Formation of Functional Urban Areas: The Case of Bialystok Functional Area

Summary

Functional urban areas are becoming increasingly important in urban development policies as a comprehensive approach to solving problems and addressing development goals, not only of cities but also neighboring towns. Integrated territorial investments (ITIs) are a new tool of cohesion policies aimed at better achievement of socio-economic development objectives regarding urban functional areas. The purpose of the paper is to assess the use of ITIs in policies for the development of Bialystok Functional Area by analyzing strategic documents, including the Strategy of Integrated Territorial Investments of Bialystok Functional Area for the years 2014-2020. The following research hypothesis has been formulated: the financial resources in ITIs allocation enable the city to strengthen its cooperation with the neighboring municipalities, mainly in the fields of public transport, investment attractiveness, and human capital.

Key words: integrated territorial investments, functional urban areas

JEL Classification: H72, O21

1. Introduction

The concept of urban functional areas (UFA) allows for a comprehensive perspective of the problems and challenges of modern cities. By adopting the theory of central place, the notion of UFA implies that the development of towns does not take place independently, but is closely linked with flows of people, goods, services, capital, and information between a central city (the core) and the adjacent areas. Integrated territorial investments (ITIs) are a tool for supporting this approach to urban development. ITIs constitute a new financial instrument of the European Union (EU) for the years
2014-2020. Their objective is to ensure long-term cooperation of local governments located within a given functional area through cooperation in projects the objectives of which are to solve the shared socio-economic, environmental, demographic, and other problems. In Poland, as many as 17 urban functional voivodeship areas and 7 regional centers obtain funds within the framework of this instrument.

The aim of the paper is to assess how the ITI instrument is used in the development policy of Białystok Functional Area through analysis of such strategic documents as the Strategy of Integrated Territorial Investments of Białystok Functional Area for the years 2014-2020.

2. Urban functional areas in Poland

Both the definition and delimitation of urban functional areas in Poland are conducted within the framework of “The National Spatial Development Concept 2030” (NSDC) [2011, pp. 187-194]. The document defines an urban functional area (UFA) as a settlement complex that is spatially continuous and consists of separate administrative units. This means that, apart from the area of a city, there are its urbanized environs, functionally connected with the city, and in administrative terms possibly encompassing other urban or/and rural municipalities. In the theory of economics, the notion of a functional area is related to the central place theory, in accordance with which, it is an area centered around a large city, linked to it by means of various interdependencies regarding exchange of people, goods, services, capital, and information [quoted after: Szafranek, 2015, p. 112].

NSDC distinguishes four basic types of UFAs. These are: voivodeship areas (including metropolitan areas), regional, sub-regional, and local areas. As regards voivodeship capitals, delimitation of functional areas and UFA development strategies and plans are obligatory. In strategic planning, it ought to be a fundamental principle that priority is given to regeneration (renovation) of buildings over developing new areas for building purposes. Also, planners should strive towards rational saturation of the entire area with various metropolitan functions and higher-order services. The functional areas of regional centers are formed around those cities that have major importance for the country’s development and are inhabited by 100,000 to 300,000 people. What makes them different from the previous type is that they are not required to create separate development plans or strategies. In sub-regional centers, functional areas are established by voivodeship local governments around towns inhabited by approx. 50,000 to 100,000 people. This also regards selected smaller centers. Development plans for such areas are optional. The final category, local centers, likely to concentrate economic functions, provide infrastructure related to services for rural areas. Local centers include towns inhabited by fewer than 50,000 people [KPZK 2030, 2011, pp. 187-194]

Policies targeted at urban functional areas are a significant factor of supporting their development because they: counteract inequalities as regards the level of development, help more accurately define their development potentials, and provide comprehensive solutions to problems occurring there. The National Urban Policy [Krajowa Polityka Miejska, 2015, p. 81] also emphasizes that the development of cooperation between local government units in accordance with the principles of partnership and effective cooperation
should be the main direction of the activity of functional areas. Poland’s membership in the European Union provides an opportunity to obtain EU funds and instruments in order to support the development of functional areas. One of these are integrated territorial investments.

The fundamental document establishing the area of ITI implementation is entitled “Criteria of delimitation of urban functional areas of voivodeship centers” [Kryteria delimitacji miejskich..., 2013, pp. 7-9].

