

# Provincial but Smart—Urban-Rural Relationships in Brandenburg/Germany



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**Abstract** While the idea of intelligent or smart cities started a vivid discussion and brought up a whole variety of strategies to transform urban areas into smart cities, the discussion about smart regions is less developed and rather vague. By looking into trends and strategies developed in the first implementation projects, one general lesson learned is that there is not just one approach to transforming regions into smart regions, but that innovation and smartness need to be related to their specific spatial, infrastructural and sociopolitical contexts (place-based approach). This contribution discusses existing concepts of Smart Regions and argues that peripheral regions may similarly become smart by implementing place-based approaches. In a first step, a short literature review on smart regions and challenges of the peripheral is presented. In a second step, new approaches in peripheral regions will be analyzed and discussed by providing and comparing four case studies from the Brandenburg region in Germany.

**Keywords** Smart regions · Urban-Rural-Relationships · Metropolization and peripherization

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# 1 Introduction

Spatial concepts of urban-rural relations have been scrutinized in urban-planning debates over recent decades. While discussions about globalization and the information society have brought urban research back to the agenda, spatial-planning discourses often consider the role of the countryside in the urban age. Major concerns are the challenges of polarization caused by parallel trends of growth and decline between urban and rural areas (Lang 2012; Kühn 2015). In the context of these debates, several spatial visions and strategies have been developed to deal with issues of spatial polarization and regional divides, like the concept of urban-rural partnerships (TA 2011; OECD 2013) or the RURBAN initiative (BBSR and DV 2012: 68–70).

A core element of those concepts is endogenous regional development by cooperation and networking between various actors. The aim of this urban-rural cooperation is better management of natural resources, enhanced innovation and economic spill-over effects from urban centers into their hinterlands. Therefore, networking between regional stakeholders will overcome the dichotomizing mindsets of “the urban” and “the rural”, which for example are often found in funding practices. Furthermore, the cooperation in multilevel governance structures is seen as a precondition for knowledge clusters, learning in networks and the creation of innovation (Davoudi and Stead 2002) that prevents the marginalization of rural areas (Kühn 2015).

Concepts of smart regions can build upon findings of research that strive to create knowledge networks and multi-level-governance structures including cities and their neighboring areas. Due to the smartness debates, the partnership approach is now concentrated on green and knowledge-based economies/clusters, circular economies and investigations into using ICT to improve services, participation processes or resource-efficiency to create more liveable regions (Angelidou 2014).

In the spatial sphere, the debates about smart regions often concentrate on prosperous urban agglomerations. But this disregards the fact that the settlement structures in Europe are characterized by a number of small- and medium-sized cities. This is also the case in the German state of Brandenburg. The Capital Region of Berlin-Brandenburg contains, besides Berlin, a number of rural, peripheral and distressed areas and a large number of cities with less than 50,000 inhabitants. In regional planning, these cities are characterized as the backbone of rural development by providing services, economic, social and cultural functions for rural regions.

In the debates, an academic void exists regarding the role of urban-rural partnerships for creating smart regions or coherent development strategies on the scale of medium-sized metropolitan regions. Based on a competition (“*Stadt-Umland-Wettbewerb*”—SUW) initiated by the state of Brandenburg, regional stakeholders were asked to develop coherent strategies for urban-rural partnerships for regional development. The state provides the successful applicants with ERDF funding for projects named in the strategies. Our study is based on literature reviews,

expert interviews and the in-depth analysis of the SUW competition program and entries. We follow up on discussions about smart regions and analyze recent achievements in transforming traditional regions. Furthermore we:

- discuss the definitions and criteria of smart regions in a literature review and focus on the understanding of urban-rural interrelations and multilevel governance for the smart regions,
- demonstrate how the SUW competition on a program level encourages regional stakeholders to develop coherent strategies for creating smarter regions,
- analyze in a case study what kind of strategies are applied to foster the energy transition on a local/regional level.

