# **Regional development zones in Finland: territorial cohesion and competitiveness**

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This article analyses regional development zones (RDZs). RDZs aim to combine economic growth with balanced regional development by directing development in a zonal way between growing centres and less central areas. The zones are generally formed along major roads or railroads between larger centres. RDZs cross many administrative borders and physically connect areas to each other. The empirical material of the study is derived from Finnish spatial planning documents at the national, regional and local levels as well as of semi-structural questionnaire (373 answers) and interviews with key actors involved in the studied RDZs. The OuKa RDZ crossing Finland in west-east direction between Oulu and Kuhmo is studied in-depth regarding the goals of the European Union Territorial Agenda. RDZs can become an important integrative tool for territorial cohesion as expressed in the Territorial Agenda. However, a more efficient concentration of functional activities and land use to core RDZ structures, as well as enhancement of the belongingness of inhabitants and key economic actors to the RDZ, are needed for this purpose.

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### Introduction

Knowledge-based development, innovations and internationalization are buzzwords in today's regional development aiming to raise the competitiveness of regions. Territories with an innovative milieu, social capital and enough, but not too many differences in their physical and natural characteristics and well-developed internal and external networks have the greatest potential for success. In the contemporary world, large urban areas gather crucial resources, necessary actors and institutional thickness for knowledge-based economic growth. However, territorially, most of Europe is not consisted of large urban agglomeration, but rather of peripheral areas. A key challenge for cohesion and competitiveness is the interaction between centres and peripheries.

This article deals with regional development zones (RDZs). The aim of RDZ is to combine economic growth (competitiveness) with balanced regional development (cohesion) by directing and enhancing development in a zonal way in and between centres and peripheries. As tools for regional development, RDZs aim to intertwine two broader policy orientations, namely the competition-oriented workfare state and the distributionoriented welfare state (see Jessop 1993; Amin 1999; Macleod & Goodwin 1999). In the former, the public sector and central authorities support strategies and organization of private sector-led regional development. The latter refers to the public sector holding a key strategic position in organizing regional development and actively using public sector resources to guide the development. These two regional development policy strands lie in the background of the current Finnish regional policy (Jauhiainen 2007).

A RDZ, a territory with a system of production and social and institutional base has an active endogenous role in development. As Garofoli (2002: 227) expresses, a territory "includes all those historical, cultural and social factors that are the basis of specific models of productive organization, of the continuous interaction among economic and social actors and, therefore, of the actual processes

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of economic and social transformation." The endogenous potential of polycentric urban regions is recognised in the densely built Europe (see Priemus & Zonneveld 2004) but has not as yet been given much consideration in peripheral areas.

RDZs have existed in various forms during history. Among the first well-known contemporary RDZs is the 'Blue Banana' from the 1980s, stretching between London and Milan. Currently, the most debated RDZ is the 'Pentagon' of Europe inbetween London-Paris-Milan-Munich-Hamburg. There are also nationally designed RDZs. For example, the United States, South Africa and China have various zones of empowerment, enterprise and export known as development zones with special status and incentives to attract (foreign) direct investment and promote regional economy. Examples of such incentives are exemptions or deductions of taxes, increased assess to investment credits, loans and reduced government and public sector regulations (Ge 1995; Wong & Tang 2005). However, this article does not discuss these zones based on external top-down policy. Instead, the emphasis here is on the endogenous potential of RDZs as regional development tools to simultaneously promote competitiveness and cohesion. The key question is how growing centres and declining peripheries are organised within RDZs towards proactive and efficient territorial integration.

In this article, current regional development is conceptualized as zones, corridors and networks. Geographical proximity and territorial embeddedness in various forms are issues that are at stake. The way RDZs are linked to growing centres and peripheral areas will also be analysed. The research questions are as follows:

- What are the regional development zones in Finland? How are they defined in strategies at different spatial levels, presented in regional development plans and implemented in practice when connecting central and peripheral areas?
- How does one important Finnish regional development zone, the OuKa crossing the country in west-east direction, relate to the European Union's Territorial Agenda?

The conceptual elaboration for this article regards competitiveness, cohesion and peripherality. These notions derive from scientific articles, the European Union documentary and Finnish spatial development strategies. The main empirical material comes from an analysis of RDZs in Finland (see also Jauhiainen et al. 2007). The OuKa RDZ (*Oulu–Kajaani-kehittämisvyöhyke*) is analysed in detail regarding competitiveness and cohesion. Special attention is paid to how the OuKa RDZ responds to the regional development challenges posed by the Territorial Agenda of the European Union.

First, the recent national guideline for territorial development, Competitiveness, well-being and eco-efficiency. Perspectives for spatial structure and land use in Finland, was studied to determine how it both visually and textually presented the RDZs in Finland (Ministry of the Environment 2006). The strategy titled "Land use and regional structure in year 2017" from the 1990s was studied to investigate the continuity of such a policy (Ministry of the Environment 1995). Second, the most recent regional development plan as well as regional strategic programs and land-use plans of each regional council with a RDZ were analysed. These plans have been approved of from the year 2003 onwards, depending on the region. The study included investigating whether and, if so, how, the RDZs were discussed in these plans. In addition, selected larger urban areas in different parts of Finland were similarly analysed to trace evidence of RDZs. The applied method was that of basic visual and textual analysis of respective plans.

