

# Cross-border collaboration in the North. Viewpoints of municipal representatives and firm managers on the Bothnian Arc project

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Today greater responsibilities are being put on regions to shape their own future. Thus, different kinds of regional collaboration arenas have emerged and an increasing number of regional collaboration projects are now crossing both county and nation borders. The object of interest in this study is the Bothnian Arc project. This project involves municipalities on the Swedish and the Finnish side of the Gulf of Bothnia. The aim has been to analyse opinions and experiences of Swedish actors regarding the Bothnian Arc as a region-strengthening project. The article is based on interviews with fourteen municipality representatives and a questionnaire answered by approximately 300 firm managers within the Bothnian Arc area.

The Bothnian Arc is essentially a political project and this study shows that the policy creating institutions have not succeeded in transferring ideas and objectives to firms within the area. In fact, only 30 per cent of the firm managers were familiar with the project. More concrete projects adapted to firm interests were required by a few of the municipality representatives. Moreover, the municipalities closest to the Finnish border are more active and involved both on municipal and firm level. This tendency is primarily due to already existing traditions of collaboration with Finnish actors.

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## Structural changes and self-sufficient regions

Today significant changes concerning economic, social and demographic structures are taking place in many parts of Europe. Sweden is no exception. The tendency is a more polarised development pattern. The metropolitan areas and the university cities continue to attract the young, productive part of the population. On the other hand, towns with traditional industries and sparsely populated areas experience low birth rates, a steady net out-migration and an ageing population. Rationalisations and closures of small units take place in public services. Due to increasing global competition, the industry needs to continuously upgrade their capacity to compete. One obvious strategy is to focus more on knowledge intensive activities and innovative strength. Another structural tendency is

a growing number of service-producing firms (Pettersson 2002; Glesbygdverket 2003, 2004; ITPS 2004; Långtidsutredningen... 2004).

Simultaneously, the importance of local and regional arenas for collaboration has been emphasised to increase the competitiveness. Collaboration across administrative borders is accentuated by EU-policies and planning ideas, such as the European Spatial Development Perspective (ESDP), which is supporting the development of functionally integrated regions (European Union 2004). By the principle of subsidiarity and a number of support systems within the EU, greater responsibilities are being put on the regions themselves to shape their own future (Törnqvist 1998).

However, the establishment of regional arenas is still very often a product of politicians and planners (Davoudi 2003; Meijers & Romein 2003). An interesting question is whether economic growth

can be stimulated by policymaking and planning or if it is a result of slow development processes, random factors and/or inherited conditions unique for a certain place, which are difficult to imitate. Some researchers mean that if visions and objectives only exist on the political level, it is hard to transform the ideas to concrete activities on the grass-root level (Malmberg 2002).

Regional collaboration arenas are currently about keeping territories together based on various types of interactions and transactions, i.e. flows of information, goods and people. A major argument is that enlarged functionally integrated regions make the service production more efficient and thus improve the conditions of individuals, households and firms. These processes are growing out of local contexts, but are also widening into larger territories and an increasing number of regional collaboration projects are now crossing both county and nation borders. This kind of projects is characterised by functional integration processes of different scales, from small and temporary collaboration projects, to more powerful and sustainable processes of region building. An important factor for national and transnational projects within Europe is financial support from national authorities and the Interreg funding of the European Union.

### **The aim, material and structure of the study**

The object of interest in this study is the Bothnian Arc project, which consists of a combination of national and transnational collaboration activities. This project involves municipalities on the Swedish and the Finnish side of the Gulf of Bothnia. The aim is to analyse opinions and experiences among Swedish actors of the Bothnian Arc as a region-strengthening project. Do local politicians and firm managers on the Swedish side regard this as a meaningful project from their perspective? What are the objectives that the municipalities want to achieve? The Bothnian Arc is essentially a political project and it is not obvious that the policy creating institutions has managed to transfer these ideas and objectives to the firms within the area. Böhme (2002), for instance, stress the need for involving other actors at local and regional level in order to fulfil the intentions of the ESDP, whereas Davoudi (2003) accentuate the importance to strengthen

linkages between firms as one key factor to create polycentric regions. Nevertheless, matters must be discussed and operated among a number of actors to bring such a project to success.

Methodically, this article is mainly based on interviews and a questionnaire survey. The interviews were conducted in October 2004, with fourteen key actors at the Swedish municipalities, such as municipal commissioners and directors of trade and industry departments<sup>1</sup>. The answers were compiled from all of the municipalities taking part in the Bothnian Arc collaboration. The interviews were based on an interview guide, containing questions with open alternatives of answers. The questions dealt with collaboration projects and priorities of the municipalities in general, with the Bothnian Arc project in particular and finally with the decision-making process and future organisation.