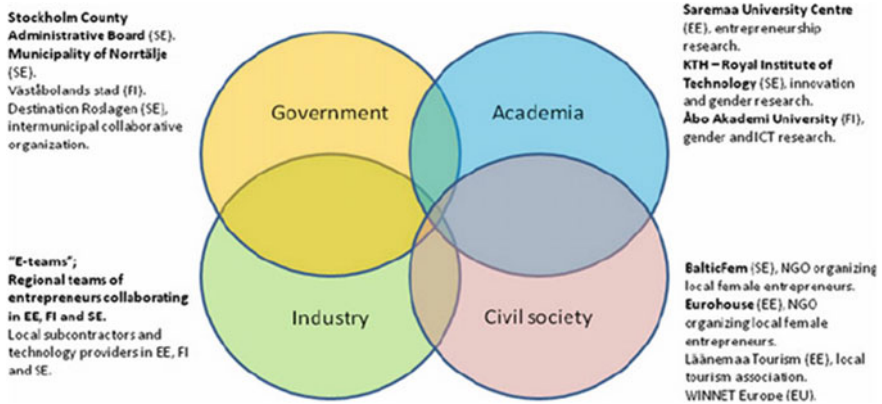
In this paper, we want to explore in which way urban-rural partnerships in rural areas can support the transition process to a smart region and a funded competition like the SUW in Brandenburg could enhance the process. We finally conclude how definitions of smart regions need to be adjusted for regions outside metropolitan areas.

## 2 Smart Regions

The term ‘smart region’ emerged some ten years ago in academic discussions. Early definitions were heavily influenced by discussions on smart cities and focused on prosperous city regions; they emphasize that “smart regions deliver prosperity and growth through the development of competitive strengths in knowledge and technology intensive sectors” (Greenfield et al. 2006: iii). Smart regions, in that conception, are based on potentials of economic growth, new technologies, knowledge creation and innovation at a larger scale (Greenfield et al. 2006: ix).

But regional smartness may also be conceived differently: in the literature, knowledge-based approaches can be found that emphasize the need to relate new technologies to local knowledge (for example, Rogerson 2001: 34; Camagni and Capello 2013) as well as society-based, participatory approaches (Roth and Hirschmann 2013; ref.) that focus on relations of technology and society under the label of ‘social innovations’ (Calzada 2013).

Within the scope of such a broadened perspective on smart regions in which spatial and societal context matters, involvement of a variety of actors is postulated. Following that thought, government, academia, industry and civil society—the quadruple helix—need to work together in order to develop context-related solutions for smart regions (see Fig. 1).



**Fig. 1** Quadruple helix as a basis for smart innovations (Lindberg et al. 2014)

### 3 The Challenges of the Peripheral

Following the smart-region definition of Greenfield et al. (2006), it can be questioned whether peripheral or less favored regions could be considered ‘smart regions’ at all. Instead of being economic centers, they are characterized by specific socio-spatial challenges such as structural deficits, e.g., in infrastructure, a lack of capital, resources and skilled people; weak technological and institutional structures (Rosenfeld 2002: 9–10), as well as a concentration of poverty, shrinkage and outmigration (Kühn 2015: 367).

In search of causes of polarized structures and spatial inequalities, recent debates focus on peripheries. They argue that old industrialized regions or medium-sized cities in rural areas are more likely to be affected by socioeconomic decline. In addition, they emphasize mutual dependencies of centralization and peripheralization dynamics (Herrschel 2012). Hence the peripheralization can be understood as a product of the dynamics of:

- economic polarization, e.g., by a lack of innovation (Davoudi and Stead 2002),
- social inequality (through cultural, social or structural marginality and poverty (Wacquant 2008) and a lack of political power and participation (Kühn 2015: 368ff).
- political dependencies and exclusion from sources of power (decision-making, agenda-setting), as well as from networks (Herrschel 2012).

The process-centered approach draws attention to the fact that peripheries are products of multi-dimensional processes and not “pre-given spaces” (Fischer-Tahir and Naumann 2013). In consequence, researchers suggest developing endogenous governance networks to reduce exogenous dependency on the centers or establishing vertical networks to the centers to improve innovation capacities and to overcome disadvantages of exclusion (Kühn 2015).