To indicate opportunities and challenges of RDZs in the recent European Union and Finnish territorial development policies, the study focused on the economic, social and political aspects of six RDZs in Finland. These represent the variety of RDZs in the country. For a more in-depth analysis, the OuKa RDZ was studied regarding its geographical context, economic and social resources and governance. The geographical context was characterised by location and accessibility (internal and external transport network, physical and temporal connection to Helsinki), natural resources (renewable and nonrenewable resources) and social resources (population and employment distribution and density). The dynamics of social resources was analysed using a geographical information system by measuring population change in 1995–2005 and employment change in 1995-2003 in each square kilometre. Governance was studied through a questionnaire among key regional development actors dealing with economy, politics and regional planning in six RDZs. In total, 373 persons from six RDZs, mostly from public and non-governmental sectors involved in regional development issues, completed a four-page semi-structural questionnaire sent by e-mail in 2006 (response rate

25.5%). The methods used in the analysis were basic frequencies and cross-tables. In addition, ten persons from RDZs were interviewed to analyse further the interpretations received from the questionnaire. For the OuKa RDZ, also additional interviews were conducted. Furthermore, a database of regional development projects funded by the European Union in 2000–2006 was formed from the OuKa data. The aspects analysed were how the projects focus on OuKa territorially and thematically by having either an economic, cultural or environmental focus.

## Territorial cohesion policy of the European Union

After decades of almost exclusively focusing on lagging regions and regions with structural problems in its member countries, the European Union regional development policies have recognised that without successful urban agglomerations, Europe cannot become a globally leading economic area (Nordregio 2005). Therefore the European Union increasingly promotes competitiveness by enhancing the performance of urban areas. This is evident in the European Union structural policies for 2007–2013.

However, concentration also has another, more negative side to it, namely increasing the lagging behind and divergence of smaller peripheral areas. Scott and Storper (2003: 589) argue that a crucial task for regional development in global economy is to create and sustain agglomerations without which countries cannot enter the highest ranks of global economy, while simultaneously ensuring that income disparities remain socially just and politically tolerable. This is the demanding task of regional development: to simultaneously remain competitive and cohesive. Therefore the concentration of global competitiveness into one megaregion in Europe, 'the Pentagon', is not the aim of the European Commission, but rather a polycentric territorial development throughout the continent (Priemus & Zonneveld 2004: 287). Unlimited concentration creates undesirable effects also to growing urban areas which experience rising housing costs, growing traffic congestion and declining social and ecological quality. Towns and cities cannot direct the material and social consequences of growth, which may result in unwanted sprawl in the urban fringe.

In the recent political discussion about the European spatial development, competition and cohesion go together in regional development if applied appropriately. The strategies are to improve comprehensive skillful networking of urban regions, promote endogenous development and enhance partnership between urban regions and surrounding less developed areas. Ministers responsible for spatial planning in European countries expressed this in 2006 as follows: "It is necessary to devise and build networks as "bridges" for the sustainable spatial and socio-economic development of the European continent. Sustainable development is better achieved by boosting interactions among the different systems and strong networks may help to promote sustainability." (European Conference of Ministers... 2006). However, as Amin (1999: 375) mentions, there is a risk of parochial optimism being centred on the belief that building local capabilities would be sufficient for establishing a privileged position within global networks. The critical success is "not the presence of local relations of association and institutional advancement but the ability of places to anticipate and respond to changing external circumstances."

### European Spatial Development Perspective and Territorial Agenda

Growth and decline certainly have a spatial dimension manifested in concrete places everywhere in the world. During the 1990s, cooperation between the European Union member states deepened in regional development and spatial policy matters. As an outcome emerged a new layer in policy discussion about the spatial impacts of concentration and dispersal. As a result, two major documents of spatial importance were designed in the European Union: the European Spatial Development Perspective and the Territorial Agenda.

The European Spatial Development Perspective (ESDP), approved in 1999, indicates guidelines for how Europe should develop spatially not only within the European Union, but also across its external borders. The main goals of the ESDP are to develop a balanced and polycentric urban system and a new urban-rural partnership; secure parity of access to infrastructure and knowledge; and achieve sustainable development, prudent management and protection of nature and cultural heritage (Commission of the European Communities 1999).

However, the implementation of ESDP is challenging because it is not a legally binding agreement. As Faludi and Waterhout (2002) clearly express, the ESDP is not a 'masterplan' designed and implemented by 'Brussels'. Instead, ESDP is more informal, rather a compromise between different traditions of spatial planning in various European countries (Janin Rivolin & Faludi 2005) and between these countries and the Commission (Schön 2005: 389). Nevertheless, from the spatial planning perspective, the ESDP is a key strategic document enhancing inter-European spatial development policies and practices. Among these goals are cross-border development, territorial structure based on interactive and linked urban centres (polycentrism) and trans-European networks tying European regions together.

The ESDP fortified the focus on territorial dimension in the European Union. One significant result is the goal of territorial cohesion alongside with economic and social cohesion in the draft of the Treaty establishing the Constitution for Europe. Albeit this constitution was rejected in referenda in France and the Netherlands, the target of territorial cohesion endures on the European political agenda. In the Leipzig informal ministerial conference in May 2007, the ministers responsible for spatial development in the European Union member states agreed on the policy document Territorial Agenda of the European Union. This clearly expresses the need to strengthen territorial cohesion in the European Union (Territorial Agenda... 2007). The Territorial Agenda (TA) can be seen as a continuum from the ESDP as it is built upon the latter's main objectives (Territorial Agenda... 2007: 3). As Faludi (2006b: 13) expresses, the ESDP agenda has been modified "under the flag of territorial cohesion".

Territorial cohesion includes competitiveness and convergence of European regions. In 2004, the third Cohesion report of the European Union concluded that territorial cohesion can be used to reduce existing disparities, prevent territorial imbalances and assist in making sectoral policies with a spatial impact more coherent. Another goal is to improve territorial integration and encourage cooperation between regions (Commission of the European Communities 2004: 27). In the TA, territorial cohesion means focusing on development opportunities to encourage cooperation and networking, bringing coherence and coordination between regional and sectoral policies, paying attention to the strengths of individual areas and targeting policy instruments more effectively (Faludi 2006a). Polycentrism is a method to intertwine centres and their hinterlands, conceptualise and communicate competing strategies and prepare development options. It supports the catching-up of national economies by strengthening the growth centres as the economic locomotives of a country, but also strongly supports the spreading of economic growth potential to secondary cities and regions to avoid internal polarisation (Schön 2005: 394).

