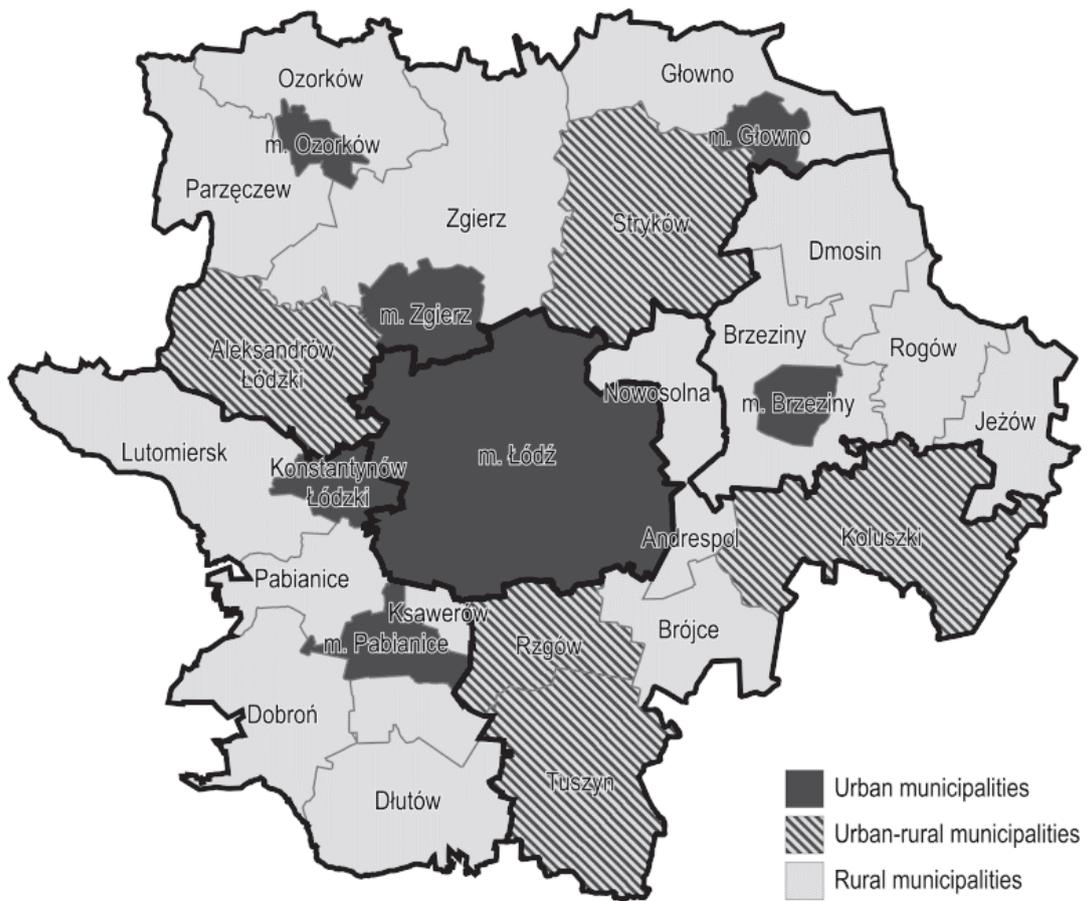
- Warsaw Functional Area
- Lodz Functional Area

Map 1.3: Warsaw Functional Area for ITI



Source: City of Warsaw 2017.

Map 1.4: Lodz Functional Area for ITI



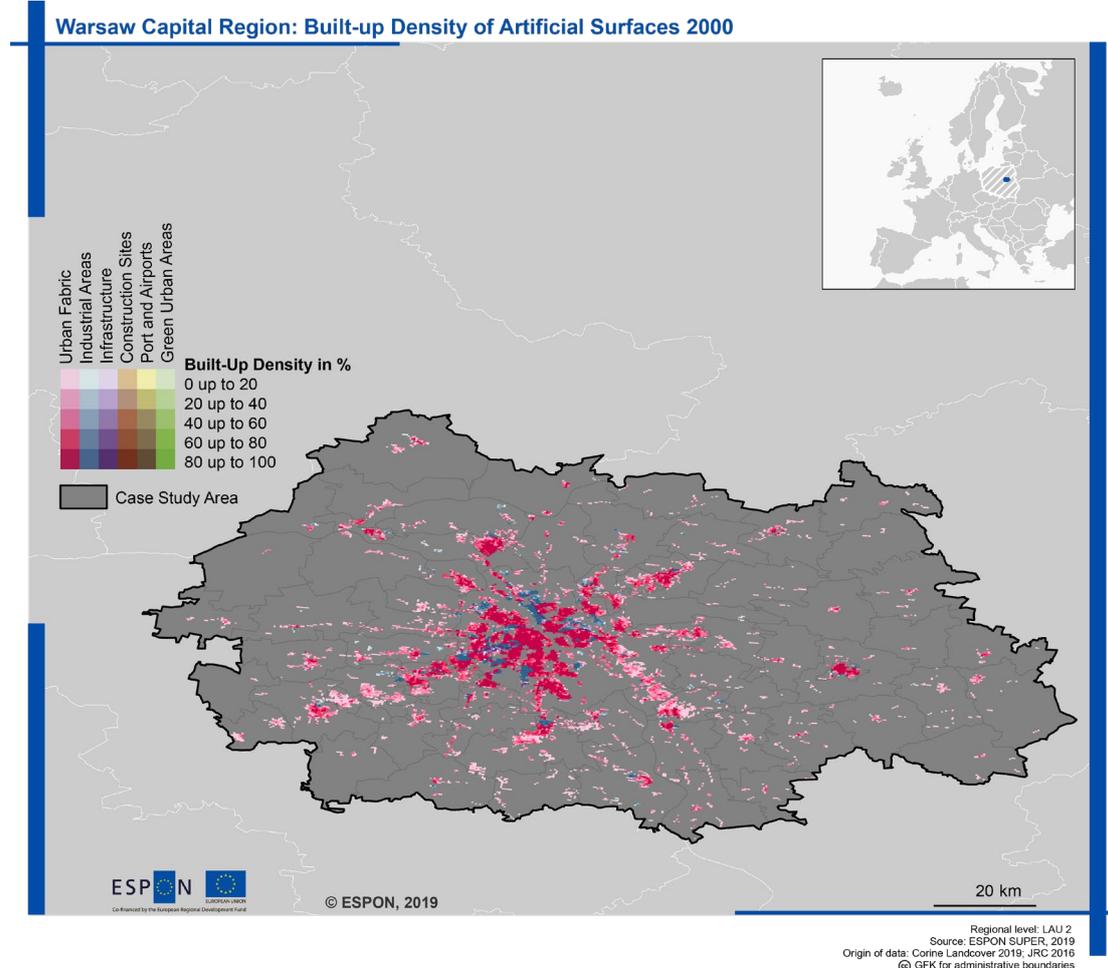
Source: Napierała 2017.

