Cross-border knowledge transfer and innovation in the European neighbourhood: Tourism cooperation at the Finnish-Russian border

Makkonen, T, Williams, A, Weidenfeld, A & Kaisto, V

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Cross-border knowledge transfer and innovation in the European neighbourhood: Tourism cooperation at the Finnish-Russian border

Abstract: Knowledge transfer and innovation cooperation between the EU and its neighbours has remained weakly developed. To promote this cooperation, the EU has set up initiatives for the European neighbourhood. The issue has, however, received very limited scholarly attention in the field of tourism. This research gap is addressed here via interview data collected from participants in tourism related EU-funded projects in the Finnish-Russian cross-border region. These underline the importance of EU-funding in facilitating knowledge transfer and innovation between Finland and Russia. While language issues, and differences in business culture and administrative/legislative systems between the two countries, constitute barriers for practical cross-border cooperation, it is cross-border differences in culture and technological capabilities that drive cross-border knowledge transfer and innovation in the cross-border region. The paper concludes with policy recommendations for promoting future cross-border cooperation in innovation and tourism.

Keywords: cross-border region; European neighbourhood; Finland; innovation; knowledge transfer; Russia; tourism

Highlights:
- Cross-border funding is of paramount importance for innovation related goals
- Language and legislative issues are barriers for practical cross-border cooperation
- Differences in culture and technology facilitate cross-border knowledge transfer

Introduction
The European Union (EU) has clear goals of becoming the world’s leading tourism destination via, for example, promoting sustainable tourism, developing innovation in the tourism sector and cross-border tourism initiatives. It has been recognised that cross-border tourism can potentially address issues of peripherality, and enable transnational synergies, leading to promotional- and profile-enhancing gains for the tourism sector of the EU as a whole (European Commission, 2010). Therefore, the EU has produced best practice guidance for tourism innovation (CSES, 2013) and has funded the development of sustainable transnational tourism products through several programmes and initiatives (European Commission, 2016a). At the same time, the EU has been committed to promoting sustainable socio-economic and socio-cultural development of non-EU regions in order to advance its cohesion and cooperation goals in relation to its neighbours (European Commission, 2012). This cross-border cooperation (CBC) has recently (2007–2013)
been funded through the “European Neighbourhood and Partnership Instrument” (ENPI) – subsequently replaced (2014–2020) by the “European Neighbourhood Instrument” (ENI) – including support for tourism innovation projects (European Commission, 2016b).

One of the EU’s most important borders is with Russia. Russian border regions have implemented programmes, with similar goals to those in the EU, to promote regional social and economic development, to be realised in part via the tourism sector (Saveliev, 2013). Additionally, Russia’s central government has taken a close interest in funding CBC programmes and projects in order to be seen to act as an equal partner to the EU. Thus, while Russian policies for border regions are not framed by structural and cohesion funding policies similar to those in the EU, there is mutual understanding that overcoming economic weaknesses in cross-border regions (CBRs) can harmonise the interests of Russia and the EU (Valuev, 2002). It also seems that the importance placed on CBC has not been affected by the current tense political climate between the EU and Russia (Fritsch et al., 2015). For example, CBC programmes have not been included in the contemporary sanctions/countersanctions list of either the EU or Russia.

The importance that the EU has attached to tourism-related CBC at its external borders is evident in around 17% of EU-financed CBC projects, in the programme period 2007–2013, being related to tourism according to the KEEP-database. Similarly, CBC in innovation has been deemed pivotal to the economic development of CBRs (Tripl, 2010; Makkonen & Rohde, 2016). It is surprising therefore that little academic attention has been given to the topic, except some case studies in the Hungary-Slovakia-Romania-Ukraine (Kosinski & Mára, 2013) and in the Finnish-Russian (Németh et al., 2014; Petrova & Kolesnikov, 2014) CBRs. However, these studies have mostly concentrated on describing or listing existing tourism-focused ENPI CBC projects, rather than analysing their significance for cross-border knowledge transfer and innovation. The same research lacuna applies to other borders besides the external borders of the EU: whereas the existing literature on cross-border tourism has generally concentrated on development, marketing and governance issues in cross-border destinations (Ioannides et al., 2006; Prokkola, 2010, 2011; Blasco et al., 2014; Stoffelen et al., 2017), the empirical literature on cross-border knowledge transfer and innovation within the tourism sector remains limited (Weidenfeld, 2013). This is a significant omission, given the current challenge of facilitating collaboration across the Finnish-Russian border (Heusala & Koistinen, 2016). Therefore, this study aims to provide a deeper understanding of the factors that facilitate or act as barriers to cross-border knowledge transfer and innovation in general, and in the context of EU external borders in particular. By means of interviewing 24 participants of
tourism related ENPI funded project at the Finnish-Russian CBR, the paper will identify the role of the Finnish-Russian ENPI CBC projects in facilitating cross-border knowledge transfer and innovation in tourism. Based on these analyses, policy recommendations are suggested in order to promote successful CBC.

**Literature review**

**Knowledge transfer, innovation and tourism**

Knowledge flows are an important element in the performance, competitiveness and innovativeness of tourism organisations (Shaw & Williams, 2009; Weidenfeld et al., 2010). These knowledge flows can basically be divided into two categories based on the actors’ stance on sharing knowledge; knowledge can flow either intentionally through (managed) “knowledge transfer” or unintentionally through “knowledge spillovers”. In this paper, we are interested in intentional knowledge sharing mechanisms potentially leading to cross-border tourism innovation and therefore mostly focus on the concept of knowledge transfer.