The questionnaire, with fixed alternatives of answers, was directed towards managers within the Swedish part of the Bothnian Arc, in December 2003 and January 2004. From a total of about 25,000 firms, a selection of 2000 firms, with five employees or more<sup>2</sup>, was conducted. After that a branch-stratified selection was made. The branches selected was those considered as the most relevant in perspective of priorities in the Bothnian Arc project, such as the manufacturing and steel industry, information and communication technology, forestry, health care/welfare and tourism (Bothnian Arc 2004a). The selection resulted in 517 firms. After one reminder, 302 of the managers had answered the questionnaire, i.e. 58 per cent. Most of the questions have an internal drop-out rate between 0 and 4 per cent. One should keep in mind that dropouts risk distorting the results, as this is a group of respondents we lack other forms of compensatory information from. The questionnaire focused on topics such as the managers' knowledge about and actual involvement in the Bothnian Arc project, and whether actors such as universities and other firms within the Bothnian Arc area are of interest for future cooperation. Other questions dealt with the firm managers' views on which issues should be prioritized within the project, as well as their opinion about future prospects for their own firm and for the area in general.

This introduction is followed by a summary of related theoretical perspectives on polycentric regions, region-building processes and economic growth. Thereafter, a brief description of the Both-

nian Arc is made, followed by a presentation of the results from the interview study and the survey. The article concludes with some summarising remarks.

## Polycentric regions and development corridors

To achieve sustainable long-term results, collaboration projects across administrative borders in a subnational and transnational perspective gradually have to develop into more powerful processes of regional integration. However, it must be stressed that there is no unambiguous and clear-cut definition of the region concept or region building in processes of shaping regions as alternatives to existing administrative regions. In what way a region is categorised and marked off from its surroundings often depends on the social and/or economic context (Wiberg 2002). Moreover, Taylor (1988) stresses that regions rarely meet at clear-cut boundaries, but rather overlap across border zones. Over time, both the space and the contents of a region are constantly changing through different phases and processes. In this study the theoretical discussion is based on the concept of the *functional region* that is tied together by flows and transactions. The *polycentric region* is one type of functional region, highly focused on in current policymaking within the EU (Davoudi 2003). The polycentric idea is about the nodes in form of cities and towns to be involved in different kinds of networks. The thought is for the sub-areas to be useful to each other, either by similarities or by complementary effects regarding for instance labour markets, and to get access to a variety of services and cultural activities (Wiberg 2002; Pettersson & Westerberg 2003). The idea is also to reduce disparities and hierarchic power relations between centre and periphery; between cities of larger and smaller scales and between urban and rural areas (European Union 2004).

A special kind of polycentric region is the *development corridor* (Jussila et al. 1993). This is not a new phenomenon in Sweden and Finland. Especially in northern Sweden this is an apparent geographical pattern and for centuries settlements and economic activities have been concentrated to coasts and river valleys (Pettersson 2002). Today these "natural" corridors have been strengthened with road and railway infrastructure. The modern

kind of development corridors have in fact evolved around major transport links, and within these corridors there are possibilities for households and firms to establish important connections and meeting points. As the need for mobility and accessibility increases, it is assumed that strategic investments in crucial corridors can promote more robust service structures and economic growth in sparsely populated areas. However, proper physical infrastructure is not enough to create regional functionality and attraction. Additional factors of significance are the industrial character, knowledge production and labour competence, the built environment in relation to the natural landscape and the possibilities of the housing market to satisfy people with a great variety of income situations, desires and lifestyles (Copus 2001; Wiberg 2002).

## Regional arenas of collaboration and region building processes

The establishment of regional arenas might adopt a variety of forms and structures. Nordgreen (1995) discusses three different kinds of linked region structures with varying intermediate networks. A *new enlarged region* emerges from integration processes between smaller, equivalent functional regions. Thus, in this larger region a new functional and hierarchic structure is created. A *region system*, on the other hand, contains a great number of horizontal links between the smaller regions, but without the merging process into one large region. Finally, a *region alliance*, consisting of horizontal collaboration without the regions necessarily being spatially close to each other, is considered by Nordgreen as the most suitable region structure in the knowledge based "new economy".

Paasi (1986) describes region building as a process, consisting of different phases of development that step-by-step lead to internal cohesion and external separation. These phases can be related to Hettne's (1997) *regionness*, suggesting that regions exist in different grades and levels, from the natural shaped region to the historically demarcated region with a clear identity. Processes of this kind are rarely as simple and uncomplicated though, as to be clearly marked off in specific phases. Aalbu and Wiberg (1997) suggest a more dynamic model in which the elements institutional changes, infrastructure investments and joint action, are interre-

lated. These factors interact with each other without any particular order, and backward as well as forward linkages tie the elements together. Thus activities within one element automatically affect the others, which in turn stimulate cumulative processes. Furthermore, Hettne (1997) emphasises that regional integration is not an irreversible process. On the contrary, disintegration and fragmentation could dissolve this process. Meijers and Romein (2003) highlight the need to build regional organization capacity in order to realize the potential of polycentric regions. In this process, shared visions, regional identity and leadership are important aspects.