2 Contextual analysis

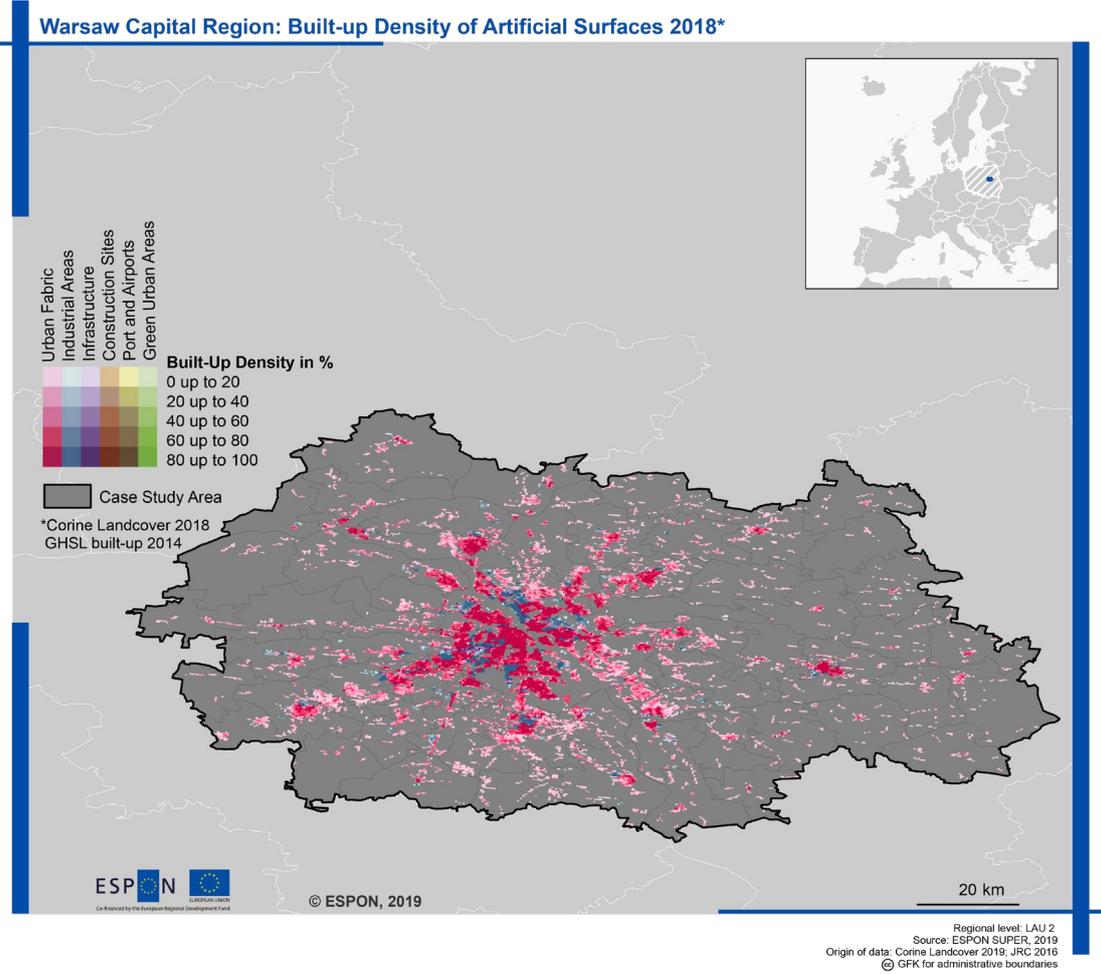
2.1 Typical urban development

Uncontrolled urban development is increasingly becoming a problem throughout the country, although visible with particular strength primarily in the largest, most dynamically developing Polish cities. The problem of suburbanization in Poland is already well diagnosed (Kajdanek, 2011; Lityński, 2015; Lityński & Hołuj, 2017; Lityński & Hołuj, 2020; Lityński, Zotic & Hołuj, 2015; Szewrański et al., 2015; Triantakonstantis & Stathakis 2015). However, so far this knowledge did not translate into effective actions. In any case, the scale of the phenomenon in some areas (especially in Warsaw and the surrounding area, see maps below, and e.g., Degórska, 2003; Pabjanek & Szumacher, 2017) is so large that even with very well planned and large-scale activities it is difficult to expect a radical solution to the problem. It is much more realistic to expect some mitigation of the negative effects of suburbanisation and some slow down of this phenomenon.

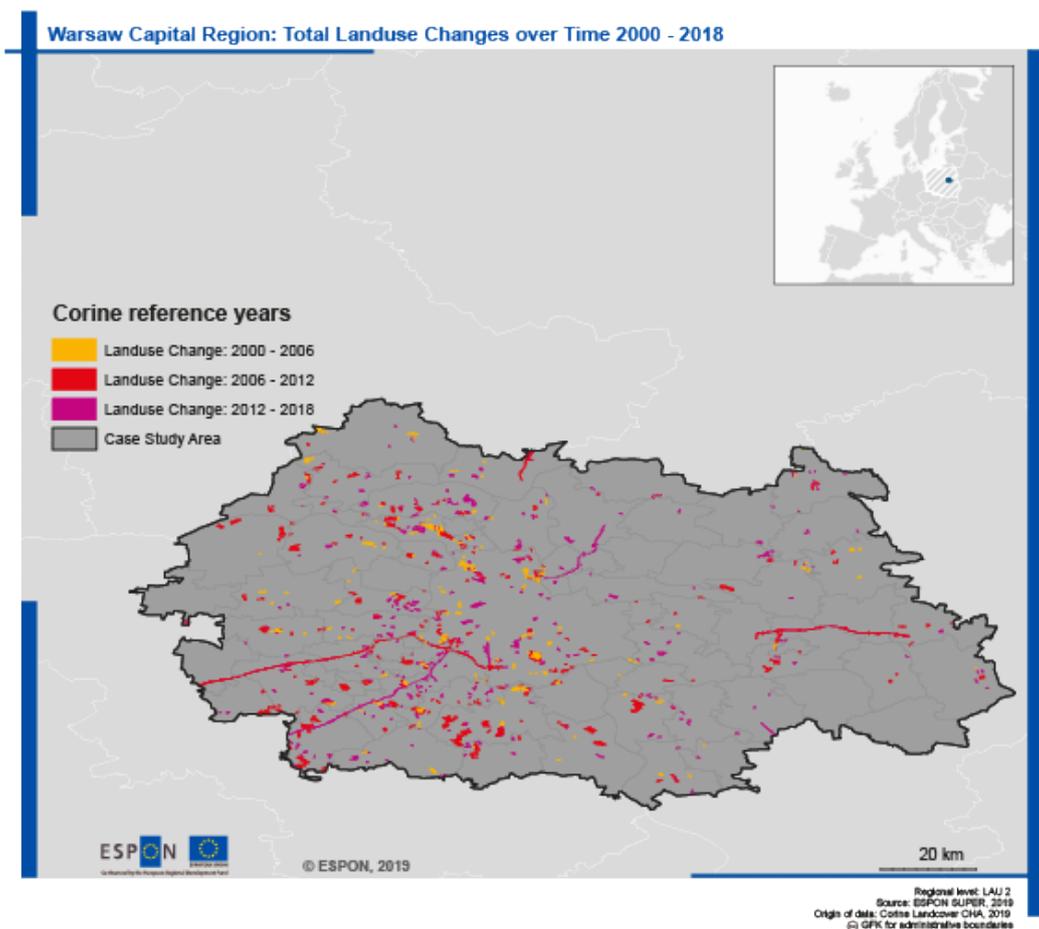
Map 2.1: Built-up density of artificial surfaces in Warsaw functional urban area in 2000



Map 2.2: Built-up density of artificial surfaces in Warsaw functional urban area in 2018



Map 2.3: Total land use changes in Warsaw functional urban area between 2000 and 2018



In order to slow down suburbanisation, good and consistent spatial planning is necessary—which in itself is a great challenge in Polish conditions (Karwińska, Böhm & Kudłacz, 2018). In the case of suburbanization, the challenges associated with spatial planning are even greater. This is due to the nature of this process, which crosses the boundaries of cities and municipalities. In order to tame it, it is necessary to coordinate the plans and the resulting investment decisions in the wider urban and metropolitan areas. It seems, however, that currently there are neither mechanisms to stimulate such cooperation nor the political will to conduct it. The reason is competition between local government units, which see the opportunity to increase their budgets by attracting new residents. It is easy to forget that the increase in the number of inhabitants also means an increasing demand for social services and infrastructure. Local authorities usually enjoy higher tax revenues from new residents until they look at the costs of developing infrastructure for increasingly less-satisfied new voters. However, the negative effects of suburbanisation on the micro level are less dangerous than on the macro level: the ineffective settlement structure will increase over the years the cost of transport and provision of public services in the metropolitan areas. The benefits of uncontrolled suburbanisation are therefore short-term, and in the long run, costs prevail.

2.2 Basic institutional conditions

In Poland, spatial development in the surroundings of the largest cities takes place in a spontaneous and insufficiently controlled manner. Admittedly, there is an appropriate framework for spatial plans of a strategic nature: at the level of regions (voivodships) and municipalities ("gminas"), but they have a rather general character and usually create a lot of freedom in interpretation. As a result, individual decisions regarding building conditions (in building conditions, in Polish: "Decision on building conditions and spatial development") become crucial (see also: Bovet, Reese & Köck, 2018; Hernik, Czesak & Pazdan, 2013).

2.3 Initiative

In Poland the initiative to develop new areas belongs primarily to private investors. Local authorities limit their activity primarily to public investments, they rarely carry out investments in housing or industrial areas development. When it comes to private entities, professional developers dominate in large cities. However, in the surroundings of cities, in areas subject to suburbanization, private individuals also play an important role as investors.