The primary instruments on which delimitation of functional areas of voivodeship centers is based include:

- Functional indicators – i.e.: F1 – number of those commuting to work in the UFA core per 1,000 working-age inhabitants older than 50 years of age (2006); F2 – number of registrations of residence in the UFA core per 1,000 inhabitants above 3 (2009);
- Socio-economic indicators – i.e.: S1 – share of people working outside the agriculture sector in voivodeship's average higher than 75% (2002); S2 – number of economic entities per 1,000 inhabitants as relation to voivodeship's average higher than 75% (2011); S3 – share of economic entities classified as higher order services (sections J-R) in all entities;
- Morphological indicators – i.e.: M1 – population density (excluding forests and water reservoirs) in relation to voivodeship's average higher than 50% (2011); M2 – number of new flats per 1,000 inhabitants in the years 2002-2011 in relation to voivodeship's average higher than 75%.

In the financial perspective for the years 2014-2020, the ITI instrument is implemented by 17 functional areas of voivodeship capital cities and their location is shown in Figure 1. These sub-regions are: Jelenia Góra Agglomeration, Wałbrzych Agglomeration, the Southern Sub-Region of Śląskie Voivodeship, the Northern Sub-Region of Śląskie Voivodeship, the Western Sub-Region of Śląskie Voivodeship, the Agglomeration of Kalisz and Ostrów, as well as the Functional Area of Koszalin, Kołobrzeg and Białogard.

The largest functional area is the Central Sub-Region of Śląskie Voivodeship. It is inhabited by more than 2.7 mln people (3 times more than the average for UFAs) in 73 municipalities and comprises the area of 5.5 000 km² (almost 3 times more than average). The smallest one is the Urban Functional Area of Gorzów Wielkopolski. It comprises only 5 municipalities and in terms of the population constitutes only 21% of the average of all the UFAs, whereas in terms of its area – 34% of the average [Mierzyńska, Perło, Truskolaski, 2016, pp. 95, 248].
3. Integrated territorial investments as main support instrument for development of functional areas

Integrated territorial investments constitute a new support instrument earmarked for solving particular problems of territorial urban areas (functional areas). The purpose of this tool is to provide a mechanism of integrated responses to diverse needs formulated in the development strategies of the functional areas.
The definition of ITIs can be created on the basis of source documents. One of these is the Decree No. 1301/2013 of 17 December 2013, which specifies that “Within the framework of sustainable urban development, it is considered necessary to support integrated actions to tackle the economic, environmental, climate, demographic and social challenges affecting urban areas, including functional urban areas, while taking into account the need to promote urban-rural linkages. The principles for selecting the urban areas where integrated actions for sustainable urban development are to be implemented, and the indicative amounts for those actions, should be set out in the Partnership Agreement with a minimum of 5% of the ERDF resources allocated at national level for that purpose. The scope of any delegation of tasks to urban authorities should be decided upon by the managing authority in consultation with the urban authority” [http://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:32013R1301&from=PL]. Another document is The Regulation (EU) No. 1303/2013 of the European Parliament and of the Council of 17 December 2013, Art. 36 of this document specifies the usage of ITIs in situations where the development strategies of urban areas require an integrated approach with financial support from ESF, ERDF, or the Cohesion Fund under one or more priority axis or one/several operational programs [http://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:32013R1303&from=PL].

In Poland, ITI projects are financed from regional operational programs (ROP). In total, taking into consideration all the ROPs, allocations for this purpose in relation to the total allocation of particular funds earmarked for Poland, amount to at least 5.2% of the ERDF allocations and 2.4% of the ESF allocations, as specified in the Partnership Agreement [Umowa Partnerstwa, 2015, pp. 215-217].

The principles of realizing integrated territorial investments are specified by the Act of 11 July 2014 on the principles of implementation of the cohesion policy programs, financed under the 2014-2020 financial perspective. The conditions that each functional area needs to meet include the institutionalization of cooperation forms, e.g. in the form of an association, agreement, or union between municipalities, or through establishment of a shared ITI strategy [Journal of Acts 2014, item 1146 with further alterations, p. 33]. The strategy ought to specify a set of interrelated activities serving long-lasting improvement in the following spheres: society, economy, environment, and demography of a particular functional area. The preferred methods of intervention within the framework of ITIs include:

- sustainable development of transport to integrate the functional area,
- improvement of socio-economic functions in degraded areas (revitalization),
- improvement of the natural environment,
- actions for low emission economy and energy efficiency,
- improvement of the quality of public services and efforts towards upgrading the importance of the functional area,
- enhancing innovation, support for R&D sector [Zasady realizacji..., 2013, pp. 6-7].

