

INTERREG A FUNDS AS AN INSTRUMENT FOR MANAGING A BORDER REGION

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Abstract: The article focuses on the financing of border regions from the point of view of the use of selected EU funds. It analyses INTERREG A funds designed to support cross-border cooperation. The purpose of the research was to identify and analyse innovative projects undertaken under INTERREG A programmes in Polish-German areas. The territorial scope of the study corresponded to the assisted area outlined for the purposes of these programmes. It included Zachodniopomorskie Voivodeship on the Polish side, and Mecklenburg-Vorpommern and Brandenburg on the German side. The temporal scope covered three programming periods: 2000-2006 (Poland only joined it in 2004), 2007-2013 and 2014-2020 (still ongoing). The studies were based on an analysis of material obtained from INTERREG A online project databases, as well as the available reports and other sources. The results confirmed that INTERREG A programmes provided opportunities for innovative projects, the share of which, among all the projects completed was small, but essential from the point of view of the development of a cross-border region. The innovative projects were mostly in the field of healthcare. The structure of the entities performing such projects was diversified, although higher education institutions prevailed.

Keywords: INTERREG VA programmes, European Union funds, innovative projects, management, cross-border cooperation.

1. Introduction

The development of European Union regions is assisted with funds earmarked for the implementation of a number of projects identified as relevant for the Community. Assistance schemes based on public and non-repayable funds, their use and the effects of their use on the economy, the environment and local communities are the focus of attention of researchers, public authorities and the public.

As part of EU policies, particular attention is paid to border regions, which is due to their peripheral character, their problems, the diversity of their endogenous potential, and other aspects. The expansion of cross-border cooperation in financial, organisational and social terms

is one of the instruments supporting the development of border regions. Collaboration beyond the borders is made possible by the assistance received from specially allocated EU funds. They are available under the so-called INTERREG A programmes. Polish border regions are beneficiaries of such programmes as well. The projects completed under INTERREG A programmes have an actual impact on the functioning of the areas in question and the quality of their inhabitants' lives. Currently, innovations are known to be relevant to the development of regions. Hence, it is essential that they should be incorporated into the way border regions are managed.

The aim of the study was to identify and analyse innovative projects undertaken under INTERREG A programmes in a Polish-German region encompassing Zachodniopomorskie Voivodeship, Mecklenburg-Vorpommern and Brandenburg¹ across the subsequent financial perspectives.

2. Literature review

Border regions are frequently referred to as peripheral. Generally, their economic performance is worse than that of the rest of their respective countries (Monfort, 2009; Malkowski, 2018), although contemporarily the significance of spatial factors to the regions' socioeconomic development has diminished (Copus, 2001; Richardson, and Jensen, 2000). The development of border areas continues to encounter numerous barriers (Malkowska, 2016; Studzieniecki, 2016). It is accepted that cross-border cooperation between neighbouring regions is vital to combating such barriers and constitutes an effective and readily available tool for solving the problems faced by the regions concerned (People-to-people..., 2017). Also, attempts are being made to measure the outcomes of such cooperation (Capello et al., 2018). Perkmann and Sum (2002) claim that the creation of cross-border regions has become a clear strategic objective.

Since 2007, the European Territorial Cooperation has become one of the objectives of the EU regional policy (Scott, 2012). This objective is mainly being pursued under the so-called INTERREG A programmes financed under the European Regional Development Fund. Research confirms that the programmes do affect the functioning of border regions (Malkowska, 2014). Therefore, it is essential that projects undertaken within the framework of cross-border cooperation should also be innovative. The literary sources agree that innovations are some of the main determinants that favour the regions' economic growth and competitiveness (Fischer, and Nijkamp, 2009).

¹ In this paper, these three regions are also referred to as the "assisted area". Its exact boundaries are set forth in the INTERREG A programming documents for the particular financial perspectives.

An important role in the implementation of EU assistance programmes is played by their beneficiaries. They have been proven to have an impact on the efficiency and effectiveness of structural assistance on the one hand, and the level and quality of the resources utilised on the other. This, in turn, translates into the development and the better competitiveness of the less-developed regions of Poland (Pylak, 2007). Hence, EU funds are a valid element of managing a region (Pasternak, 2016).