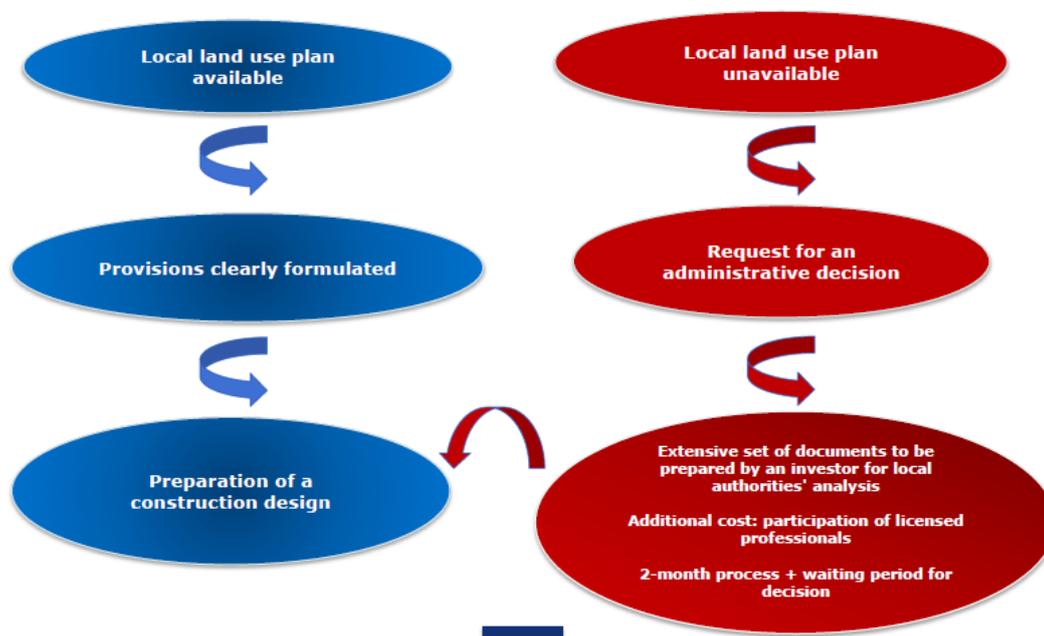
2.4 Planning permission

There are two ways to officially start a new construction. The first case concerns the areas covered by the local plan - in this case what one can build is regulated by the plan and in principle does not require any further agreements. The second case concerns areas where there is no local plan. In this case, the individual decision on "building conditions" ("Decyzja o warunkach zabudowy i zagospodarowania przestrzennego") is issued. More than a half of construction permits are based on administrative decisions, and not on local plans.

In general, the key problem is insufficient coverage of the territory by local zoning plans ("Miejscowy Plan Zagospodarowania Przestrzennego"), their low quality, and inadequate relation between plans in single functional areas. For example, current plans enable the construction of a new dwellings for more people than the present number of inhabitants in Poland. Therefore, even in the areas covered by local zoning plans, scattered and inefficient spatial structures are not uncommon. However, in the areas that are not covered by local zoning plans, disorganised spatial development is even more likely, and the investment process is more complicated and create opportunities for corruption (see the figure below).

Figure 2.1: Investment process

Investment process with/without land use plan



Source: Munch & Rudka (2016).

2.5 Development process

As mentioned above, in the areas surrounding the city, the dominant form of expansion are single-family houses built by private investors. In this case, usually the owner is also a resident. When selling, the new owner is also usually a resident. Another form is the construction carried out by professional developers, these are usually small estates of single-family houses or apartment buildings. In this case, houses or apartments are most often sold to future owners. Construction for renting or buying property for rent is rare in suburban areas.

2.6 Current issues

- The main challenge is the overall improvement of the spatial planning system in Poland. Despite the ongoing discussions and many emerging ideas, no real steps have been taken towards qualitative improvement, the suboptimal status quo is still being maintained.
- No cadastre system meaning that local authorities have no tools to influence owners / investors in the case of undeveloped areas.
- Insufficient coverage of spatial local plans.
- The dominant role of administrative decisions in the location of new investments (in the absence of local plans).
- Lack of framework for coordinating spatial plans in functional urban areas.

3 Sustainability of objectives

3.1 Thematic dimensions

Sustainability is a key concept in the intervention document (Ministerstwo Rozwoju Regionalnego, 2013). All sustainability dimensions considered in this case study – economic, ecological and equity – are highlighted in the document. The ecological dimension is most pronounced as it can be seen as the most horizontal feature of the intervention. Moreover, ecological sustainability has its dedicated strategic objective “Improving the condition of the natural environment in the functional area of the city”. Specific objectives also address economic and equity sustainability. Economic sustainability is primarily addressed by projects aimed at technological innovations and SMEs development. While equity sustainability is addressed by complex urban renewal projects. Urban renewal projects have to be “integrated”: i.e., “taking into account infrastructure, economic, social and environmental aspects. The implemented projects should combine activities related to the reconstruction or adaptation of buildings (physical revitalization) with activities related to the socio-professional activation of excluded persons and persons at risk of exclusion” (Ministerstwo Rozwoju Regionalnego, 2013, p. 6). In effect, urban renewal projects can (or even should) include actions aimed at local economic capacities, even if they consist of low-tech, basic, typical services and other economic activities.

3.2 Temporal balance

Temporal sustainability is explicitly mentioned in the document: “The ITI strategy [...] must contain a coherent set of interrelated actions to improve the social, economic, climatic and demographic conditions of the given functional urban area in the long term.” (Ministerstwo Rozwoju Regionalnego, 2013, p. 10). The intervention should produce not only immediate outcomes but should also increase capacities for long term impact. This is not discussed in the document in great detail. Temporal sustainability is rather implicitly underlying the conceptual framework of the intervention. ITIs are a part of Cohesion Policy; thus all of the Cohesion Policy requirements, including temporal sustainability of particular projects and their effects, have to be taken into account in the planning and implementation of the intervention.

4 Impact assessment

4.1 Pre-intervention

4.1.1 Identification of the problem

There are no effective development management mechanisms in the functional areas of the largest cities in Poland (Ahrend, Schumann, 2014; Smętkowski, Jałowicki, Gorzelak, 2009). As a result, unfavourable processes of urban sprawl occur, suburbanization is uncontrolled, and spatial chaos deepens. A weak spatial planning system enables urban sprawl processes (Krajewska, Żróbek, Šubic-Kovač, 2014; Veneri, 2015). Around 70% of municipal territory lacks local spatial plans, and building permits are granted based on administrative decisions that do not ensure coherence with spatial planning (Ministry of Regional Development, 2012). Many new developments lack access to urban infrastructure (OECD, 2016). As a result, the costs of providing public services are increasing, such as public transport, water supply, sewerage, social services. In addition, the lack of investment coordination results in inconsistent linear infrastructure networks (e.g. lack of cycle paths connecting municipalities).

