

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

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22

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

33

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

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37

1 **Highlights:**

- 2 · Cross-border funding is of paramount importance for innovation related goals
 - 3 · Language and legislative issues are barriers for practical cross-border cooperation
 - 4 · Differences in culture and technology facilitate cross-border knowledge transfer
- 5

6 **Introduction**

7 The European Union (EU) has clear goals of becoming the world's leading tourism destination via,
8 for example, promoting sustainable tourism, developing innovation in the tourism sector and cross-
9 border tourism initiatives. It has been recognised that cross-border tourism can potentially address
10 issues of peripherality, and enable transnational synergies, leading to promotional- and profile-
11 enhancing gains for the tourism sector of the EU as a whole (European Commission, 2010).
12 Therefore, the EU has produced best practice guidance for tourism innovation (CSES, 2013) and has
13 funded the development of sustainable transnational tourism products through several programmes
14 and initiatives (European Commission, 2016a). At the same time, the EU has been committed to
15 promoting sustainable socio-economic and socio-cultural development of non-EU regions in order to
16 advance its cohesion and cooperation goals in relation to its neighbours (European Commission,
17 2012). This cross-border cooperation (CBC) has recently (2007–2013) been funded through the
18 “European Neighbourhood and Partnership Instrument” (ENPI) – subsequently replaced (2014–
19 2020) by the “European Neighbourhood Instrument” (ENI) – including support for tourism
20 innovation projects (European Commission, 2016b).

21

22 One of the EU's most important borders is with Russia. Russian border regions have implemented
23 programmes, with similar goals to those in the EU, to promote regional social and economic
24 development, to be realised in part via the tourism sector (Saveliev, 2013). Additionally, Russia's
25 central government has taken a close interest in funding CBC programmes and projects in order to be
26 seen to act as an equal partner to the EU. Thus, while Russian policies for border regions are not
27 framed by structural and cohesion funding policies similar to those in the EU, there is mutual
28 understanding that overcoming economic weaknesses in cross-border regions (CBRs) can harmonise
29 the interests of Russia and the EU (Valuev, 2002). It also seems that the importance placed on CBC
30 has not been affected by the current tense political climate between the EU and Russia (Fritsch et al.,
31 2015). For example, CBC programmes have not been included in the contemporary
32 sanctions/countersanctions list of either the EU or Russia.

1
2 The importance that the EU has attached to tourism-related CBC at its external borders is evident in
3 around 17% of EU-financed CBC projects, in the programme period 2007–2013, being related to
4 tourism according to the KEEP -database¹. Similarly, CBC in innovation has been deemed pivotal to
5 the economic development of CBRs (Tripl, 2010; Makkonen & Rohde, 2016). It is surprising
6 therefore that little academic attention has been given to the topic, except some case studies in the
7 Hungary-Slovakia-Romania-Ukraine (Kosinszki & Măran, 2013) and in the Finnish-Russian
8 (Németh et al., 2014; Petrova & Kolesnikov, 2014) CBRs. However, these studies have mostly
9 concentrated on describing or listing existing tourism-focused ENPI CBC projects, rather than
10 analysing their significance for cross-border knowledge transfer and innovation. The same research
11 lacuna applies to other borders besides the external borders of the EU: whereas the existing literature
12 on cross-border tourism has generally concentrated on development, marketing and governance
13 issues in cross-border destinations (Ioannides et al., 2006; Prokkola, 2010, 2011; Blasco et al., 2014;
14 Stoffelen et al., 2017), the empirical literature on cross-border knowledge transfer and innovation
15 within the tourism sector remains limited (Weidenfeld, 2013). This is a significant omission, given
16 the current challenge of facilitating collaboration across the Finnish-Russian border (Heusala &
17 Koistinen, 2016). Therefore, this study aims to provide a deeper understanding of the factors that
18 facilitate or act as barriers to cross-border knowledge transfer and innovation in general, and in the
19 context of EU external borders in particular. By means of interviewing 24 participants of tourism
20 related ENPI funded project at the Finnish-Russian CBR, the paper will identify the role of the
21 Finnish-Russian ENPI CBC projects in facilitating cross-border knowledge transfer and innovation
22 in tourism. Based on these analyses, policy recommendations are suggested in order to promote
23 successful CBC.