With reference to this debate, *urban-rural cooperation is a precondition for any smartness of regions*. Such cooperation aims at networking, at creating partnerships and at mobilizing synergies and facilitating endogenous developments and specialization for innovation and growth (Davoudi and Stead 2002). The actors involved are both the urban and rural stakeholders from politics, administration, science, the business sector and civil society (Lindberg et al. 2014).

In European policies, these recommendations led to strategies of urban-rural partnerships (TA 2020) and programs like RURBAN (EPRS 2016: 7). They support territorial partnerships of cities and rural areas and promote the creation of structures for territorial multilevel governance to assess possible economic and social gains from enhanced cooperation and to improve regional competitiveness. Due to the fact that obstacles of cooperation are also created by EU funding policies, the RURBAN program addressed the question of how EU funding can best be used to support urban-rural cooperation. As a result, the EU recommended to the Member States supporting community-led local development (CLLD) by a multi-fund approach that finances investments by the ERDF, ESF and LEADER when the investments are embedded in a coherent regional strategy.

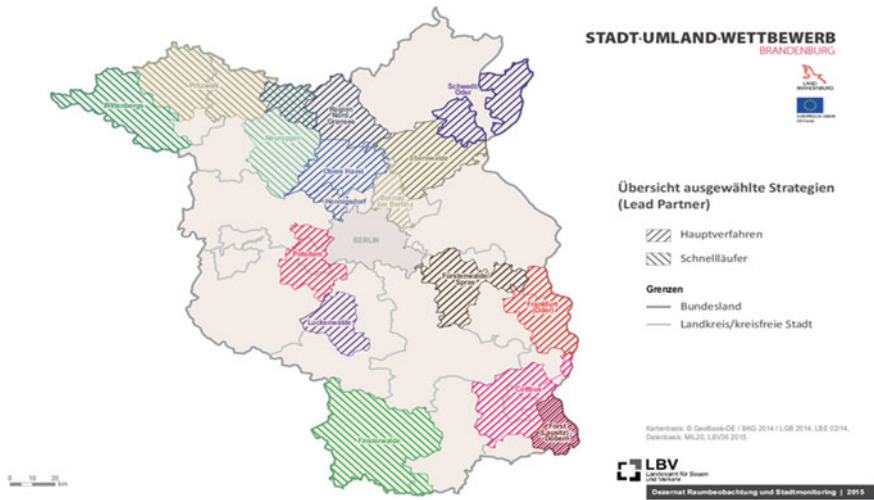
The multi-fund approach was applied in the program period 2014–2020 for the first time, and the state of Brandenburg followed the recommendation. The state established the “*Stadt-Umland-Wettbewerb (SUW)*” (city-region competition) and asked the municipalities for concepts of urban-rural partnerships. Before we give insights into the competition for urban-rural cooperation, we will briefly characterize our case study of the Brandenburg region.

## 4 New Approaches in Brandenburg

The State of Brandenburg is one of 16 states in Germany and known as the “energy state” since energy production is traditionally the main economic sector. One of the distinguishing characteristics of Brandenburg is its spatial containment of the German capital city-state of Berlin (Fig. 2).

While Berlin’s current population is approximately 3.5 million (as of 12/31/2014) and has been growing steadily since about 2010, Brandenburg has a population of approximately 2.48 million. With regard to population density, Berlin has some of the highest densities in all of Germany (3891 persons/km<sup>2</sup> on average) while Brandenburg, like the other former East German states, possesses one of the lowest population densities (average 82.9 persons/km<sup>2</sup> overall). It is, however, necessary to differentiate within Brandenburg between the so-called “*Speckgürtel*” with an average of 325.42 persons/km<sup>2</sup> and the peripheral regions with an average of only 57.11 inhabitants/km<sup>2</sup>.

