ESPON

TERCO
European Territorial Co-operation as a Factor of Growth, Jobs and Quality of Life

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This basic report exists only in an electronic version.

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1 Main goals, hypothesis and questions

Territorial Agenda 2020 states that 'Co-operation is key to fostering smart, inclusive and sustainable growth and territorial cohesion in the EU'. This hypothesis, however, needs scientific verification, and our project contributes to this challenge. **TERCO's main hypothesis** is in fact very similar to the one of TA2020, but narrowed as follows: '**Territorial co-operation (TC) is one of the factors underpinning the socio-economic development of territorial units'**. In order to verify such hypotheses, various types of co-operation have been analysed and their links to various aspects of development established. Hence, the TERCO project provides a valuable insight into the overall policy relevance of territorial co-operation as a contributing element to European Cohesion, with participants demonstrating a high degree of motivation to network their locales and regions across borders and internationally. In order to develop policy-relevant suggestions for the future design of TC support programmes, however, it is necessary to address the considerable shortcomings of present mechanisms – particularly with a view to improving the overall workings of EU policies.

Following the logic of the project, the **main goal of TERCO was to assess the relationship between territorial co-operation (TC) and the socio-economic development of EU and neighbouring regions.** Three aspects of the development were of special interest, i.e. economic growth, job creation and quality of life, as manifested in the project's title.

Four subordinate objectives were also defined for better structuring the analyses:

1. to estimate the impact that various types of TC has on socio-economic development;
2. to assess the adequacy of existing TC domains and areas;
3. to identify key determinants of successful TC; and
4. to establish good practices of governance for successful TTC.

Thirty-seven questions were analysed in details within the project, and they are gathered in Table A1 together with links to their answers within the report. They are divided into three groups: Research Questions, Policy Questions and TERCO-specific Questions. The former two originated from the Project Specification and the latter from the Project Application. They are all interrelated but address territorial co-operation from slightly different angles. All of them, however, fall into five thematic categories related to current and future TC. In particular they refer to: (i) the physical range of TC areas, (ii) thematic range/domains of TC, (iii) structures of TC and specific border situations (e.g. co-operation with non-Member States), (iv) driving forces and governance of TC, and (v) impact of TC on socio-economic development and various international flows (see Table A1).

Five types of territorial co-operation were investigated by means of standardised tools (electronic surveys and in-depth interviews), where each type was distinguished mainly by two criteria: (i) level of the territorial unit involved (NUTS2, NUTS3 or LAU2) and (ii) relative location of the co-operating units (adjacent vs. distant). The types are:

1. **Twinning City co-operation** - the units are LAU2 (cities or communes) and they are either adjacent (e.g. Twin Cities) or distant (e.g. Sister Cities), but they need to have twinning agreements.
2. **Cross-border co-operation -** takes place among larger administrative units, such as NUTS3 regions (and their non-EU equivalents), which are neighbours across a national border.
3. **Interregional co-operation** - co-operation of NUTS2 regions (and their non-EU equivalents) located in different countries, which are not directly neighbouring across a national border.

4. **Transnational co-operation** - NUTS2 regions (and their non-EU equivalents) co-operating within close proximity to each other within boundaries of some larger geographical macro-region, e.g. Baltic Sea, Alpine, Mediterranean regions, etc.
5. **Transcontinental co-operation** – regions and cities in the EU (at NUTS3, NUTS2, LAU2 level) undertaking co-operation with equivalent non-EU territorial units located in other continents.

Apart from that, considerable attention was devoted to **European Grouping of Territorial Co-operation (EGTC)** based on separate case studies: Eurometropole LIKOTO, the EGTC Greater Region, and two EGTCs in the Danube Region.

Attention was also given to other territorial co-operation activities/programmes. Those most frequently mentioned by the case study (CS) interviewees included the following: **URBACT, EUROCITIES, ESPON projects, Municipalities' agreements (other than Twinning Cities), European Neighbourhood and Partnership Instrument (ENEPI), Co-operation with EUROREGIONs and Regional Development Agencies** (for a full list, see Table A2).

The working **definition of territorial co-operation (TC)** had to be narrowed for the benefit of the project to allow a systematic analysis of TC. Hence, TC refers to the **collaboration between administrative bodies and/or political actors in Europe and beyond, representing their respective territories, which can also engage other stakeholders as long as their involvement is within the same institutionalised framework.** Accordingly, it is acknowledged that there are plenty of non-governmental and non-public institutions involved in such co-operation, but the scientific tools address municipalities and public actors as they establish institutional frameworks for each type of co-operation, within which the TC becomes official and possible to follow in a systematic way. It is important to underline that this report analyses TC that goes beyond national boundaries, so that TC can be understood as *international territorial co-operation*, especially since the project included co-operation not only within the ESPON area but also beyond the European continent (South America and North Africa in particular).

2 Key analyses and findings

The methods in the project were chosen to complement each other. First, the desk research was carried out, producing a comprehensive literature review and extensive data collections. The conceptual model of successful territorial co-operation was derived from the former, and unique databases were created from the latter, focused on twinning cities and transcontinental co-operation. Second, case studies were carried out in 19 countries based on standardised electronic questionnaires (CAWIs) and in-depth interviews (IDIs), which provided the necessary data to realise the conceptual model empirically. Once the primary data had been collected, it was used as a basis for calibrating the Structural Equation Model (TERCO-SEM). Secondary data, on the other hand, facilitated the creation of typologies and patterns of territorial co-operation and its determinants. Additional cases studies were carried out to investigate governance issues and EGTC in greater detail. The main findings from each method are presented below.

2.1 Model of successful territorial co-operation (TC)

Based on the project's literature review (see Scientific Report), a theoretical model of territorial co-operation was proposed (see Figure 1a). As far as can be determined, this is the first concise model of this type, attempting to put into one consistent framework all the factors shaping territorial co-operation while at the same time assessing their relative importance for successful co-operation. Accordingly, TERCO-SEM is a pioneer in this respect.

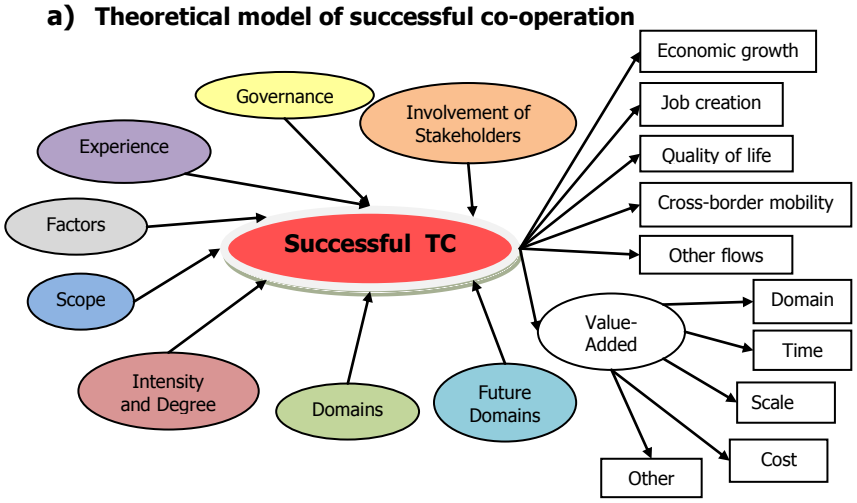
The model draws on key theoretical concepts related to territorial co-operation. For instance, it uses: Colomb's (2007, p. 358) concept of the scope of co-operation, according to which the lowest level is 'exchange of experience' and the highest is 'jointly producing and implementing a transnational spatial strategy (see Main Definitions); Barca's (2009, p. 161) notion of the value-added that TC can generate 'by dealing with relevant, over-the-border interdependencies and promoting co-operation

networks and collaborative learning involving both public and private actors'; and the expected effectiveness of TC in 'facilitating worker mobility' (Manifesto, 2008), etc. The model represented an effort to capture and empirically estimate the determinants and outcomes of successful territorial co-operation.

Following the hypothesis, successful territorial co-operation is defined as that which brings the highest socio-economic development from co-operation. The development referred to comprises economic growth, job creation and increasing quality of life. In addition to this definition, two other elements were added: transnational flows and value-added (right-hand side of the model). The left-hand side of the theoretical model sets out factors influencing territorial co-operation. The theoretical model was verified empirically by constructing the Structural Equation Model TERCO-SEM (fully described in the Scientific Report), using data collected via CAWIs from all the TERCO Case Studies (see Section 2.5). The theoretical model was evolving after statistical procedures were applied, e.g. eliminating insignificant links, modifying variables that build specific factors, standardising variables, etc. All these procedures were aimed at improving the quality and consistency of the model to produce the best fit with reality. The final model is depicted in Figure 1b.