24

25 **Literature review**

26 ***Knowledge transfer, innovation and tourism***

27 Knowledge flows are an important element in the performance, competitiveness and innovativeness
28 of tourism organisations (Shaw & Williams, 2009; Weidenfeld et al., 2010). These knowledge flows
29 can basically be divided into two categories based on the actors' stance on sharing knowledge;
30 knowledge can flow either intentionally through (managed) "knowledge transfer" or unintentionally
31 through "knowledge spillovers". In this paper, we are interested in intentional knowledge sharing

1 mechanisms potentially leading to cross-border tourism innovation and therefore mostly focus on the
2 concept of knowledge transfer.

3
4 Knowledge transfer is closely linked to the concept of innovation. There are many different
5 conceptual understandings of innovation, but it has been commonly defined as a new or an improved
6 product or process that is successfully implemented in an organisation or introduced into the market
7 (Lorenz, 2010). Innovations have been labelled according to their novelty value as being either
8 radically new products, services or processes, or incremental (continuous) improvements to existing
9 ones (Garcia & Calantone, 2002). A further distinction can be made between the development of
10 innovations (new-to-the-world), and the diffusion or adaptation of innovations (new-to-the-country;
11 new-to-the-region; new-to-the-firm) (Edquist et al., 2009). The innovativeness of CBC projects is
12 commonly related to knowledge transfer characterised by innovation diffusion, whereby existing
13 technologies, products, services and best practices are transmitted from one side of the border to the
14 other (Liuhto, 2011; Knippschild & Vock, 2017). Therefore, even though there is no theoretical basis
15 to exclude CBC innovations from being radical and new-to-the-world (Lundquist & Tripp, 2013), in
16 reality – and particularly in the EU’s cross-border programmes – these commonly resemble the
17 (diffusion of) best practices (Knippschild & Vock, 2017) associated more with new-to-the-country or
18 new-to-the-region (incremental) improvements. Successful innovations and best practices do of
19 course need to be fine-tuned to local conditions: what works in one regional setting might not work
20 when transferred to and implemented in another (Tödting & Tripp, 2005). Innovations (and
21 innovation policies) do not maintain their shape intact as they move between places but change
22 according their specific contexts (Peck & Theodore, 2015).

23
24 Similarly, innovations in the tourism sector are strongly linked to other sectors, i.e. tourism firms (and
25 other tourism organisations) tend to adapt and implement innovations produced elsewhere
26 (Weidenfeld et al., 2010; Makkonen & Hokkanen, 2013): linkages within the tourism sector are likely
27 to result in incremental process innovations, whereas those between tourism and non-tourism sectors
28 are more likely to create new knowledge and lead to (radical) product innovations (Weidenfeld,
29 Forthcoming). However, there is still an element of co-production of the innovation even if only in
30 the process of adjustment during implementation in the tourism sector. Nevertheless, radical new-to-
31 the-world innovations produced purely, or even largely, within the tourism industry are rare (Mayer,
32 2009; Brooker & Joppe, 2014). Consequently, analyses of tourism innovation have mostly focussed

1 on incremental and imitated improvements (Souto, 2015). For example, Hjalager (2015) has
2 summarised an extensive list of innovations – many of which have been originally developed in other
3 industries or did not specifically target tourism – that, when adapted within the sector, have
4 consequently transformed the tourism industry.

5
6 ***The role and impact of cross-border cooperation programmes in tourism***

7 As noted earlier, only a limited number of studies discuss tourism-related CBC projects at the
8 European neighbourhood level², that is, the external borders of the EU. Furthermore, the relationships
9 between intra-border regions to their neighbouring extra-(non-EU) border regions remain largely
10 ignored, particularly in the context of knowledge transfer and innovation. Thus, while several cross-
11 border tourism projects have been funded by the ENPI CBC programme and its predecessors, to the
12 best of the authors' knowledge there has been no actual analysis of their impacts on knowledge
13 transfer and innovation. However, according to the existing evidence from EU-financed CBC
14 programmes in its internal borders, tourism has become an integral part of the general strategies for
15 promoting CBC. For example, Nilsson et al. (2010), Rajčáková and Švecová (2013) and Vaishar et
16 al. (2013) have shown that the role of cross-border tourism as an important contributor to the regional
17 economies (increasing local income and creating employment opportunities) is widely recognised.
18 This has provided the basis for justifying funding and investments on cross-border tourism projects
19 to support the social-cultural and economic development of CBRs.