Knowledge transfer is closely linked to the concept of innovation. There are many different conceptual understandings of innovation, but it has been commonly defined as a new or an improved product or process that is successfully implemented in an organisation or introduced into the market (Lorenz, 2010). Innovations have been labelled according to their novelty value as being either radically new products, services or processes, or incremental (continuous) improvements to existing ones (Garcia & Calantone, 2002). A further distinction can be made between the development of innovations (new-to-the-world), and the diffusion or adaptation of innovations (new-to-the-country; new-to-the-region; new-to-the-firm) (Edquist et al., 2009). The innovativeness of CBC projects is commonly related to knowledge transfer characterised by innovation diffusion, whereby existing technologies, products, services and best practices are transmitted from one side of the border to the other (Liuhto, 2011; Knippschild & Vock, 2017). Therefore, even though there is no theoretical basis to exclude CBC innovations from being radical and new-to-the-world (Lundquist & Tripp, 2013), in reality – and particularly in the EU’s cross-border programmes – these commonly resemble the (diffusion of) best practices (Knippschild & Vock, 2017) associated more with new-to-the-country or new-to-the-region (incremental) improvements. Successful innovations and best practices do of course need to be fine-tuned to local conditions: what works in one regional setting might not work when transferred to and implemented in another (Tödtling & Tripl, 2005). Innovations (and innovation policies) do not maintain their shape intact as they move between places but change according their specific contexts (Peck & Theodore, 2015).
Similarly, innovations in the tourism sector are strongly linked to other sectors, i.e. tourism firms (and other tourism organisations) tend to adapt and implement innovations produced elsewhere (Weidenfeld et al., 2010; Makkonen & Hokkanen, 2013): linkages within the tourism sector are likely to result in incremental process innovations, whereas those between tourism and non-tourism sectors are more likely to create new knowledge and lead to (radical) product innovations (Weidenfeld, Forthcoming). However, there is still an element of co-production of the innovation even if only in the process of adjustment during implementation in the tourism sector. Nevertheless, radical new-to-the-world innovations produced purely, or even largely, within the tourism industry are rare (Mayer, 2009; Brooker & Joppe, 2014). Consequently, analyses of tourism innovation have mostly focussed on incremental and imitated improvements (Souto, 2015). For example, Hjalager (2015) has summarised an extensive list of innovations – many of which have been originally developed in other industries or did not specifically target tourism – that, when adapted within the sector, have consequently transformed the tourism industry.

**The role and impact of cross-border cooperation programmes in tourism**

As noted earlier, only a limited number of studies discuss tourism-related CBC projects at the European neighbourhood level, that is, the external borders of the EU. Furthermore, the relationships between intra-border regions to their neighbouring extra-(non-EU) border regions remain largely ignored, particularly in the context of knowledge transfer and innovation. Thus, while several cross-border tourism projects have been funded by the ENPI CBC programme and its predecessors, to the best of the authors’ knowledge there has been no actual analysis of their impacts on knowledge transfer and innovation. However, according to the existing evidence from EU-financed CBC programmes in its internal borders, tourism has become an integral part of the general strategies for promoting CBC. For example, Nilsson et al. (2010), Rajčáková and Švecová (2013) and Vaishar et al. (2013) have shown that the role of cross-border tourism as an important contributor to the regional economies (increasing local income and creating employment opportunities) is widely recognised. This has provided the basis for justifying funding and investments on cross-border tourism projects to support the social-cultural and economic development of CBRs.

However, in practice the EU’s funding programmes (such as INTERREG) have generally been considered more akin to additional financial methods to support cross-border networks between tourism firms and other related actors than as constituting ground-breaking new forms of CBC. This
has led to questioning of whether the EU’s funding programmes, perceived as top-down initiatives, can play a significant role in stimulating cross-border knowledge transfer and innovation. The onerous administrative burden attached to EU programmes, and the fact that they commonly offer only short-term funding, have acted as major constraints that reduce the motivation of organisations to apply for EU support in the first place, and as additional barriers to funded projects having a sustainable long-term impact. For example, Blatter (1997) and Gualini (2003) have commented that bureaucratic structures create obstacles for practical and innovative CBC, whereas Prokkola (2007; 2008) considers that the intensity of cross-border interactions in EU-funded tourism projects has been relatively low and, after the funding has ended, short-lived. Thus, the implementation of local cross-border tourism projects is no guarantee for positive destination-wide regional development (Stoffelen & Vanneste, 2017).

Notwithstanding these reservations concerning CBC across internal borders, such as the established cooperation between EU member states like Finland and Sweden (Prokkola, 2007; 2008), there is practically no empirical evidence on whether these notions also apply to the external EU borders, where the conditions for CBC are very different from those on the internal EU borders. Yet, EU-financed programmes at the external borders can be regarded as being potentially more important, since these provide good incentives for CBC (Studzieniecki et al., 2016) in a context where most actors are more likely to be in the early stages of learning how to cooperate across the border.

Borders as barriers and facilitators
Permeability of borders

State borders may act as barriers to human, economic, cultural and social exchanges and movements, even though, in the context of the EU, European integration has eroded some of the functions traditionally performed by borders between national states. Specifically, internal EU borders have changed from being separating boundaries into being (more) integrated CBRs: that is, they have become areas of cross-border exchange and interaction (Comelli et al., 2007). The greater bridging role of internal EU borders has highlighted the barrier functions of the external borders that have been reinforced by substantial socio-economic disparities across the external border of the EU. Consequently, flows or mobilities (goods, people, knowledge, etc.) across the internal borders of the EU are generally higher and less volatile than across the external ones (O’Dowd, 2002a).