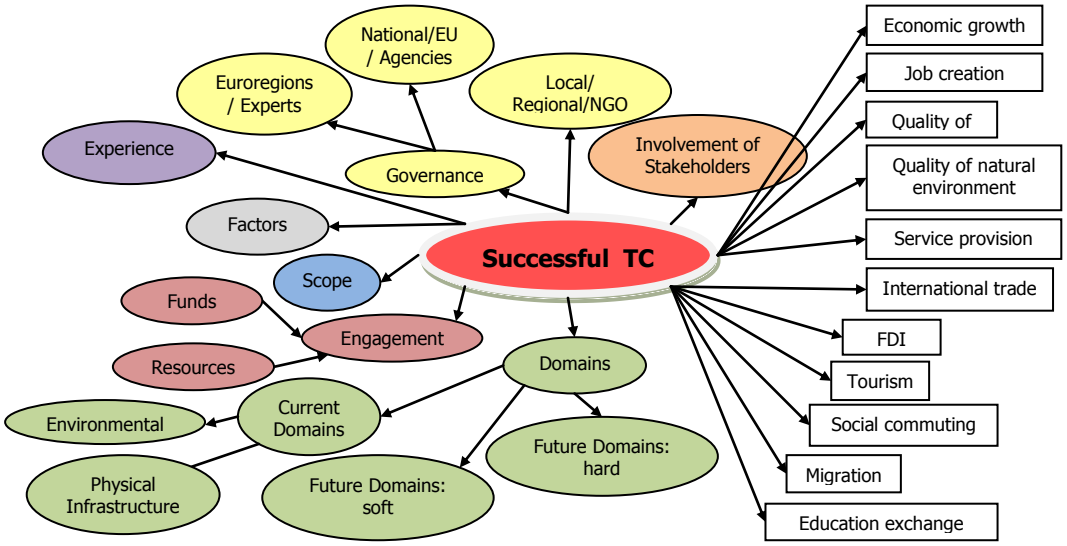
Figure 1: Models of successful territorial co-operation

a) Theoretical model of successful co-operation



- Involvement of Stakeholders – various actors involved in TC (*5 variables: eg. NGOs, business, local residents, etc.)*
- Governance – various stakeholders initiating TC (*10 variables: e.g. EU bodies, local government, etc.)*
- Experience – length of experience in TC (*i.e. when TC was started*)
- Factors – facilitators and hindrances of TC (*17 variables: e.g. historical links, language, level of development, etc.*)
- Scope – extended to 6-steps in Colomb's scale of co-operation (*e.g. exchange of experience, common actions, etc.*)
- Intensity and Degree – number of projects and partners, engagement of resources
- Domains – thematic domains of current TC (*8 domains*: e.*g. economy, natural environment, tourism, etc.)*
- Future Domains – domains that are most important for future development (*8 domains: as above*)

b) Empirical model of successful co-operation



- Local/Regional/NGO – stakeholders initiating TC are NGOs, local and regional governments
- Governance: National/EU/Agencies – stakeholders initiating TC are national government, EU bodies, development agencies and chambers of commerce
- Governance: Euroregions/Experts – stakeholders initiating TC are Euroregions and other cross-border institutions, consultants, external experts
- Experience – length of experience in TC and changeability of TC partners
- Engagement: Funds – source of funding *(five types of sources)*
- Engagement: Resources – availability of funds and staff resources
- Future Domains: soft – tourism, cultural events, educational exchange
- Future Domains: hard – economy, natural environment, physical infrastructure
- Current Domains – economy, cultural events, educational exchange, social infrastructure, tourism, joint spatial (physical) planning
- Current Domains: Environmental – natural environment and risk prevention
- Current Domains: Physical infrastructure – roads and other physical infrastructure

See Scientific Report for exact variables behind the factors

Source: Based on literature review and data from TERCO case studies.

The most visible difference between the empirical model and its theoretical counterpart is that the empirical model has more elements on both sides. This is because factors assumed in aggregated form in the theoretical model (such as governance, domains, etc.) in reality occurred in smaller homogeneous subgroups (factors and sub-factors). They were created based on the internal coherence of variables, i.e. if they strongly correlated with each other and were significant within the factor, they created a sub-factor. For example, the factor 'Governance' (which describes key stakeholders initiating TC) split in reality into two distinctive sub-factors ('Euroregions/Experts' and 'National/EU/Agencies') and also created one separate factor ('Local/Regional/NGO'). The basis for that distinction was the frequency with which different types of stakeholders were indicated by the same CAWI respondents. When respondents indicated that main initiators of TC were NGOs, they usually also indicated local and regional governments as other key stakeholders initiating TC – hence the new factor was called 'Local/Regional/NGO'. Distinguishing these three governance-related (sub-) factors described above indicates that three groups of stakeholders initiating territorial co-operation (which are behind the sub-factors) affect the probability of successful TC in different ways. The 'Euroregions/Experts' factor indicates that Euroregions and other cross-border institutions, as well as consultants and external experts, are strongly involved in TC in these areas where public authorities (local, regional and national, as well as EU bodies) and professional organisations (such as NGOs, development agencies and chamber of commerce) are not so active. At the same time, in areas where national government and EU bodies are strongly involved in TC, professional organisations (such as development agencies or chambers of commerce) are also identified as important actors initiating TC (sub-factor National/EU/Agencies). The distinction of Local/Regional/NGO as a separate factor means it has much greater importance for Successful TC in comparison to the other two sub-

factors within Governance. In fact, the initiating role of NGOs, local and regional government is one of the most important determinants of successful TC.

Other factors were similarly split or changed. In the theoretical model, the factors of Current Domains (indicating domains of TC currently prevailing) and Future Domains (domains declared as desired in the future, the most important for future development of the area) were assumed to affect TC differently – the assumption was that future domains would be more important for the success of TC because the participants would know what works best and denote the most influential domains. However, in the empirical model it turned out that the impacts of Current Domains and desired Future Domains on TC success were similar. Consequently, all the variables related to the themes of TC (current and future domains) were grouped into one factor of 'Domains'. However, within that factor, future domains created two distinctive sub-factors – related to soft and hard projects (terms explained in Figure 1b). This means that, as far as desired future domains of TC projects are concerned, two groups of preferences can be distinguished for 'soft' or 'hard' projects. At the same time, it should be emphasised that the positive influence on successful TC was higher in the latter case than in the former, i.e. when respondents preferred economy, natural environment or physical infrastructure as a future domain of TC projects, the probability of successful TC was higher (in comparison to the situation when they preferred tourism, cultural events or educational exchange).

In the factor Current Domains, there are three groups of thematic domains related to natural environment and risk prevention (Environmental), roads and other physical infrastructure (Physical Infrastructure), and other variables that do not create a consistent sub-factor. This may lead to the conclusion that, if current domains of TC projects are taken into consideration, there is a clear preference for only two thematic areas (natural environment and physical infrastructure) while other domains (economy, cultural events, educational exchange, social infrastructure, tourism, joint spatial planning) do not coincide in any meaningful pattern. At the same time, domains of the sub-factor Environmental (natural environment and risk prevention) as well as those included directly in the Current Domains factor are similarly important for successful TC and more important than domains from the sub-factor Physical infrastructure (roads and other physical infrastructure).

The factor Intensity and Degree, present in the theoretical model, appeared to be inconsistent, and the variables building this factor were divided between other factors, including a new factor – Engagement (describing the engagement of resources). In this factor, two sub-factors were distinguished (Funds and Resources), Funds (describing the source of funding) being a more important factor of successful TC than Resources (describing the availability of resources of funds and staff).

The right-hand side of the model was also significantly changed. In the theoretical model, it was assumed that successful TC consists of six elements (composed of variables). During the modelling process, however, it turned out that all the variables of successful TC are strongly correlated with each other and that it is impossible to divide them into consistent and meaningful groups. Respondents described the impact of TC on all elements of socio-economic development and flows similarly, i.e. similarly low or similarly high. This means that each variable builds Successful TC with similar factor loading, and the differences between the influence of Successful TC on each area (economic growth, quality of life, job creation etc.) are relatively small.

2.1.1 Main determinants of successful TC

Empirical evidence shows that the **success of territorial co-operation depends primarily on** factors related to the **scope of co-operation, current domains of TC** projects and **resources engaged in TC** in terms of staff and funds. In addition, **longer experience in TC** and **stability of partners** have positive, though relatively small, impacts on successful TC. **The least important factors are those related to the stakeholders involved in TC and variables describing factors that hinder and facilitate TC.** Whereas influence of the factor related to desired future domains and governance (stakeholders initiating TC) is middling, the factor related to the initiating role of NGOs, local and regional government is the most important determinant of successful TC. This

may lead to the conclusion that for successful TC the most important factors are those that initiate co-operation (both people and resources), while factors that might affect on-going co-operation are less important.

If more detailed results are analysed, the most important variables can be distinguished in each of above-mentioned factors. These variables describe types of domains, sources of funding, the scope of TC etc. that have the greatest positive influence on successful TC (contribute to successful TC to the greatest extent). The probability of achieving higher socio-economic development as a result of TC is higher if:

- **Current domains** of co-operation are cultural events, tourism, economy, natural environment or physical infrastructure (*rather than: educational exchange, social infrastructure, roads, risk prevention and joint spatial planning*);
- **Sources** of funding are own or EU funds (*rather than: public-private, from foreign partners or national other than own*);
- **Scope** is exchanging experience, sharing tools to tackle a common problem or advising each other on how to solve similar problems (*rather than more advanced forms of co-operation such as: jointly implementing common actions or investments to solve local problems, jointly implementing a spatial strategy, or solving cross-border problems that require co-operation*);
- **Stakeholders** initiating TC are NGOs, local or regional government (*rather than Euroregions and other cross-border institutions, national government, EU bodies, development agencies or chambers of commerce*).