The task of ITIs is to overcome the difficulties encountered so far as well as to encourage the neighboring LGUs to establish long-lasting cooperation. The anticipated results also include improvement of the efficiency in implementing projects co-financed by the
European Union [Truskolaski, Waligóra, 2014, p. 124]. Additionally, the specific objectives of ITIs include:

- development of cooperation and partnership of various administration units in urban functional areas,
- enhancement of the efficiency of undertaken investments and interventions by implementing integrated projects that will comprehensively respond to the needs and problems of cities and their functionally related areas,
- increasing the impact of cities and functionally related areas on the scope and mode of implementation in their area of activities supported by the cohesion policy [Zasady realizacji..., 2013, p. 4]

On the basis of the aforementioned purposes, the following definition of ITIs can be proposed – they are an instrument of socio-economic development of urban functional areas through both integrated and complementary initiatives ensuing from territorial strategies realized with the aid of funding obtained from the Structural Funds or/and the Cohesion Fund of the European Union.

4. Bialystok Functional Area: The perspectives and directions of development

The development objectives of Bialystok Functional Area were specified in the Strategy of Integrated Territorial Investments of Bialystok Functional Area for the years 2014-2020 (ITI Strategy of BFA) [2016, pp. 162-228].

The priorities of the development of this particular functional area focus on efforts to realize the vision of BFA as one which: is of key importance to the eastern EU and Poland as attractive for investors and open to cooperation, has a high level of human and social capital, and guarantees high living standards, social inclusion and respect for the natural environment. The objective is to construct an integrated organism based on economic, communicative, and social relations, which would ensure long-lasting and effective cooperation. The realization of these assumptions is believed to depend on seven main thematic objectives:

1. Investment attractiveness,
2. Competences,
3. Access to culture,
4. Active social integration,
5. Low-emission economy and environmental protection,
6. Transport accessibility,
7. Integration of strategic management of BFA development [Strategia ZIT BOF, 2016, pp. 158, 162].

For each of the aforementioned objectives, detailed objectives and measures were identified, as shown in Table 1.
## TABLE 1.

### ITI Strategy of BFA – aims and activities

| Main objective | Detailed objectives | Measures |
|----------------|---------------------|----------|
| **1. Investment attractiveness** | Support for R&D activity in companies as well as for transfer of knowledge and commercialization of R&D results. | Support from investors. |
| | Improvement of conditions for conducting and developing economic activity in Białystok Functional Area. | Development of infrastructure in investment areas. Ensuring accessibility of investment areas. |
| **2. Competences for work** | Reinforcement of attractiveness and quality of both vocational and continuing education by ensuring realization of new core curriculum in professional education, including possibility of confirming obtained qualifications. | Better quality of vocational education. Development of infrastructure of vocational and continuing education. |
| | Establishment and maintenance of the Competence Center of BFA, the aim of which is to adjust the competences of those who learn, make decisions regarding their education and professional life (qualifications, skills, and attitudes) to the needs of the regional economy. | Establishment of the Competence Center of BFA. |
| | Reinforcement of the science sector aiming at improving competitiveness via development of regional specializations. | Higher education for intelligent specializations of BFA. |
| | Ensuring equal access to high quality pre-school education for all children in BFA. | Improved quality of pre-school education. Development of infrastructure for pre-school education. |
| | Improvement of the quality of general education and fostering of information and communication competences in education. | Development of general education of children and youth. Improved quality of general education of children and youth; Development of infrastructure of institutions popularizing science and innovation. |
| **3. Access to culture** | Improvement of the efficiency of using cultural heritage and development of cultural resources. | Adaptation of historic objects for cultural activity. |
| **4. Active social integration** | Improvement of social integration of people who are excluded or at risk of social exclusion by improving and strengthening their ability to live independently. | Social inclusion, ensuring equal chances on labor market. |
| | Improvement of access to high quality social services, including especially environmental and caring services as well as services offering support to families and foster care for people facing risk of poverty and social exclusion. | Increased access to social services. |
| | Improvement of availability and quality of social services. | Development of infrastructure to improve social integration. |
| **5. Low emission economy and environmental protection** | Increasing mobility of BFA inhabitants and development of low emission public transport and bicycle transport for BFA inhabitants. | Development of low emission public transport and bicycle transport in BFA. Sustainable public transport in BFA. |
| Implementation of programs of economical use of thermal and electric energy in BFA in accordance with low emission economy. | Increased efficiency of energy management as regards street lights. Development of energy production based on RES. Increased energy efficiency of buildings. Modernization and reconstruction of heating network system. Modernization of individual sources of thermal energy. |
|---|---|
| Development of water and sewage infrastructure in BFA. | Water and sewage management. |
| 6. Transport accessibility | Improvement of external and internal transport accessibility as well as spatial cohesion of BFA. Development of key transport connections. |
| Increase in external transport accessibility of BFA. | Construction of an airstrip at Krywlany airport. |
| 7. Integration of strategic management of BFA development | Ensuring efficient management and effective use of funds; support for beneficiaries in planning and implementing projects. Institutionalization of cooperation between BFA local governments. |