To sum up, these processes towards establishing new regional arenas are very complicated and even more complex are the transnational projects, with many political, economic, geographical, infrastructural, technical and cultural hindrances and barriers to overcome (Wiberg 1995, 1996; Lindfors 2004; Rylander 2004).

## **Growth factors and partnerships**

Many theories have been developed regarding different kinds of factors considered to be of importance to economic growth and thus also to local and regional development. The more recent discussions concerning regional development deal with, for example, agglomerations and clusters (see for example Marshall 1919; Porter 1990; Castells 1996; Sheppard & Barnes 2000; Berggren & Brulin 2002; Malmberg 2002), the creation of innovation systems, knowledge and competence (Sheppard & Barnes 2000; Ljusberg 2001, 2002; Bager-Sjögren & Rosenberg 2004), social capital (Putnam 1996; Westlund 2004), the entrepreneurial spirit (Aronsson & Johannisson 2002) and the creative class (Florida 2002). These theories influence planners and policy makers at different levels and contribute to planning and decision making processes. Furthermore, the growth factors are probably important in partnerships and collaboration strategies of different kinds. One type of partnership that increasingly appears in planning, policy and region-building processes, are those between private and public actors at local and regional levels (Jussila et al. 1993; Nyström 1999). These partnerships may improve the conditions for development and decision-making by generating more creative and effective processes than at formal and strictly regulated planning.

The Triple Helix model is one theoretical approach describing the collaboration between industry, government and universities. The links between these actors often consist of consultant services and contract research. All parts in the model contribute to continuous processes where innovations, competence and knowledge transfer are created (Etzkowitz 2002; Higano 2002; Lähtenmäki-Smith & Persson 2002). There is often an assumption that universities and research institutes more or less automatically have a positive effect on the local and regional development. However, this is a complex matter and studies are indicating that the existence of R&D institutions alone is not enough to stimulate regional development and economic growth. It must be supported by other important parts of the social structure as well, such as a sufficiently large population, a diversified labour market, well functioning infrastructure and leaders who take active interest in politics and business (Olsson & Wiberg 2003).

Furthermore, the ability to adapt to specific local and regional conditions is important for planning and policy-making in general. Activities based on high technology and knowledge is often focused today, but it seems over-optimistic to expect all regions to be transformed into high-tech clusters. Economic policy and planning must be anchored to the reality to have real impact on regional development processes and in this context the public institutions have an important role to draw up the guidelines (Nyström 1999; Malmberg 2002). From this point of view the Bothnian Arc collaboration is an interesting project to study.

## **The Bothnian Arc**

The overall aim of the Bothnian Arc project is to create favourable conditions for economic growth in this part of Europe and to design planning and investment proposals to meet the structural and economic challenges connected to the relatively peripheral location (Bothnian Arc 2004a). The idea is to create networks of long-term and sustainable cross-border collaboration, but also to make the area well known in international contexts. The first phase of the project was implemented between 1998 and 2001. It was financed by the EU programme Interreg II C Baltic Sea Region and also by a number of Swedish and Finnish stakeholders (Bothnian Arc 2004a). The key actors are the municipalities, who also work for engaging firms and

universities within the region. In this way the Bothnian Arc project is an umbrella project where the idea is to develop different kinds of networks and partnerships between the actors within the area (Bothnian Arc 2004a, 2004b).

Geographically the Bothnian Arc stretches along the coast from the municipality of Skellefteå on the Swedish side, to the Ylivieska region on the Finnish side (Fig. 1). Road distance from one end to the other is more than 500 kilometres. The municipalities of Haparanda, Kalix, Luleå, Piteå, Boden, Älvsbyn and Skellefteå constitute the Swedish sub-region, which is the focus of this study (Fig. 2). Approximately 250,000 people live in the Swedish part of the Bothnian Arc (Statistics Sweden 2004). The industry consists partly of traditional branches, like mining, steel, manufacturing, forestry, energy and food production, and partly of firms within the "new economy", such as IT, music, electronics, telecom and a variety of other high-tech businesses. There are also, of course, a substantial number of firms providing services of different kinds. Regarding higher education and research, Luleå University of Technology is the most apparent actor in the area, but both Luleå University of Technology and Umeå University conduct research and give courses in other municipalities, mainly in Skellefteå.

There are still many barriers to overcome and links to create in the Bothnian Arc area. A planned coastal railway (i.e. Norrbottenbanan) will probably, from approximately the year 2020 and onwards, strengthen the Bothnian Arc as a functional development corridor. This railway will link the Bothnian Arc area to the Swedish rapid train system, but also to the Finnish and Russian railway system (Bothnian Arc 2004a; Norrbottenbanan 2004). It is an important component for the development of the area as it will improve communication and transportation networks, which in turn will support the integration processes and strengthen the nodes.