20
21 However, in practice the EU's funding programmes (such as INTERREG) have generally been
22 considered more akin to additional financial methods to support cross-border networks between
23 tourism firms and other related actors than as constituting ground-breaking new forms of CBC. This
24 has led to questioning of whether the EU's funding programmes, perceived as top-down initiatives,
25 can play a significant role in stimulating cross-border knowledge transfer and innovation. The
26 onerous administrative burden attached to EU programmes, and the fact that they commonly offer
27 only short-term funding, have acted as major constraints that reduce the motivation of organisations
28 to apply for EU support in the first place, and as additional barriers to funded projects having a
29 sustainable long-term impact. For example, Blatter (1997) and Gualini (2003) have commented that
30 bureaucratic structures create obstacles for practical and innovative CBC, whereas Prokkola (2007;
31 2008) considers that the intensity of cross-border interactions in EU-funded tourism projects has been
32 relatively low and, after the funding has ended, short-lived. Thus, the implementation of local cross-

1 border tourism projects is no guarantee for positive destination-wide regional development (Stoffelen
2 & Vanneste, 2017).

3
4 Notwithstanding these reservations concerning CBC across internal borders, such as the established
5 cooperation between EU member states like Finland and Sweden (Prokkola, 2007; 2008), there is
6 practically no empirical evidence on whether these notions also apply to the external EU borders,
7 where the conditions for CBC are very different from those on the internal EU borders. Yet, EU-
8 financed programmes at the external borders can be regarded as being potentially more important,
9 since these provide good incentives for CBC (Studzieniecki et al., 2016) in a context where most
10 actors are more likely to be in the early stages of learning how to cooperate across the border.

11

12 ***Borders as barriers and facilitators***

13 *Permeability of borders*

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

23

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

31

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

11

12 *Cross-border regional innovation systems*

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

20

21 Firstly, technological capabilities and human capital are at the core of successful knowledge transfer
22 mechanisms: without the ability of local tourism firms and organisations to acquire, assimilate,
23 transform and exploit external knowledge – commonly termed “absorptive capacity” – international
24 knowledge transfer will not result in local innovation or competitive advantage (Thomas & Wood,
25 2014; 2015). Absorptive capacity (embodied in the technological capabilities and human capital of
26 regions/firms), or the lack thereof, can thus constitute a facilitating factor or a major barrier for cross-
27 border knowledge transfer and innovation.

28

29 Secondly, social capital facilitates cooperation. As Paldam (2000) states, trust is an essential part of
30 the concept of “social capital”, commonly defined as individuals’ ability to work voluntarily together;
31 trust emerges from shared values and routines (Anheier & Kendall, 2002). As such, people, who trust
32 each other, work together more easily, and the effects are cumulative because, by working together,

1 they build trust. Therefore, trust influences the choice of innovation partners (Zach & Hill, 2017) and
2 underpins the development of most forms of cooperation (Paldam, 2000). In Russia, different from
3 most Western countries, there is strong reliance on trust at the individual level because of lack of trust
4 at the system level, that is, trust in institutions based on past experiences (Schrader, 2004).

5
6 Thirdly, borders may stimulate tourism innovations via the introduction of new products or services
7 to the neighbouring border region, thereby increasing the appeal of the CBR to tourists (Weidenfeld,
8 Forthcoming). Cross-border similarities facilitate this potential for knowledge transfer and
9 (incremental) innovation. However, the greater the differences between neighbouring border regions,
10 the greater the potential for learning and (radical) innovation (Williams & Shaw, 2011; Weidenfeld,
11 2013). These notions resonate with the concept of “related variety” (Content & Frenken, 2016), which
12 in tourism refers to shared technological competences and similar educational backgrounds that can
13 stimulate knowledge transfer between different economic sectors and, thus, enable re-composition of
14 existing technologies (Weidenfeld, Forthcoming). The literature on related variety, in the context of
15 CBRISs, stresses that too much similarity across the opposing sides of the border results in situations
16 where there is relatively little potential for mutual learning. Contrarily, if the competencies are too
17 different there are constrained possibilities for building synergies across the border (Tripl, 2010;
18 Lundquist & Tripl, 2013; Makkonen & Rohde, 2016). Both situations reduce mutual interest in
19 cross-border knowledge transfer. Therefore, some differences in competencies, culture, working
20 methods, sectors, etc. act as an enriching and facilitating factor for CBC in the Finnish-Russian CBR,
21 as in other CBRs.