Brandenburg is not only sparsely populated but also characterized by a socioeconomic situation outside the “*Speckgürtel*” influenced by the major structural change starting in the 1990s, which de-industrialized large parts of the state. This is also true for energy production as the major economic sector and main



**Fig. 2** Overview of the selected city-regions in the competition (LBV 2015)

employer (e.g., in the south of Brandenburg). The sector is faced with the challenge of adapting to the energy transition (with the goal of 30% renewables by 2030) and replacing existing coal mining and lignite-fired power plants by renewable energy (MWE 2012).

Given those specific conditions, it seems crucial that (further) peripheralization is to be avoided since, without a stabilization of the hinterland, it will become impossible to establish vital centers and growth centers (urban-rural interdependency) where local resources can be concentrated and exchanged. In consequence, peripheral regions may need a specific infrastructure that suits their spatial context (decentralized). Despite the fact that the conditions in Brandenburg do not fulfill the criteria proposed by Greenfield, we suggest that “smartness” is not only feasible but also crucial for the context-related, regional development of less favored regions.

The German State of Brandenburg initiated the “city-region competition” (*SUW*) among municipalities and their respective regions in 2015 to promote communal cooperation for the realization of specific projects. The competition was conducted by the Ministry of Infrastructure and Regional Planning and encompassed a total subsidization volume of 213 million Euros in a multi-fund approach, including funding from the European Structural Investment Fund (ESI), the ERDF and the EAFRD, while the ESF was optional (MIL 2015). In and of itself, the competition can be characterized as innovative and “smart” due to the concentrated, multi-fund and place-based approach. Furthermore, the competition aimed to promote strategies of innovation and networking in public-service provision, regional development and inclusion by supporting urban-rural partnerships and by enhancing towns as anchors for regional development. Prerequisites for participating in the

competition were, for example, inter-communal cooperation and strategic planning. It can therefore be suggested that the competition was also “smart” with regard to its objectives, contents and its strategic approach.

Out of 34 competition entries (small- and mid-sized towns with corresponding regions), 16 city-regions were chosen for subsidization of their projects (Fig. 2). These 16 city-regions receive funding totaling about 160 million Euros (ESI-Fonds) to develop strategies for innovative relations and networking between small- and mid-sized towns in Brandenburg and their respective rural regions.

These selected entries include such aspects as inter-communal cooperation, urban-rural-linkages, food sovereignty, material flows and circulation, public and private actors, digitalization in rural areas, adaptation to climate change, division of labor between town and region (for example as culture and nature, work and recreation and the chance to generate new businesses for the rural regions) etc. In addition, the energy transition was a component in three-fourths of the competition entries, which combined innovative technologies and cooperative relationships on both local and regional levels.

In the following, we will focus on three city-regions and their cooperative activities in the decentralized production and provision of renewable energies, the energetic upgrading of existing buildings and the promotion of e-mobility. We place the emphasis on energy since the sector is a major economic factor in Brandenburg and debates about smartness of cities and regions target the improvement of resource-efficiency. In the context of the competition, the energy transition also constitutes an effort to overcome inequality in urban-rural relations.

#### ***4.1 City of Pritzwalk/East Prignitz***

The city of Pritzwalk and the surrounding region of East Prignitz are located in the northwest of the State of Brandenburg, approximately halfway between Berlin and Hamburg. The competition entry was based on the long-standing and institutionalized “Workgroup Growth Region Autobahn Triangle Wittstock/Dosse” which includes four municipalities, extends across the administrative boundaries of two counties and encompasses a total of approx. 44,800 inhabitants. This collaborative group was joined by two additional municipalities and a number of private partners for the competition. As a response to the challenge of sustainable service provision in a shrinking region, the competition entry focused on a division of labor regarding public services. For the implementation of the proposed projects, Pritzwalk and the city-region of East Prignitz were granted a total of 10.3 million Euros.