Source: [Busłowska, 2016 p. 84].

Analysis of the aforementioned data makes it possible to observe that both the objectives and measures have been specified in a holistic way and comprise diverse spheres that require support in the municipalities of BFA. Particularly extensive measures and types of support are included in objective No. 2 - Competences for work. The strategy implies a wide range of undertakings aimed at formation and development of human capital. These tasks include both the sphere regarding the development of competences, knowledge and abilities on all education levels, as well as support in the form of 'hard' investments in the infrastructure of kindergarten education and vocational schools. Additionally, within the framework of a non-competition project there is a plan to support the infrastructure popularizing science and innovations by means of establishing the Laboratory of Young Champions and Explorers in Białystok (Laboratorium Młodego Mistrza i Odkrywcy w Białymstoku). Objective No. 5, which is related to low emission economy and the natural environment, is of special importance, both in terms of the measures and variety of tasks. The tasks planned in this sphere include both the development of low emission public transport and support for energy efficiency, as well as water and sewage management. Meanwhile, the non-competition projects to be realized include, among others: the modernization of individual sources of thermal and electric energy in 8 BFA municipalities and, in particular, the partnership project for 9 municipalities that is connected with the purchase of low emission rolling stock and rebuilding of local roads and bike paths.

The importance of the aforementioned objectives is also reflected in the financial structure of support which is planned to result from the ITIs = (Table 2). A vast majority of the expenses was earmarked for the realization of aims No. 2 and 5, i.e. 28.5 mln Euros and 27.9 mln Euros, respectively. Consequently, one may conclude that the ITI Strategy of BFA largely focuses on social and environmental issues. This approach is consistent with the adopted mission specified in the ITI Strategy of BFA for a particular area, which implies making BFA an attractive place to work and live. Additionally, the investments in human
capital ought to be positively assessed in the light of theories of regional and urban development (e.g. Cooke’s theory of regional innovation systems, M. Storper’s theory of learning regions, and Florida’s theory of creative capital in urban development) [quoted after: Bartnik, 2016, pp. 16-17].

### TABLE 2.

| Objective of ITI Strategy of BFA | Sub-measures within the framework of ITIs | ITI allocation (EURO) | Source of financing of ITI allocation |
|---------------------------------|------------------------------------------|----------------------|-------------------------------------|
| Objective 1                     | Sub-measure 1.2.1. Development of infrastructure in investment areas | 12,146,051           | ERDF                                |
|                                 | Sub-measure 1.2.2. Ensuring availability of land for investment purposes | 1,570,183            | ERDF                                |
|                                 | Sub-measure 2.1.2. Development of occupational and continuing education infrastructure | 13,939,699           | ERDF                                |
|                                 | Measure 2.2. Establishment of the Competence Center of BFA | 4,271,357            | ESF                                 |
|                                 | Sub-measure 2.4.1. Improvement of quality of pre-school education | 1,554,888            | ESF                                 |
|                                 | Sub-measure 2.4.2. Development of pre-school education infrastructure | 4,779,221            | ERDF                                |
|                                 | Sub-measure 2.5.2. Development of infrastructure for institutions popularizing science and innovations | 4,000,000            | ERDF                                |
| Objective 4                     | Measure 4.2. Increased access to social services | 2,989,950            | ESF                                 |
|                                 | Measure 4.3. Development of infrastructure for improving social integration | 2,776,382            | ERDF                                |
| Objective 5                     | Sub-measure 5.1.1. Development of low emission public transport and bicycle transport in BFA | 21,992,369           | ERDF                                |
|                                 | Sub-measure 5.2.1. Increase in the efficiency of energy management as regards street lights | 918,342              | ERDF                                |
|                                 | Sub-measure 5.2.5. Modernization of individual sources of thermal or electric energy | 5,061,558            | ERDF                                |
| **Total**                       |                                           | 76,000,000           | x                                   |

Source: authors’ own work on the basis of: [Strategia ZIT BOF, 2016, pp. 304-305].
It needs to be observed that the Strategy indicates ITIs as one of many instruments. In order to realize the projects complying with the Strategy objectives, the beneficiaries may use other forms of external support as well as their own funds.