Faludi (2006a: 671–673) carefully explains how the idea of territorial cohesion has 'French roots' in experiences gained from the administrative decentralisation of France since the 1960s. Besides the regulative institutions at European and national levels, also various local-regional interest groups such as inhabitants, enterprises, planning agencies and governmental and non-governmental organisations are involved in this process. The government works alongside a range of non-state actors to realise policy goals implementing multi-level governance. In addition, the role of regions or territories increases in spatial planning practices organised along development zones. This satisfies better the management of European cohesion and structural funds dealing with regional development as well as facilitates integrated proactive spatial planning strategies in the European Union member states (Schout & Jordan 2007: 835-837). The emphasis on spatial and territorial aspects means that places and geographical context matter, policies are differentiated according to the territorial context, that the thematic integration of sectoral policies with impact on certain places (whatever the spatial level) is desirable and that the involvement of actors from subnational levels (regions and municipalities) is crucial for successful strategies and their translation into the 'regional language of people' (The Territorial State... 2005). Applied appropriately, it is expected that territorial cohesion will strengthen the endogenous potential in territories and overcome imbalance between territories (Schön 2005: 393).

Territorial cohesion policy gives weight to comprehensive spatial strategies which take into account specific regional characteristics. Territorial cohesion has two sides: "One more interventionist in the sense of actively pursuing balanced development throughout the territory concerned... and the other concerned with co-ordination" (Faludi 2004: 1355). In other words, territorial cohesion is said to merge two spatial planning traditions. The regional economic approach focuses on the location of economic development, while the comprehensive integrated approach focuses on land use (Faludi 2004: 1355). These traditions appear also in Camagni's (2007: 135) definition of territorial cohesion as "the territorial dimension of sustainability". Here territorial cohesion policies require an integrated approach which takes into the consideration socio-cultural, economic and environmental aspects of a particular territory (Camagni 2007: 137).

The TA established the goals as follows: promoting polycentric development and innovation through networking of city regions and cities; new forms of partnership and territorial governance between urban and rural areas; promoting regional clusters of transnational competition and innovation in Europe; strengthening and extending trans-European technological networks; promoting trans-European risk management including the impacts of climate change; and strengthening ecological structures and cultural resources as added value for development (Territorial Agenda... 2007). Such an agenda emphasising territories and territorial relations was received positively by various organizations, e.g. the Council of European Municipalities and Regions (Council of European... 2007). Nevertheless, the TA is also a political statement and a mental framework for collective learning about the desired spatial structure (Zonneveld & Waterhout 2005: 22). Therefore the TA needs to be analysed, for example, with regard to how networking is linked to spatial development and what its impact on territorial cohesion will be.

However, the TA process is only at its beginning stage in 2007. The road map of territorial cohesion into practice is being designed in the action plan. As in the case of the ESDP, territorial cohesion does not have a legal binding status in the spatial development plans of the European Union member states.

## Spatial development, territorial cohesion and peripheries

In the contemporary world of globalisation and multi-scalar flows, spatial development can be generally categorised upon three simplified models. The first model of centre-periphery means an unregulated concentration of people and material recourses into one or more growing centres. The long-term result is congestion in the centre and consequential decline of periphery. The second model is hierarchic spatial organization of society into centres, hinterlands and peripheries promoted by regulative public sector intervention. This hierarchic network needs substantial public resources. In the third, dynamic model, larger and smaller centres and their neighbourhoods form an interactive network. The result is a polycentric spatial structure in which each actor enhances the network's potential for innovation through participation. While each of the three models is based on networks, their direction and level of interaction vary (Hadjimichalis & Hudson 2006: 859). Furthermore, it has to be taken into account that very diverse organizational systems may coexist, cooperate and compete within the same territory (Garofoli 2002: 226).

In this article, networked regional development is conceptualised through networks, zones and corridors (Fig. 1). Conceptualisation is elaborated further from studies by Mustikkamäki and Viljamaa (2001) and Jauhiainen et al. (2007). The first ("network") is a functional network. While geographical proximity within the network can be an asset, it is not necessary. The actors in the network select partners due to their core resources that improve the network performance by complementing it. Technology transfer and innovation networks are examples of functional networks. A network of a transnational enterprise having subsidiaries in many centres around the world also belongs to this category. The role of a particular locality is less important and can be replaced by another locality, for example, in the relocation of economic activities from Western Europe to China and India.

The second ("zone") is a physical-functional network with emphasis on tackling development challenges or enhancing cooperation between key actors in a territorially connected area. Geographical proximity plays an important role. The network derives from structural and content-related activities. Examples of such networks are national and international networks between urban regions, urban areas near to each other and internal networks within a functional urban region. The key actors are local authorities or private sector representatives. A proper infrastructure facilitating material and immaterial flows within the zone is important. Attention is paid also to the identity and image of the network to facilitate its marketing and lobbying.



Fig. 1. Networked regional development: network, zone and corridor.

The third ("corridor") is a physical network in which geographical proximity and territorial continuity are crucial elements. Such a network follows major infrastructures, e.g. a road, railroad or river that ties the partners physically together. Local authorities possess a significant role here. The aim is to enhance the connection between infrastructure and land-use within the network area to intensify material flows between network centres. A corridor can develop into a zone when its development strategy and practices are enhanced by complementing resources within the network and creating a collective identity for it.