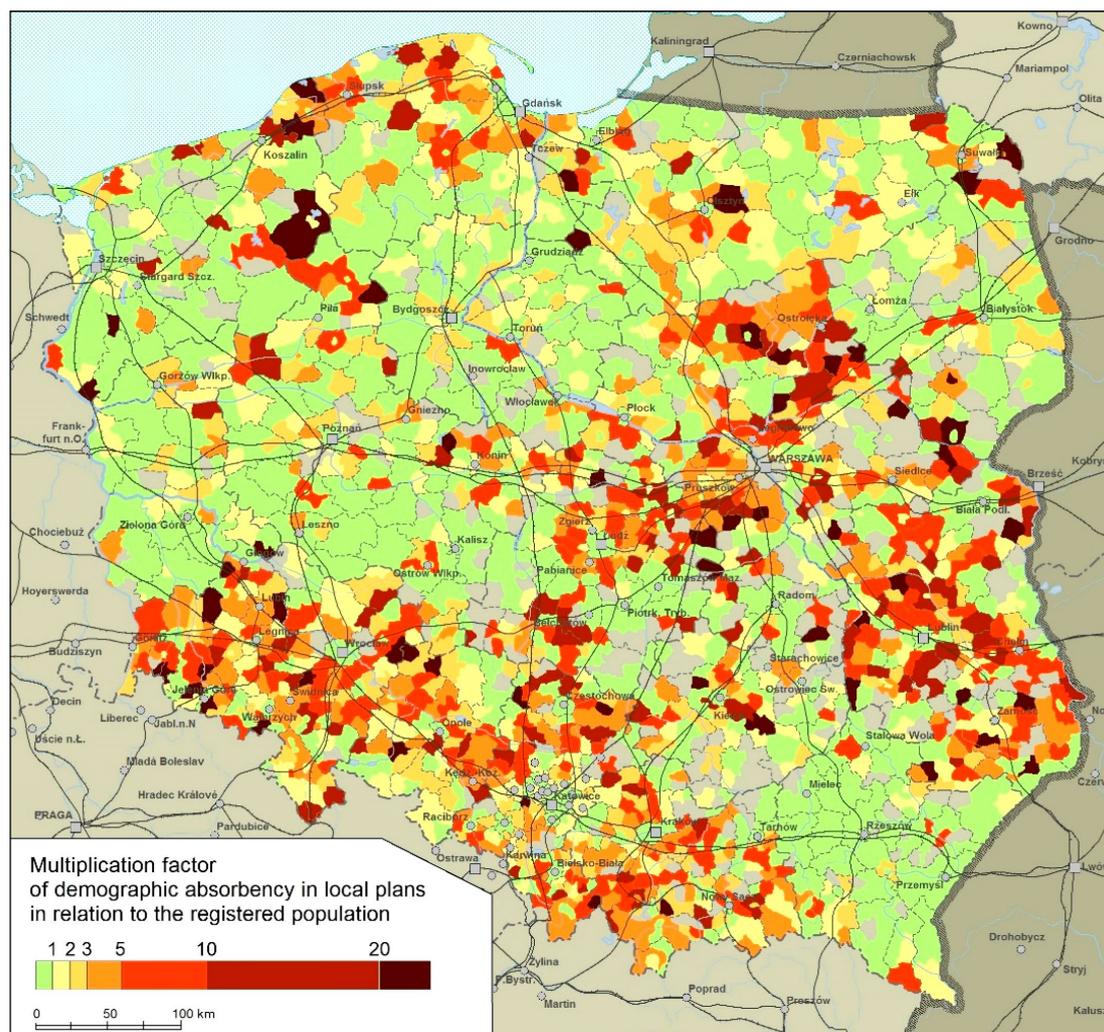
Even more significant problem is the lack of coordination of spatial plans. This aspect is extremely paradoxical. On the one hand, a local spatial development plan is potentially an excellent instrument for providing an effective spatial arrangement in individual municipalities (gminas). On the other hand, there is a lack of coordination of plans in wider functional areas. One of the interviewed stakeholders explains this problem:

“Cooperation in the field of spatial planning, apart from being the subject of debates [...], when it comes to hard cooperation, is actually implemented what results from the Act on spatial planning. That is, if a study is being prepared, then of course you need to inform the neighboring municipalities and collect any comments and conclusions from them. However, when it comes to such coordination cooperation, it does not occur on an ongoing basis. Occurs locally on the basis of rather good will of both parties. Of course, there is a great desire that there be some body or entity that will coordinate activities. However, a "but" voice immediately appears, provided that he does not take away our possibilities of self-determination. Spatial planning is one of the competences today at the local level and is therefore one of those elements that municipalities do not want to get rid of too much. [...] However, until it grows up with the relevant legal regulations, I think that we will not go too far here.”

The increase in the number of inhabitants is perceived by municipalities as a way of fostering their development (namely: higher personal income tax inflows to local governments budgets). Thus, municipalities allocate too large areas for housing, mainly single-family. As a result, the supply of areas intended for housing in the entire functional urban area is many times higher than demand. According to estimates for the whole Poland, the local spatial development plans in force at the end of 2013 could accommodate about 58 million inhabitants – it is worth noting that these plans covered less than 1/3 of Poland's surface

area, and that the entire population of the country in 2013 was 38 million people (Śleszyński, 2015). Moreover, there are municipalities where according to existing plans it can live more than 20 times so people than the current number of inhabitants see figure below). Consequently, spatial development, despite being based on a good, in principle, mechanism of local spatial development plans, results in low-density, chaotic, inefficient spatial structures (Kowalewski et al., 2014).

Map 4.1: Multiplicity of demographic absorptency according to the local plans in relation to the registered number of inhabitants.



Source: Śleszyński et al. 2020.

Lack of cooperation in metropolitan areas is an example of a broader problem of social capital shortage in Poland (Czapiński, 2008). The role of mutual trust of partners and personal characteristics of city leaders is essential here because the success of development processes depends on the characteristics of individual actors of local and regional development, especially those exceeding the grain of local administration units. From the point of view of management in metropolitan areas, social bridging capital is particularly important, which means the possibility of relationships between individuals or groups

seemingly completely unrelated to each other, different in social or political terms, but still capable of developing relatively lasting bonds that can result in later cooperation. The subordinate capital that focuses on vertical relations, which assumes the establishment of sustainable and positive bonds between entities with different positions in the administrative hierarchy, also seems important (Kuć-Czajkowska, 2019).

4.1.2 Inception of goals/action

ITI instrument is implemented in many European countries. However, in individual countries, the approach to ITI differs in both the scale of investment and understanding of the place-based approach. Poland has by far the highest amount of funding allocated to territorial instruments – over EUR 6 billion – and has made extensive use of ITI, allocated across 24 integrated sustainable urban development ITI strategies. The majority of strategies are located around the regional (NUTS2) capitals (Ferry, 2019).

The ITI instrument had to meet the following objectives:

1. promoting partnerships between various administrative units in functional urban areas;
2. increasing the efficiency of interventions by implementing integrated projects that respond in a comprehensive manner to the needs and problems of cities and their hinterlands;

In the context of a low level of social capital, poor procedural efficiency in administration and, above all, strong competition and various development concepts within functional urban areas, ITI instrument brought tangible benefits and achieved the objectives of building cooperation between neighbouring municipalities (gminas). ITI instrument primarily allowed for the activation of a number of relations between partners that did not exist. The effects of the implementation of ITIs include: deepening integration, building trust between partners, reducing competition, defining and attempting to solve common problems and eliminating concerns about the dominant position of core cities.

The general thematic scope of the ITI instrument is as follows:

- the development of sustainable, efficient transport connecting the city and its functional area (thematic objectives 4, 7);
- restoring the socio-economic functions of degraded areas (thematic objectives 6, 8, 9, 10);
- improvement of the natural environment in the functional areas (thematic objectives 4, 6);
- supporting energy efficiency and promoting low-carbon strategies (thematic objective 4);
- improving access and quality of public services in the whole functional area (thematic objectives 2, 6, 8, 9);

- strengthening research, technological development and innovation (objectives thematic 1, 3).

The largest number of ITI projects concerns the renovation of public infrastructure for energy efficiency goals (in particular modernization), education from pre-school to secondary, urban transport, labour market and access to public services (including health care).

There are two models of collaboration between municipalities within ITI: (1) spatial purpose collaboration platform dedicated exclusively to implementation of ITI, (2) general purpose association. In the latter case, structured collaboration usually existed before ITI (some association have long histories, however before ITI they have very limited resources to deliver tangible results), in the former case collaboration was usually induced by the vision of financial resources available for ITIs. There is some evidence that the general association model is more effective and provides more stable long-term collaboration framework.

The ITI instrument in Poland directly fits into the problems diagnosed in “B2.1 Identification of the problem”. A key aspect of the ITI instrument is forcing cooperation between local government units in functional urban areas. The incentive to cooperate was the promise of separating a special pool of financial resources for projects implemented in distinct functional urban areas. The key condition for obtaining funds was agreeing on a development strategy common for the entire area (Kociuba, 2018).

However, the range of impact of this instrument is, in principle, limited. First of all, ITIs do not introduce a requirement to coordinate all management processes in functional urban areas (coordination is limited to the implementation of some projects financed from European Union funds). Secondly, the ITI instrument is limited to certain categories of investments using EU funds. Thirdly, the ITI instrument does not include spatial planning in the strict sense – it does not introduce new solutions forcing spatial planning to cover the entire metropolitan area.

4.1.3 Pre-intervention conclusions

Despite the limited potential impact on metropolitan management processes in Poland, especially in relation to spatial planning, the ITI instrument is perceived by stakeholders as an essential factor enabling better development management in functional urban areas. The key aspect here is that ITI has created real incentives (available funding) to establish and intensify cooperation between local governments in the main metropolitan areas of the country. Preliminary analyses show that cooperation forced by ITI has a good chance of going beyond the ITI framework and that there is a strong will to continue cooperation, even if the ITI instrument will not be continued in the future (the continuation of ITI depends on the decision of national authorities) (Wolański et al., 2018). A key factor in the success of project implementation – also in relation to ensuring more balanced spatial development – is the need to agree on a development strategy common for the entire metropolitan area.

4.2 Implementation

4.2.1 Technical capability

The planning and implementation of projects under ITI have been successful (that is, the assumed goals are achieved or the process of achieving these goals goes as intended); no actual problems have been identified in this regard. This is primarily due to the fact that the primary entities responsible for these processes – regional and local governments and their subsidiaries – have extensive experience in implementing projects and programs financed by EU funds. ITI implementation does not differ significantly from other EU programs and projects.