During the modelling process, it became evident that all the variables defining successful TC are strongly correlated with each other, and so it is impractical to disaggregate them into sub-factors. Although the weights of particular variables are relatively similar in building success, some differences can be seen: the factors that play the greatest role in building successful TC are economic growth, quality of life, quality of natural environment and service provision, while the role of job creation and flows is smaller. Thus, it seems that success in TC translates more into overall socio-economic development rather than functional integration of co-operating areas (represented by flows such as international trade, FDI, migrations, etc). In this respect, TC can be seen as a tool for the socio-economic development of co-operating regions rather than as a means of reducing the role of barriers related to borders. And this is true not only within EU and Schengen area, but also for co-operation with non-EU countries.

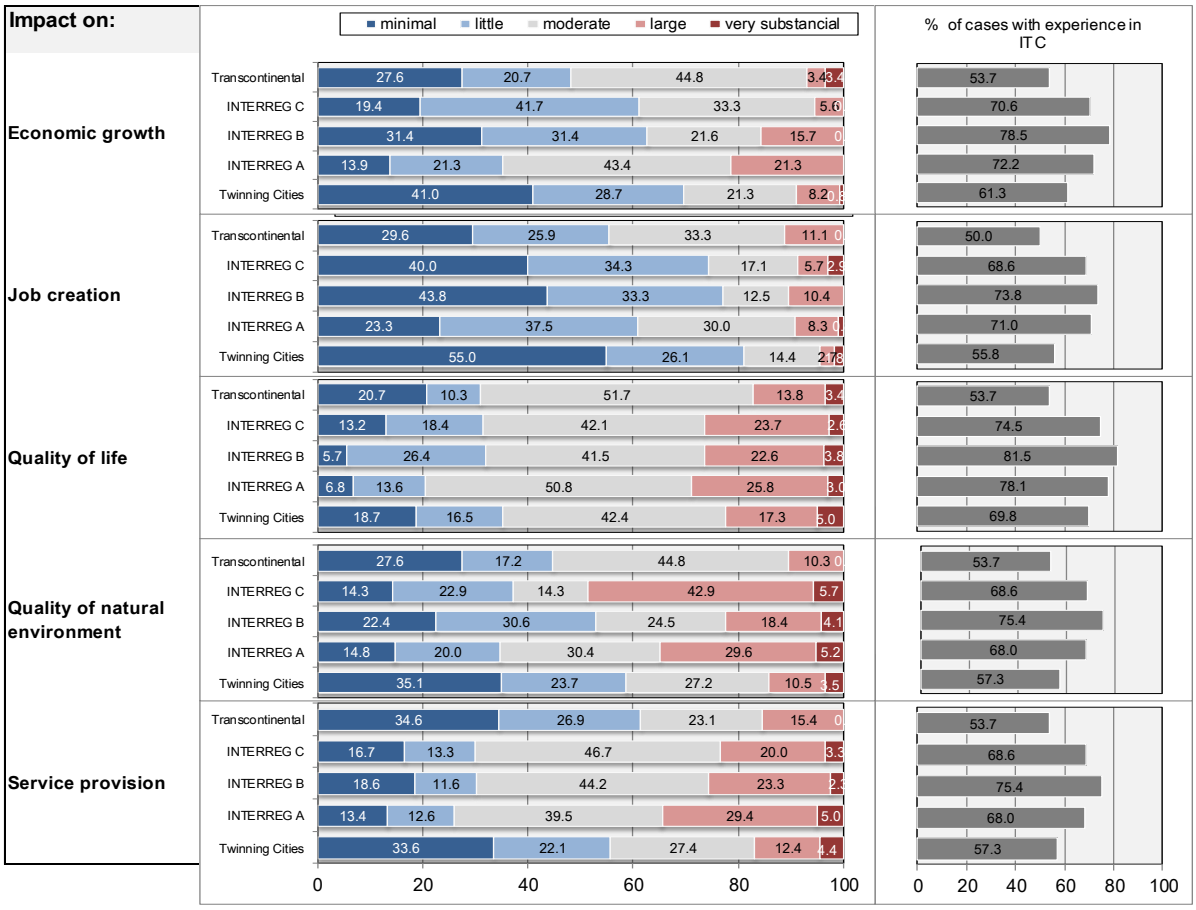
In conclusion, the probability of success of territorial co-operation measured by socio-economic development is highest when TC projects are initiated by NGOs, local or regional government, funding comes from own or EU sources, co-operation is based on simple forms of collaboration, and it relates to culture, economy, tourism, natural environment or physical infrastructure.

2.1.2 Impact of TC on socio-economic development

Based on the TERCO-SEM model, **the hypothesis that territorial co-operation underpins socio-economic development was verified.** It was assumed at first that such a relationship theoretically existed, and then by applying empirical data, significant results were obtained for the model. In particular, it was proved that:

- **Territorial co-operation contributes to socio-economic development,** as its impact on growth, jobs, and quality of life is statistically significant and positive.
- That impact of TC on socio-economic development is, however, evaluated as only minimal to moderate (see Figure 2).
- The most noticeable influence of TC on development relates to quality of life, then quality of natural environment and service provision (see Figure 2).

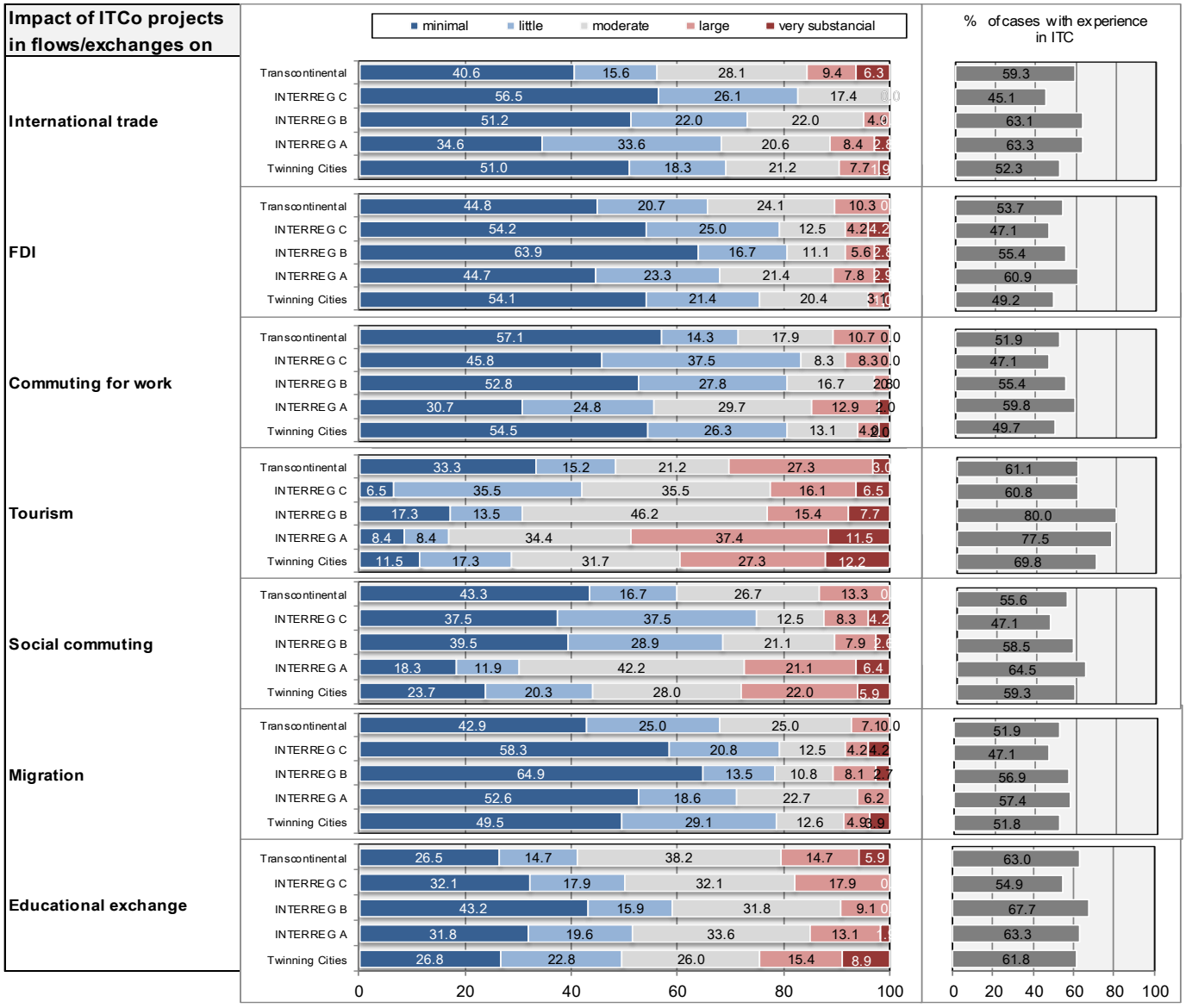
Figure 2: Impacts of each type of TC on socio-economic indicators



Source: TERCO findings based on CS.