22
23 Based on the previous discussion, it would seem that initially many of the EU’s external borders, such
24 as the Finnish-Russian CBR, are at a disadvantage (technological gap; low permeability; low
25 similarity) in terms of their prospects for cross-border innovations, but have definite potential in
26 developing these (due to cross-border differences). Indeed, earlier studies have shown that, while the
27 EU has gradually been integrating in terms of its internal science, technology and innovation
28 cooperation (Scherngell & Lata, 2013; Makkonen & Mitze, 2016), the situation is quite different
29 when it comes to collaboration with its neighbours (Autant-Bernard et al., 2017). An important factor
30 influencing this is access to EU funding; Makkonen and Mitze (2016), for example, have shown how
31 the new member states of the EU have been able to boost rapidly their cross-border scientific
32 collaboration with the established EU members after joining the EU, and have gained access to

1 improved research funding. Contrarily, when it comes to knowledge transfer, a recent study by
2 Autant-Bernard et al. (2017), for example, has shown that knowledge diffusion between the EU and
3 its neighbours has remained weakly developed. This applies also for the situation between Finland
4 and Russia, where “genuine innovation activity aiming at jointly creating new products and services
5 is still in its infant stage”, and cooperation is dominated by rather unilateral flows of (high-tech)
6 products and knowledge from Finland to Russia (Liuhto, 2011: p.164).

7 8 **Study design: Case study region, data and methods**

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

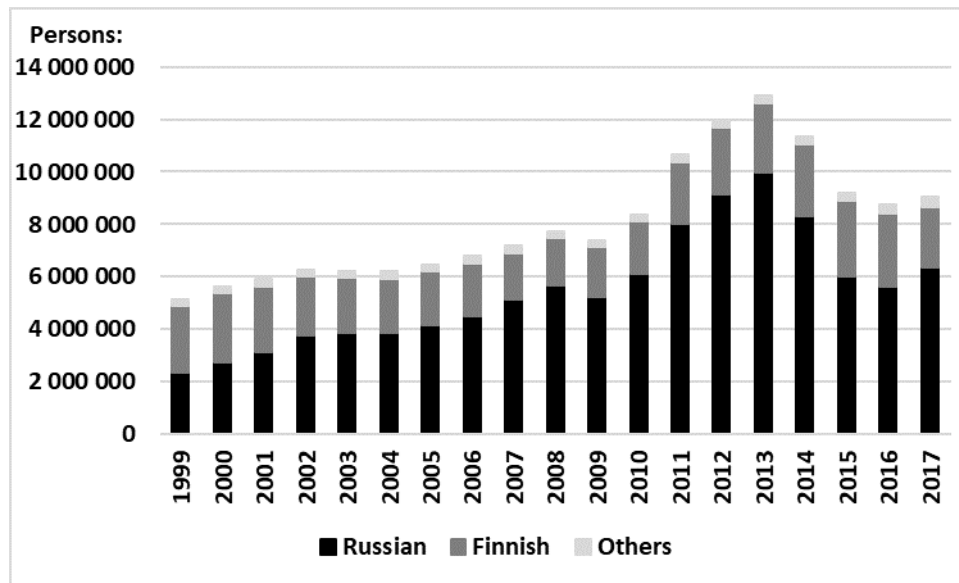


Figure 1. Cross-border traffic at the land border crossing points between Finland and Russia; persons entering and exiting (Source: Finnish Border and Coast Guard Academy, 2018)

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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 CBC³. 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 Kolarctic programme area also included Norrbotten from Sweden and Nordland, Troms and Finnmark from Norway, but here the focus is on Finnish-Russian CBC.