4.2.2 Data and information

Access to adequate data and information is a significant challenge in ITI management in the functional areas of Polish cities. This is because ITI areas are not the same as statistical units at any of the NUTS / LAU levels. As a result, it is necessary to aggregate data from lower levels – where data is available at the level of municipalities or poviats (LAU2 or LAU1). Despite this, many critical phenomena and processes are not easily quantified – e.g. daily population movements in functional areas are measured in a very approximate way, there are no uniform and accurate measures of quality and access to public services. Moreover, to date, the implementation of ITI has not translated into a reliable assessment of the demand for different types of investment areas in functional urban areas.

4.2.3 Participation

Although the key feature of the ITI instrument was forcing cooperation between local governments in functional areas, the very process of formulating individual partnerships and development strategies, and then managing the implementation of ITI can be considered mostly inclusive (Kamrowska-Zaluska, Obracht-Prondzynska, 2017). The main threat to the balance between partners is that in every ITI in Poland there is a vast disproportion between the potential of the central city and the surrounding municipalities. In two cases analysed more closely (Łódź and Warsaw), however, stakeholders managed to develop cooperation models in which weaker partners have a sense of influence on ITI decisions. Appropriate consideration of the voice of the weakest stakeholders (consensus seeking, voting weights) can be seen as a success factor for ITI in Poland, and can also be considered as a good practice worth spreading in other similar situations. One of the survey respondents explains it this way:

“There was such a fear on the part of municipalities whether [big city] would dominate this cooperation for themselves. It will use this mechanism to use these funds and the whole potential for itself. During this work it turned out that

it is sustainable development. Municipalities feel it. That's why these relationships are actually partnership. This also results in the fact that this cooperation is quite smooth. [...] I see in relation to 2014 and to the present moment - precisely despite the changes at the personal level and the political vision of municipal leaders - that this cooperation is good."

4.2.4 Strategic vision

A strategic vision for each ITI in Poland was ensured by the requirement to develop a joint development strategy covering all local governments in each of ITI area. The strategy had to be prepared before starting the implementation of projects under given ITI. All ITI funded projects must directly result from the strategy and should contribute to achieving its objectives. Nevertheless, in both closely analysed cases (ITI Warsaw and ITI Łódź), land-use sustainability is not emphasized in the strategy. This aspect is rather implicit, as the justification and goal of activities related to, e.g. improvement of public transport in the Warsaw metropolitan area, as well as projects in the field of urban renewal in Łódź. Especially in the latter case, ITI can have a positive impact on land-use sustainability. Improving the residential, service and business attractiveness of a neglected city centre may translate into a reduction in suburbanization pressure.

4.2.5 Institutional coordination

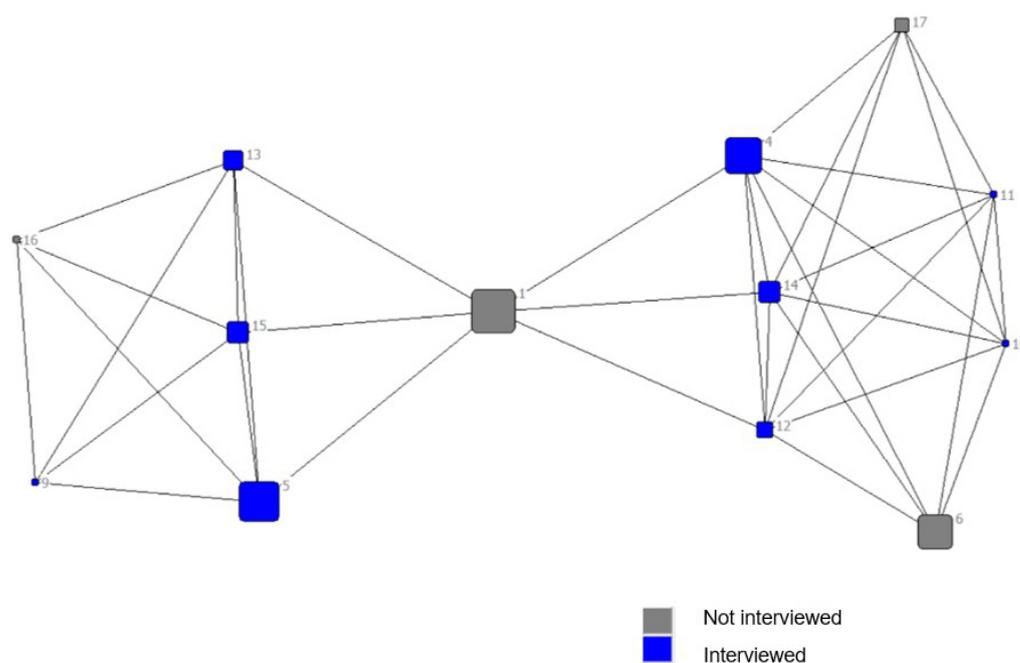
A key element of the institutional coordination of ITIs is the establishment of a special unit responsible for the preparation and implementation of ITI in each functional urban area. These units are appointed by all local governments from the area of a given ITI. They come in two forms, the proper association of local governments or the "agreement", which largely functions like the association. The main differences between the association and the agreement are: (1) the agreement is created for a limited period of ITI implementation, and the association is created for an indefinite period; (2) the scope of the agreement's competence is limited to the scope of ITI, while associations have a wider range of interests. As a result, those ITIs in which implementation is based on an association (including ITI Warsaw and ITI Łódź) can theoretically be more durable and can have a greater impact on the development of a functional area in the long run, including in particular sustainable land-use. However, this hypothesis has not been tested yet, mostly due to the short time that lapsed from the inception of ITIs in Poland.

4.2.6 Institutional leadership

ITI implementation in Poland in relation to institutional leadership can be analysed at two levels. At the general national level, the main institution that sought to implement ITI in its current form was the ministry responsible for regional development. This ministry together

with academic consultants developed the principles of ITI implementation and delimitation of particular areas in which ITIs are implemented. The key role of the ministry is evidenced by the network analysis of interviewed stakeholders from Warsaw and Lodz ITIs – the ministry occupies the central position in the network, linking stakeholders involved in two separate ITIs – see Figure below.

Figure 4.1: Stakeholder influence network.



At the ITI level, on the other hand, the key cities that make up the functional urban area have a key leadership role. This is mainly due to the fact that they have the greatest economic, political and institutional potential. In technical terms, the offices of the largest cities have the largest resources and the most experienced staff that can be allocated to ITI. It is also significant that the president of the main city has the largest democratic mandate (large number of votes cast for them in direct elections). This mandate is even greater than in the case of the voivodship marshal (regional leader), who is elected by the regional parliament and not in direct elections.

4.2.7 Political will

The planning and implementation of ITI in Poland was not a very controversial process. To a large extent, it was a technocratic process, controlled by officials and not by politicians. However, three aspects can be identified where the political will was relevant. First of all, the decision to direct ITI in Poland to functional urban areas was a clear sign of appreciation of the importance of urban policy by the central government. Secondly, mayors of the largest cities lobbied for ITI. Thirdly, few objections came from municipalities and cities that did not

have a chance to be included in ITI (they were too far from a large city, or – in the case of cities, were too small to create separate ITI).

4.2.8 Implementation conclusions

The example of implementing ITI instrument in Poland confirms the intuition that creating economic incentives for cooperation between territorial self-governments may facilitate establishing and maintaining such cooperation. The second, less obvious, conclusion concerns the beneficial effect of creating joint strategic documents. Having a common strategy for the entire ITI area was a requirement for access to ITI funds. This allowed for the development of a consensus between partners at an early stage, which seems to translate into good cooperation at the implementation stage and fuels hopes for continuing cooperation in the future, also in areas beyond the capabilities of the ITI instrument. Another aspect worth emphasizing is the problem of cooperation between strong and weak partners. In the case of ITI instrument, the relationship between a strong central city and surrounding municipalities can be problematic above all. The key here is to develop practices (formal and informal) in which partners have the impression that the central city is not imposing its will on others, and that the voice of weaker partners is also included.