- There is also a variation in the impact of TC on socio-economic development by TC types. The most influential type of TC on socio-economic development is INTERREG A, where 65 percent of respondents claimed that it had a moderate-to-very-substantial impact on economic growth, 39 percent on job creation and 78 percent on quality of life (see Annex, Table A3).
- TC also has small but significant and positive **impacts on various flows and exchanges**, the largest of which are on **tourism**, **educational exchange** and **social commuting**. There is almost no influence on FDI or migration. INTERREG A has the highest influence on tourism, INTERREG B on social commuting, INTERREG C on educational exchange, Transcontinental on tourism, educational exchange and international trade, and Twinning Cities on tourism and educational exchange (Figure 3 and Annex, Table A4).
- All types of TC have a **large-to-moderate impact on building mutual trust**, **joint project preparation and networking among firms**, while the remaining activities appear to have minimal impact in most cases. This evidence suggests that TC in general helps in building mutual understanding among the key stakeholders preparing and launching common initiatives in the social sphere, in particular (see Annex, Table A5). The greatest influences are on *networking of firms* (by INTERREG C), on networking of *NGOs* (by Transcontinental co-operation), on *building mutual trust* (by Twinning Cities and INTERREG A), on *joint project preparation* (INTERREG A) and on *joint spatial planning* (INTERREG B and INTERREG A).

Figure 3: Impact of Territorial Co-operation on flows and exchanges by type of TC



Source: TERCO findings based on CS.

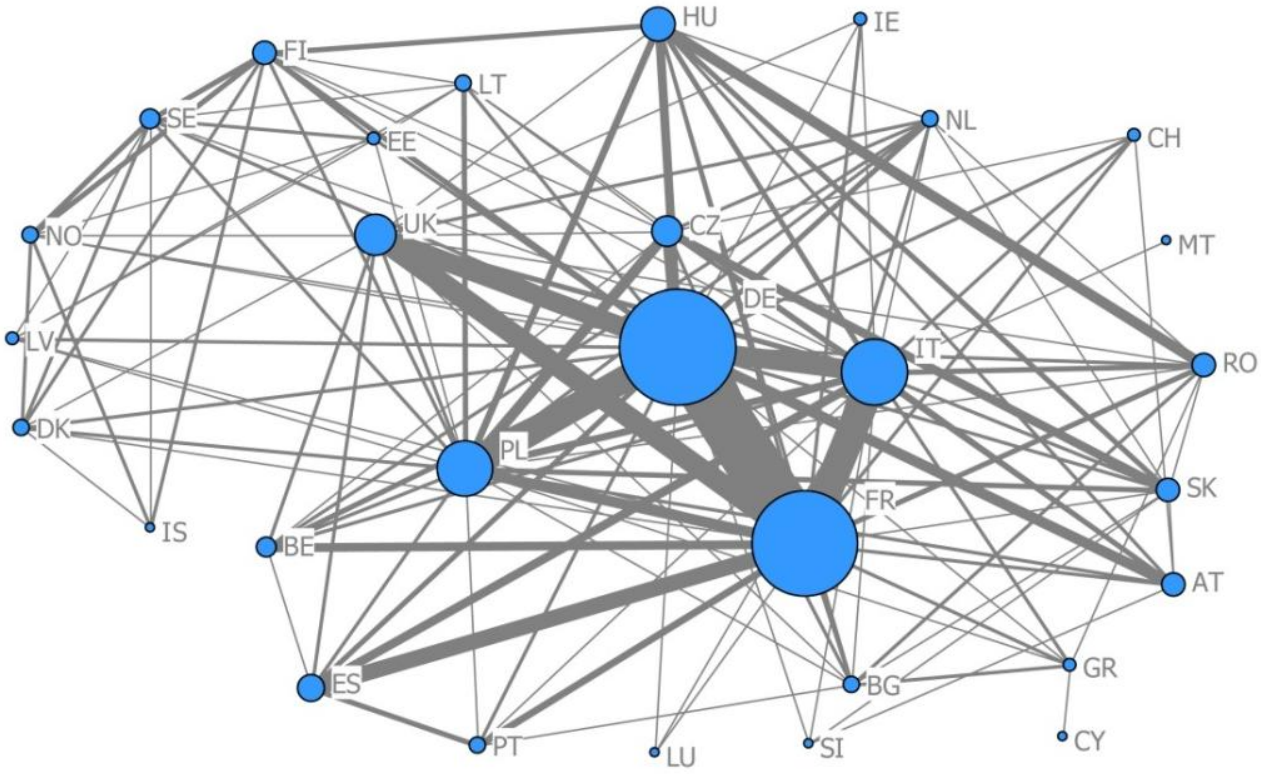
2.2 Networking of Twinning Cities

Territorial Agenda 2020 states that 'The co-operation and networking of cities could contribute to smart development of city regions at varying scales in the long run'. Hence we investigated a network of 'twinning cities' – communes/cities that cooperate within formal co-operation agreements made between local commune/city authorities. Such co-operation usually takes place between communes/cities located in different countries, and therefore our analyses covered both the entire ESPON area and transcontinental links. The database used for these analyses is unique, since we created it especially for this project. It was carried out by applying sophisticated tools in downloading and transforming data records from Wikipedia web-pages of all communes and cities (see Scientific Report). The quantitative analyses of Twinning City networks were further enriched by qualitative analyses within our Case Studies.

The number of twinning city agreements in a certain country clearly depends on the size of the country, and in particular on the number of communes (cities) that can enter into

such agreements. The largest number of twinning city agreements with foreign countries was recorded in Germany (2.1 thousand), France (1.9 thousand), Italy (1.1 thousand), Poland (0.9 thousand) and United Kingdom (0.7 thousand). Taking into account the frequency of interactions between particular countries, there is a very high number of mutual agreements between communes/cities of France and Germany (0.65 thousand), France and Italy (0.35 thousand), Germany and Poland (0.31 thousand), France and UK (0.24 thousand), Germany and Italy (0.22 thousand), and Germany and UK (0.22 thousand). This is depicted in Figure 4 by the thickness of the lines connecting the countries and reflects **intensity of co-operation.** The thicker the line, the higher the intensity, measured by the number of common projects/agreements between them (Figure 4).

Figure 4: Twinning cities on country level



* *The size of the nodes corresponds to the number of twinning cities agreements in a given country*
The thickness of the lines joining the nodes corresponds to the number of twinning cities agreements between specific countries

Source: Authors' elaboration.

It must be noted, however, that intensity measured in this way does not determine the **scope** of co-operation (defined by Colomb, 2007). In other words, co-operation can be very intensive (involving many agreements between the countries or regions), but its scope can be limited to 'exchanging experience', which is the lowest level on Colomb's scale (see Main definitions). For example, in the case of Belgium and France, the intensity of twinning city co-operation is medium-ranking, hence the line between the two is of medium thickness (Figure 4). At the same time, the case study revealed that the scope of the co-operation there is mostly 'exchanging experience' and 'advice on solving similar problems' (see Table 1). Another example is co-operation between Germany, Poland and the Czech Republic, which is rather intensive, especially between Germany and Poland (as indicated by the thick line). In that case, it was observed that the scope of the co-operation is higher, as the majority of cases encompasses up to four levels of co-operation scope – from 'exchange of experience' up to the 'common actions to solve local problems' (see Table 1).

Table 1: Scope of Twinning City co-operation within CS areas

Theme	Mode	CS1:BE/FR	CS2:FI/RU	CS3:PL1/UA/SK	CS4:PL2/DE/CZ	CS5:BG/GR/TR	CS6:UK/SE/NO	CS7?:ES	Total
Twinning Cities	Exchanging experience	63.6	90.0	78.0	88.9	79.3	94.3	70.0	83.9
	Advising to solve similar problems	27.3	30.0	62.0	55.6	58.6	64.2	60.0	57.3
	Sharing tools to tackle a common problem	0.0	30.0	60.0	50.0	55.2	56.6	50.0	51.3
	Common actions to solve local problems	9.1	60.0	70.0	66.7	55.2	30.2	40.0	51.3
	Implementing a spatial strategy	0.0	10.0	34.0	22.2	34.5	17.0	10.0	23.1
	Solving cross-border problems	0.0	20.0	22.0	27.8	48.3	28.3	10.0	26.6

Source: Based on TERCO Case Study.

Twinning Cities were also analysed at the regional level (aggregated at NUTS2 level), and it was concluded that by and large **all NUTS2 regions within ESPON space are involved in Twinning City co-operation but with different intensities** (see Map 1a). The largest number of twinning city agreements among ESPON space regions is recorded in the Île-de-France region (474 agreements).

The number of Twinning City agreements related to regions' populations is highest in the regions of Iceland and Finland, some regions of Norway, Estonia, regions of Eastern Germany and Western Poland, the Czech Republic, Slovakia, and Hungary (see Map 1b).

At the same time, the lowest number of Twinning City agreements per capita is recorded in the regions of Great Britain. This probably results from relatively limited competences of the local authorities in this country, meaning that they have no appropriate potential for developing co-operation. In addition, it should be kept in mind that the regions there are quite populous.