3. Methodology

The article explores the problems of the development of border areas in terms of using selected EU funds, concentrating on the INTERREG A programmes. These programmes are designed to support cooperation between regions (NUTS III level) from at least two different Member States lying directly on the borders or adjacent to them. The research focused on Polish-German cooperation between Zachodniopomorskie Voivodeship and the federal states of Mecklenburg-Vorpommern and Brandenburg, with the attention mainly shifted to the Polish part of the region.

As a starting point, the paper gives a general description of INTERREG A programmes designed for the area in question. Three subsequent financial perspectives are discussed, namely: 2000-2006 (with Poland participating since 2004), 2007-2013 and 2014-2020 (still ongoing). Therefore, the temporal scope of the paper covers the entire period during which Zachodniopomorskie Voivodeship has been using the funds concerned, which corresponds to the period between Poland's accession to the EU and the end of the ongoing 2014-2020 programming period. The choice of this temporal scope allowed for an almost comprehensive analysis of the research topic, which in turn made it possible to observe changes over time and provided grounds for comparisons and assessments.

The main part of the paper offers a description and analysis of the projects co-financed under the INTERREG III A (2004-2006), INTERREG IVA (2007-2013) and INTERREG VA (2014-2020) programmes. After a detailed analysis of the online databases of projects or their summaries provided in reports, the choice was made to only focus on the so-called innovative projects. The following criteria were adopted: (1) the name of the project or its description should clearly indicate its innovative character; (2) the project's beneficiaries had to be entities from the Polish assisted area, i.e. Zachodniopomorskie Voivodeship.

Mainly, data made available by the Managing Authority of the INTERREG programmes were used. The study also referred to Polish and international literature sources concerned with the subject-matter. Desk research and the descriptive method with elements of deduction were utilised, while in the paper the results are presented in tables.

4. Results

4.1. Description of the INTERREG A programmes undertaken in the region in question

As one of the EU's border regions, Zachodniopomorskie Voivodeship has participated in INTERREG A programmes since 2004, undertaking them jointly with its neighbouring German regions, namely Mecklenburg-Vorpommern and Brandenburg. During the current 2014-2020 programming period, this area totals almost 42.2 thousand square kilometres and has a combined population of approx. 2.9 m. Of note is, however, the fact that 54% of that area lies on the Polish side of the border, in Zachodniopomorskie Voivodeship, which is inhabited by approx. 59% of the whole cross-border region's population.

Cross-border cooperation in the Polish-German region concerned has been assisted with funds under INTERREG A programmes. So far, three such programmes have been run, namely INTERREG III A (2000-2006), INTERREG IVA (2007-2013) and INTERREG VA (2014-2020). Each of them had a specified budget and objectives that set forth the levels on which projects were to be undertaken. The overall budgets within the particular financial perspectives were similar, amounting to approx. EUR 157 m. The level of funding did change, though, with the maximum amount being 75% between 2004 and 2006, and 85% since 2017. Between 2004 and mid-2019, the projects worth a total of approx. EUR 378.5 m were undertaken. Altogether, over 250 projects oriented at the so-called cross-border effect were completed with the financial assistance from the European Regional Development Funds under INTERREG A (Table 1). The objectives of these projects mainly revolved around such priorities as economic development, improvement of technical and tourist infrastructure, rural area development, support for cross-border economic and scientific integration, health care, education and the environment.

Table 1.

INTERREG A programmes in the periods 2000-2006, 2007-2013 and 2014-2020 for the Polish-German cross-border region encompassing Zachodniopomorskie Voivodeship, Mecklenburg-Vorpommern and Brandenburg

Specification	INTERREG IIIA 2000-2006	INTERREG IVA 2007-2013	INTERREG VA 2014-2020
Overall budget (in EUR m)	157.6	156.3	157.6
EU funds (in EUR m)	118.2	132.8	134.0
Level of support	Max. 75%	Max. 85%	Max. 85%
Number of completed projects	157	69	29**

* Without technical assistance.