Seen from a different scalar perspective (also Ahlqvist & Inkinen 2007 in this volume), the same flow can have different impacts. The spatial scope and orientation of interactions between places do not coincide exclusively with the polycentric system as a whole. Flows are dynamic and vary considerably between types of interactions (Meijers & Romein 2003: 180–181). Moving across scales indicates how there are deconstructing elements within and between nodes, i.e. challenges in governance of the nodes, in fostering of economic flows within the nodes and increasing the belongingness of people and other actors to the node. Centres and peripheries can be intertwined towards zonal development by means of polycentrism. As Faludi (2006a: 669) expresses, the ESDP does not explicitly define the locations where such zones should be created. Rather, there is a need for cooperation and initiatives from below to create transnational development strategies. Inside the broader goal of competitiveness, territorial cohesion could become a key policy to promote polycentric development based on interactive RDZs. RDZs could be territories to promote and strengthen the capacity of local initiatives.

#### Polycentric development and peripheries

Currently, the debate on polycentrism is interested in larger centres and focused on the well-developed areas of Europe. However, as much as 72 per cent of inhabitants in the European Union live in towns and villages with less than 100,000 inhabitants (Council of European... 2007). In the current discourse, being small means being peripheral – while being both small and located in a remote area signifies being 'double peripheral'. In regional development, periphery has traditionally been defined through accessibility and geographical absolute distance (see Keeble et al. 1988). Transport and travel costs, together with the lack of agglomeration advantages, have explained the weak economic performance of remote areas. As a consequence, traditional regional policy tools have focused mainly on improving transport and communication infrastructure (Copus 2001: 539, see also Vickerman et al. 1999) and developing deep peripheries with resource transfer (Spiekermann & Aalbu 2004: 29). The location and accessibility of a peripheral area to economic core regions have defined the area's competitiveness, productivity and economic success (Spiekermann & Neubauer 2002: 7).

Considering that 'geography matters', i.e. that location of people and economic activities is of great significance, it is of utmost importance how nodes and flows enhance the formation towards a polycentric network. Geographical proximity is still important in forming other proximities, such as institutional proximity providing a basic level of trust and reducing uncertainty to draw people into mutual projects even when they have had no earlier social interaction (Lagendijk & Lorenzen 2007: 458). Cultural proximity supports necessary trustbuilding for innovation-led regional development (Gertler 2003). Studying Italy, Garofoli (2002: 235) suggests twinning more and less peripheral areas to build real strategic alliances. It involves both a system of development actors of a well-developed area (such as consortia of enterprises, associations of interests, service centres and intermediate institutions, and educational and research institutions) and a system of local actors (embedded and trustbased networks between SMEs, etc.) in a less developed area. In RDZs these systems network within geographical proximity, binding actors from centres and peripheries to cooperation.

Lagendijk and Lorenzen (2007) and Torre and Rallet (2005) have recently discussed spatial and non-spatial proximity. Spatially bounded geographical proximity is a product of the historically accumulated construction of transport infrastructures and meeting places shaping territorially bounded spaces along social, institutional, political and economic dimensions. Spatially-bound geographical proximity underpins their connectivity and positionality. This has an objective dimension (what is easy and affordable to reach) and also a subjective sense (what feels to be near). Spatially unbounded proximity is definable along two dimensions: belonging meaning social proximity and similarity meaning institutional proximity. Both are fundamental in organisational proximity. Significant in RDZs is to consider how geographical proximity meets with organisational proximity (Table 1) and how these forms of proximity affect the formation of RDZs.

The information society has created new meanings for periphery since the significance of physical distance has changed. Communication infrastructure facilitates the economic potential of all regions. As information technology reaches peripheral regions, economic success of a region cannot be derived directly from its physical location. Copus (2001) defines the new periphery with the concept of aspatial peripherality through the quality of local information technology infrastructure, human capital (especially capacity to utilise information society technologies), quality of local business networks, local embeddedness and civic society, local institutional structures/networks and quality of links to European/global markets and information networks. These elements either boost or weaken a region's economic development and its ability to exploit the possibilities brought by new accessibility (Copus 2001: 544-546, see also Terlouw 2001: 83-84). In RDZs, the elements of aspatial peripherality are, however, partially linked to spatial dimensions of peripherality as physical context affects the quality and nature of local networks.

In the context of innovations, periphery can be understood as a region with deficient regional innovation system (Gren 2003: 4). The elements defining aspatial periphery are crucial in defining

Geographical proximity	Organizational proximity			
	Strong	Weak		
Strong	Local systems of innovation/production (clusters, agglomerations) and temporary co-localization (projects, meetings)	Co-location without ( <i>direct</i> ) interaction (agglomeration, corridor) with <i>indirect</i> effect: in urbanization economies		
Weak	Non-localized interaction (trans-local organizations, value chains, etc.)	Activities in isolation, for example, in rural- peripheral areas		

regional innovation systems in a periphery. Although innovations are usually found to arise due to agglomeration advantages, there are also successful regions in peripheral Europe (see Gren 2003). In fact, a peripheral region can equally experience economic growth when these geographically unbounded characteristics increase their significance in regional development (Copus & Skuras 2006: 79–81). Different networks help to overcome obstacles arising from a remote location. A wider recognition of the possibilities of a periphery is needed to maximise the potentials of remote regions (Vaessen & Keeble 1995: 490; Copus 2001: 549; Terlouw 2001: 83).

The concept of polycentrism has opened up new possibilities to innovative activities in peripheries. However, this concept leaves the concrete spatial organisation of innovation actions open. One possibility to spatially manage innovations is through RDZs in which actors are geographically and functionally connected. According to the study regarding peripheries by Copus and Skuras (2006: 82), "businesses accessing spatially defined horizontal networks may favour local economic activity as they tend to increase their marginal propensity to consume locally produced products. Further to this argument, businesses that access spatially defined vertical networks increase their exports and increase their multiplier effect in the local area." A wider knowledge of the benefits of zonal organisation of innovation activities is, however, needed to realise the potentials of RDZs. Important is the additional value RDZs bring to innovation potential compared to non-geographical and spatially unbounded networks.