### The municipality perspective

The interviews with municipality representatives showed that collaboration across municipal borders already exists in the Swedish part of the Bothnian Arc area, such as The Municipal Square (Fyrkanten; i.e. Luleå, Piteå, Boden and Älvsbyn) and Eastern Norrbotten (Östra Norrbotten; i.e. Haparanda, Kalix, Överkalix and Övertorneå). An



Fig. 1. The geographical area of the Bothnian Arc.

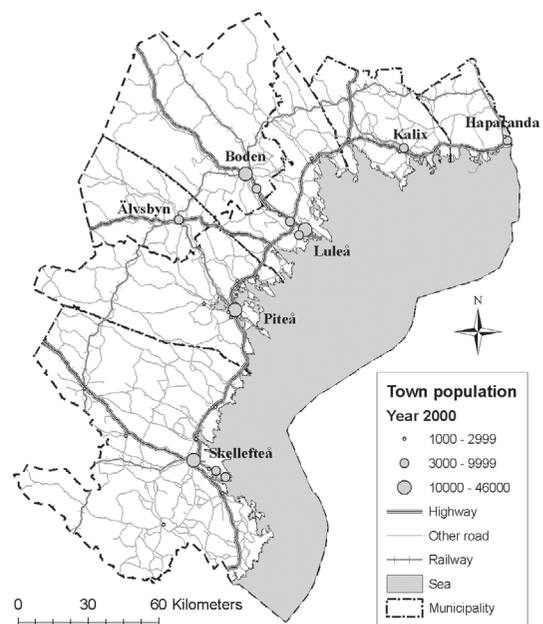


Fig. 2. The Swedish sub-region with nodes and links.

association including the municipalities of Västerbotten has also been established, as well as EU-projects across municipal borders within the county concerning trade, industry and education. It is clear that trade and industry development, research and education are important areas of collaboration both locally between adjacent municipalities and regionally between counties. At present there are research collaborations between the higher education centres concerning digital archives and also between a music school and a university within the area. The border municipalities Haparanda and Tornio have been collaborating for a long time and there is a close partnership between a couple of energy companies, owned by Swedish and Finnish municipalities.

The characteristic features of the Bothnian Arc project are efforts to elaborate collaboration in the fields of knowledge/education/research, tourism, technology, industry and trade. Another matter of great importance is a well-functioning infrastructure, including public transport and modern information and communication technology. Great hopes are expressed regarding the future Norrbottenregion, which is expected to function as a connecting link for the entire region. Other advantages with the Bothnian Arc are increased opportunities to find creative forms of collaboration within mutual areas of interests, as the familiarity of each other and the knowledge of cultural differences between Sweden and Finland increases. One of the municipality representatives emphasised the use of collaboration projects like the Bothnian Arc within EU-contexts, not least when it comes to funding development projects.

Furthermore, the role of the Bothnian Arc as a platform for marketing and development of northern Sweden, northern Finland and the Barents region is stressed. According to the municipality representatives, there is a strong interest to increase the collaboration with Finland within the tourism industry, where Finnish actors are appreciated collaboration partners. Other areas of interest for collaboration are research, product development and trade.

However, some of the municipalities had not advanced very far in the Bothnian Arc collaboration. A representative of one of the southern municipalities stated that their involvement in the Bothnian Arc project was mainly a political initiative, not entirely anchored among civil servants in the municipality administration. The interviews have also revealed a pattern regarding the priority

of the Bothnian Arc project compared to other collaboration projects. Except from one civil servant, the respondents of the four northernmost municipalities are giving very high priority to the Bothnian Arc project, whereas it seems to have lower priority in the other municipalities.

During the first phase of the Bothnian Arc project, 1998–2001, the number of contacts and networking increased in many of the municipalities. The actors in Sweden and Finland got more acquainted with each other and have developed a better understanding of the cultures of both countries.

"[The municipalities] have a completely different dialogue than before, when it was more or less non-existent between many of the involved municipalities. Tornio and Haparanda have been collaborating successfully for some time though, and have been urging in this. Luleå and Uleåborg also have a good dialogue and it is very important for this collaboration." (Politician)

Some examples of more concrete contributions mentioned in the interviews are for example intensified work on upgrading the standard of the Haparanda railway<sup>3</sup>, bus transports around the northern part of the Bothnian Arc, mapping of the coastline from Skellefteå on the Swedish side to Brahestad on the Finnish side, applications for EU-financing and some recently created tourist projects. Moreover, the Bothnian Arc project has created the foundation for sub-projects aimed to develop the knowledge level and the steel industry in the area. However, there are also critical comments. A couple of the municipality representatives are quite critical about the fact that very little has happened up to now, that the process is too slow and that there are too few concrete achievements. In some cases they blame these problems on differences in the decision-making processes on the Swedish and Finnish side of the border.

"From the Finnish perspective, I imagine that they think things are going slow quite often and that it ought to be more action and less processing in board meetings. I would like it that way as well, that we would get more concrete projects, but it probably will take some time." (Politician)

Part of the criticism is also the fact that the Bothnian Arc is still quite unknown for many people, within the area as well as outside. The marketing of the Bothnian Arc has to be faster and more leg-

ible to be effective. Furthermore, one of the municipal representatives stresses that it might not be meaningful for all municipalities to take part in all activities and that it might be better to focus on matters that are useful to the individual municipality.