Contemporary border studies approach borders through “bordering” dynamics (Brambilla, 2015). It is an ongoing process of construction, deconstruction and reconstruction of borders through, for
example, socio-political discourse, decision-making and practices. At times, the effects of a border can be reduced (de-bordering) or reinforced (re-bordering) (Durand & Perrin, 2017). CBC, for instance, can be considered de-bordering, and sanctions or reintroduction of border controls represent re-bordering. Recently, the role of borders has been reinforced even within some of the internal borders of the EU, due to the refugee challenge and its impact on the reintroduction of border controls.

In the context of knowledge transfer and innovation these bordering dynamics have an influence on the permeability of borders. High permeability of borders is considered to enhance knowledge transfer and innovation, whereas low permeability impairs these (Weidenfeld, 2013). Permeability of borders refers not only to the physical borderline and to the possibilities of crossing it, but to the type of the border. Martinez (1994) distinguishes between four types: 1) alienated (almost no cross-border interchange), 2) coexistent (slightly open borders allowing limited interaction), 3) interdependent (increased interaction and economic interdependence) and finally 4) integrated (essentially unrestricted, stable and permanent movement of people and goods, and functionally merged economies). The permeability of border is not fixed (Mol & Law, 2005): over time it can change from more to less integrated or vice versa.

Cross-border regional innovation systems

Weidenfeld (2013) introduced the concept of cross-border regional innovation systems CBRIS (Tripl, 2010; Lundquist & Trippl, 2013) to the tourism literature and has raised interesting issues about contemporary tourism related CBC. These include debates on the influence of cross-border similarities/differences – in terms of, for example, legislation, culture, habits, norms and technological capabilities – on cross-border knowledge transfer and innovation (Weidenfeld, 2013; Weidenfeld et al., 2016). A number of factors are seen to constitute barriers to CBC or to function as facilitators of cross-border knowledge transfer and innovation.

Firstly, technological capabilities and human capital are at the core of successful knowledge transfer mechanisms: without the ability of local tourism firms and organisations to acquire, assimilate, transform and exploit external knowledge – commonly termed “absorptive capacity” – international knowledge transfer will not result in local innovation or competitive advantage (Thomas & Wood, 2014; 2015). Absorptive capacity (embodied in the technological capabilities and human capital of regions/firms), or the lack thereof, can thus constitute a facilitating factor or a major barrier for cross-border knowledge transfer and innovation.
Secondly, social capital facilitates cooperation. As Paldam (2000) states, trust is an essential part of the concept of “social capital”, commonly defined as individuals’ ability to work voluntarily together; trust emerges from shared values and routines (Anheier & Kendall, 2002). As such, people, who trust each other, work together more easily, and the effects are cumulative because, by working together, they build trust. Therefore, trust influences the choice of innovation partners (Zach & Hill, 2017) and underpins the development of most forms of cooperation (Paldam, 2000).

In Russia, different from most Western counties, there is strong reliance on trust at the individual level because of lack of trust at the system level, that is, trust in institutions based on past experiences (Schrader, 2004).

Thirdly, borders may stimulate tourism innovations via the introduction of new products or services to the neighbouring border region, thereby increasing the appeal of the CBR to tourists (Weidenfeld, Forthcoming). Cross-border similarities facilitate this potential for knowledge transfer and (incremental) innovation. However, the greater the differences between neighbouring border regions, the greater the potential for learning and (radical) innovation (Williams & Shaw, 2011; Weidenfeld, 2013). These notions resonate with the concept of “related variety” (Content & Frenken, 2016), which in tourism refers to shared technological competences and similar educational backgrounds that can stimulate knowledge transfer between different economic sectors and, thus, enable re-composition of existing technologies (Weidenfeld, Forthcoming). The literature on related variety, in the context of CBRISs, stresses that too much similarity across the opposing sides of the border results in situations where there is relatively little potential for mutual learning. Contrarily, if the competencies are too different there are constrained possibilities for building synergies across the border (Trippl, 2010; Lundquist & Trippl, 2013; Makkonen & Rohde, 2016). Both situations reduce mutual interest in cross-border knowledge transfer. Therefore, some differences in competencies, culture, working methods, sectors, etc. act as an enriching and facilitating factor for CBC in the Finnish-Russian CBR, as in other CBRs.

Based on the previous discussion, it would seem that initially many of the EU’s external borders, such as the Finnish-Russian CBR, are at a disadvantage (technological gap; low permeability; low similarity) in terms of their prospects for cross-border innovations, but have definite potential in developing these (due to cross-border differences). Indeed, earlier studies have shown that, while the EU has gradually been integrating in terms of its internal science, technology and innovation cooperation (Scherngell & Lata, 2013; Makkonen & Mitze, 2016), the situation is quite different.
when it comes to collaboration with its neighbours (Autant-Bernard et al., 2017). An important
factor influencing this is access to EU funding; Makkonen and Mitze (2016), for example, have shown how the new member states of the EU have been able to boost rapidly their cross-border scientific collaboration with the established EU members after joining the EU, and have gained access to improved research funding. Contrarily, when it comes to knowledge transfer, a recent study by Autant-Bernard et al. (2017), for example, has shown that knowledge diffusion between the EU and its neighbours has remained weakly developed. This applies also for the situation between Finland and Russia, where “genuine innovation activity aiming at jointly creating new products and services is still in its infant stage”, and cooperation is dominated by rather unilateral flows of (high-tech) products and knowledge from Finland to Russia (Liuhto, 2011: p.164).