4.3 Sustainability assessment

4.3.1 Planning and development culture

The ITI instrument has undoubtedly proved to be an innovative solution in the Polish functional urban areas (FUAs) management system. FUAs in Poland are not a part of the main framework of territorial administration nor spatial planning. They are mainly voluntary and auxiliary forms of territorial cooperation and planning. Therefore, the most important effect of ITI implementation in individual functional urban areas is the creation of a framework for cooperation between individual territorial self-governments falling within the boundaries of a given area. As a result, it can be expected that the intensification of cooperation will not be temporary but more prolonged. Furthermore, forcing the creation of a common investment strategy within ITI was an important success factor for the ITI instrument. Consequently, the investments of individual self-governments have contributed to a coherent whole, but also significant experience of joint planning has arisen, which may facilitate the undertaking of further similar initiatives. The described positive phenomena are visible in the short term when the implementation of the first ITI strategies has not yet finished. Whether accomplishment will be similar in the long run is not a predetermined conclusion. However, the opinions of key stakeholders regarding the future of cooperation within particular functional urban areas are very optimistic.

4.3.2 Economy

The economic dimension of ITI intervention is seen by most interviewees as the most important. However, in reality, few ITI projects are directly related to economic development. Rather, economic development is an objective that is to be facilitated by other ITI activities (urban renewal, transport infrastructure, human capital development, etc.). An interesting example of activities directly aimed at strengthening the economic potential are projects for creating economic development zones: e.g. consolidation of new investment areas or preparation of brownfields for new investments. It should be underlined, however, that this type of projects is rarely implemented as a part of ITI in Poland. Such activities were planned as part of ITI in the functional urban area of Warsaw. Initially, brown-field regeneration for business purposes were included in ITI strategy. However, no project could be implemented, mainly, as interpreted by the interviewed stakeholders, for formal reasons. The closest to successful implementation was a brown-field project in one of the communes near Warsaw. The project did not come to fruition as a result of extended formal ambiguities. The biggest obstacle turned out to be formal issues related to public aid for private business entities.

One of the stakeholders describes this case like this:

“Criteria for the project were very difficult [...] Generally, in the approach to investment areas, in the current perspective there has been a swing in the opposite direction compared to the previous perspective. In the previous perspective, this intervention was very popular among local governments, because sometimes under the guise of this intervention it was also possible to bring some media to the investment area, which increased the attractiveness of not only the area that was eventually intended for this investment for entrepreneurs, but also surrounding areas. [...] It has been noticed from the European level, that here local governments in Poland are doing kind of good things, because they increase the level of infrastructure availability, but it may not necessarily be implemented as part of [...] the preparation of investment areas. These rules regarding the introduction of this interventions in the current perspective have been radically sharpened. In such a way that intervention is possible only within the boundaries of the area, which is intended for subsequent investments [...]. Also because of the sustainability of projects and the fact that these entrepreneurs would have to be maintained for at least five years from the end of the project, [...] this intervention was gradually diminished until finally completely extinguished. This is not just about our ITI, but a few others who were also planning to intervene in this regard.”

Formal requirements (probably sensible) made the project (too) difficult to implement. However, other factors are also important here – it seems that these kind of projects is not high on the priority list of local governments as business development is largely done by private entities.

To date, no detailed analysis of the impact of the ITI instrument on economic sustainability has been carried out (the implementation of the first ITI strategies has not yet been completed). However, the expected – by interviewed stakeholders – impact on the economic sustainability of the activities undertaken under the ITI instrument is high. The implemented investments mainly concern the strengthening of broadly understood socio-economic potential. Interviewees' opinions suggest that investments of particular value from the point of view of economic development are the improvement of the functioning of public transport and integrated urban renewal projects.

4.3.3 Ecology

In accordance with the assumptions of the ITI instrument, the environmental dimension of implemented projects was essential. First of all, some projects were directly aimed at solving environmental problems. This applies to projects in the field of thermo-modernization and reduction of low emissions. In other projects, the environmental dimension was not so much an objective as an important component, as in the case of projects regarding the development of public transport systems or the development of bicycle infrastructure. In addition, the environmental dimension was an important component of urban renewal projects – in terms of improving the quality of urban greenery. A noteworthy feature of the ITI instrument in the field of environmental sustainability is an integrated approach. Environmental sustainability is achieved primarily through the implementation of projects whose main objectives relate to other aspects of functional urban areas (e.g. economic development, improvement of public transport, spatial, economic and social renewal).

To date, no detailed analysis of the impact of the ITI instrument on the environment has been carried out – the implementation of the first ITI strategies has not yet been completed.

4.3.4 Equity

At the current stage of implementation of the ITI instrument in Poland, it is difficult to indicate a specific impact on the social sphere. This is primarily due to the fact that ITI intervention in Poland is halfway through implementation. Nevertheless, it can already be concluded from the interviewees' opinions that the greatest positive impact on social sustainability will have urban renewal projects, especially those implemented in the centre of Łódź. Łódź urban renewal programme is a large scale comprehensive programme devoted to substantially revitalise 10 selected areas in the central area of Łódź (more information: <https://rewitalizacja.uml.lodz.pl/>). ITI is used to fund projects in 5 areas (out of 10). The key advantage of these projects is integration. As part of one initiative, selected city blocks are comprehensively revitalized, and activities include infrastructure, buildings, spatial development and urban greenery, as well as economic (supporting professional development

and employability) and social (e.g. creation of local cultural and social assistance centres). Here is an excerpt from an interview with one of the stakeholders:

“So we have a change of function and thanks to this life will return to these buildings. A lot of those buildings or areas that are subject to revitalization - will improve the quality of life of residents. It will improve the availability of apartments, because there are a lot of housing under. For example, to commercial premises, which will contribute to the development of entrepreneurship, creation of new jobs, activation of residents. [...] Children's day rooms, social integration clubs, and creative and cultural studios are often built in these buildings. This will also contribute to social exclusion. Not only for children, but for adults. A lot of greenery will be planted. Often, some small playgrounds, such pocket parks.”

To date, no detailed analysis of the impact of the ITI instrument on equity has been carried out – the implementation of the first ITI strategies has not yet been completed.

4.3.5 Balance

Despite the fact that ITI instrument has been successful in stimulating cooperation between local governments in metropolitan areas this increased cooperation does not translate, so far, in a significant way into the issues of spatial planning. An important limitation here is the national spatial planning system, which lacks integrated spatial management tools in functional urban areas.

In the context of spatial dimension, the biggest failure of the ITI instrument are difficulties in implementing projects related to investment sites. In this case, the main obstacle indicated by the interviewees is the issues of state aid to private enterprises. However, it seems that a more significant obstacle may be the lack of local plans designating industrial areas, as well as the fact that local governments usually do not own areas that could be used for business development. They also do not have required resources and essential competences to buy and merge such areas.

ITI instrument has a positive impact on all key stakeholders in individual functional urban areas. Interviewees clearly indicate that they are winners and that their key partners also benefit from ITI. At the same time, it can be assumed that local governments outside ITI areas may be the losers. However, such an assessment would be premature. Local governments outside ITI areas may use other chunks in regional and national operational programs.

Interviewees' expectations have been generally met. However, some of them expected broader and larger intervention, as well as more meaningful collaboration with other partners.

4.3.6 Multi-stakeholder assessment conclusions

The opinions of all interviewees are unequivocally positive regarding the effects of the ITI instrument observed so far. This applies to all the analysed spheres (economy, society, environment, planning). The effects are largely in line with expectations - which results from the fact that the intervention in individual ITIs was planned in detail in the form of a written strategy. At the current stage of ITI implementation in Poland, it is difficult to assess the durability of effects. However, it seems that the most important long-term effect of ITI will be to create the foundation for continuing and further strengthening cooperation in functional urban areas.

4.4 Conclusions

ITI instrument in Poland can be understood as an experiment in public policy. Undoubtedly, the approach to ITI used in Poland was innovative (against other implemented initiatives). It required – and was designed for – overcoming significant barriers to the implementation of development policies in functional urban areas diagnosed during the implementation of cohesion policy under the first two financial perspectives of the European Union (after Poland joined the community in 2004). The main obstacle to the effective management of the development of functional urban areas of the largest Polish cities was the inability to cooperate and even the reluctance of local governments to implement joint projects. From this point of view, forcing cooperation between local governments, i.e. conditioning access to funds on joint investment strategy agreed by multiple stakeholders, was a bold decision of the national authorities (One can imagine a framework for ITI in Poland where the requirement for cooperation would be very soft, and as a result inter-municipal cooperation within ITI would be very superficial). As such, it can be seen as a kind of experiment. Its effects were, at least initially, difficult to predict (see: Kozak, 2016).