To conclude, it can be assumed that the ITI Strategy of BFA presents a holistic approach to the development of BFA. The activities planned to be undertaken will contribute to reducing and minimizing the negative socio-economic phenomena that have been found to occur within BFA, while the main purpose is to achieve a synergy effect and create a platform for further cooperation. The ITI strategy of BFA constitutes a complex and at the same time individualized plan for the development of this functional area.

5. Conclusion

To conclude, the paper presents a broad perspective on issues related to both the formation and role of urban functional areas in development policy. The following conclusions can be drawn:

1. The ITI strategy of BFA as an instrument of shaping the functional area is an attempt to solve, in a comprehensive manner, the problems of BFA. The fact that a relatively low number of measures and sub-measures has been included among the Strategy’s main objectives should be regarded as positive. Thanks to this, it is possible to preserve the transparency and rationality of the planned activities. At the same time, the strategy constitutes a good basis for further planning documents.

2. The resources available under ITIs in BFA constitute a platform for cooperation of local governments, mainly as regards improved availability of public and bicycle transport within the framework of a partnership project (objective 5). A complex approach to solving the problems of the area can also be observed in terms of development of human capital (there are plans to subsidize at least 25 vocational schools and 18 kindergartens) and reinforcement of BFA's investment attractiveness (by the end of 2023, 15 new investments in developed investment areas will have been completed), which is related with the 2nd and 1st objectives of the Strategy, respectively.

3. Integrated approach to the development of functional areas is a positive direction of changes, aimed at building a culture of partnership between individual LGUs. It makes it possible to identify development needs and reinforces the cohesion and competitiveness of BFA. These activities ought to be conducted on all levels of LGUs in order to achieve a synergy effect.

So far the implementation of projects within the framework of the ITI Strategy of BFA has been proceeding rather smoothly. The main difficulties concern low interest in the competitions for development of social services. In three conducted competitions, an agreement was signed to finance only one project (approx. 11% of the allocations for this purpose), whereas another project is being evaluated. Overall, the share signed contracts in the total allocations of ITIs in the form of competitions has amounted to 33%. The implementation of non-competition projects identified under the ITI Strategy of BFA
has been very successful. All the applications for financing have been submitted, 84% of the contracts have been signed and the share of allocations for non-competition projects has amounted to 51% [Data obtained from BOF Association, 28.09.2017].

Finally, attention ought to be drawn also to certain hazards of the adopted form of cooperation within UFAs. They may regard, among other things, the prolonged negotiations between co-operating LGUs with reference to the division of benefits and costs related to the implementation of joint projects, intensification of suburbanization processes as a result of improved transport accessibility, occurrence of an unfavorable disproportion of the bargaining power that the voivodeship’s capital would have owing to the possessed resources (in terms of finances, staff, knowledge, and politics) [Truskolaski, Waligóra, 2014, pp. 134-135]. Having assessed the present-day cooperation within the framework of BFA, it can be said, however, that none of these negative effects has occurred, although, it has functioned for too short a period of time for any firm conclusions to be drawn.

To sum up, it should be noted that cooperation within the framework of UFA seems to be a positive direction in the development of Białystok. The dimension of such cooperation ought not to be confined to submitting joint applications for EU funds, but needs to be multi-faceted: e.g., in BFA a group was established for joint purchase of electric energy. It is essential that the development of urban areas is shaped by means of a long-term, deliberate policy conducted by self-governments.

The authors’ participation in the preparation of the article

Tadeusz Truskolaski, PhD, Professor of the University of Białystok – development of the research concept, carrying out the research with data collection and literature analysis, developing results, preparation of all parts of the article – 34%

Anna Busłowska, PhD – development of the research concept, carrying out the research with data collection and literature analysis, developing results, preparation of all parts of the article – 33%

Kamil Waligóra, MA – development of the research concept, carrying out the research with data collection and literature analysis, developing results, preparation of all parts of the article – 33%

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