In order to involve the firms in the Bothnian Arc project, most of the municipal representatives respond that circulars have been sent out to the firms in the area and that firms have been informed at different occasions, at seminars and personal visits. At these occasions, the firms have also had the opportunity to express their requirements and preferences, which in the long run might contribute to more concrete and firm-adjusted projects. Yet, several respondents claim that the municipalities have not succeeded very well in engaging and involving the firms to a satisfactory extent. More concrete projects, of interest for trade and industry, are asked for.

By contrast, the universities have been involved from the start. For instance, R&D projects are mentioned by several of the municipalities where for example Luleå University of Technology and its decentralised College of Music in Piteå are involved. Contacts have also been established between the university association/research station Eastern Norrbotten and Finnish R&D centres. However, two of the seven municipalities have not taken any initiatives at all to engage universities.

The most concrete plans for the near future are to continue to develop collaborations within knowledge, steel industry and tourism, and to follow up the existing projects. Some of the municipalities are also planning to intensify the marketing of the Bothnian Arc. The northernmost municipality, Haparanda, is working on a vision of an international centre in the Barents region. During the second phase, 2002–2005, five of the municipalities have the intention to increase the involvement of firms and universities.

"All the time we are looking for ways to engage firms more concretely in different projects. The problem is that many projects are too long-term, which makes it hard to involve firms and to get them to invest money. The individual entrepreneur must be able to see that this will bring something, which can be difficult at times." (Civil servant)

An interesting question, from a functional region perspective, is what the municipal represent-

atives reckon about the extensive territory that the Bothnian Arc actually constitutes. This has been studied from different perspectives. The proximity to Russia is one of the aspects, and this is seen as a business related advantage by more or less all of the municipality representatives. Other perspectives concern barriers to collaboration due to different languages, cultures, currencies and the relatively great internal distances. In these cases the opinions differ quite a lot, where some respondents see hindrances, other see advantages and opportunities. One of the respondents, for instance, argues that this large geographic area contains many different landscapes, which is then seen as positive for tourism development. It is also emphasised that this territory has similar structures regarding base industries, such as forestry and mining. Other strengths mentioned with the Bothnian Arc area are the high level of competence, modern industry and high-quality technology within R&D. Some of the municipal representatives, however, see difficulties with the different languages, cultures, currencies, tax systems and the big distances within the Bothnian Arc. Not least lack of knowledge in Finnish language and culture seems to be an obstacle.

"What really consists a problem is the language and the cultural differences. There are different ways to get the job done." (Civil servant)

Worth noting is that the collaborations existing today have often grown from experiences of earlier collaborative efforts in the Swedish part of the area, such as The Municipal Square and Eastern Norrbotten, which both seem to be of higher priority than the Bothnian Arc project. One way to strengthen the collaboration in the Bothnian Arc would be to constitute a more formal organisation, e.g. a municipal union, with legible agreements on collaboration between the municipalities. Today, a municipal union between Haparanda and Tornio is actually in the process of being established. The process has been long and hard though, as this kind of cross-border unions requires significant legal adaptations in both countries. Nevertheless, this union might serve as a model for other municipalities in the area and the collaboration between Haparanda and Tornio is by several representatives viewed as an interesting pioneering project. In contrast, several of the respondents claim that the current collaboration is quite enough.

## The firm perspective

As economic growth is one important dimension in the Bothnian Arc project, the second major focus in this article is the firm perspective on the efforts of the project. The questionnaire to firm managers within the Bothnian Arc showed that only 30 per cent of the managers are familiar with the Bothnian Arc project. There are also obvious differences between the municipalities and the awareness seems to decrease as the distance from the Finnish border increases (Fig. 3). Firm size also turned out to matter. The managers of big firms are much more often familiar with the Bothnian Arc project as compared to the managers of small businesses. The bigger firms often have more developed connections and might thus get more information at an early stage about different activities and projects affecting their business, than the smaller firms do. Moreover, bigger firms probably have more resources to put into this kind of projects and therefore they might be more open for such information.

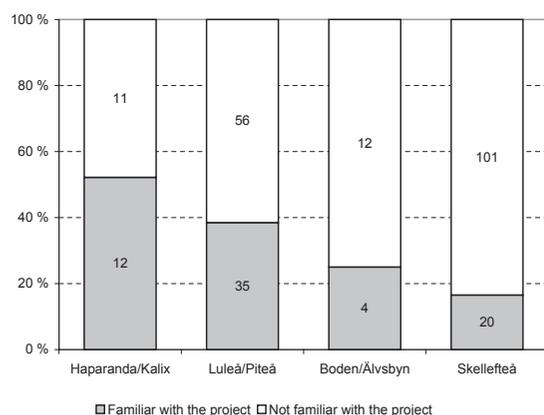


Fig. 3. The managers' awareness of the Bothnian Arc project in relation to municipality group. Note: the figures show the actual numbers of responding managers.