** data as at 16 August 2019.

Source: the author's own study based on: (INTERREG III A..., 2003; Program Operacyjny Celu 3 „Europejska Współpraca Terytorialna”...2010; Program Współpracy INTERREG VA ..., 2015).

Due to the nature of the subject-matter hereof, it should also be explained which types of entities were entitled to apply for funds under the INTERREG A programmes discussed. And thus, they were predominantly local government and public administration authorities, their subordinate bodies and their associations, and non-governmental non-profit organisations. Practically, the character of these EU funds and the related formal and legal issues limited the possibility for private enterprises to undertake projects financed under INTERREG A programmes.

Between 2004 and 2006, Polish local government entities and their associations and organisational units undertook a definitive majority of the projects under INTERREG III A, with their number accounting for more than 81%. Financially, the advantage enjoyed by local government entities was even more substantial, as they absorbed approx. 67% of the total budget for all the investment projects. By way of comparison, Zachodniopomorskie Voivodeship higher education institutions and public cultural institutions only reached a budget absorption rate of 5% (Klimaczak et al., 2010). Similarly, between 2007 and 2013, local government authorities prevailed among the beneficiaries (approx. 63%). Associations and foundations came second (approx. 17%), followed by entities financed from the state budget (9%). The share achieved by all the remaining entities was much smaller. If the Polish beneficiaries of INTERREG IVA were to be analysed from the perspective of their main objects of business, the most active ones were: local government (approx. 63%), business support institutions (approx. 8%), educational institutions (6%), tourism and sports institutions (5%), scientific institutions (4%) and central administration institutions (4%) (Raczyk, and Dolzblasz, 2017). No analysis of the objects of activity of the individual beneficiaries in the 2014-2020 programming period is yet possible to be performed as it is still ongoing.

Given the above, by way of summary it should be stated that in the region concerned, the local government's share was the largest in terms of the number of INTERREG A projects undertaken and the funds absorbed. These entities both received co-financing for particular projects and brought their own contribution. Thereby, they had a considerable share in managing this type of EU funds.

4.2. Innovative projects

In the period between 2004 and 2006, Zachodniopomorskie Voivodeship commenced INTERREG A projects in cross-border cooperation with Mecklenburg-Vorpommern and Brandenburg. Although this was a time when Poland was only learning how to use EU funds, already then the significance of innovation to the development of cross-border region in question was being emphasised. Supporting cooperation in innovative fields and joint studies between the region's research institutions were the strategic objectives of INTERREG III A. The innovative projects were mainly carried out within the *Economic development and cooperation* and *Improving technical and tourist infrastructure* priorities. In the case of the former, such projects were supported that were expected to contribute to the stabilisation and development of entities active in innovative fields. This was meant to increase the number of

innovations through cross-border cooperation. In the case of the latter, the financial support was given to those projects that contributed to improving business-support and technical infrastructure in terms of innovation and economy. It must be emphasised that in this programming period, the requirements expected from the projects were the least strict compared to those that came later. The projects were supposed to exert an impact on the other side of the border, although this requirement was not made particularly specific, which led to differing interpretations by the beneficiaries.

Within the framework of the INTERREG III A programme, there were seven main projects in Zachodniopomorskie Voivodeship that were related to the emergence of innovations (e.g. a prototype of the 'EURIS' Euroregional information system) or that supported innovative infrastructure (e.g. modernisation of a higher education institution's laboratory, the formation of the BalticNet-PlasmaTec network or the telemedicine network supporting the treatment of cancer patients in the Euroregion of Pomerania). Table 2 contains a list of all these projects.

Table 2.