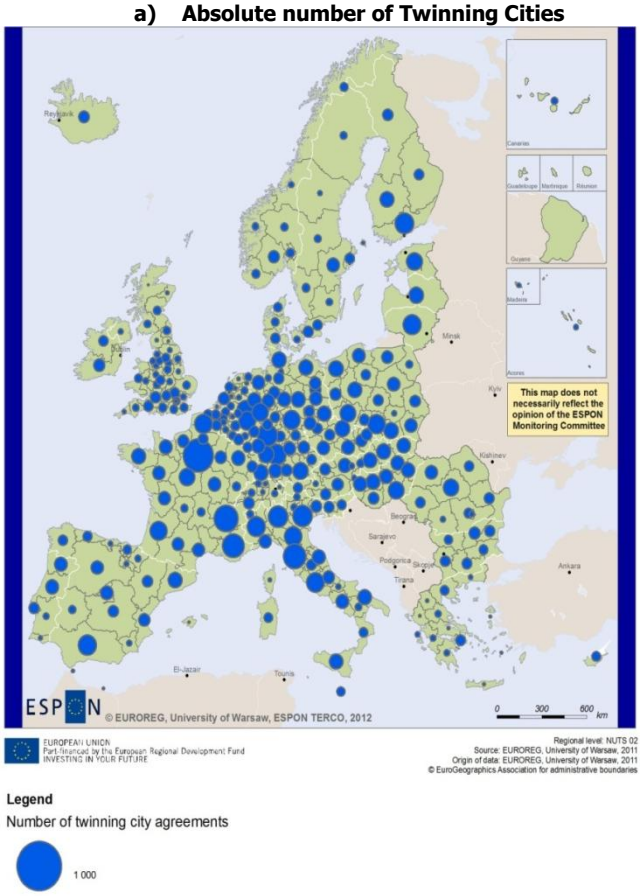
Looking at the number of Twinning City agreements relative to the size of regional GDP, one can see the highest position of Central and Eastern Europe (see Map 3) – in this instance, the results depend on both high activity in this form of co-operation and relatively low values of regional GDP in the area.

Regions with the highest number of Tinning City agreements per local authorities (even up to 63) are in the regions of the Nordic countries (excluding Denmark, however) as well as in the regions of North-Western Germany (Ruhr region) (see Annex Map A1). In the majority of European regions, only a small percentage of communes have Twinning City agreements – up to 20 percent (see Annex Map A2). In certain regions, this form of co-operation extends beyond 50 percent and even up to 100 percent of communes – these occur in regions of Sweden, Norway and Finland, Belgium, Netherlands, North-Western Germany, Western Poland, and Central Italy.

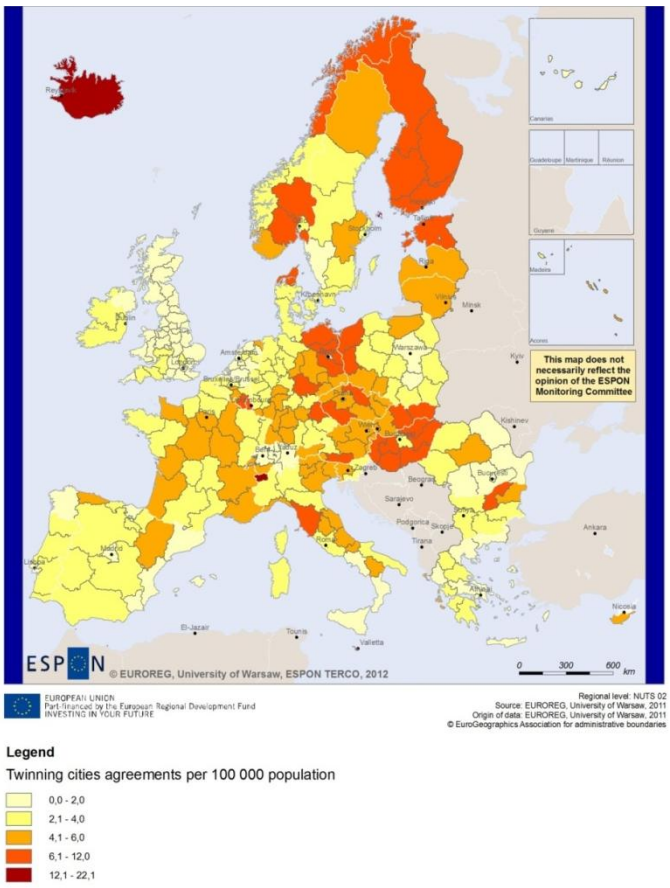
Taking into account the mean number of Twinning City agreements per commune (with at least one such agreement), it can be seen that most regions have the average of 2-3 agreements (see Annex Map A3). Higher values of the index, i.e. 4-5 or more agreements, are recorded mostly in regions located in the eastern part of the ESPON space (particularly in Finland, the Baltic countries, Poland, Slovakia, Hungary, Romania, and Bulgaria).

Map 1: Intensity of Twinning Cities co-operation at NUTS2 level

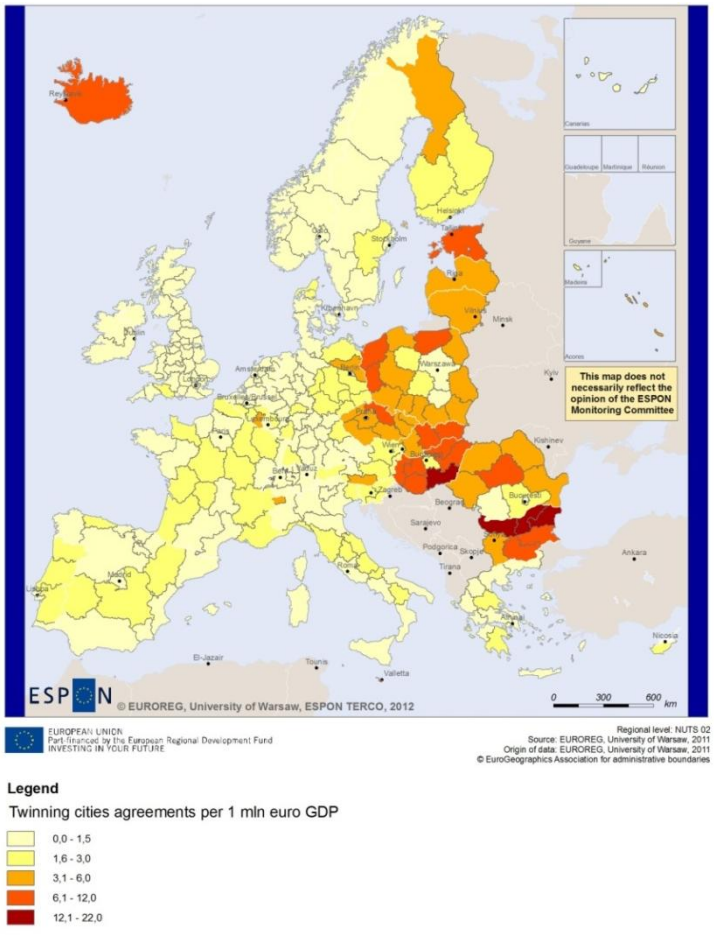
a) Absolute number of Twinning Cities



b) Twinning City agreements per 100 0000 population



Map 2: Twinning City agreements per 1 million EUR GDP



Source: Authors' elaboration.

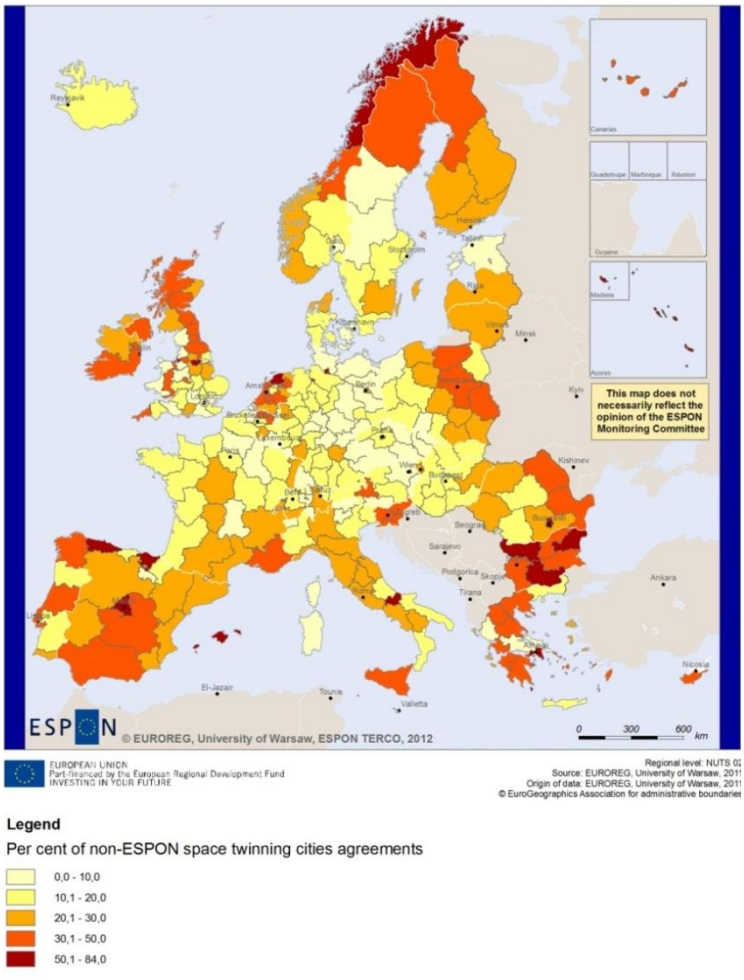
Twinning cities – directions of co-operation within ESPON space

Spatial proximity plays the most important role in establishing Twinning City co-operation. In all the countries analysed, it is apparent that co-operation is particularly intensive with the closest neighbours, whereas interactions with regions located some distance away occur relatively rarely (see examples on Map A4). **Other important factors determining Twinning City co-operation comprise historical and cultural links** (it should be underlined that they are also usually connected with spatial proximity). These are precisely the factors that explain the intensive co-operation between communes and cities from Hungarian and Romanian regions: North-West, Centre, and West, which in the past used to be the Transylvania region connected with Hungary.