From the halfway point of ITI implementation in Poland, it should be said that the expectations of this instrument have been met. Individual investment strategies are implemented without major complications. The most important effect is the impact of ITI on tightening cooperation between local governments in metropolitan areas (Noworól, 2019). Some experts even argue that ITI can lead – in the long run – to the formation of new governance models in metropolitan areas in Poland (Ferry, Borkowska-Waszak, 2018). In this case, the basic factor of success was financial stimulation: making access to finance conditional on the creation of a joint strategy.

However, in the broader perspective of the management of development in metropolitan areas, ITI is rather only a moderate success. First of all, it cannot be ruled out that cooperation and co-ordination can end as soon as the funding for joint strategies runs out¹.

¹ Such a phenomenon has already occurred in Poland in the case of networks of technology transfer institutions. The networks operated as long as they received public funding. As soon as the funds from

Secondly, from the point of view of spatial planning and sustainable land development, ITI has not yet brought significant changes to public policy practice. The cases of positive impact on spatial development consist mainly in mitigating the negative effects of urban sprawl (by improving transport accessibility), projects related to urban renewal and ecological sustainability. Indubitably, such actions are needed and positive, because they will improve the quality of life. However, the current approach seems to take too little account of the long-term perspective. In the future, cooperation in metropolitan areas will need to be further intensified – especially in the form of a requirement for joint spatial planning of spatial development throughout the whole area.

4.5 Implications for sustainable urbanization and land use

This case study sought to illuminate the black box of development practices within a particular territory in Europe, focusing on a particular intervention which changed, or attempted to change, these practice to more sustainable ends. The primary source material was in-depth interviews with stakeholders directly involved in decision-making on spatial development, on crafting or applying the intervention, or both. Through their candid explanations, it was possible to provide a nuanced, and often critical, account of the origins, mechanisms and impacts of the intervention. As can be read above, the results show stakeholders in agreement on some issues and disagreeing on others.

The purpose of this final section is to give voice to the case study researchers by asking them to specifically reflect on the key questions posed to the project at its inception. The ideas and opinions expressed in this final section – printed in italics – are, therefore, solely those of the authors.

To what extent can the observed land-use changes in the case be considered sustainable?

ITI implementation is halfway through. Not enough time has passed to assess the impact of ITI in this aspect.

this source dried out (the end of programs and / or projects), the networks almost immediately ceased to operate, although in the initial assumptions they were to achieve a level of development allowing them to operate based on fees for their services (Płoszaj, 2013).

To what extent did short-term thinking weigh up against concerns of long-term economic, ecological and social vitality?

The key feature of the ITI instrument is the long-term perspective and focusing on sustainability in the metropolitan area. ITI instrument facilitates long-term strategic planning in the functional urban areas. This could potentially be the most important effect of using this instrument

To what extent were trade-offs avoided between economic, ecological and social values (e.g. urban green spaces in densifying areas)?

In two more closely analysed cases, no significant trade-offs were identified. This may be the result of the fact that individual projects implemented within ITI must directly result from the strategy of actions for a given ITI. The development of a strategy, in a sense, enforces a more systemic approach and avoiding actions whose effects are contradictory.

Was there a tension between sustainability at different levels of scale (e.g. a locally sustainable development having unsustainable attributes at the regional level)?

No.

To what extent is there a correlation between urban form (e.g. high-density contiguous urbanisation versus low-density scattered development) and sustainability?

ITI actions leading to densification (urban renewal in central zones) seem to be more sustainable than other types of actions. This may be due to the integration of urban renewal projects.

How much impact did various interventions have in producing sustainable urbanisation and land-use outcomes?

Actions leading to densification (urban renewal) seem to be more sustainable. On the other hand, actions improving the quality of life in suburban areas (e.g. development of the public transport system) primarily reduce the negative impact of suburbanization processes.

To what extent were place-based approaches and territorial cooperation responsible?

ITI is a perfect example of a place-based approach and a policy that requires and strengthens territorial cooperation. Territorial cooperation is a key success factor for ITIs.

To what extent were financial, fiscal and economic mechanisms responsible?

ITI is a financial measure. Availability of funds, under ITI's umbrella, is a key aspect encouraging cooperation in functional urban areas.

How sustainable are the measures themselves over time?

Long-term sustainability is a key objective of ITI instrument.

Do they produce economic benefits?

Economic benefits are very important for planning and selection of particular projects within ITI. Economic dimension is by far the most important for local and regional stakeholders.

To what extent do they enjoy popular support or consensus among stakeholders?

ITI instrument is supported by stakeholders. Building consensus among stakeholders in particular functional urban areas is a key feature of ITIs in Poland.

How can urban sprawl be contained and which instruments can be used to do that?

In the context of ITIs implementation in Poland, projects related to urban renewal in city centres have the greatest potential to contain urban sprawl.

How can the impacts of land take/soil sealing be limited?

Closer (than within ITIs) cooperation between local governments in functional urban areas would be needed – especially in the form of a requirement for joint planning of spatial development throughout the whole area.

How can the place based approach and territorial cooperation be used?

The requirement to have a joint development strategy covering several local governments.

How can we benefit economically from measures to limit land take/soil sealing?

These were not considered in the Polish case.

How can financial, fiscal and economic mechanisms be used to limit urban sprawl?

Provide resources that can be used for specific types of projects that contribute to the long-term development strategy of the whole functional urban area.

How can external costs be internalized? For example: at the moment it is often cheaper to develop greenfields instead of brownfields, but the costs of for instance the ecosystem services lost by developing a greenfield are not included in the development costs.

These were not considered in the Polish case.

How can green and open spaces in urban areas be maintained for the quality of life, despite the (laudable) effort to densify settlement areas?

These were not considered in the Polish case.

5 References

- Ahrend, R., & Schumann A. (2014). "Approaches to metropolitan area governance: a country overview", OECD Regional Development Working Papers, No. 2014/03, OECD Publishing.
- Bovet, J., Reese, M., & Köck, W. (2018). Taming expansive land use dynamics—Sustainable land use regulation and urban sprawl in a comparative perspective. *Land use policy*, 77, 837-845.
- City of Warsaw (2017). Integrated Territorial Investments for Greater Warsaw. Warsaw: The City of Warsaw, European Funds and Development Policy Department.
- Czapiński, J. (2008). Kapitał ludzki i kapitał społeczny a dobrobyt materialny. *Polski paradoks. Public Governance/Zarządzanie Publiczne*, (4 (2)), 5-28.
- Degórska, B. (2003). Impact of urban sprawl on environmental planning—Warsaw metropolitan area in the context of European experiences. *EUROPA XXI*, 51.
- European Commission (2013) Integrated Territorial Investment Factsheet.
- Ferry M., & Borkowska-Waszak, S. (2018). Integrated Territorial Investments and New Governance Models in Poland. *European Structural and Investment Funds Journal*, 6(1), 35–50. <https://estif.lexxion.eu/article/ESTIF/2018/1/7>
- Ferry M., & McMaster, I. (2018). Assessing Integrated Territorial and Urban Strategies. Challenges, Emerging Approaches and Options for the Future. *European Structural and Investment Funds Journal*, 6(1), 58–67.
- Ferry, M. (2019). Study on Integrated Territorial Investments as an Effective Tool of the Cohesion Policy: Report to BUDG Committee, European Parliament. European Union.
- Ferry, M., & Borkowska-Waszak, S. (2018). Integrated Territorial Investments and New Governance Models in Poland. *European Structural & Investment Funds Journal*, 6(1).
- Ferry, M., Kah, S., & Bachtler, J. (2018). Integrated territorial development: new instruments—new results? European Policies Research Centre Delft, Technical University Delf.
- Hernik, J.D.-G., Czesak, R., Pazdan, B.M. (2013). Ansätze polnischer Bodenpolitik unter besonderer Berücksichtigung der Woiwodschaft Malopolska. *Flächenmanagement und Bodenordnung*, 256–262.
- Kaczmarek T. (2017). Implementacja Zintegrowanych Inwestycji Terytorialnych (ZIT) w miejskich obszarach funkcjonalnych. Przykład metropolii Poznań. *Rozwój Regionalny i Polityka Regionalna*, (40), 9-24.
- Kaczmarek T., & Kociuba, D. (2017). Models of governance in the urban functional areas: Policy lessons from the implementation of integrated territorial investments (ITIs) in Poland. *Quaestiones Geographicae*, 36(4), 47-64.
- Kajdanek, K. (2011). Suburbanizacja w Polsce—pejzaż społeczno-przestrzenny. *Przegląd Socjologiczny*, 60(2-3), 303-321.
- Kamrowska-Zaluska, D., & Obracht-Prondzyska, H. (2017). Implementation of the integrated territorial investments. In *Uncovering the Territorial Dimension of European Union Cohesion Policy* (pp. 114-126). Routledge.
- Karwińska, A., Böhm, A., & Kudłacz, M. (2018). The phenomenon of urban sprawl in modern Poland: Causes, effects and remedies. *Zarządzanie Publiczne/Public Governance*, (3 (45)), 26-43.
- Kociuba D. (2017a). Delimitacja miejskich obszarów funkcjonalnych ośrodków wojewódzkich w realizacji zintegrowanych inwestycji terytorialnych w Polsce—teoria versus praktyka. *Studia Regionalne i Lokalne*, (3 (69)), 54-78.
- Kociuba D. (2017b). Zintegrowane Inwestycje Terytorialne jako narzędzie zarządzania terytorialnego w miejskich obszarach funkcjonalnych. *Studia KPZK PAN*, 174, 144-153.
- Kociuba, D. (2018). Implementation of integrated territorial investments in Poland—rationale, results, and recommendations. *Quaestiones Geographicae*, 37(4), 81-98.
- Kowalewski, A., Mordasewicz, J., Osiatyński, J., Regulski, J., Stępień, J., & Śleszyński, P. (2014). Ekonomiczne straty i społeczne koszty niekontrolowanej urbanizacji w Polsce—wybrane fragmenty raportu. *Samorząd Terytorialny*, (4), 5-21.
- Kozak M. (2016). Zintegrowane Inwestycje Terytorialne jako eksperyment, *Studia Regionalne i Lokalne* Nr 3(65)/2016.
- Kozak, M. W. (2016). Zintegrowane inwestycje terytorialne jako eksperyment. *Studia Regionalne i Lokalne*, 17(65), 50-69.