Innovative projects completed under INTERREG IIIA in 2000-2006 for the Polish-German cross-border region encompassing Zachodniopomorskie Voivodeship, Mecklenburg-Vorpommern and Brandenburg

Project	Beneficiaries	Project value in EUR
Modernisation of the construction materials laboratory	Szczecin University of Technology	180,744.96
Construction of the EURIS geographical and statistical information system	Kołobrzeg County	154,674.2
BalticNet-PlasmaTec Network	TECHNOPARK POMERANIA Technologiezentrum Förder gesellschaft mbH	412,821.87 407,951.76
Creation of the Regional Centre for Innovation and Technology Transfer	Szczecin University of Technology	111,917.12
Telemedicine network supporting cancer patient treatment in the Euroregion of Pomerania	Pomeranian Medical University of Szczecin Tumorzentrum Vorpommerne.V.	347,280.06 1,058.149.97
Expansion of the innovative technical infrastructure at the Training & Research Centre for Renewable Energy Sources at Ostoja located within the Euroregion of Pomerania	Agricultural University of Szczecin	510,808.92
E-powiat –innovative cross-border services in local government administration	Police County	365,789.02

Source: the author's own study based on: Inicjatywa Wspólnotowa INERREG III A..., 2008.

The subsidised projects were mainly in such areas as IT technologies, plasma technology, construction technology, innovative communication and data exchange technology, information (healthcare), service provision (public administration) and renewable energy sources. These projects helped to considerably improve the conditions for a deeper linking-up of innovative institutions representing different fields. This was a significant effect, as entities that have access to external sources of knowledge and networks also acquire the opportunity to develop a wider perspective for innovation (Qian, 2016). As an example, Szczecin University

of Technology began cooperation with the Institute for Plasma Science, Greifswald; the modernisation of the construction materials laboratory allowed Szczecin University of Technology to establish cooperation with Hochschule Neubrandenburg with regard to construction industry development.

Three types of Zachodniopomorskie Voivodeship entities were the beneficiaries of the funds awarded under the projects concerned, namely higher education institutions, local government and R & D institutions. The projects were valued at almost EUR 2.1 m, which accounted for approx. 1.3% of INTERREG III A budget (Table 1). The involvement of universities and R & D institutions plays an important role in regional development, as it provides new knowledge that is perceived as crucial for ensuring creativity and innovation (Tripl et al., 2015). Additionally, the results of their research are expected to bring practical benefits to the society and the economy (Benneworth, and Sanderson, 2009).

In the next 2007-2013 financial perspective, entities from Zachodniopomorskie Voivodeship, together with their partners from the German part of the assisted area, completed five main innovative projects. Their total value was almost EUR 22.4 m, which accounted for 14.3% of the INTERREG IVA budget. Thus, this share was far larger than it was in the previous programming period. Mainly, such areas received assistance as healthcare (telemedicine network, neonatal screening), agriculture (new arable crops), forestry (wood biomass assessment) and education (innovative teaching methods). Table 3 presents a detailed list of the projects.

Table 3.

Innovative projects completed under INTERREG IVA in 2007-2013 for the Polish-German cross-border region encompassing Zachodniopomorskie Voivodeship, Mecklenburg-Vorpommern and Brandenburg

Project	Partners	Project value in EUR
Telemedicine in the POMERANIA Euroregion – Pomerania network	Pomeranian Medical University (PUM), Poznań University of Medical Sciences, 11 Polish hospitals, Telemedizin Euroregion POMERANIA, 21 German hospitals	12,859,122
Pilot project on wine and new arable crop growing in Pomerania region	West Pomeranian University of Technology Szczecin, Hochschule Neubrandenburg	620,191
Development of a cross-border system for aiding decision-making processes for wood biomass assessment (Foreseen POMERANIA)	Regional Directorate for State Forests in Szczecin, Drawno Forest District, Poznań University of Life Sciences, Landeskompetenzzentrum Forst Eberswalde	2,624,311
Pomerania as a model region in terms of territorial cooperation in neonatal screening (PomScreen)	Greifswald University Hospital, Ernst-Moritz-Arndt-Universität Greifswald, Pomeranian Medical University, Szczecin, Institute of Mother and Child	4,449,526
Provision of innovative teaching by investing in infrastructure in the POMERANIA Euroregion	Economic and Hotel School Complex in Kołobrzeg, Berufsbildungsverein Eberswalde e.V.	1,798,321

Source: the author's own study based on: Regionalny..., 2014.