## Regional development zones in Finland and territorial cohesion

Regional development zones as potential tools for spatial development appeared in the Finnish context in the 1980s. Among the first was the HHT from the national capital Helsinki via Hämeenlinna to Tampere connecting the two largest urban agglomerations of the country. The importance of HHT made national authorities to consider other RDZs in Finland as well as to recognise their potential international significance. At the same time in the 1980s there was a discussion about the development zone 'Blue Banana' between London and Milan. The first spatial development vision for Finland in 1996 and the early notions of polycentric spatial structure increased consciousness about RDZs in the country (Ministry of the Environment 1995; Haarni & Vartiainen 1996).

In the spatial development vision for Finland 2030, the Ministry of the Environment, the entity responsible for guidance of spatial planning, identifies several development zones between major agglomerations. Accordingly, the RDZs with good logistics enhance polycentric spatial structure and networking of urban regions. The RDZs link urban centres with their hinterlands as well as improve and guide cooperation between urban regions (Ministry of the Environment 2006). Also the Ministry of the Interior and other key regional development actors paid attention to RDZs in the early 2000s (Antikainen 2005; Antikainen et al. 2006). The aim to combine economic competitiveness with balanced regional development fits to the European and national development goals for regions. Addressing the significance of the RDZs for such a combination played an important role in the Finnish presidency of the European Union in 2006 when the Territorial Agenda was prepared. Furthermore, the idea of polycentrism has been enhanced in Finland by the European Union policies (see Antikainen 2005). This includes also the broader European Union -oriented research program ESPON and its results promoting a polycentric spatial structure for the European Union member states (Nordregio 2005).

In the early 2000s, RDZs consolidated their position in the Finnish national spatial development strategies. RDZs are becoming a tool to balance regional development, which has been the task of national regional policy. The idea is not to create passive subsidy transfer to marginal areas but to actively improve connections and cooperation within the zones located in various parts of the country. Centers and less central areas can be tied together as development zones along major transport infrastructures. In general, RDZs aim to increase new and better employment opportunities, broaden economic structures, attract new enterprises, boost cooperation among the public sector as well as between the public and private sectors and enhance the image of the area (Ministry of the Environment 2006).

According to the most recent development plans of regional councils and the national spatial development vision for Finland 2030, one can identify approximately a dozen RDZs in Finland (Fig. 2 and Table 2). There is no single concept or practice



Fig. 2. Regional development zones in Finland.

for the RDZs. Networks, corridors and zones are equally called RDZs in regional development documents. Some RDZs are a few kilometres wide corridors along transport and communication structures. Others are broad, sparsely populated and consist mostly of un-built areas. The more advanced zones have their own organisation, funding and staff, while the less developed are still just an idea.

Following the analysis of various spatial development documents, it came out that some Finnish RDZs, such as the HHT, the E18, the Bothnian Arc, the Mid Nordic and the OuKa, act on the international level. The others' focus is regional or local around medium-sized towns. The smallest RDZ has less than 20,000 inhabitants, whereas the largest has a population of almost two million people. RDZs are often based on an agreement between administrative organisations involved in their activities. Therefore RDZs are seldom functionally coherent. In practice, only parts of several municipalities are active in a RDZ.

As indicated above, 373 key public and nongovernmental sector actors of six RDZs answered to a semi-structured questionnaire in 2006. Most respondents were not well aware of the RDZs in Finland. The best known RDZs were the Bothnian Arc, the OuKa RDZ and the Torneå Valley, of which about three out of five were aware of. Of the studied RDZs, the Arctic Corridor and the Southern Karelia Quality Corridor were the least known and only about every fourth knew them to some degree. Surprisingly, the HHT and the E18 were known only by one third of the respondents. However, the respondents were not from these zones (Jauhiainen et al. 2007).

Table 2. Regional development zones in Finland. Source: Jauhiainen et al. 2007.

Name	Size (sq.km)	Length (km)	Inhabitants (millions)	Туре	Development phase
HHT Zone	9100	220	1.70	international	stabile
E18 Corridor	8500	500	1.50	international	stabile
Mid-Nordic	60,500	500	0.80	international	stabile
Bothnian Arc	46,000	400	0.60	international	stabile
OuKa	16,500	400	0.20	international	stabilizing
Torneå Valley	49,000	600	0.08	international	idea
SK Quality Corridor	3900	100	0.12	regional	idea
JJÄ	4900	50	0.08	supra/regional	idea
Arctic Corridor	32,100	400	0.02	reg./international	idea

There is not yet a proper understanding about the specific possibilities of RDZs in contemporary regional development. According to these key actors, RDZs should address quite basic regional development issues, such as employment and economic structure (Fig. 3). The most important goals are to increase new jobs in municipalities, improve transport and connections and diversify economic structure within the zone. Still, rather few see RDZs as important strategic or practical tools for regional development. The least important goals were RDZs as an action tool for the private sector, as a crucial instrument for practical development and as a strategic base for developing the area. For many regional development actors, RDZs have not as yet been truly established as regional development tools. A further challenge is that RDZs cross many municipal and regional administrative borders and require inter-sectoral cooperation. Many actors have not found a proper position for RDZs among traditional strategic planning by regional councils or detailed land-use planning by municipalities. Public sector (regional) authorities lead the RDZs, and most private sector and non-gov-