- Krajewska, M., S. Żróbek and M. Šubic-Kovač (2014), "The role of spatial planning in the investment process in Poland and Slovenia", *Real Estate Management and Valuation*, Vol. 22, No. 2, pp. 52-66.
- Krukowska J., & Lackowska M. (2016). Metropolitalne kolory europeizacji. Instytucjonalizacja współpracy w funkcjonalnych obszarach miejskich w Polsce w świetle nowych instrumentów polityki spójności UE. *Studia Regionalne i Lokalne*, (1 (63)), 82-107.
- Kuć-Czajkowska, K. (2019). *Obszary Funkcjonalne miast wojewódzkich w Polsce. Przestrzeń współpracy i konkurencji samorządów terytorialnych*. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Lityński, P. (2015). Degree and features of urban sprawl in selected largest Polish cities. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (402), 184-193.
- Lityński, P., & Hołuj, A. (2017). Urban sprawl costs: The valuation of households' losses in Poland. *Journal of Settlements and Spatial Planning*, 8(1), 11-35.
- Lityński, P., & Hołuj, A. (2020). Urban Sprawl Risk Delimitation: The Concept for Spatial Planning Policy in Poland. *Sustainability*, 12(7), 2637.
- Lityński, P., Zotic, V., & Hołuj, A. (2015). Polish urban sprawl. An economic perspective. *Journal of Settlements and Spatial Planning*, 6(2), 95-105.
- Matkó M (2016) Sustainable urban development in Cohesion policy programmes 2014-2020, a brief overview. Paper presented at Urban Development Network Meeting, 18 February 2016.
- Miller S., & Van der Zwet, A. (2018). Integrated Territorial Investment in the UK: A Tale of Two Regions. *European Structural and Investment Funds Journal*, 6(1), 51–57.
- Ministerstwo Rozwoju Regionalnego (2013). *Zasady uwzględniania wymiaru miejskiego polityki spójności UE, w tym realizacja Zintegrowanych Inwestycji Terytorialnych*. Warszawa: Ministerstwo Rozwoju Regionalnego.
- Ministry of Regional Development (Ministerstwo Rozwoju Regionalnego) (2012). *Koncepcja Przestrzennego Zagospodarowania Kraju 2030*, Warsaw.
- Munch W., Rudka A. (2016). *Improving Spatial Planning in Poland. Follow-up of Country Specific Recommendations #3*. European Commission.
- Napierała, T. (2017). Municipal Investments in the Łódź Metropolitan Area (Poland) between 2007 and 2013. *ISR-Forschungsbericht*, 42, 369-386.
- Noworól, A. (2019). Management of the Kraków Functional Urban Area, in Poland, using a European Union Instrument: Integrated Territorial. *Zarządzanie Publiczne*, (48), 26-36.
- OECD (2016). *OECD Economic Surveys: Poland 2016*, OECD Publishing, Paris.
- Pabjanek, P., & Szumacher, I. (2017). Land use and ecosystem services temporal changes in the urban sprawl zone, Warsaw, Poland. *Probl. Landsc. Ecol*, 29-40.
- Płoszaj, A. (2013). *Sieci instytucji otoczenia biznesu*. Warszawa: Wydawnictwo Naukowe Scholar.
- Śleszyński P. (2013). Delimitacja miejskich obszarów funkcjonalnych stolic województw. *Przegląd Geograficzny*, 85(2): 173–197.
- Śleszyński, P. (2015). Błędy polskiej polityki przestrzennej i krajobrazowej oraz propozycje ich naprawy. *Problemy Ekologii Krajobrazu*, 40, 27-44.
- Śleszyński, P., Kowalewski, A., Markowski, T., Legutko-Kobus, P., & Nowak, M. (2020). The Contemporary Economic Costs of Spatial Chaos: Evidence from Poland. *Land*, 9(7), 214.
- Smętkowski, M., Jałowiecki, B., & Gorzelak, G. (2009). *Obszary metropolitalne w Polsce-diagnoza i rekomendacje*. *Studia Regionalne i Lokalne*, 1, 52-73.
- Swianiewicz P. (2016). Współpraca międzygminna – formy, zakres, motywacje. *Samorząd Terytorialny* 5: s. 11-31.
- Szafrańek E. (2015). Zintegrowane Inwestycje Terytorialne jako narzędzie wspierające kształtowanie centrów rozwoju regionalnego. *Rozwój Regionalny i Polityka Regionalna*, (32), 81-94.
- Szewrański, S., Kazak, J., Szkaradkiewicz, M., & Sasik, J. (2015). Flood risk factors in suburban area in the context of climate change adaptation policies—Case study of Wrocław, Poland. *Journal of Ecological Engineering*, 16(2).
- Toscis I. (2016). Integrated territorial investment. A missed opportunity? [in:] Bachtler J., Berkowitz P., Hardy S., editors. *EU Cohesion Policy (Open Access): Reassessing Performance and Direction*. Taylor & Francis.

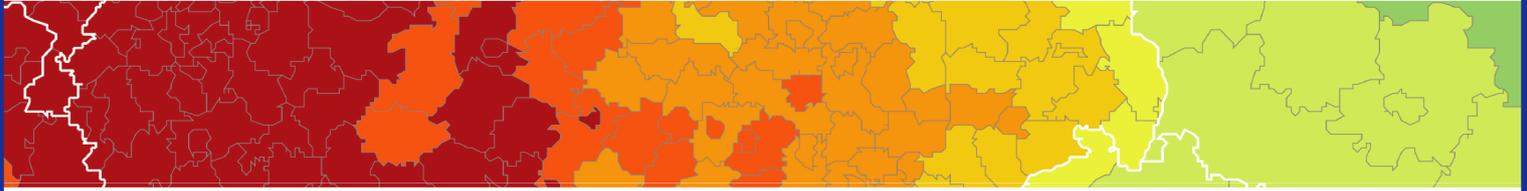
Tosics, I. (2017). Integrated territorial investment: a missed opportunity? [in:] EU Cohesion Policy, edited by John Bachtler, Peter Berkowitz, Sally Hardy and Tatjana Muravska. Routledge.

Triantakonstantis, D., & Stathakis, D. (2015). Examining urban sprawl in Europe using spatial metrics. *Geocarto International*, 30(10), 1092-1112.

Veneri, P. (2015), "Urban spatial structure in OECD cities: Is urban population decentralising or clustering?", OECD Regional Development Working Papers, No. 2015/01, OECD Publishing.

Wolański M., Ledzion B., Borowczak A., Kupiec T., Płoszaj A., Popis Z., Mrozowski W., Borkowska-Waszak S., & Haber A. (2018). Ewaluacja systemu realizacji instrumentu ZIT.

Zygadło (2017). Zintegrowane Inwestycje Terytorialne. Warszawa: Ministerstwo Rozwoju.



ISBN: 978-2-919795-39-0

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The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.