Most of the beneficiaries of these programmes were higher education institutions, hospitals, post-elementary schools and units operating in the field of forestry, with practically no local government representation. Importantly, the formal and legal requirements in the 2007-2013 financial perspective were different to those in the 2000-2006 period. The projects were supposed to include beneficiaries from at least two different states. Additionally, their cooperation had to encompass at least two of the four specified elements: joint development, joint implementation, joint staffing and joint financing. This contributed to a stronger “cross-border effect” of these projects and to the development of cross-border cooperation.

6 innovative projects from the INTERREG VA project database were qualified for the study. Their joint value was over EUR 8.5 m, which accounted for 5.4% of the total budget for this assisted area (Table 4). This share grew when compared to the 2004-2006 period, but was smaller than in 2007-2013. However, it should be remembered that the current financial perspective has not yet ended and the data shown herein may be subject to change.

The projects undertaken in this region concerned as part of INTERREG V A were mainly designed to support such fields as education (innovative teaching methods), medicine (modern diagnostic methods), healthcare (modern ICT systems), security (application of genetic research to combating terrorism) and environmental protection (development of new joint methods for collecting, analysing and assessing the social and the regional-economic effects in protected areas). Table 4 presents a detailed list of the projects.

Table 4.

Innovative projects completed under INTERREG V A in 2014-2020 for the Polish-German cross-border region encompassing Zachodniopomorskie Voivodeship, Mecklenburg-Vorpommern and Brandenburg

Project	Partners	Project values in EUR
Teaching the neighbour's language from pre-school to the end of education	Szczecin Municipality–lead partner; West Pomeranian Centre for Maritime and Polytechnic Education –Teacher In-Service Training Centre; Landkreis Vorpommern-Greifswald; Landkreis Uckermark; Regionale Arbeitsstelle für Bildung, Integration und Demokratie (RAA) Mecklenburg-Vorpommern; Universität Greifswald; Amt Gramzow	2,569,643.29
Consolidation of cooperation in modern diagnostic methods in ophthalmology	Pomeranian Medical University of Szczecin–lead partner; Universitätsmedizin Greifswald, Körperschaft des öffentlichen Rechts	501,727.47
Combating cross-border terrorist and criminal ties in the field of genetic and IT research	Voivodeship Police Headquarters in Szczecin–lead partner; Landeskriminalamt Mecklenburg – Vorpommern Pomeranian Medical University of Szczecin	1,174,034.12

Cont. table 4.

Cross-border cooperation between universities and large protected areas in the Euroregion Pomerania (Acronym: REGE)	West Pomeranian University of Technology in Szczecin – lead partner; Hochschule für nachhaltige Entwicklung Eberswalde Universität Greifswald University of Szczecin	762,445.50
Cross-border cooperation through the exchange of knowledge and skills in modern haematological and oncological methods	Pomeranian Medical University of Szczecin –lead partner; Universitätsmedizin Greifswald	132,100.00
An innovative Polish-German cross-border programme for early diagnosis and treatment of rare neonatal diseases	Universitätsmedizin Greifswald–lead partner; Ernst-Moritz-Arndt-Universität Greifswald Charité –Universitätsmedizin Berlin Pomeranian Medical University of Szczecin 1 st Autonomous Public Teaching Hospital (SPSK1) Institute of Mother and Child The Children’s Memorial Health Institute (IPCZD)	3,395,562.31

Source: the author’s own study based on: INTERREG V A project database, <https://interreg5a.info/pl/2015-02-27-07-08-29/wdrazanie-projektow/lista-zakontraktowanych-projektow.html> (18 August 2019).

The project partner structure was here far more diversified than in the other programming periods. Also, the number of partners involved in the individual projects was higher, reaching as many as seven in some cases. In the current financial perspective 2014-2020, the general rule is that there should be a lead partner, joint development and joint implementation, and that at least one of the remaining two conditions –joint staffing and financing – should be met. The entities participating in these projects were local government authorities, higher education institutions and the police. All of them took up the roles of the leading partners, as well.

5. Summary

The implementation of the EU regional policy objectives, including those of the European Territorial Cooperation, provides an opportunity for a special treatment of border regions. The projects undertaken under the INTERREG A programmes share the general objective of ensuring a lasting and sustainable border area development and population integration.