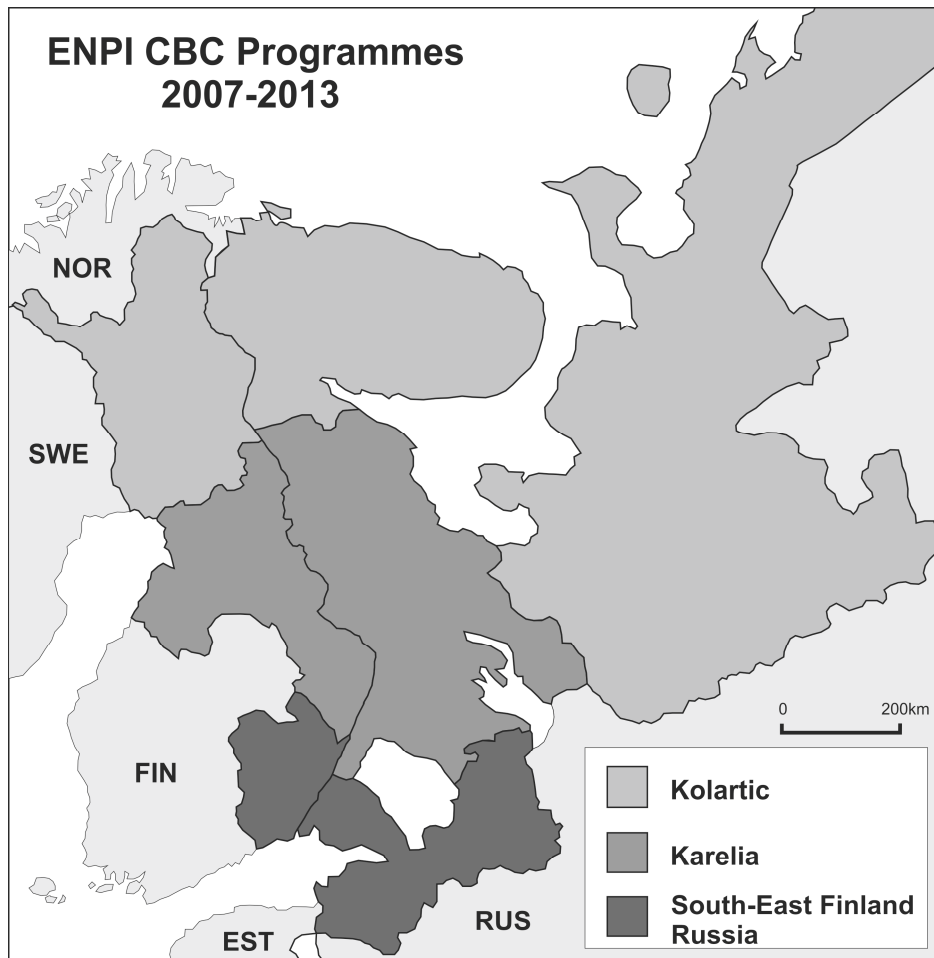


Figure 2. The study area: Finnish-Russian ENPI CBC programme core areas

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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 -database¹, 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

1 Finnish and 12 Russian; 13 lead partners and 11 participants). In four cases, the interviewees had
2 participated in more than one project. A list of the interviewees and projects can be found in
3 Appendixes 1–2.

4

5 The semi-structured interview framework included a set of questions related to the importance of the
6 ENPI funding instruments *vis-à-vis* knowledge transfer and innovation, and the main facilitators and
7 barriers for cross-border innovation. The interviews also explored opinions and policy suggestions
8 for improved CBC funding, knowledge transfer and cross-border innovation. The interviews (from
9 30 to 80 minutes) were conducted in the native language of the interviewees (Finnish or Russian) on
10 site or via telephone between August and December 2016 and transcribed soon after. The excerpts
11 from the interviews have been translated into English by the authors.

12

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

25

26 **Empirical analysis**

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

28 *Project targets, achievements and ENPI funding*

29 Among the projects in the sample, only a few were concerned with building up new attractions and
30 tourism information centres or improving the existing regional tourism infrastructure, while most
31 projects were focussed on softer social and human capital related forms of cooperation. That is, most
32 projects aimed to promote networking between local tourism actors (such as companies, local

1 administrative organisations, etc.) as well as at providing training sessions, benchmarking trips and
2 marketing assistance, particularly e-marketing, and new (cross-border) product development. Several
3 projects were also involved in guiding local administrative organisations in tourism-related strategic
4 regional planning. The interviewees were fairly satisfied with the achievements of their projects.
5 However, a common problem was the radical change in the operational environment, towards the end
6 of the programme period, attributed to the weakening of the Ruble, Ukrainian crisis and the resultant
7 shift in international relations and subsequent economic sanctions. This led to a drastic decline in
8 cross-border traffic (Figure 1) in the programme areas and to difficulties in securing
9 further/alternative funding and investments. Although the project participants had very little control
10 over this, they generally considered that CBC is continuing in the CBR despite the macro-political
11 changes. As such, the programme was viewed as making a useful contribution to the regional
12 development of Finnish-Russian CBR.