One of the activities considered important for regional development processes is increased collaboration between firms. This is also one of the aims within the Bothnian Arc project. According to the survey, the share of managers who have established new contacts with other firms within the Bothnian Arc area is low. Worth noting though, is that newly established contacts with firms on the Swedish and Finnish side of the Bothnian Arc is almost the same, even if the actual numbers are low. Also regarding to what extent the Bothnian Arc project has influenced the firm activities, the figures are quite modest and a majority of the managers claim that the influence on their own firm activities has been quite limited.

Even though actual collaboration has not advanced very much, the interest in various collaborative activities is evident. For instance, there is a significant interest in increased collaboration with firms on the Finnish side, especially among managers who are already familiar with the Bothnian Arc project. There is an even greater interest in collaboration with firms on the Swedish side, whereas the interest in collaborating with firms in Northwest Russia and in other parts of Europe is smaller (Table 1). This legible interest in firm collaboration was also revealed when the managers were asked to specify which measures ought to be prioritised in the area. Networking between firms within the Bothnian Arc received the greatest interest.

As mentioned before, the connection to R&D is a crucial factor for economic growth and development in general. The investigation showed that there is an interest among the managers to collaborate with universities, even if it is slightly less pronounced than the interest to collaborate with other firms. In this case the interest mainly concerns the universities on the Swedish side; Luleå University of Technology and Umeå University.

Finally, the managers' expectations about the future development in a more long-term perspective show that there is careful optimism.

Table 1. The managers' interest in cooperation with firms in Sweden, Finland, Russia and Europe.

Cooperation interest in:	The Swedish part	The Finnish part	Northwest Russia	Europe
Yes, very much	30%	26%	12%	23%
Yes, to some extent	54%	45%	35%	42%
Not at all	16%	29%	53%	35%
Total, percent	100%	100%	100%	100%
Total number	283	275	255	260

## Concluding remarks

This study reveals that the municipalities have not been quite successful in engaging firms in the Bothnian Arc project. Less than one third of the firm managers were familiar with the project. Also confirmed is a rather distinct geographical pattern. The three municipalities closest to the Finnish border are more active and involved both on municipal and firm level, which primarily seems to depend on already existing traditions of collaboration with Finnish actors. In the municipalities further from the border, there is a more pending attitude. The interest among firm managers to participate in the Bothnian Arc project was however quite big by the time they answered the survey, and thus there seems to be a good opportunity to take further steps towards broader and deeper collaboration. Nevertheless, it seems important to find more successful ways to reach the managers in their everyday activities. More concrete projects adapted to the firm interests were also required by some of the respondents. If there is no engagement from the firms, it is quite hard to implement ideas and activities from the top. Firm involvement is also desirable to get information about which types of efforts that ought to be made and perhaps also to get financial support.

At present, the Swedish side of the Bothnian Arc should be regarded more as an identified functional arena for collaboration – partly with polycentric corridor characteristics – than an actual established polycentric region. There are still many political, economic, geographic, infrastructural, technical and cultural barriers to overcome before that can be fulfilled. Another problem that was mentioned by a couple of the municipal representatives is the differences in the Swedish and the Finnish way to handle administrative matters. According to the respondents, the Swedish model is sometimes seen as too slow and complicated from a Finnish perspective. Böhme (2002) concludes that Swedish actors, even in comparison to actors in other Nordic countries, are especially devoted to find consensus agreements. Furthermore, it seems as if Finnish actors, compared to Swedish actors, are more on the alert when it comes to ESDP, but also more used to collaboration across administrative boundaries and in new regional constellations (for instance various types of federations of municipalities). In Sweden, it appears as if participants more often think in traditional ways where boundaries separating municipalities, coun-

ties and nations are regarded as real barriers restricting collaboration. From this perspective it seems important to build on experiences from present collaboration such as The Municipal Square, Eastern Norrbotten and Haparanda–Tornio.

A couple of the municipality representatives also implied that it might be easier for bigger municipalities to participate in collaboration activities as they have more resources, human as well as economic. Furthermore, apprehensions have been expressed regarding the risk of smaller municipalities being run over by the bigger ones. One way to handle this problem could be to establish a more formal organisation, such as a municipal union, but it is clear that most of the respondents were quite pending to this option. Many of the municipal representatives stressed that the current organisation is quite enough for now. First and foremost they want to see what happens further on in the border municipalities Haparanda and Tornio, who seem to have gained the role as a kind of pilot project and a role model for deepened regional collaboration within the Bothnian Arc.