Increase new jobs to municipalities (N=362)	180		138	36	
Develop traffic lanes and connections (N=361)	167		137	51	
Diversify industrial structure (N=360)	158		160	34	-
Increase new enterprises (N=361)	154		160	42	
Increase regional visibility (N=363)	152		157	52	
Increase cooperation betw een municipalities (N=361)	151		162	45	5
ncrease the amount of public development funds (N=362)	150		158	50	
Maintain jobs (N=361)	146		168	38	
Increase international connections (N=361)	135	14	9	71	
Increase w ell-being of citizens (N=365)	131	1	73	54	
Promote regional marketing to investors (N=362)	121	164	4	63	
Increase public-private-partnership (N=361)	110	19	8	51	
Increase investments to the RDZ (N=362)	110	178		64	
Increase cooperation betw een public actors (N=357)	103	191		60	
Increase cooperation betw een centres (N=360)	103	193		57	
Increase cooperation between private actors (N=358)	87	200		66	
Unify regional development strategies (N=358)	85	173		90	
Assist in specialising industrial structure (N=359)	86	163		97	
Improve the accessibility of peripheral regions (N=358)	84	178		80	
Increase the revenue of enterprises (N=360)	82	161		104	
Increase the accessibility of centres (N=361)	79	174		90	
Increase jobs in technology (N=360)	69	152	12	25	
Balance regional development (N=362)	65	164	11	1	_
Increase residents to the RDZ (N=361)	61	146	127		_
Offer an operations model to spatial planning (N=360)	59	162	12	27	
Offer a basis for strategic development (N=361)	59	162	12	3	
Offer an essential tool for practical development (N=360)	42	175	12:	3	
Offer an operations model to business (N=359)	37 132	2	154		_
0	% 20 %	40 % 6	0 % 80	) %	100
■ Very important	Slightly imp	ortant	Not import	ant	

Fig. 3. Significance of aims of regional development zones. Answers by key public and non-governmental regional development actors in six RDZs.

ernmental actors have not realised their opportunities. Due to the project-based administration of RDZs, some actors question the political accountability and legitimacy of RDZs in regions and municipalities.

The answers to the questionnaire and the analysed planning documents of regional councils and functional urban regions show that RDZs have, at the moment, many challenges as tools to combine competitiveness and balanced territorial structure. For many, RDZs still remain undefined wishes rather than focused strategies and their implementation. Nevertheless, leaning on Zonneveld and Waterhout (2005), RDZs gain importance as concrete tools to build mental frameworks for territorial cohesion. These 'mental frameworks' boost the vital elements of territorial cohesion, namely territorial integration and cooperation. From a strategic spatial development viewpoint, RDZs have strong connection to material reality by directing human activities to selected areas. This is a significant element of territorial cohesion, which Camagni (2007) calls "the territorial dimension of sustainability".

There are various structural and organisational reasons for today's rather weak performance of RDZs in Finland. First, many so-called RDZs are in fact passive transport corridors or extensions of towns along major roads. They have not been integrated into regional development plans. Different actors at regional level consider the possibilities of RDZs differently. Some claim they are important, while others in the same region consider them insignificant. Second, the activities of RDZs are mostly narrow cooperation between official public regional development actors. Openness and participation to the activities of RDZs are mostly unsatisfactory. The large size of many RDZs makes it difficult to find commonalities between actors and interests. Therefore RDZs in Finland in general are merely visions and wishes for a balanced growth than the reality of a conscious policy. Fragmentation of physical structure, development almost exclusively based on the public sector and lack of resources for concrete activities hinder the development of RDZs. Furthermore, it is difficult to establish one best practice because RDZs differ very much from each other. Of the less stabilised zones, the Arctic Corridor may have more importance in the future when large energy fields in the Barents regions will be opened. Also the opening of an efficient railroad transport connection from Korea and China through Russia to Finland will

significantly alter the importance of many Finnish RDZs, depending on their position as regards this transit traffic.

### Ouka regional development zone and the Territorial Agenda of the European Union

The following analyses the OuKa RDZ (*Oulu–Kajaani-kehittämisvyöhyke*) with regard to the key aspects addressed in the European Union Territorial Agenda (*Territorial Agenda*... 2007). The OuKa RDZ is among the most well-known RDZs in Finland. In 2006, the zone covered nine municipalities reaching from Oulu at the northern edge of the Baltic Sea eastwards to the Vartius border station in Kuhmo next to the Russian border (Fig. 4). The road distance from Oulu to Vartius is 256 km and from Oulu to Helsinki about 600 km. The total area of the OuKa zone is 16,500 km<sup>2</sup> of which 2000 km<sup>2</sup> is water. With a population of 206,000 inhabitants it is among the medium-sized Finnish RDZs.

Although the area has a centuries-long tradition of east-west export and import of goods, the first report about a possible east-west development zone came out as late as in 1995. The idea was to connect Oulu and Kajaani in Finland with Arkangelsk and Komi in Russia. In 2004, the regional authorities of two Finnish regions, Northern Ostrobothnia and Kainuu, started to develop a regional development zone OuKa to promote prerequisites for their development. The emphasis was directed on using knowledge flows, improving transport connections, making the zone better known and more attractive, distributing welfare and developing a specific zonal model. Development projects were started to achieve these goals. The activities include various aspects: development of competence, development of cooperation, OuKa an as activity area and the OuKa transport corridor. Regional planning documents of Northern Ostrobothnia and Kainuu describe the OuKa as an international development zone from Oulu all the way to Kostomukša and Arkhangelsk in Russia. The OuKa zone is also part of the European Union transport corridor called the Northern Axis or the Northern East-West Corridor. In 2006, OuKa was managed by a board of 14 members from public sector organisations all over the zone. The first budget period was in 2004-2006 and the second in 2007-2010 (OuKa 2006).



Fig. 4. OuKa regional development zone.