With regard to energy transition, Pritzwalk et al. proposed the following projects for funding:

- new facilities of energy production/heating, e.g., a biogas facility for remote heating of public facilities in the community of Gross Pankow and a small-scale hydroelectric plant in Pritzwalk

- retrofitting of the housing stock for renewable-energy production, e.g., solar-thermal heating in the Röbeler Vorstadt in Wittstock
- provision of energy/heating to public facilities, e.g., heating of public buildings with surplus industrial heat in Heiligengrabe and the case mentioned previously in Gross Pankow.

## 4.2 *City of Potsdam*

The city of Potsdam is the capital of the State of Brandenburg and is located immediately adjacent to Berlin in the southwest. Due to its proximity to Berlin, Potsdam and the surrounding communities comprise a growing local region within the “*Speckgürtel*” around Berlin. The mutual dependency between Potsdam and Berlin is matched by an interdependency between Potsdam and the surrounding communities. This also means the Potsdam city-region is confronted with challenges such as a large amount of commuter traffic, as well as the provision of housing and services to a growing population. For the city-region competition, Potsdam created a new form of cooperation with neighboring communities with a total of 246,627 inhabitants. To prepare the competition entry, the members of the group collaborated in the planning process, e.g., in common thematic workshops. Based on, among other factors, the size of the affected population and the significance of the projects, the city-region of Potsdam was granted 21.89 million Euros for the funding of their projects.

As projects for energy transition, Potsdam and the collaborating communities proposed the following:

- investments in renewable-energy production facilities such as the local remote heating system fired by wood chips in the former Olympic Village in the community of Elstal
- construction of new energy-efficient housing, e.g., the CO<sub>2</sub> neutral housing development in Krampnitz, north of Potsdam, with a biogas-fired local power and heating plant, solar thermal and photovoltaic systems
- improvement of the commuting infrastructure, e.g., construction of high-speed bike paths and e-mobility infrastructure (charging stations), along with mobility management (e.g., information systems).

## 4.3 *City of Cottbus*

The city of Cottbus is located in the southeast of the State of Brandenburg at approximately the same distance as Pritzwalk from Berlin (1.5 h). Cottbus proper is a center of a higher order and has a population of roughly 100,000. For the



city-region competition, Cottbus cooperated with seven additional municipalities encompassing a total of approx. 188,600 inhabitants and extending across two functional regions. This collaboration could draw upon the experience gained in over 15 years of inter-communal cooperation, e.g., on the joint Regional Development Concept Forst/Guben and in the International Building Exhibition (IBA) Fürst-Pückler-Land from 2000 to 2010 in the lignite coal-mining region. A total of 12.99 million Euros was granted for the realization of the proposed projects.

Within the scope of the competition entry, Cottbus and the collaborating municipalities within the region proposed the following projects for energy transition:

- renewal of inner-city quarters, including energetic upgrading with components such as a low-temperature remote heating system based on solar-thermal and power-to-heat systems, the integration of renewable energies into remote heating systems and a decentralized heating system
- the creation of a mobility network and infrastructure for charging stations for electric public buses
- preparatory actions for energy transition in the post-mining region including the redevelopment of former lignite coal-mining areas.

The competition entries illustrate that the municipalities in Brandenburg emphasize energy efficiency and renewable energies (production, heating) by following an incremental and place-based approach. According to various different challenges in agglomerations or rural areas, the energy pilot actions in the three cases highlight distinctive regional strategies: The case of Potsdam shows that in metropolitan areas challenges of smart mobility and solutions for the housing demand are primary while in regional growth poles like Cottbus, issues of restructuring urban infrastructures and the energetic retrofitting of housing are a main challenge. In the Prignitz, as a representative of a rural-peripheral region, the central tasks for municipalities are ensuring public services. In this case, smart cooperation is applied to strengthen the division of labor, thereby ensuring main factors of the quality of life. With regard to the smartness of regions, we interpret the pilot actions in the SUW for low-carbon development, as well as ensuring or improving (efficient) public services under difficult socioeconomic conditions, as smart strategies.