The research showed that INTERREG A programmes enable the implementation of innovative projects. In the period of interest, 18 innovative projects worth a total of over EUR 33 m were completed within the region concerned. Their share in the total number of projects was small, only accounting for 7%. At the same time, though, they absorbed almost 9% of the total funds provided. These projects were mostly designed to support the creation or modernisation of joint innovative infrastructure, although they were also used to support the creation of innovations. The majority of funds were spent on supporting innovative projects in healthcare, which is of importance in terms of improving the quality of life of this borderland’s inhabitants.

The structure of entities benefiting from INTERREG A funds for innovative projects was diversified, with higher education institutions prevailing. Notably, however, local government, the police and the State Forests participated in implementing innovative projects as well, where they frequently held the positions of the leading partners. They seemed to be acquiring a better and better understanding of the relevance and importance of innovations in the management of borderland areas. Such entities are prone to spend their funds on the so-called own contribution to the projects. Thereby, the research showed it was not only R&D institutions that were successfully benefiting from EU co-financing of innovative projects in borderlands.

Although local government entities prevailed both with regard to the overall number of projects they were involved in and the INTERREG A funds they were able to absorb, the number of strictly innovative projects they undertook was definitively smaller. However, it is these entities that have an essential impact on the development and management of a cross-border region. This development should be based on innovative solutions, as they will strengthen the region's competitiveness, both domestically and internationally. Since innovative activity is costly, the opportunity to acquire additional assistance from INTERREG A programmes should be viewed as particularly valuable. For border regions, INTERREG A programmes constitute an additional prospect for receiving extra funds for their innovative projects.

References

1. Benneworth, P., and Sanderson, A. (2009). The regional engagement of universities. *Higher Education Management and Policy*, 21(1), 1-18. doi: 10.1787/17269822.
2. Capello, R., and Nijkamp, P. (Eds.) (2010). *Handbook of regional growth and development theories*. Cheltenham, Northampton: Edward Elgar Publishing.
3. Capello, R., Caragliu, A., and Fratesi, U. (2018). Measuring border effects in European cross-border regions. *Regional Studies*, 52(7), 986-996. doi: 10.1080/00343404.2017.1364843
4. Commission for Territorial Cohesion Policy and EU Budget (2017). *People-to-people and small-scale projects in cross-border cooperation programmes* (Draft opinion). Brussels: European Committee of the Regions.
5. Copus, A.K. (2001). From core-periphery to polycentric development: Concepts of spatial and aspatial peripherality. *European Planning Studies*, 9, 4, 540-545.
6. *INTERREG III A Joint Programming Document 2000-2006 Program Regionalny niemiecko-polskiego obszaru granicznego na terenie Krajów Związkowych Meklemburgia – Pomorze Przednie/Brandenburgia i Polski (Województwo Zachodniopomorskie)*.