The OuKa RDZ has been recently analysed in detail from the viewpoints of spatial structure, population dynamics, economy and politics (see Jauhiainen et al. 2007). The following will discuss the opportunities and challenges the OuKa RDZ has from the point of view of the key aspects of the European Union Territorial Agenda (*Territorial Agenda...* 2007).

Regarding the goal of polycentric development and innovation achieved through networking of urban regions, the spatial structure of OuKa consists of two regional centres (Oulu and Kajaani), one small town (Kuhmo) and a number of small municipal centres along roads, railroads and rivers. The city of Oulu with its surroundings is the second fastest growing area in Finland, while the rest of the RDZ experiences population decline. Two-thirds of the population live in the Oulu river valley in the west on an about 50-kilometer-long stripe stretching from the city of Oulu towards the southeast, whereas the Oulu lake area and the Upper Kainuu area have significantly less people. A vast majority of the zone is very sparsely populated, having less than twelve persons per square kilometre.

There has not been much cooperation between Oulu and Kajaani. Their rather independent administrative position is due to active state-led regional policy in the 1960s–1980s when the Finnish territorial structure was organised along hierarchic centres and their hinterlands. However, at present the role of larger centres is increasing. OuKa aims to enhance cooperation between these centres and encourage networking within the zone. In the usage of the European Union Structural Funds for 2000-2006, priority was given to direct the activities along the OuKa zone. Enhancing cooperation between actors in the zone has been a secondary, but nevertheless important goal in the European Union co-funded projects. The improvement of infrastructure in the zone is different in different parts of the area. The projects in the Objective 2 area have mostly focused on infrastructure, but elsewhere infrastructure improvement did not play such an important role. Most projects funded by the Structural Funds focus only partially on the OuKa RDZ. The projects are targeted either to wider geographical regions (e.g. projects for the whole region) or smaller territories (e.g. municipal or sub-regional projects). This is partly due to the Oulu and Kainuu areas belonging to different regional development programs and their intertwining is administratively difficult.

With regard to internal accessibility, OuKa is characterised by long distances that nevertheless enable daily interaction between regional actors. OuKa aims at the zonal organisation of innovative activities, but the possible results become visible only after a few years. There are strategies to internationalise the OuKa by extending it to Russia and Sweden through the Bothnian Arc RDZ. According to Priemus and Zonneveld (2004: 292), in polycentric urban networks, international aviation connections (through airports), harbour connections (through seaports) and high-speed train networks (through stations) are important. Interconnectivity of networks is relevant for passenger and freight transport. In OuKa, there is one harbour (Oulu) with several weekly freight connections to European and other ports, two airports (Oulu and Kajaani) and railroad connections (one in east-west and two in north-south direction). The domestic Oulu airport is the second busiest in Finland having 2300 daily passengers whereas Kajaani is used by under 300 passengers daily. The rail connection between the two centres of OuKa is rather poorly served and has less than 500 daily passengers. However, the importance of the railroad is growing due to freight to Russia. The road network is the main internal connection within the RDZ.

Regarding territorial governance and partnership between urban and rural areas, the abovementioned administrative mixture is a challenge. OuKa passes through two regions (Northern Ostrobothnia and Kainuu) and two European Union NUTS 2 areas and reaches two international borders. Of the zone's nine municipalities, only one is moderately urban and the rest predominantly rural. The western and eastern parts belong to different spatial development plans, making the management and intertwining of European, national and regional funds difficult. OuKa is not yet an entirely functional zone. For example, there are ten municipalities that belong to the functional urban region of Oulu, but only two of them take part in the OuKa activities.

The governance structure of OuKa is rather loose as regards development and planning. In 2004–2006, there were 14 members from municipalities, one full-time employed project manager and one part-time consultant in the management board (OuKa 2006). Some smaller municipalities expressed that their voice is not heard in OuKa. This indicates difficulties in formal urban and rural partnership. Until 2007, enterprises, non-governmental organisations and inhabitants' representatives were absent from the management board. This is what Hadjimichalis and Hudson (2006: 868–869) warn about networks having rhetorical emphasis upon partnership, equality and equity between partners whereas often the reality is of asymmetrical power positions, democratic deficit and political unaccountability.

Nevertheless, the OuKa RDZ has geographical proximity, something which purely functional networks do not have. As a consequence, OuKa has the potential for using spatial proximity to enhance its innovative activities. For example, rural parts can be included more efficiently in food production chains within the RDZ. Common road and rail networks are an asset for the governance of the whole zone. It facilitates the change from weak to strong organizational proximity. As Lagendijk and Lorenzen (2007) indicate, temporary co-localisation with projects and meetings is important in intensive local systems of innovation and production. Garofoli (2002: 236) underlines the importance of regional authorities and other public and intermediate institutions (for instance, national and regional development agencies) in supporting and coordinating local initiatives, assisting the diffusion of knowledge about successful cases and encouraging the replication of best practices. This requires a strong commitment to planning capacities and to coordinating local systems which favour initiatives in local economic development and interregional collaboration.

Regarding the clustering of emerging internationally competitive innovations, OuKa has significant potential in selected activities. The Oulu FUR is a well-known cluster in information and communication technology (ICT) despite small regional and national markets. The said ICT sector employs approximately 15,000 people and a substantial number of individuals are involved in research and development activities in e.g. the world's leading ICT company Nokia and at the University of Oulu (Ala-Rämi 2007). However, there are only two larger employment and productive clusters (the central parts of Oulu and Kajaani). Oulu holds over 80 per cent of total net sales of the RDZ while a majority of the zone is peripheral. Besides the Oulu FUR, local strands of innovation activity lie in Kajaani (Measurepolis), Vuokatti (Snowpolis) and Rokua (Humanpolis). These small technology development clusters belong to the Multipolis innovation network which promotes innovative actions in localities not only in northern Finland, but also in northern Scandinavia. Nevertheless, cooperation between innovative technology enterprises and universities has not as yet been fully explored (Jauhiainen 2006). According to interviews with

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respective polis managers, these technology clusters cooperate partly within the OuKa RDZ. Two out of three polis leaders have cooperated with well-being and environmental technology actors within OuKa. The exploration of the potential of OuKa requires cooperation with enterprises to form a regional innovation system. However, stronger clustering and focusing on selected internationally competitive activities would retain resources from traditional sources of living, such as agriculture and low-tech manufacturing.