Study design: Case study region, data and methods
The dissolution of the Soviet Union and Finland’s accession to the EU have led Finnish decision-makers to endorse Finland’s image as the “bridge” between Russia and the EU. This image has been supported by an evident and measurable increase in cross-border tourism and volumes of cross-border cargo and passenger traffic (Stepanova, 2014). These increases have been, at least partially, facilitated by EU-funded CBC programmes (Fritsch & Eskelinen, 2011). As a result, tourism has become a significant sector for local economies in the Finnish-Russian CBR since the collapse of the Soviet Union. During the Soviet period, the Finnish-Russian border remained relatively closed and tourism was mainly constituted of organised groups travelling to large cities (Stepanova, 2014). The number of travellers crossing the border has gradually increased, peaking in 2013 with over 12.9 million, and then declining (due to the macro-political climate and the weakening of the Ruble) to around 9.1 million in 2017 (Figure 1). In Finland, Russian travellers form the largest group of foreign visitors in the whole country and are considered the most important target group for Finnish tourism marketing (Visit Finland, 2015). Similarly, Finnish tourists are among the most frequent incoming tourists in Russia as a whole and, of course, are the most numerous group in immediately neighbouring regions, such as the Republic of Karelia (Stepanova, 2014). The largest part of the Finnish and Russian travellers are day visitors that live relatively close to the border and who travel to near-by regions for shopping and leisure purposes (Visit Finland, 2016). There have been both public and private investments in border regions to serve the visitors and, in the Finnish-Russian border regions, tourism is considered a key industry in how the regional economy adjusts to structural changes (Pohjois-Karjalan Maakuntaliitto, 2010). Finnish-Russian ENPI CBC programme documents emphasise the need to develop tourism infrastructure, products and services, joint marketing, and the preconditions for tourism
entrepreneurship in the CBR. At the same time, the documents recognise innovations as a means to promote economic development in the programme areas (Karelia ENPI CBC, 2008; Kolarctic ENPI CBC, 2008; South-East Finland–Russia ENPI CBC, 2008).

**Figure 1.** Cross-border traffic at the land border crossing points between Finland and Russia; persons entering and exiting (Source: Finnish Border and Coast Guard Academy, 2018)

The indications of intensified cross-border interaction suggest that the EU-funded Finnish-Russian CBC programmes may also have been particularly successful in terms of learning and innovative outcomes. If this is the case, the experience of the case study region will provide valuable insights for other CBRs. Additionally, the choice of the case study area was motivated by the argument that the Finnish-Russian border area constitutes one of the most challenging external border areas of the EU in terms of CBC\(^3\). Therefore, and for practical reasons (language proficiency of the research group), this paper focusses on investigating the knowledge transfer and innovation aspects of tourism focused CBC projects funded by the ENPI CBC programme – financed jointly by the EU, Finland and Russia – within three Finnish-Russian programme areas: 1) Kolarctic, 2) Karelia and 3) South-East Finland-Russia (Figure 2). The Kolartic programme area also included Norrbotten from Sweden and Nordland, Troms and Finnmark from Norway, but here the focus is on Finnish-Russian CBC.

**Figure 2.** The study area: Finnish-Russian ENPI CBC programme core areas

Tourism (and culture heritage related) projects from the programme period 2007–2013 and the three Finnish-Russian programme areas (all funded by the ENPI CBC programme), identified from the Keep-database\(^1\), were screened for innovation related contents (innovations, product development, new services, etc.) in their descriptions. The principal interest was in projects, which: 1) specifically expressed, in their project description and/or among their achievements, some form of involvement in innovation and tourism; and 2) had ended quite recently (i.e. been funded up until the end of the programme period). The latter point facilitated the contacting of potential interviewees, but also allowed us to investigate whether CBC has continued after the end of the funding period. In this way, out of the 38 tourism (and culture heritage related) projects in the programme areas in 2007–2013, 19 innovation-related Finnish-Russian cross-border tourism projects were eventually
identified with the aim of interviewing a balanced number of project leaders and participants from both sides of the border. The total number of conducted interviews, after some refusals and non-responses, was 24 (12 Finnish and 12 Russian; 13 lead partners and 11 participants). In four cases, the interviewees had participated in more than one project. A list of the interviewees and projects can be found in Appendixes 1–2.

The semi-structured interview framework included a set of questions related to the importance of the ENPI funding instruments *vis-à-vis* knowledge transfer and innovation, and the main facilitators and barriers for cross-border innovation. The interviews also explored opinions and policy suggestions for improved CBC funding, knowledge transfer and cross-border innovation. The interviews (from 30 to 80 minutes) were conducted in the native language of the interviewees (Finnish or Russian) on site or via telephone between August and December 2016 and transcribed soon after. The excerpts from the interviews have been translated into English by the authors.