13

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

18

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

21

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

25

26 The key fact is that there seems to be no funding mechanism equivalent to the ENPI programme,
27 which would allow both sides of the border to act as equal partners in the project. Local and national
28 funding sources do not usually allow international actors to receive funding or, at least, not in an
29 equivalent volume to that of domestic organisations, because their primary objectives are to support
30 local/national development. Again, according to the interviewees, local and national funding sources
31 generally award smaller grants. As such, it was considered that ENPI funding, which facilitated the

1 inclusion of a wide range of expertise from both sides of the border, leads to better outcomes than
2 projects carried out with local or national funding:

3
4 “At the moment, there are no other funding instruments that would support both Finnish and
5 Russian partners alike” (Finnish partner)

6
7 “I think that funding from just one side, from Russia, would reduce the quality of our results
8 and our possibilities. In this way, international cooperation is much more effective” (Russian
9 partner)

10
11 Finally, most of the Russian interviewees noted that national funding in their country is more
12 commonly directed at concrete infrastructure improvements rather than the softer human and social
13 capital aspects of regional development, which lie in the heart of many EU-funded programmes. The
14 focus on softer aspects of CBC was generally viewed as being very positive since, compared to
15 infrastructure projects, developing human and social capital was considered a more sustainable way
16 to develop long-lasting links and continued cooperation across the border. Consequently, most of the
17 interviewed organisations had continued the cooperation, across the border at least informally after
18 the projects officially ended. It was however repeatedly emphasised that it is difficult to find funding
19 sources that would fit CBC, since national funding commonly promotes domestic over international
20 cooperation. Therefore, the interviewees were anxiously waiting for the opening of the next Finnish-
21 Russian CBC programme period financed by the EU, Finland and Russia (i.e. ENI)⁴.

22
23 *ENPI funding and innovation*

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

32

1 “I think that the ‘eureka moments’ occurred in the Russian side of the border. For Finnish firms,
2 these things are already familiar” (Finnish partner)

3
4 “The innovations came from the study of experiences (*from the Finnish side of the border*) and
5 from the adoption of these experiences to our territory” (Russian partner)

6
7 The interviewed Russian project partners considered that the projects resulted in several innovations
8 being introduced in the Russian side of the programme area for the first time. As such, the innovations
9 were new to the Russian side of the region. These innovations were mostly related to: 1) developments
10 in information and communications technologies such as joint cross-border e-marketing (concrete
11 examples being e.g. joint web-based marketing portals and e-ticketing services) and 2) the application
12 of mobile technologies (concrete examples being e.g. guided tours, virtual tours and map
13 applications), but also 3) to new cross-border tourism products and services (concrete examples being
14 e.g. cross-border travel routes) and 4) ecologically efficient technologies in the waste management of
15 tourist attractions/facilities (concrete examples being e.g. improved recycling and eco-friendly
16 lavatories). A commonly cited process innovation was new cooperative working methods, that is, the
17 way that the tourism entrepreneurs were encouraged to network and cooperate. Particularly on the
18 Russian side – where collaboration between tourism firms was viewed to have been relatively
19 uncommon – this was considered to constitute a novel approach.

20
21 The future potential of these innovations was perceived in various ways. Most innovations had clear
22 future potential and were still available in the market at the time of interview, whereas some others
23 required further development and funding to remain operational. However, many of the Finnish
24 partners expressed some scepticism as to the success of their innovations in terms of sustainability.
25 They were concerned with their innovations remaining up-to-date, competitive and viable, after the
26 projects had ended:

27
28 “Once the project ended, the updates stopped... here in the Finnish side we have been a little
29 disappointed at this, that the service is not kept up-to-date” (Finnish partner)

30
31 The interviewees also felt that – particularly, due to the contemporary macro-political and economic
32 climate and its concrete impact on cross-border traffic (Figure 1) – it is extremely difficult to estimate

1 the wider precise impacts on the local economy of a single, cross-border tourism project or
2 innovation. However, they generally believed that their projects provide “platforms” for further
3 developments and that the innovations have also made at least a small positive contribution to the
4 overall growth of (cross-border) tourist flows in the region. Cumulatively, they consider that these
5 have provided a substantial competitive advantage for the local tourism sector.