## 5 Conclusion

The definition of “smart” should be adapted when examining regions and furthermore should take into consideration the particular social, economic and technological conditions in the respective region. For local city-regions in Brandenburg, this means considering the spatially differentiated demographic and economic

development within the overall Capital City Region, which includes the entire state of Brandenburg. Until now, most definitions of “smart” imply demographic and economic growth in cities and regions. But faced with the far-reaching structural changes such as those in Brandenburg and especially in the rural regions, it is necessary to develop a definition of “smart” that can apply to the various approaches and solutions to the myriad of problems within shrinking regions. In other words, “smart” can and should apply to the “survival strategies” in such regions. Besides the emphasis on ensuring services and qualities in regions, “smart” strategies in Brandenburg focus on resource and energy efficiency, and ICT is used as a tool for meeting the challenges of regional development.

With regard to cooperation and networking among municipalities, communities and their respective regions, the State of Brandenburg can be considered “smart”: The city-region competition in Brandenburg stipulated urban-rural cooperation and joint strategic planning as requirements for competition entries. The program creates a framework for innovative urban-rural relationships in applying a multi-fund approach, permits flexibility for place-based innovation and is biased toward existing networks of municipalities. Within the various collaborative arrangements, medium-sized cities take on the role of growth poles and include neighboring functional areas. It was therefore not surprising to find various forms of cooperation within the entries and the corresponding projects. Furthermore, it appears that there is a direct positive relationship between the duration and extent of existing cooperation and the success of the entries in the city-region competition. However, the program could not achieve the objective of fostering the quadruple-helix structures since in all of the entries the involvement of private actors is very limited.

The competition aimed to systematically evaluate city-regions in order to distribute funding for projects that fulfill the requirements of the ESI Fund (ERDF). The State of Brandenburg was one of the few German states which used this instrument for preparing decisions on economic support, i.e., subsidization. That may, in and of itself, be considered “smart” on the level of state regional planning. It will, of course, be interesting to observe whether the cooperative relationships named in the individual competition entries will: (1) actually benefit the realization of the projects, and (2) continue beyond the purposes of the projects.

With regard to the federal guidelines for regional development in Germany, it appears that the results of the city-region competition deviate from the objective of “strengthening strengths” on the spatial level of the entire State of Brandenburg, in which the so-called “*Speckgürtel*” in the area surrounding Berlin reveals the greatest strengths (demographically and economically). But, on the spatial level of the counties, towns and local regions, the competition and the subsequent funding will benefit existing strengths on the local level. In future research, it would be interesting to monitor the duration and quality of cooperation and to investigate cooperative relationships that extend beyond the specific sectoral fields delineated by the city-region competition.