In line with Kiryushin et al. (2013) – who discussed CBC among green tech firms in the Danish-Swedish Øresund CBR – this paper adopted the concept of CBRIS as an analytical framework for interpreting data. It does so by focusing on technological capabilities on both sides of the border, the permeability of the border and particularly the similarities/differences across the border. To the best of the authors’ knowledge, this is the first time that the CBRIS concept has been applied as an empirical construct in the tourism literature. Thematic analysis was applied as an empirical tool to assess the textual data (transcribed interviews). Following Guest et al. (2011), the transcripts were read and re-read to gain a general interpretative understanding of the empirical material and coded into three main themes (and sub-themes): 1) The relevance of ENPI funding for knowledge transfer and innovation across the border (a. targets and achievements and b. innovation); 2) Facilitators of and barriers to knowledge transfer and innovation in CBRs (a. facilitators and b. barriers); and 3) Policy suggestions for developing the EU’s CBC initiatives.

**Empirical analysis**

*The role of ENPI funding in cross-border innovation*

*Project targets, achievements and ENPI funding*

Among the projects in the sample, only a few were concerned with building up new attractions and tourism information centres or improving the existing regional tourism infrastructure, while most projects were focussed on softer social and human capital related forms of cooperation. That is, most projects aimed to promote networking between local tourism actors (such as companies, local
administrative organisations, etc.) as well as at providing training sessions, benchmarking trips and marketing assistance, particularly e-marketing, and new (cross-border) product development. Several projects were also involved in guiding local administrative organisations in tourism-related strategic regional planning. The interviewees were fairly satisfied with the achievements of their projects. However, a common problem was the radical change in the operational environment, towards the end of the programme period, attributed to the weakening of the Ruble, Ukrainian crisis and the resultant shift in international relations and subsequent economic sanctions. This led to a drastic decline in cross-border traffic (Figure 1) in the programme areas and to difficulties in securing further/alternative funding and investments. Although the project participants had very little control over this, they generally considered that CBC is continuing in the CBR despite the macro-political changes. As such, the programme was viewed as making a useful contribution to the regional development of Finnish-Russian CBR.

It was unanimously agreed that the projects, targets and their achievements would not have been initialised, carried out and achieved without the funding provided by the programme. Some smaller parts might have been undertaken, but in a different way and over a longer time period, if it had been necessary to rely on national or regional budget funding or alternative funding sources:

“No organisation would be able to take these huge ‘quantum leaps’ without this type of external funding” (Finnish partner)

“Without this, we would not have been able to do anything! (Interviewer: Not even some parts of the project?) Well we could have done something, but again, perhaps one part out of ten” (Russian partner)

The key fact is that there seems to be no funding mechanism equivalent to the ENPI programme, which would allow both sides of the border to act as equal partners in the project. Local and national funding sources do not usually allow international actors to receive funding or, at least, not in an equivalent volume to that of domestic organisations, because their primary objectives are to support local/national development. Again, according to the interviewees, local and national funding sources generally award smaller grants. As such, it was considered that ENPI funding, which facilitated the inclusion of a wide range of expertise from both sides of the border, leads to better outcomes than projects carried out with local or national funding:
“At the moment, there are no other funding instruments that would support both Finnish and Russian partners alike” (Finnish partner)

“I think that funding from just one side, from Russia, would reduce the quality of our results and our possibilities. In this way, international cooperation is much more effective” (Russian partner)

Finally, most of the Russian interviewees noted that national funding in their country is more commonly directed at concrete infrastructure improvements rather than the softer human and social capital aspects of regional development, which lie in the heart of many EU-funded programmes. The focus on softer aspects of CBC was generally viewed as being very positive since, compared to infrastructure projects, developing human and social capital was considered a more sustainable way to develop long-lasting links and continued cooperation across the border. Consequently, most of the interviewed organisations had continued the cooperation, across the border at least informally after the projects officially ended. It was however repeatedly emphasised that it is difficult to find funding sources that would fit CBC, since national funding commonly promotes domestic over international cooperation. Therefore, the interviewees were anxiously waiting for the opening of the next Finnish-Russian CBC programme period financed by the EU, Finland and Russia (i.e. ENI).

**ENPI funding and innovation**

The interviewees considered that most innovations introduced or implemented would not have occurred without the ENPI funding. The Russian partners and firms in particular benefited from transferring, adapting, implementing best practices and adopting existing tourism products and services from Finland. For the Finns, the projects were not unanimously considered innovative, since generally Finnish firms have higher existing technological capabilities and, therefore, they had already been familiar with the methods, products and services introduced in the projects: most of the Finns considered the innovations to represent small incremental improvements. Therefore, some of the interviewees viewed their project outcome as innovation diffusion rather than actual innovating:

“I think that the ‘eureka moments’ occurred in the Russian side of the border. For Finnish firms, these things are already familiar” (Finnish partner)
“The innovations came from the study of experiences (from the Finnish side of the border) and from the adoption of these experiences to our territory” (Russian partner)

The interviewed Russian project partners considered that the projects resulted in several innovations being introduced in the Russian side of the programme area for the first time. As such, the innovations were new to the Russian side of the region. These innovations were mostly related to:

1) developments in information and communications technologies such as joint cross-border e-marketing (concrete examples being e.g. joint web-based marketing portals and e-ticketing services) and 2) the application of mobile technologies (concrete examples being e.g. guided tours, virtual tours and map applications), but also 3) to new cross-border tourism products and services (concrete examples being e.g. cross-border travel routes) and 4) ecologically efficient technologies in the waste management of tourist attractions/facilities (concrete examples being e.g. improved recycling and eco-friendly lavatories). A commonly cited process innovation was new cooperative working methods, that is, the way that the tourism entrepreneurs were encouraged to network and cooperate. Particularly on the Russian side – where collaboration between tourism firms was viewed to have been relatively uncommon – this was considered to constitute a novel approach.