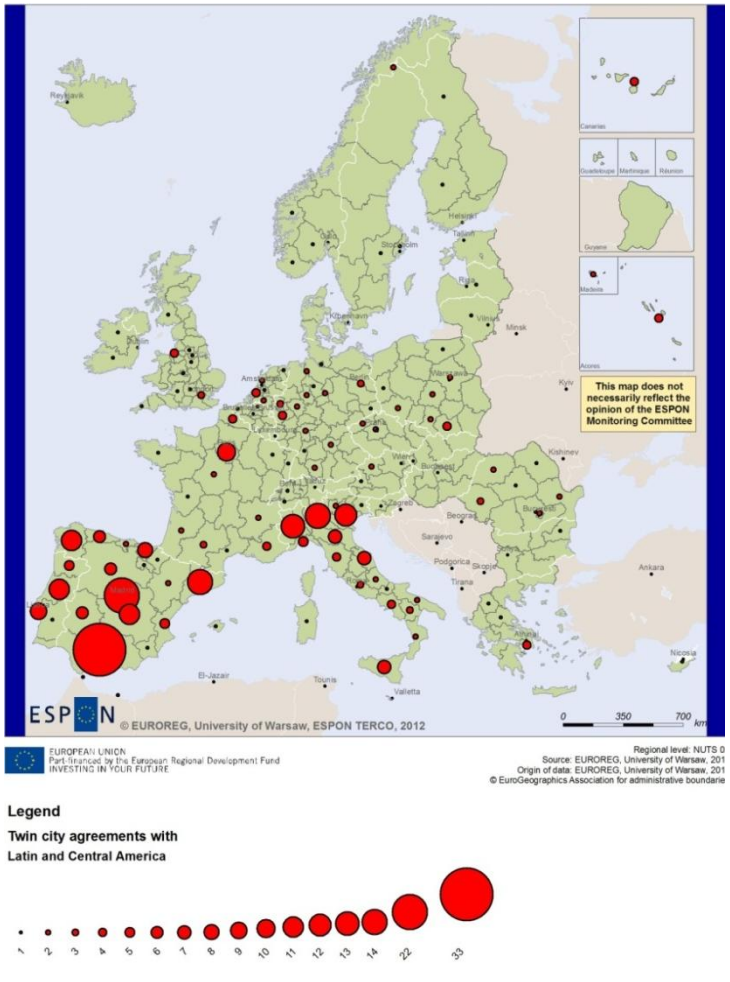
Twinning cities – co-operation beyond ESPON space

The direction of Twinning City co-operation depends considerably on the location within the ESPON area. As a rule, a more peripheral location facilitated the establishment of co-operation with partners from outside the ESPON area, particularly those located in the direct vicinity; it also made the range of co-operation within the ESPON area potentially the largest (see Map 4). Even though involvement in co-operation outside ESPON space is generally visible in regions located in the peripheries of the analysed space, the regions of Netherlands are the exception to this rule, being located in the geographical and economic centre of the EU but with significant co-operation beyond the ESPON space.

Map 3: Non-ESPON space twinning cities



Map 4: Twinning cities with Latin and Cent. America



Source: Authors' elaboration.

Co-operation of various regions with selected countries (regions) of the world is illustrated in Map A4. **Twinning City co-operation with communes and cities in the USA takes place in almost all regions of ESPON space, but it is significantly more frequent in the west of the continent** (Map A5). The significant involvement of Irish communes and cities is particularly noticeable in co-operation with communes and cities in the USA. On the other hand, with regard to **co-operation with countries from Latin America**, **Spain, Portugal, and Northern regions of Italy are particularly active** (see Map 4). This shows the importance of cultural similarities as well as the influence of history on the directions of Twinning City co-operation. A similar explanation may be offered for co-operation with Russia and the Ukraine, although in this case cultural similarity and spatial proximity are both important factors (see Map A6and Map A7).

2.3 Spatial patterns of interregional and transnational territorial co-operation

Interregional territorial co-operation

Interregional co-operation (within INTERREG IIIC and INTERREG IVC initiatives) is an example of a relatively flexible type of co-operation (in terms of geographical participation), although it is more restrictive than Twinning Cities, which are unlimited grassroots arrangements. The consortia within INTERREG C could have been built within the entire ESPON space. This means that the partners from particular regions had formally equal opportunities to be involved in the INTERREG C projects. Thus it seems that in this case the co-operation network has a more natural character[1] than the more restrictive co-operation networks within transnational co-operation (INTERREG IIIB and IVB) – where co-operation has to fit the predetermined areas.

Under the INTERREG IIIC and IVC initiatives, 384 projects were implemented (as of January 2011), involving over 4,000 partners. The spatial distribution of project partners is presented in Map 5. In the case of INTERREG IIIC and IVC, a small number of project leaders can be identified as coming from regions of the new Member States (EU12) (see Map 6).

Correlation analysis of the number of projects and the number of partners in particular regions as well as the basic measures describing the regional co-operation network within INTERREG IIIC and IVC – the number of activities with partners from other regions and the number of regions with which there is at least one activity – shows very high correlation coefficients, amounting to over 0.9 (see Table 2). Thi s means that **the main factor explaining the spatial distribution of the interregional co-operation network is simply the number of implemented projects in regions or entities – project partners – involved in them.**[2]

Table 2: INTERREG IIIC and IVC correlations on NUTS2 level

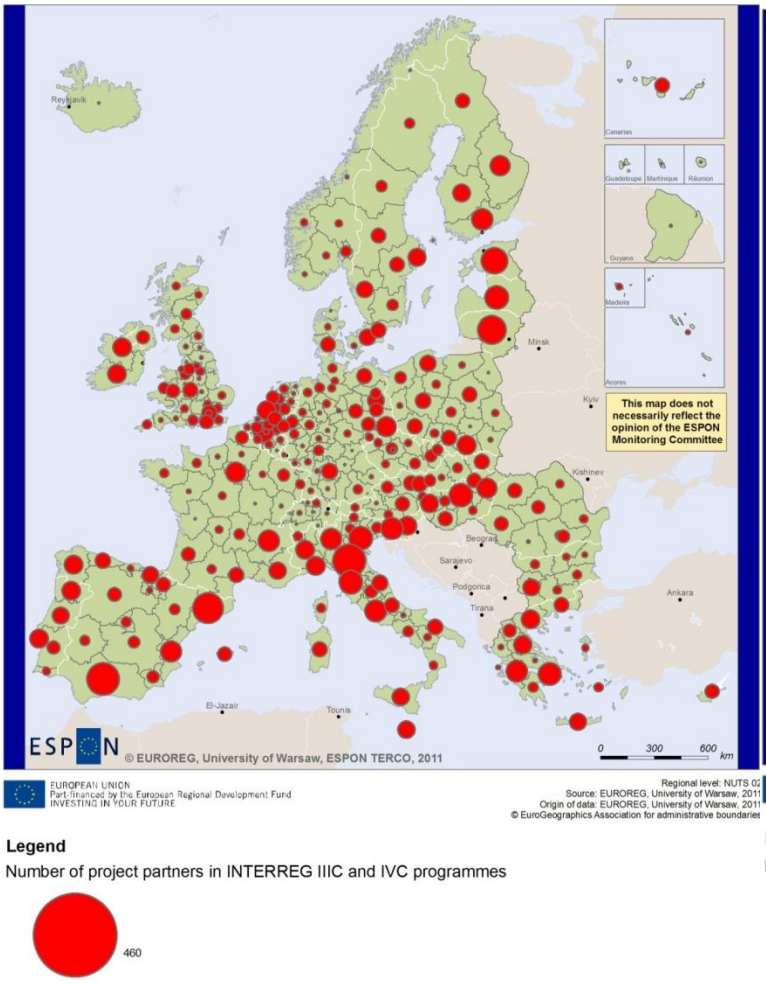
	Number of partners	Number of projects	Links to partners	Connected regions
Number of partners	x	0.99	0.97	0.90
Number of projects	0.99	x	0.96	0.91
Links to partners	0.97	0.96	x	0.92
Connected regions	0.90	0.91	0.92	x

Source: Authors' elaboration.