To achieve the potential of territorial cohesion, strong technological networks are needed. In general, the OuKa RDZ has a very good basic technological network structure. There are plans to enhance wireless communication to cover the whole Oulu FUR as well as the generally peripheral Kainuu region. This would facilitate information transfer and potentially improve education, working and leisure possibilities at distance in selected topics. The Multipolis network is an example of the use of technological networks in developing high technology. However, geographical proximity is also needed because face-to-face interaction is crucial in many phases of technology development (Ala-Rämi 2007). The coming together of regional actors improves embedded knowledge, but technological networks are needed to connect it to global pipelines (Maskell et al. 2006) and to overcome problems of aspatial peripherality (Copus 2001).

*Risk management* has not been a major theme in OuKa thus far. However, the Oulu river is a potential topic. The river is important in energy production and there are also plans to introduce other sustainable energy sources, such as wind power plants and bioenergy fields within the zone. There is strong pressure to build housing by the riverside, which makes the impacts of climate change a relevant issue in certain waterfront areas that can be flooded. However, the land rise lessens the threat of flooding.

The added value for development gained through ecological structures and cultural resources is also addressed in OuKa. The most widelyknown project of OuKa is to re-introduce salmon into the Oulu and Lososinka rivers that are blocked by several water power stations. Specific passages for salmon would improve the zone's potential for tourism and bring back lost ecological qualities. In general, green networks are important regarding ecological significance (biodiversity), landscape value and agriculture. However, such networks need to have spatial coherence that will suit the habitat demands of wildlife (Priemus & Zonneveld 2004: 292). From the point of view of cultural heritage, the most important project in OuKa is Via Pix following an old road along the OuKa RDZ. This project aims to revive the history of the zone as a route to import tar in past centuries with ICT practices. The seemingly small and trivial examples involving salmon and tar are important when attempting to strengthen the inhabitants' sense of belonging to the zone.

### Conclusions

This article discussed regional development zones (RDZ) as tools to take into account competitiveness and cohesion as expressed in the European Union regional development policies, especially in the recently launched Territorial Agenda. Empirical examples derived from Finland in which RDZs have been promoted in spatial development during the past two decades. In Finland the polycentric development is becoming a key strategy for regional policy. In the early 2000s, RDZs are present in many national and regional development strategies and plans. However, as discussed above, despite national strategies and regional and local practices regarding RDZs, there is not as yet a clear definition, strategy or implementation for them. The Finnish RDZs vary in size, resources, organisation, administration and performance. Some are located in-between main urban agglomerations, but there are also RDZs in more peripheral areas. Nevertheless, the national authorities see RDZs as tools to overcome disadvantage rising from peripheral location by intertwining a centre and more peripheral localities into partnership to foster their endogenous potential, as exemplified by the case of OuKa. As presented above, many challenges exist in the OuKa RDZ as regards the goals of the Territorial Agenda of the European Union.

To get better advantage out of RDZs, there is a need for more careful and critical consideration of them as integrative tools of spatial development strategies and practices (see also Amin 1999). RDZs can become concrete tools towards interactive polycentric territorial structure and balanced spatial development instead of the currently increasing concentration of activities into larger urban agglomerations. Rather than stressing opposing differences (centre vs. periphery, growth vs. decline, concentration vs. dispersal, urban vs. rural), RDZs enable the intertwining and networking of actors and endogenous potential to promote economic growth and social and ecologic sustainability. In fact, added value arises from linking spatial, cultural and organisational proximities facilitating actors' commitment to regional development and mobilisation of endogenous local resources. RDZs as mental frameworks (see Zonneveld & Waterhout 2005) help thinking across administrative and territorial borders. Compared to loosely spatially-binding thematic networks or passive transport corridors, actively intertwined RDZs have spatial proximity that enhances social capital and commitment needed for cohesion and competitiveness. Applied appropriately, they also deepen territorial cohesion and trust needed to form an efficient regional innovation system. This way RDZs become an efficient, targeted policy instruments that use geographical proximity for cooperation, specialisation and new division of labour and tackle down some disadvantages of spatial and aspatial peripheries.

As discussed above, the governance of many Finnish RDZs is challenging because the zones cross many sectoral, administrative and territorial borders. Intraregional consensus, proactive national, strategic regional planning and quality and quantity of participants are important in developing RDZs. RDZ activities must be open to people and enterprises to justify RDZs as tools bringing more social justice and territorial cohesion into regional development. Endogenous development and the inhabitants' and key economy actors' belongingness to the RDZ are also necessary for that purpose.

The special qualities of each RDZ have to be accounted for. To achieve territorial cohesion, i.e. sustainable economic growth with reasonably balanced development, more focus ought to be placed on the functional activities of RDZs and common logistics and communication infrastructure should also be supported. This means efficient concentration of activities and land use to the core structure along each RDZ. Geographically close physical and material infrastructures help the interaction between two or more functional centres. A clear definition is needed to distinguish RDZs and their activities from broader strategic alliances, spatially less coherent networks and passive infrastructure corridors. RDZs can become an important integrative tool for regional development in the European Union struggling for competitiveness and cohesion.

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