The future potential of these innovations was perceived in various ways. Most innovations had clear future potential and were still available in the market at the time of interview, whereas some others required further development and funding to remain operational. However, many of the Finnish partners expressed some scepticism as to the success of their innovations in terms of sustainability. They were concerned with their innovations remaining up-to-date, competitive and viable, after the projects had ended:

“Once the project ended, the updates stopped… here in the Finnish side we have been a little disappointed at this, that the service is not kept up-to-date” (Finnish partner)

The interviewees also felt that – particularly, due to the contemporary macro-political and economic climate and its concrete impact on cross-border traffic (Figure 1) – it is extremely difficult to estimate the wider precise impacts on the local economy of a single, cross-border tourism project or innovation. However, they generally believed that their projects provide “platforms” for further developments and that the innovations have also made at least a small positive contribution to the overall growth of (cross-border) tourist flows in the region. Cumulatively, they consider that these have provided a substantial competitive advantage for the local tourism sector.
**Borders as opportunities and barriers to knowledge transfer**

**Facilitators of cross-border knowledge transfer**

The lead partners and project managers were highlighted as key figures in the projects. Their project management capability was acknowledged to be essential for good performance and in facilitating cross-border knowledge transfer. Existing cross-border contacts were commonly mentioned as an underlying condition for building trust, which was seen to be the most important factor for successful CBC and knowledge transfer. Having personal contacts was considered to be more important than cooperation between organisations, since trust between individuals is not affected by movement of these individuals between organisations. Furthermore, organisational cooperation was viewed as being more formal and less effective than that, which is based on personal contacts:

“Without personal contacts, well it is really hard to advance things solely on organisational level. There has to be personal contacts in the background first; it is easier…on an organisational level the cooperation is much more formal and involves bureaucracy” (Finnish partner)

“Organisations can say all sort of things, but if they do not have an individual who actually wants to do it properly, it will not get done properly” (Finnish partner)

Differences in culture, the sectors they were involved in, technological capabilities, educational backgrounds or competencies between the project participants seem to facilitate cross-border knowledge transfer. Similar competencies can ease the practical side of cross-border interactions. However, according to most of the interviewees, the differences in culture, technological capabilities and competencies (i.e. related variety) actually created learning opportunities and facilitated cross-border knowledge transfer in the projects:

“Differences? They are not a barrier they are an opportunity!” (Finnish partner)

The projects were particularly successful in unidirectional transmission of new service concepts, technologies and best practices from the Finnish side to the Russian one – due to the difference in technological capabilities across the border – whereas the Finnish partners benefitted from new knowledge on conducting business and dealing with administrative issues in Russia and
networking. Thus, while there seems to be a technological gap within the tourism sector across the border, the Russian actors have sufficient absorptive capacity to learn from their neighbours.

**Barriers to cross-border knowledge transfer**

The Russian partners were relatively satisfied overall with the cross-border knowledge transfer processes within their projects. In contrast, the Finnish partners were somewhat more sceptical concerning the success of cross-border knowledge transfer, and identified some key issues that they considered to constitute barriers. Language issues were considered to be among the main obstacles to cross-border knowledge transfer particularly by the Finnish interviewees. The Finns emphasised that it is important to have personnel employed in the project, preferably as managers, who have knowledge of the Russian language and culture since English was insufficient to communicate and since it facilitated cross-border knowledge transfer with the Russian project partners and other stakeholders such as entrepreneurs and regional administration.

The business cultures on the Finnish and Russian sides of the border were described as very different; Finnish firms tend to plan further ahead, whereas Russian firms are more spontaneous and are not accustomed to long-term planning. Another frequently mentioned difference was the Finnish way of doing things in advance, whereas Russians are more inclined, in the words of one Russian interviewee, to do “everything on the last day”. According to most of the interviewees, these issues can lead to problems of expectations and dissatisfaction and can potentially act as barrier to cross-border knowledge transfer. This highlights the importance of cultural sensitivity and understanding, of which the following excerpt is a representative example:

“Knowledge about and respect for other’s culture is the key issue here. You cannot operate properly with others if you do not understand how they are doing things and why” (Finnish partner)

The Russian legislative and administrative system was described by many interviewees, both Finns and Russians, as being more bureaucratic than the Finnish system. For example, there are significant differences between Finnish (more in line with the EU rules and the rules of the ENPI programme) and Russian accounting rules, which led to practical problems related to auditing. Again, the above-mentioned lack of funding opportunities and private investments for the tourism industry was seen to be a major obstacle for the promotion of cross-border tourism and knowledge transfer within the sector. In contrast, visa requirements and practical issues concerning the crossing
of the border were almost unanimously excluded from the list of barriers to cross-border knowledge transfer: only a few interviewees had experienced difficulties with the custom offices. Generally, the rules and practicalities of crossing the border constitute “business as usual” for most of the interviewees, who live and work in the border region, and, thus, permeability in terms of crossing of the physical border does not seem to be an issue. Therefore, the more problematic differences in the Finnish-Russian border seem to manifest in the form of institutional contrasts, such as in business culture and legislation.