6

7 ***Borders as opportunities and barriers to knowledge transfer***

8 *Facilitators of cross-border knowledge transfer*

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

17

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

21

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

24

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

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

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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)

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

15

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

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

27

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

31

1 Secondly, there were complaints that the planning phases of the programme had taken too long. This
2 has been repeated in the case of the ENI programme, which could have started as early as 2014, but
3 at the time of conducting the interviews (between August and December 2016) there was still
4 considerable uncertainty concerning when the application phase would finally open⁴. This
5 undermines the sustainability of cross-border innovation cooperation, since for many organisations
6 the lack of funding is a major constraint hindering their possibilities for participating in such
7 collaboration. Relatedly, some of the interviewees hoped that in future the decisions concerning the
8 programme priorities (or themes) would be made in a less top-down fashion than previously:

9

10 “Somebody has planned the programme and it includes certain priorities. And it does not
11 always match with the most acute problems that we should be solving...They come from above”
12 (Russian partner)

13

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

21

22 **Discussion and conclusions**

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

28

29 Firstly, since local and national funding sources commonly favour domestic over international
30 cooperation, the role of cross-border focused ENPI funding was considered to be of paramount
31 importance in achieving the innovation related goals of the projects: the inclusion of a wide range of
32 expertise from both sides of the border leads to better-quality outcomes. The innovations were mostly

1 diffused from the Finnish to the Russian side of the border, where they represented new-to-the-region
2 improvements which had required adjustment to the local context. This is in line with the literature
3 on best-practice approaches in CBC (Knippschild & Vock, 2017).

4
5 Secondly, the crossing of the physical border as one aspect of the permeability of the border
6 (Weidenfeld, 2013), or the lack of absorptive capacity (Thomas & Wood, 2015), were not considered
7 to hamper CBC. When it comes to barriers for cross-border knowledge transfer, the most commonly
8 identified issues, in line with theoretical discussions of CBRISs (Lundquist & Trippel, 2013), consisted
9 of differences in language competencies, business culture and legislative and administrative systems,
10 and the lack of funding opportunities and private investments for tourism. In contrast, personal trust
11 based relationships (Schrader, 2004) and – in line with the literature on related variety (Content &
12 Frenken, 2016) – cross-border differences in culture, the sectors involved, technological capabilities,
13 educational backgrounds and competencies, were considered the most important factors facilitating
14 cross-border knowledge transfer. As indicated by the CBRIS literature, the actors involved in CBC
15 projects need to be similar enough to be able to cooperate across border, but not too similar in their
16 professional expertise and behaviour, since this would constrain learning opportunities (Lundquist &
17 Trippel, 2013). This also applied in the case of the Finnish-Russian CBR: the dissimilarities between
18 neighbouring border regional actors create practical barriers for successful CBC, but the differences
19 – particularly technological and cultural – between the actors were actually the very essence that
20 drives the cooperation for cross-border knowledge transfer and innovation across the Finnish-Russian
21 border. Therefore, the CBRIS framework, and the related discussion on related variety, provided a
22 useful analytical framework for investigating facilitating and hindering factors of CBC within the
23 tourism sector.

24
25 Thirdly, the results point to the following practical policy suggestions for developing the EU's CBC
26 initiatives and enhancing cross-border knowledge transfer and innovation:

- 27 · The specific arrangements for the sustainability of the project results and innovation should
28 be agreed upon at the start of the project
- 29 · Stronger local support from decision-makers is needed to ensure the sustainability of the
30 innovations at the end of the project life-cycle

- 1 · To promote innovation, funding should prioritise softer aspects of CBC, such as improving
2 social interactions between people from different cultures (see also Weidenfeld et al., 2016),
3 rather than infrastructure projects
- 4 · The impact evaluation of the projects should be (more) flexible and include the (potential)
5 long-term benefits of innovation, such as sustainable impact outcomes, and long-term
6 economic implications.

7

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

23

24 Finally, we acknowledge that the EU’s external border regions are heterogenous, having diverging
25 characteristics and development patterns (Topaloglou et al., 2005; Feliu et al., 2013) and, therefore,
26 adapting practices from one (border) region to another is not problem free (Tödtling & Trippel, 2005).
27 However, despite differences between border regions, the EU’s external border regions do also share
28 common features, for example, in terms of their (poor) economic performance and (weak) knowledge
29 transfer links (Petraikos & Topaloglou, 2008; Autant-Bernard et al., 2017). Therefore, even if it is not
30 possible to generalise the research results gained in one external border region to all the others, the
31 experiences and lessons learnt in the Finnish-Russian CBR can be reflected upon and provide insights
32 for understanding the relationships between other border regions in the EU external border context.