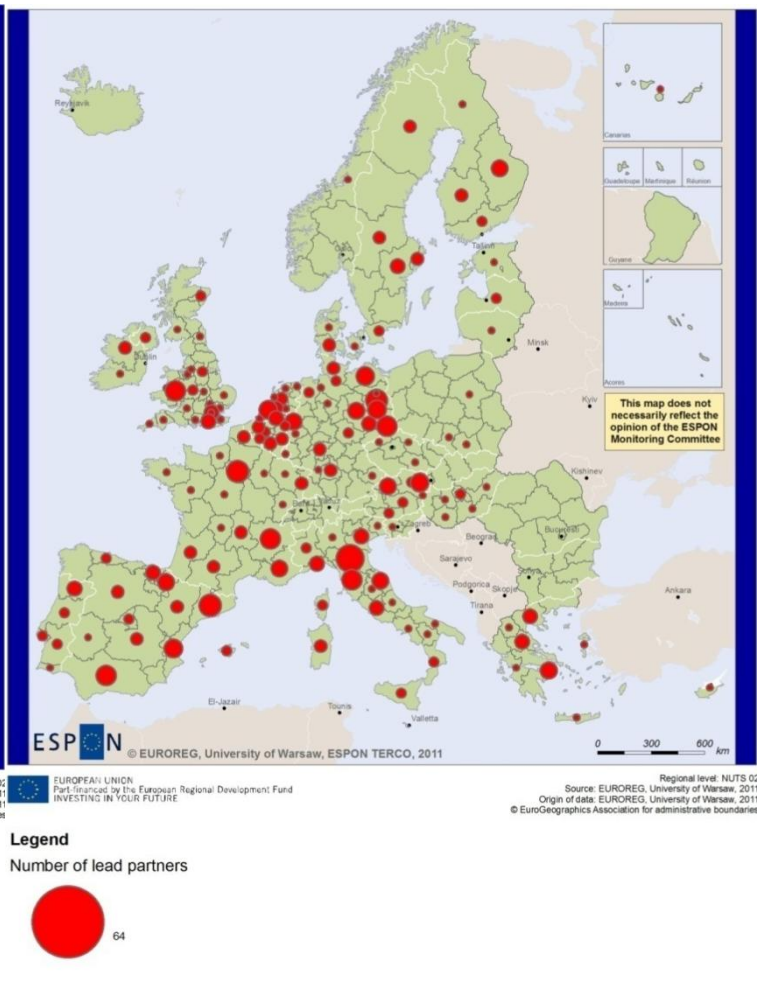
[1] However, it should be noted that the INTERREG IIIC and IV programme requirements also have an impact on the form of the co-operation network, as they prefer project consortia consisting of representatives of various European regions and macro-regions.

[2] Moreover, it can be added that the spatial pattern based on all four analysed measures is very similar, and consequently there is no need to make detailed analyses – i.e. create and analyse maps – for each of these dimensions.

Map 5: INTERREG C III and IV partners



Map 6: INTERREG C III and IV lead partners



Source: Authors' elaboration.

Transnational territorial co-operation

Implementation of projects within INTERREG IIIB and IVB programmes – the most restrictive TC in terms of geographical areas of all those analysed – took place within the frames of predetermined areas, including both the EU countries and the neighbouring countries(see Maps A8 and A9). Hence, European regions (NUTS3) differ significantly in terms of involvement in implementation of projects within INTERRREG IIIB and IVB initiatives. To some extent, this is related to the diversity of particular programmes. An important factor determining the diversity is the fact that some regions could have benefited from more than one programme both in the period of implementation of the INTERREG IIIB initiative and the INTERREG IVB initiative. Therefore, it seems that the observed diversity should be perceived as resulting largely from the accepted structure of INTERREG IIIB and IVB initiatives and particular programmes within them.

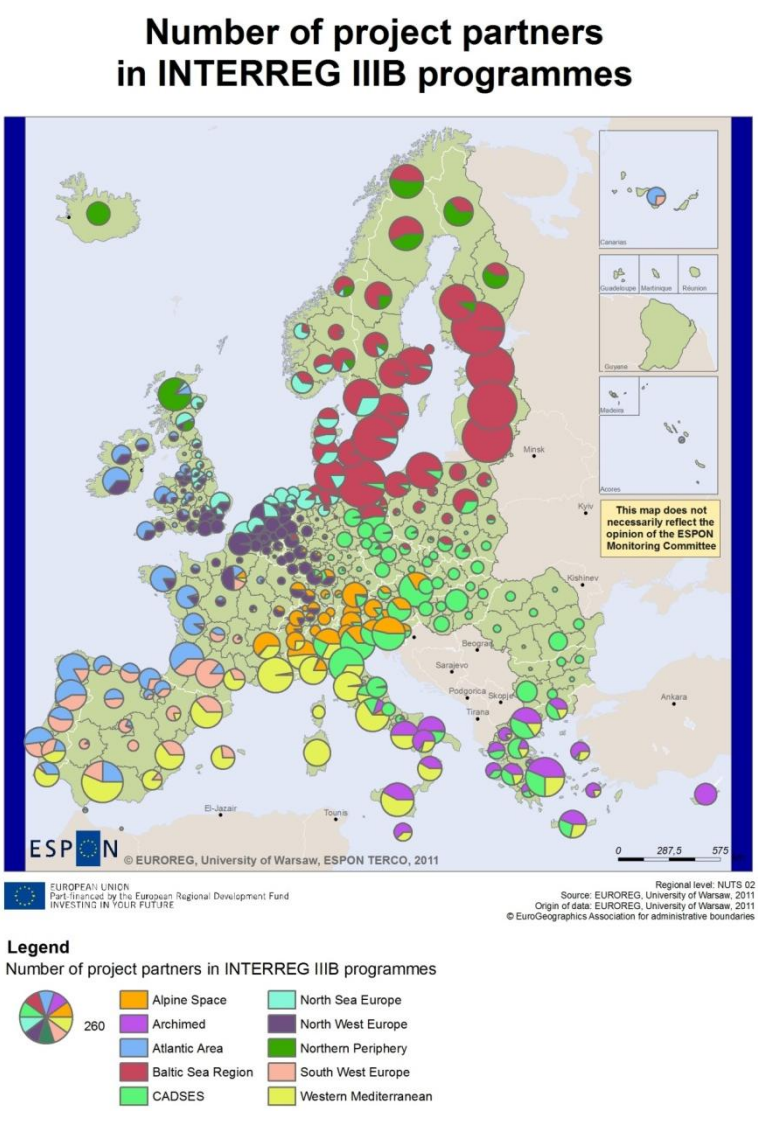
In the case of projects within the INTERREG IIIB initiative, there is a very high level of activity of institutions in the area included in the Baltic Sea Region programme. Italian regions are similarly characterised by a large number of projects, as are those French, Spanish and Portuguese regions located in the Mediterranean or the Atlantic Ocean region, where projects were implemented within more than one programme. For some countries – in particular Spain, France, Germany and Poland – there are marked differences in the level of activity between coastal regions, which generally involved

a large number of project partners, and hinterland regions, where the number of partners implementing projects was significantly smaller (see Map 7).

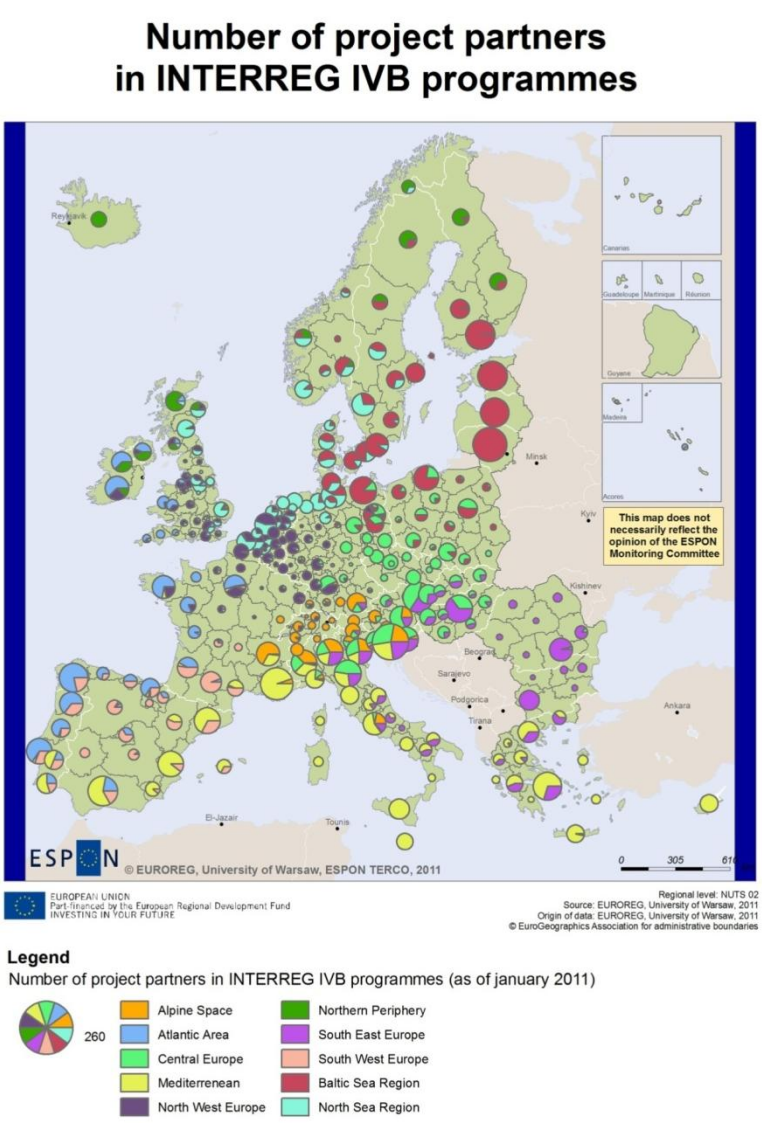
In the subsequent period (INTERREG IVB), the pattern of participation in the implementation of transnational co-operation projects is quite similar (see Map 8). There is still a greater interest in projects in coastal and Atlantic regions than in the hinterland of particular countries. One of the more pronounced changes is the relative decline in the number of projects implemented in the Baltic Sea basin. Moreover, there is a notably large involvement of regions in Northern Italy and Slovenia, which are active in as many as four programmes (which should be interpreted as a further manifestation of the influence of the set-up of the initiative under discussion – i.e. the entities from regions ascribed to more than one programme use the opportunities to implement projects within various macro-regions designated in those programmes).