**Developing the EU’s cross-border cooperation initiatives**

Overall, the interviewees were satisfied with the procedures and processes (application, support and reporting) related to the ENPI funding, but also had suggestions for how policy could help maximise the impact of future projects. Firstly, there were issues concerning the sustainability of the project results and innovation: there is a need to clarify who should maintain and update the innovations emanating from the projects. This applies in particular to the sustainability of the innovations after the life cycle of the projects had ended. The problem is amplified since there were only a handful of firms (which are at the heart of the commercialisation of innovations) that were involved as (equal) partners within the interviewed projects. As such, the interviewees wished for stronger local support, since some of the problems faced by the projects could be overcome with support from local decision-makers:

> “Often some innovation is developed in a project, but in order for it to continue, there should be support from the local level, for example, in terms of how it will be further financed”

(Russian partner)

Secondly, there were complaints that the planning phases of the programme had taken too long. This has been repeated in the case of the ENI programme, which could have started as early as 2014, but at the time of conducting the interviews (between August and December 2016) there was still considerable uncertainty concerning when the application phase would finally open. This undermines the sustainability of cross-border innovation cooperation, since for many organisations the lack of funding is a major constraint hindering their possibilities for participating in such collaboration. Relatedly, some of the interviewees hoped that in future the decisions concerning the programme priorities (or themes) would be made in a less top-down fashion than previously:
“Somebody has planned the programme and it includes certain priorities. And it does not always match with the most acute problems that we should be solving…They come from above” (Russian partner)

It was stressed that the emphasis on funding for CBC projects should be on social and human cooperation rather than expensive infrastructure projects: it was contended that the money spent on a single infrastructure project would be sufficient to fund several collaborative projects involving softer aspects of CBC, and that these would have a more durable impact on Finnish-Russian cross-border innovation cooperation. Many participants also stated that the procedures for evaluating project impacts should have a more flexible timeframe, since the outcomes of innovations only become fully evident in the long-run.

Discussion and conclusions

This paper set out to evaluate the role of EU-funded CBC programmes in terms of their potential facilitation of cross-border knowledge transfer and innovation. The empirical material was collected from semi-structured in-depth interviews with participants from the Finnish-Russian ENPI CBC programme, who were engaged in tourism related projects. Altogether 24 interviews (with 12 Finnish and 12 Russian partners) were conducted. The main results can be summarised as follows:

Firstly, since local and national funding sources commonly favour domestic over international cooperation, the role of cross-border focused ENPI funding was considered to be of paramount importance in achieving the innovation related goals of the projects: the inclusion of a wide range of expertise from both sides of the border leads to better-quality outcomes. The innovations were mostly diffused from the Finnish to the Russian side of the border, where they represented new-to-the-region improvements which had required adjustment to the local context. This is in line with the literature on best-practice approaches in CBC (Knippschild & Vock, 2017).

Secondly, the crossing of the physical border as one aspect of the permeability of the border (Weidenfeld, 2013), or the lack of absorptive capacity (Thomas & Wood, 2015), were not considered to hamper CBC. When it comes to barriers for cross-border knowledge transfer, the most commonly identified issues, in line with theoretical discussions of CBRSs (Lundquist & Trippl, 2013), consisted of differences in language competencies, business culture and legislative and administrative systems, and the lack of funding opportunities and private investments for tourism. In contrast, personal trust based relationships (Schrader, 2004) and – in line with the
literature on related variety (Content & Frenken, 2016) – cross-border differences in culture, the
sectors involved, technological capabilities, educational backgrounds and competencies, were
considered the most important factors facilitating cross-border knowledge transfer. As indicated by
the CBRIS literature, the actors involved in CBC projects need to be similar enough to be able to
cooperate across border, but not too similar in their professional expertise and behaviour, since this
would constrain learning opportunities (Lundquist & Trippl, 2013). This also applied in the case of
the Finnish-Russian CBR: the dissimilarities between neighbouring border regional actors create
practical barriers for successful CBC, but the differences – particularly technological and cultural –
between the actors were actually the very essence that drives the cooperation for cross-border
knowledge transfer and innovation across the Finnish-Russian border. Therefore, the CBRIS
framework, and the related discussion on related variety, provided a useful analytical framework for
investigating facilitating and hindering factors of CBC within the tourism sector.

Thirdly, the results point to the following practical policy suggestions for developing the EU’s CBC
initiatives and enhancing cross-border knowledge transfer and innovation:

- The specific arrangements for the sustainability of the project results and innovation should
  be agreed upon at the start of the project
- Stronger local support from decision-makers is needed to ensure the sustainability of the
  innovations at the end of the project life-cycle
- To promote innovation, funding should prioritise softer aspects of CBC, such as improving
  social interactions between people from different cultures (see also Weidenfeld et al., 2016),
  rather than infrastructure projects
- The impact evaluation of the projects should be (more) flexible and include the (potential)
  long-term benefits of innovation, such as sustainable impact outcomes, and long-term
  economic implications.

The suggestions made by the interviewees clearly reflect wider concerns about the feasibility of
EU-funded project-based CBC. This poses the question of whether a (re-)turn to a less project-
driven bilaterally-governed cooperation – based on local needs rather than on EU policies – could
be a more viable future approach, as some scholars and practitioners in the Finnish-Russian border
region have suggested (Scott, 2013). Evaluation reports of the Finnish-Russian ENPI CBC
programmes recognise that projects implemented at the Finnish-Russian border face similar
problems to those reported at the EU’s internal borders (Kahila et al., 2016; Oxford Research, 2016;
TK-Eval, 2016). The ENPI -funded tourism projects had encountered some of these obstacles, namely short-lived CBC periods and bureaucracy, but not the problem of low interest in participating in CBC, and the consequent low impact of CBC. On the contrary, unlike the experiences of cross-border tourism projects in internal EU border regions (Prokkola, 2007; 2008), the interviewees generally considered that Finnish-Russian ENPI funded tourism projects were impactful. Therefore, the partners had either continued this cooperation or were actively seeking further collaboration: despite the current political climate there is, as stated by an interviewed Russian partner, “a strong will to collaborate on both sides of the border”.