## References

- Angelidou, M. (2014). Smart city policies: A spatial approach. *Cities—The International Journal of Urban Policy and Planning*, 41(1), 3–11.
- BBSR (Federal Institut for Research on Building, Urban Affairs and Spatial Development) & DV (Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung e.V.). (2012). Partnership for sustainable rural-urban development: extisting evidences. [http://ec.europa.eu/regional\\_policy/de/policy/what/territorial-cohesion/urban-rural-linkages/](http://ec.europa.eu/regional_policy/de/policy/what/territorial-cohesion/urban-rural-linkages/).
- Calzada, I. (2013). *Critical social innovation in the smart city era for a city-regional European horizon 2020*. Accessed as May 4, 2017 from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2506952](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2506952).
- Camagni, R., & Capello, R. (2013). Regional innovation patterns and the EU regional policy reform: Toward smart innovation policies. *Growth and Change*, 44(2), 355–389. <http://www.sre.wu.ac.at/ersa/ersaconfs/ersa12/e120821aFinal00190.pdf>.
- Davoudi, S., & Stead, D. (2002). Urban-Rural-Relationships: An introduction and a brief history. *Built environment*, 28(4), 269–277.
- EPRS (European Parliamentary Research Service). (2016). Bridging the rural—urban divide. rural—urban partnerships in the EU [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573898/EPRS\\_BRI\(2016\)573898\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573898/EPRS_BRI(2016)573898_EN.pdf).
- Fischer-Tahir, A., & Naumann, M. (2013). *Peripheralization. The making of spatial dependencies and social injustice*. Wiesbaden: Springer.
- Greenfield, P., Hammond, L., Milsom, N., & Rayner, M. (2006). *Smart regions: Characteristics of globally successful regions and implications for Queensland*. Accessed as May 04, 2017 from <http://www.chiefscientist.qld.gov.au/images/documents/chiefscientist/pubs/reports-other/smart-regions-report.pdf>.
- Herschel, T. (2012). Regionalisation and marginalisation. Bridging old and new divisions in regional governance. In Danson, M. & DeSouza, P. (Ed.) *Regional Development in Northern Europe. Peripherality, Marginality and Border Issues* (pp. 30–48). London: Routledge.
- Kühn, M. (2015). Peripherization—Theoretical concepts explaining socio-spatial inequalities. *European Planning Studies*, 23(2), 367–378.
- Lang, T. (2012). Shrinkage, metropolization and peripherization in East Germany. *European Planning Studies*, 20(10), 1747–1754.
- LBV (Landesamt für Bauen und Verkehr). (2015). *Stadt-Umland-Wettbewerb Brandenburg, Übersicht ausgewählter Strategien*. Accessed as May 4, 2017 from <http://stadt-umland-wettbewerb.brandenburg.de>.
- Lindberg, M., Lindgren, M., & Packendorff, J. (2014). Quadruple Helix as a way to bridge the gender gap in Entrepreneurship: The case of an innovation system project in the Baltic Sea Region. *Journal of the Knowledge Economy*, 5(1), 94–113.
- MIL (Ministerium für Infrastruktur und Landesplanung des Landes Brandenburg). (2015). *Stadt-Umland-Wettbewerb Brandenburg, Wettbewerbsaufruf—Entwicklung von Stadt und Umland durch Kooperation und fondsübergreifende Förderung in der EU-Förderperiode 2014–2020 im Land Brandenburg*. Accessed as May 4, 2017 from <http://stadt-umland-wettbewerb.brandenburg.de>.
- MWE (Ministerium für Wirtschaft und Europaangelegenheiten des Landes Brandenburg). (2012). *Energiestrategie 2030 des Landes Brandenburg*. Accessed as May 4, 2017 from [http://www.energie.brandenburg.de/media/bb1.a.2865.de/Energiestrategie\\_2030.pdf](http://www.energie.brandenburg.de/media/bb1.a.2865.de/Energiestrategie_2030.pdf).
- OECD. (2013). *Rural-Urban Partnerships: An integrated Approach to Economic Development*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264204812-en>.
- Pezzi, M. G., & Urso, G. (2016). Peripheral areas: Conceptualizations and policies. Introduction and editorial note. *IJPP—Italian Journal of Planning Practice*, 6(1), 1–19.
- Rogerson, C. M. (2001). Knowledge-based or smart regions in South Africa. *South African Geographical Journal*, 83(1), 34–47. <http://www.tandfonline.com/doi/pdf/10.1080/03736245.2001.9713717>.

- Rosenfeld, S. (2002). *Creating smart systems: A guide to cluster strategies in less favoured regions*. Carrboro, North Carolina: Regional Technology Strategies. Accessed as May 2, 2017 from [http://www.rtsinc.org/publications/pdf/less\\_favoured.pdf](http://www.rtsinc.org/publications/pdf/less_favoured.pdf).
- Roth, K. O., & Hirschmann, T. (2013). Smart regions: Two cases of crowdsourcing for regional development. *International Journal of Entrepreneurship and Small Business*, 20(3), 272–285. <https://steffenroth.files.wordpress.com/2013/09/ijesb200302-roth.pdf>.
- TA 2020. (2011). *Territorial Agenda of the European Union 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions*. Accessed as May 4, 2017 from [http://www.nweurope.eu/media/1216/territorial\\_agenda\\_2020.pdf](http://www.nweurope.eu/media/1216/territorial_agenda_2020.pdf).
- Wacquant, L. (2008). *Urban Outcasts: A comparative sociology of advanced Marginality*. Cambridge: Polity Press.