- Available online https://www.funduszeuropejskie.20072013.gov.pl/OrganizacjaFunduszyEuropejskich/Documents/PIW_INTERREG_III_A_PL_MV.pdf, 12 July 2019.
7. Klimaczak, T. et al. (2010). *Badanie ewaluacyjne ex-post efektów transgranicznej współpracy polskich regionów w okresie 2004-2006* (Raport końcowy). Szczecin: Centrum Rozwoju Społeczno-Gospodarczego.
 8. Malkowska, A. (2014). Program INTERREG IV A jako instrument wspierania turystyki w województwie zachodniopomorskim. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 348, 181-189. doi: 10.15611/pn.2014.348.16.
 9. Malkowska, A. (2016). The barriers to and directions of cross-border cooperation in the northern part of the Polish-German borderland. *Współczesne Problemy Ekonomiczne. Globalizacja. Liberalizacja. Etyka*, 12, 9-20. doi: 10.18276/wpe.2016.12-01.
 10. Malkowski, A. (2018). Peripheral regions in the global economy on the example of the Western Border of Poland. In: K. Çapraz, I. Raluca Badea, M. Yilmaz (Eds.), *First In Traders. International Conference on International Trade: Conference Book*. Istanbul: Hiperlink Yayinlari.
 11. Ministerstwo Gospodarki, Pracy i Turystyki Meklemburghi i Pomorza-Przedniego, Związek Komunalny Europaregion POMERANIA (2008). *Inicjatywa Wspólnotowa INTERREG IIIA w latach 2000-2006. Wyniki współpracy transgranicznej w ramach Programu Regionalnego Meklemburgia Pomorze-Przednie/Brandenburgia – Polska (Województwo Zachodniopomorskie)*. Poczdam.
 12. Monfort, P. (2009). *Territories with specific geographical features* (DG REGIO, Working Paper, 2). Brussels: European Commission.
 13. Pasternak, A. (2016). *Zarządzanie funduszami unijnymi a rozwój przedsiębiorczości w gminach województwa śląskiego*. Wrocław: Exante.
 14. Perkmann, M., and Sum, N.L. (2002). Globalization, regionalization and cross-border regions: scales, discourses and governance. In: M. Perkmann, and N.L. Sum (Eds.), *Globalization, regionalization and cross-border regions* (pp. 3-21). London: Palgrave Macmillan.
 15. *Program Operacyjny Celu 3 „Europejska Współpraca Terytorialna” - „Współpraca Transgraniczna” Krajów Meklemburgia-Pomorze Przednie/Brandenburgia i Rzeczypospolitej Polskiej (Województwo Zachodniopomorskie) 2007-2013, Program Operacyjny zmieniony w roku 2009, zmiana zatwierdzona przez Komisję Europejską w dniu 17 maja 2010 r.* Available online: <https://interreg5a.info/pl/component/edocman/program-operacyjny-dla-interreg-iva/viewdocument.html?Itemid=>, 12 July 2019.
 16. *Program Współpracy INTERREG V A Niemcy Meklemburgia-Pomorze Przednie/Brandenburgia/ - Polska w ramach celu „Europejska Współpraca Terytorialna“ Europejskiego Funduszu Rozwoju Regionalnego (EFRR), CCI 2014TC16RFCB019, zatwierdzony przez Komisję Europejską decyzją wykonawczą C(2015)6703, z dn.*

- 25.09.201. Available online: <https://interreg5a.info/pl/component/edocman/program-wspolpracy-interreg-v-a-meklemburgia-pomorze-przednie-brandenburgia-polska/viewdocument.html?Itemid=>, 12 July 2019.
17. Pylak, C. (2007). Intelligent Region Management = Intelligent Absorption of EU funds. *Romanian Journal of Regional Science*, 1(1), 70-80.
 18. Qian, H. (2017). Skills and knowledge-based entrepreneurship: evidence from US cities. *Regional Studies*, 51(10), 1469-1482. doi: 10.1080/00343404.2016.1213383.
 19. Raczyk, A., and Dołzbłasz, S. (2017). *Wyzwania i cele dla programu INTERREG na granicy polsko-niemieckie jpo 2020 r.* (Ekspertyza na zlecenie Departamentu Współpracy Terytorialnej Ministerstwa Rozwoju). Wrocław.
 20. *INTERREG IVA – zmieniamy obraz pogranicza* (2014). Szczecin: Regionalny Punkt Kontaktowy, Urząd Marszałkowski Województwa Zachodniopomorskiego, Wydział Współpracy Terytorialnej.
 21. Richardson, T., and Jensen, O.B. (2000). Discourses of mobility and polycentric development: a contested view of European spatial planning. *European Planning Studies*, 8(4), 503-520. doi: 10.1080/713666421.
 22. Scott, J.W. (2012). *European politics of borders, border symbolism and cross-border cooperation. A companion to border studies.* 83-99.
 23. Studzieniecki, T. (2016). The development of cross-border cooperation in an EU macroregion – a case study of the Baltic Sea Region. *Procedia Economics and Finance*, 39, 235-241. doi: 10.1016/S2212-5671(16)30318-5.
 24. Tripl, M., Sinozic, T., and Lawton Smith, H. (2015). The role of universities in regional development: conceptual models and policy institutions in the UK, Sweden and Austria. *European Planning Studies*, 23(9), 1722-1740. doi: 10.1080/09654313.2015.1052782.