1 However, the identified incentives to collaborate in cross-border knowledge transfer and innovation,
2 compared to the barriers encountered, require further studies, to improve our understanding of the
3 optimal conditions to encourage cross-border innovations in general and across the internal and
4 external EU borders in particular.

5

6 **Notes**

- 7 1) The Keep -database (<http://www.keep.eu/keep/>) is a source for information on projects and partners of CBC and
8 territorial cooperation programmes such as INTERREG and ENPI. The database is maintained by the
9 INTERACT programme (<http://www.interact-eu.net/>) and co-financed by the European Regional Development
10 Fund.
- 11 2) Consisting of: Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova,
12 Morocco, Palestine, Syria, Tunisia and Ukraine. Since Russia desires to act as an equal partner to the EU, it takes
13 part in CBC activities under the European Neighbourhood Policy, but as such is not a part of it (European
14 Commission, 2016c).
- 15 3) Socio-economic disparities between the EU and non-EU countries have created highly asymmetric borders
16 rendering CBC in the external borders of the EU more challenging than along the internal ones (O'Dowd,
17 2002b): the cross-border disparity (in terms of GDP per capita) between Finland and Russia is wider than in any
18 other border region along the East/West divide in Europe (Alanen & Eskelinen, 2000; Eskelinen & Kotilainen,
19 2005).
- 20 4) The first calls for proposals of the new ENI programme period (2014–2020) in the three Finnish-Russian
21 programme areas were subsequently opened on January 2017.

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Appendix 1: List of interviewed organisations

	Organisation	Country	Role
1	Central Karelia Development Company	FIN	Lead
2	Centre for Economic Development, Transport and the Environment	FIN	Partner
3	Centre for Problems of the North, Arctic and Cross-border Cooperation	RUS	Lead
4	City of Joensuu	FIN	Lead
5	City of Kostomuksha	RUS	Partner
6	Juminkeko Foundation	FIN	Lead
7	Kainuu Vocational College	FIN	Partner
8	Kajaani University of Applied Sciences	FIN	Lead
9	Kandalaksha District Municipality	RUS	Partner
10	Kandalaksha Town	RUS	Partner
11	Karelia University of Applied Sciences	FIN	Partner
12	Karelian Educational Development Fund	RUS	Lead
13	Karelian Institute of Tourism	RUS	Partner
14	Karelian Research Centre of the Russian Academy of Sciences	RUS	Lead
15	Metsähallitus (Finnish Forest and Parks Service)	FIN	Lead
16	Ortjo Stepanov Foundation	RUS	Partner
17	Petrozavodsk State University (Engineering Center)	RUS	Lead
18	Petrozavodsk State University (KRIMEL)	RUS	Partner
19	State National Theatre of the Republic of Karelia	RUS	Lead
20	State Nature Reserve Kostomuksha	RUS	Partner
21	Suomussalmi Municipality	FIN	Partner
22	University of Eastern Finland (ADUCATE)	FIN	Lead
23	University of Eastern Finland (Centre for Tourism Studies)	FIN	Lead
24	University of Oulu	FIN	Lead

Appendix 2: List of projects

	Project	Country of lead partner	Number of interviews	Role of interviewed	Country of interviewed
1	Castle to Castle	FIN	1	Lead	FIN
2	Contemporary Old City	FIN	2	Both	Both
3	ECHO	FIN	1	Lead	FIN
4	Eco-efficient Tourism	RUS	2	Both	Both
5	Fennoscandian Green Belt	FIN	2	Both	Both
6	Karelia – Collaborative Platform	FIN	1	Lead	FIN
7	KareliaTicket	RUS	1	Lead	RUS
8	KolarcticSport	FIN	1	Participant	RUS
9	Matka.ru	RUS	1	Lead	RUS
10	Mining Road	RUS	1	Lead	RUS
11	OMK-project	FIN	2	Both	Both
12	PoCoBus	FIN	2	Both	Both
13	Promotion of Low-cost and Youth Tourism	FIN	1	Lead	FIN
14	Quality-CET	FIN	2	Both	Both
15	Rock Art Bridge	RUS	1	Participant	FIN
16	RUNAT	FIN	3	Both	Both
17	Salla-Gate	FIN	1	Participant	RUS
18	Smart e-Tourism	RUS	1	Lead	RUS
19	WHITE ROAD	FIN	3	Both	Both