Regarding strengths and weaknesses with this vast geographical area, the opinions were quite varying among the municipality representatives. The Bothnian Arc will of course become a more powerful actor if all the municipalities are deeply involved. For instance, benefits may appear within scale-economics in production, marketing opportunities and chances of getting more financial resources from the EU through this cross-border collaboration. The point is that the two sub-regions have a lot in common regarding industries such as mining, forestry and tourist related activities. There are also substantial differences between the two countries, but these do not necessarily have to be negative to the development. On the contrary, the differences might work as advantages, provided that the problems regarding existing barriers can be handled efficiently.

However, the study of the firm perspective revealed that far from all firm managers think of the Bothnian Arc as the most natural functional regional context (Bothnian Arc 2004b). This may be interpreted that the concept of the Bothnian Arc has not yet reached the way people on the grass-root level think. This may also mean that the municipality representatives have to engage in a long-term commitment of building this regional arena of collaboration without expecting any immediate response and support from the firm managers.

Part of the objectives underlying the Bothnian Arc project has been to deepen the integration within the area, between the municipalities and across the national border separating Sweden and Finland, but also to increase the collaboration between public actors, private firms and the universities on both sides of the border. These ambitions can be seen as a first step towards building a new functional region within the area. One major obstacle, however, is the long distances within the Bothnian Arc area. Frequently the examples of polycentric regions in Europe are both more densely populated and have shorter distances between large urban centres compared to the relatively vast and outstretched Bothnian Arc. This can also be an explanation as to why the actors close to the border are generally more engaged and enthusiastic, whereas actors further away from the border are more sceptical towards the project. Other obstacles to overcome are differences in language, culture and legislation. At the same time it should be kept in mind that the studied project started as recently as 1998 and that these kinds of region building processes usually takes a lot of time. This also implies that politicians and other actors have to be patient and enduring. Although the process has been slow and there are many hindrances, there seems to be a common interest within the area in continuing the integration.

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#### NOTES

<sup>1</sup> The organisation of a Swedish municipality is based partly on politically elected commissioners who make the overall decisions on local matters, and partly on civil servants handling the assignments that are decided on the political level. Compared to many other countries, the Swedish municipalities have a rather strong autonomy in relation to the Swedish government that determines the comprehensive laws and regulations (Nyström 1999; Böhme 2002).

<sup>2</sup> Nevertheless, some of the firms responding the questionnaire answered they had less than five employees at the time of the investigation.

<sup>3</sup> The Haparanda railway is at present a single-track, non-electrified part of a railway link from Boden to Haparanda and connecting to the Finnish railway system through Tornio.

#### REFERENCES

- Aalbu H & U Wiberg (1997). How may institutional regionalization promote regional development? In Dellenbrant JÅ & U Wiberg (eds). *Euro-Arctic curtains*, 77–101. CERUM, Umeå.
- Aronsson P & B Johannisson (red) (2002). *Entreprenörskapets dynamik och regionala förankring*. 217 p. Växjö University Press, Växjö.
- Bager-Sjögren L & M Rosenberg (2004). Kartläggning av aktörer i det svenska innovationssystemet. *ITPS, Rapport A2004:020*. 74 p.
- Berggren C & G Brulin (2002). Klistriga kluster eller globala glidare? Den lokala dynamikens paradoxala betydelse i den globaliserade ekonomin. *NUTEK, Rapport B 2002:2*. 61 p.
- Böhme K (2002). Nordic echoes of European spatial planning: discursive integration in practice. *Nordregio report 2002:8*. 367 p.
- Bothnian Arc (2004a). Bothnian Arc. <<http://www.bothnianarc.net/slutrappporter/popularvers.pdf>>. 27.4.2004.
- Bothnian Arc (2004b). Bottenviksbygden – funktionellt urbant nätverk. <[http://www.bothnianarc.net/slutrappporter/urbant\\_sve.pdf](http://www.bothnianarc.net/slutrappporter/urbant_sve.pdf)>. 27.4.2004.
- Castells M (1996). *Nätverkssamhällets framväxt. Band 1*. 543 p. Blackwell Publishers, Oxford.
- Copus AK (2001) From core-periphery to polycentric development: concepts of spatial and aspatial peripherality. *European Planning Studies* 9: 4, 539–552.
- Davoudi S (2003). Polycentricity in European spatial planning: from an analytic tool to a normative agenda. *European Planning Studies* 11: 8, 979–999.
- Etzkowitz H (2002). The triple helix of university-industry-government. Implications for policy and evaluation. *SISTER, Working paper 2002:11*. 16 p.
- European Union (2004). ESDP. <<http://europa.eu.int/scadplus/leg/sv/lvb/g24401.htm>>. 1.9.2004.
- Florida F (2002). *The rise of the creative class – and how it's transforming work, leisure, community and everyday life*. 434 p. Basic Books, New York.
- Glesbygdverket (2003). Årsbok 2003. <<http://www.glesbygdverket.se/site/default.aspx?id=3761>>. 27.8.2004.
- Glesbygdverket (2004). Årsbok 2004. <<http://www.glesbygdverket.se/site/default.aspx?id=7751>>. 27.8.2004.
- Hettne B (1997). Europe in a world of regions. In Falk R & T Szentes (eds). *A new Europe in the changing global system*, 16–44. United Nations University Press, New York.