Finally, we acknowledge that the EU’s external border regions are heterogenous, having diverging characteristics and development patterns (Topaloglou et al., 2005; Feliu et al., 2013) and, therefore, adapting practices from one (border) region to another is not problem free (Tödtling & Trippl, 2005). However, despite differences between border regions, the EU’s external border regions do also share common features, for example, in terms of their (poor) economic performance and (weak) knowledge transfer links (Petrakos & Topaloglou, 2008; Autant-Bernard et al., 2017). Therefore, even if it is not possible to generalise the research results gained in one external border region to all the others, the experiences and lessons learnt in the Finnish-Russian CBR can be reflected upon and provide insights for understanding the relationships between other border regions in the EU external border context. However, the identified incentives to collaborate in cross-border knowledge transfer and innovation, compared to the barriers encountered, require further studies, to improve our understanding of the optimal conditions to encourage cross-border innovations in general and across the internal and external EU borders in particular.

Notes

1) The Keep -database ([http://www.keep.eu/keep/](http://www.keep.eu/keep/)) is a source for information on projects and partners of CBC and territorial cooperation programmes such as INTERREG and ENPI. The database is maintained by the INTERACT programme ([http://www.interact-eu.net/](http://www.interact-eu.net/)) and co-financed by the European Regional Development Fund.

2) Consisting of: Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestine, Syria, Tunisia and Ukraine. Since Russia desires to act as an equal partner to the EU, it takes part in CBC activities under the European Neighbourhood Policy, but as such is not a part of it (European Commission, 2016c).

3) Socio-economic disparities between the EU and non-EU countries have created highly asymmetric borders rendering CBC in the external borders of the EU more challenging than along the internal ones (O’Dowd, 2002b): the cross-border disparity (in terms of GDP per capita) between Finland and Russia is wider than in
any other border region along the East/West divide in Europe (Alanen & Eskelinen, 2000; Eskelinen & Kotilainen, 2005).

4) The first calls for proposals of the new ENI programme period (2014–2020) in the three Finnish-Russian programme areas were subsequently opened on January 2017.

References


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### Appendix 1: List of interviewed organisations

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>Central Karelia Development Company</td>
<td>FIN</td>
<td>Lead</td>
</tr>
<tr>
<td>Centre for Economic Development, Transport and the Environment</td>
<td>FIN</td>
<td>Partner</td>
</tr>
<tr>
<td>Centre for Problems of the North, Arctic and Cross-border Cooperation</td>
<td>RUS</td>
<td>Lead</td>
</tr>
<tr>
<td>City of Joensuu</td>
<td>FIN</td>
<td>Lead</td>
</tr>
<tr>
<td>City of Kostomuksha</td>
<td>RUS</td>
<td>Partner</td>
</tr>
<tr>
<td>Juminkeko Foundation</td>
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<td>Lead</td>
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<td>Kainuu Vocational College</td>
<td>FIN</td>
<td>Partner</td>
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<td>Kajaani University of Applied Sciences</td>
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<td>Lead</td>
</tr>
<tr>
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<td>Partner</td>
</tr>
<tr>
<td>Kandalaksha Town</td>
<td>RUS</td>
<td>Partner</td>
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<tr>
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<td>Karelian Educational Development Fund</td>
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<tr>
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</tr>
<tr>
<td>Karelian Research Centre of the Russian Academy of Sciences</td>
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<td>Lead</td>
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<tr>
<td>Metsähallitus (Finnish Forest and Parks Service)</td>
<td>FIN</td>
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<td>State National Theatre of the Republic of Karelia</td>
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</tr>
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<td>Suomussalmi Municipality</td>
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<td>University of Oulu</td>
<td>FIN</td>
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## Appendix 2: List of projects

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<td>Matka.ru</td>
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<td>FIN</td>
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<td>WHITE ROAD</td>
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</tbody>
</table>
Teemu Makkonen is a Research Fellow at the Institute for Advanced Social Research, University of Tampere, Finland. He is also an Assistant Professor (on a leave of absence) at the Department of Business and Economics, University of Southern Denmark. His main research interests include border regions, economic geography and innovation.

Allan M. Williams is a Professor and the Chair in Tourism and Mobility Studies at the School of Hospitality and Tourism Management, University of Surrey, UK. He is also an Auxiliary Professor at the University of Canterbury, New Zealand. His central research interests are the relationships between economic development and mobility, tourism, innovation and risk.

Adi Weidenfeld is a Senior Lecturer in Tourism Management at the Business School, Coventry University, UK and a Visiting Researcher at Hanken School of Economics in Vaasa, Finland. His main research interests include cross-border regional innovation systems, visitor attraction management, tourism development planning and policies, tourism clusters, knowledge transfer and smart specialisation.

Virpi Kaisto is a Junior Researcher at the Karelian Institute, University of Eastern Finland. Her main research interests include cross-border cooperation, border cities and the anthropology of border.
Teemu Makkonen

Allan M. Williams

Adi Weidenfeld

Virpi Kaisto