- Higano Y (2002). *The region in the new economy. An international perspective on regional dynamics in the 21st century*. 430 p. Ashgate, Hampshire.
- ITPS (2004). Effektutvärdering av de geografiska målprogrammen inom EG:s strukturfonder. *ITPS, Rapport A2004:009*. 136 p.
- Jussila H, LO Persson & U Wiberg (1993). *Shifts in systems at the top of Europe*. 181 p. FORA, Stockholm.
- Lähteenmäki-Smith K & LO Persson (eds) (2002). Re-structuring the state – regional impacts. *Nordregio report 2002:9*. 134 p.
- Långtidsutredningen 2003/04 (2004). Regional utveckling – utsikter till 2020. *SOU 2004:34*. 158 p.
- Lindfors S (2004). Gränsöverskridande näringslivs-samarbete – en jämförande studie av andra regioners erfarenheter av gränsöverskridande samarbeten: eventuella fördelar och svårigheter. Praktikrapport. <<http://www.northsweden.org/dokument/aktuella/gransoverskridandenaringslivs-samarbete.doc>>. 15.12.2004.
- Ljusberg M (2001). *Högre utbildning i gles- och landsbygd – om tillgänglighet och nya vägar till utbildning*. 54 p. Glesbygdsverket, Östersund.
- Ljusberg M (2002). *Kartläggning av lärcentra i Sverige*. 76 p. Glesbygdsverket, Östersund.
- Malmberg A (2002). Klusterdynamik och regional näringslivsutveckling – begreppsdiskussion och forskningsöversikt. *ITPS, Rapport A2002:008*. 35 p.
- Marshall A (1919). *Industry and trade*. 875 p. Macmillan, London.
- Meijers E & A Romein (2003). Realizing potential: building regional organizing capacity in polycentric urban regions. *European Urban and Regional Studies* 10: 2, 173–186.
- Nordgreen R (1995). Regionalt utvecklingsarbete i brytningstid. Transnationellt samarbete på regional nivå i de nordiska länderna. Norske regioner og internationalt engasjement for næringsutvikling. *NordREFO, Working paper 1995:1*.
- Norrbotniabanan (2004). Pressmeddelande: snabb start av planeringsarbetet för Norrbotniabanan. <<http://www.norrbotniabanan.nu/pdf/PM040406.pdf>>. 6.4.2004.
- Nyström J (1999). *Planeringens grunder. En översikt*. 227 p. Studentlitteratur AB, Lund.
- Olsson B & U Wiberg (red) (2003). *Universitetet och den regionala utmaningen*. 207 p. SISTER, Stockholm.
- Paasi A (1986). The institutionalization of regions: a theoretical framework for understanding the emergence of regions and the constitution of regional identity. *Fennia* 164: 1, 105–146.
- Pettersson Ö (2002). Socio-economic dynamics in sparse regional structures. *GERUM Kulturgeografi* 2002:2. 47 p.
- Pettersson Ö & P Westerberg (2003). Vägar för samverkan. Storumanföretagares inställning till planeringssamarbete över kommungränsen. *CERUM, Working Paper 64:2003*. 74 p.
- Porter M (1990). *The competitive advantage of nations*. 855 p. Macmillan, Basingstoke.
- Putnam RD (1996). *Den fungerande demokratin – medborgarandans rötter i Italien*. 286 p. SNS förlag, Stockholm.
- Rylander D (2004). Nätverkan och regional utveckling. Om gränsöverskridande samarbete i södra Östersjöregionen och nätverkstjänsternas roll i samhällsutvecklingen. *Meddelanden från Göteborgs universitets geografiska institutioner, Serie B* 106. 375 p.
- Sheppard E & TJ Barnes (eds) (2000). *A companion to economic geography*. 536 p. Blackwell, Oxford.
- Statistics Sweden (2004). Sveriges statistiska databaser. <<http://www.ssd.scb.se>>. 15.12.2004.
- Taylor PJ (1988). World-system analysis and regional geography. In Agnew J (ed) (1997). *Political geography: a reader*, 17–25. Arnold, London.
- Törnqvist G (1998). *Renässans för regioner*. 192 p. SNS, Stockholm.
- Westlund H (2004). Social capital, innovation policy and the emergence of the knowledge society. A comparison of Sweden, Japan and USA. *ITPS, Rapport A2004:017*. 110 p.
- Wiberg U (1995). Samarbete i Barentsregionen. *CERUM, Reprint No. 2*. 10 p.
- Wiberg U (1996). The North Calotte as an economic region. *CERUM, Reprint No. 13*. 43 p.
- Wiberg U (2002). Hållbarhet i glesa regionala strukturer – exemplet södra Norrlandskusten. *CERUM, Working paper 39:2002*. 51 p.