An important factor determining the European transnational co-operation space is the location of project leaders. Despite the partner-based, co-operative character of the projects, the role of consortium leader brings privileges, which can usually be seen in the decisive influence on the subject-related shape of the project (determined largely at the stage of preparation of the project concept by the future leader, who can, but does not have to, take into account the propositions from the partners), and also in the higher level of financing associated with the greater extent of coordination works that the project leader must perform. The fact that the project leader has a large degree of freedom in selecting partners for the implementation of the project is also important.

Map 7: Number of partners in INTERREG IIIB



Map 8: Number of partners in INTERREG IVB



Source: Authors' elaboration

The analysis of the spatial distribution of INTERREG IIIB project leaders mostly shows a small number of leaders coming from new Member States, i.e. from the EU12 (see Map A10). This confirms that co-operation within this initiative was dominated by partners from old Member States, concentrated in certain regions. This situation probably results from the lower experience in project implementation by entities from the new Member States. Consequently, the benefits from co-operation may be unevenly distributed, to the disadvantage of regions in the new Member States (on the assumption that the coordinators from the old Member States, more or less consciously, shape projects in a form better suited to the needs of their home regions). **In the subsequent programming period (INTERREG IVB), the situation remains very similar** (see Map A11), which may result from continuing limited experience and the slow pace of organisational learning by entities from the new Member States (or constantly growing potential and competitive advantage resulting from accumulation of experience in the case of the old Member States).

Involvement in transnational and interregional co-operation

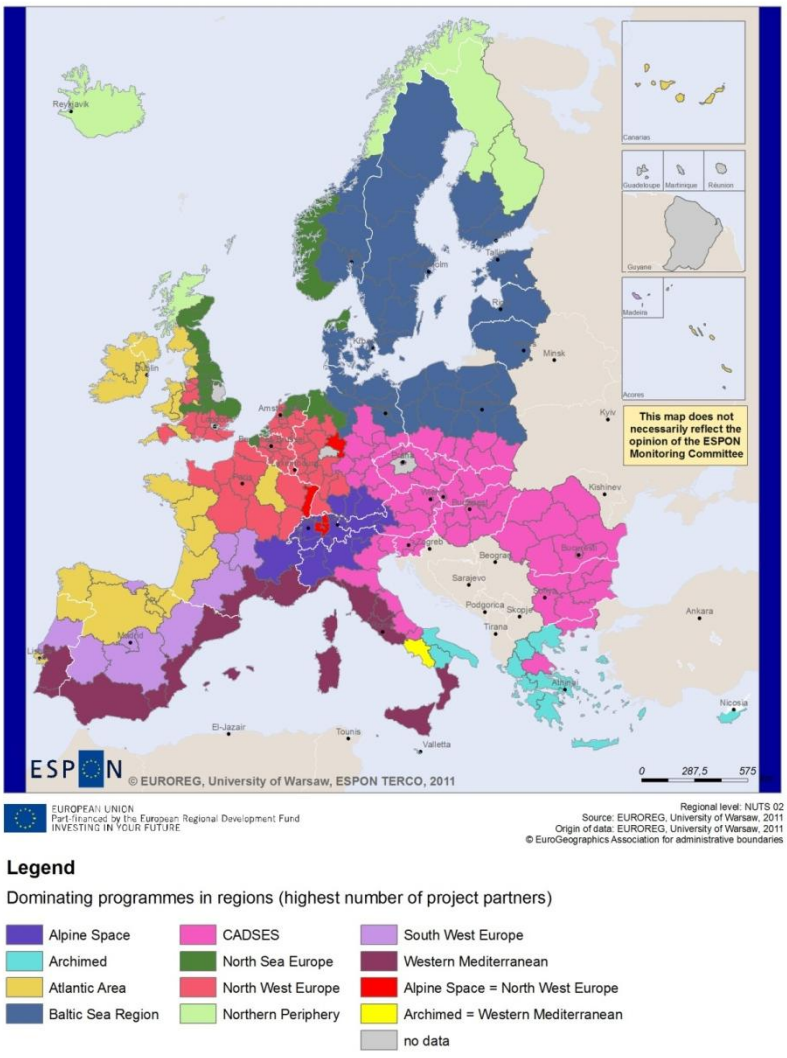
The involvement of partners in co-operation within INTERREG III and IV strands B and C can be measured by the number of project partners related to the number of inhabitants of the regions. The highest values of this index are recorded in regions with a large number of projects, but also in those with a small population. Particularly noticeable is the activity of Scandinavian regions. This complies with a general trend for greater intensity of co-operation in regions located in the spatial peripheries as compared to the European centre. Especially noteworthy is the small relative involvement in project implementation in the vast majority of regions constituting the continental centres, i.e. the so-called Pentagon (see Map A12).

2.3.1 Typology of TC based on transnational territorial co-operation

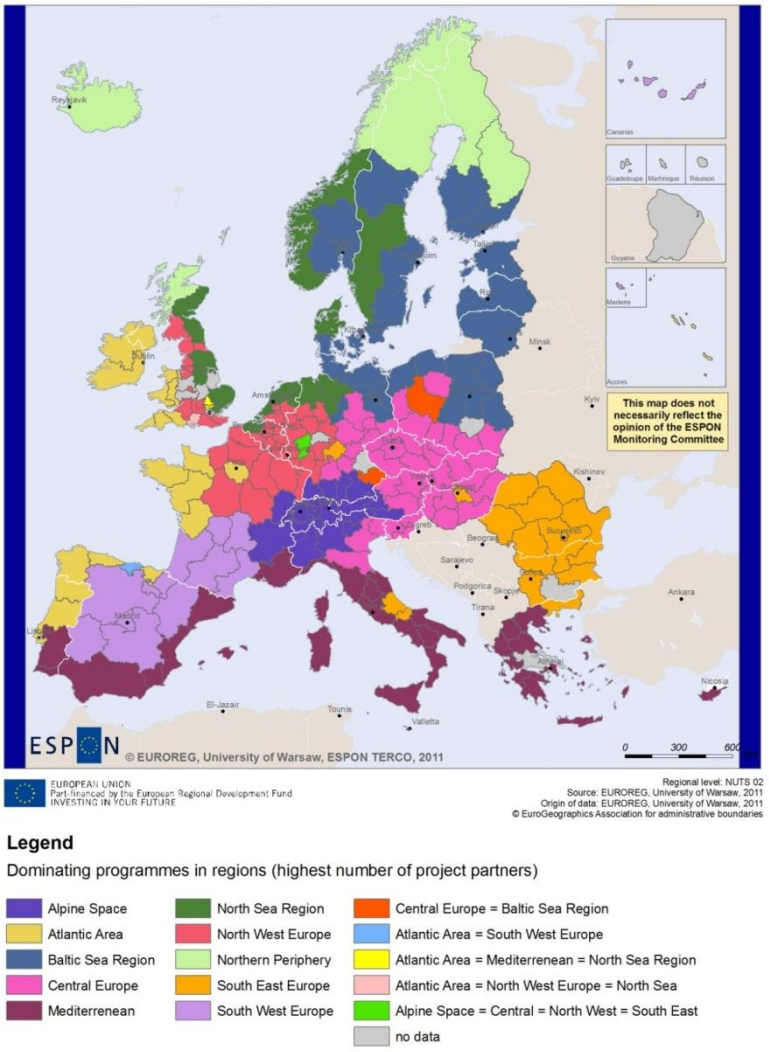
In a substantial part of the regions, entities could take part in more than one transnational co-operation programme (as can be seen on Map 7 and Map 8), and this allows an analysis of their preferences of participation in particular programmes. By ascribing each region to the programme in which the highest number of its partners participated, we obtain a simpler typology of co-operation areas within transnational co-operation. Due to predetermined areas of particular programmes and the fact that some regions were included in only one programme, the results of such a typology must be interpreted with caution. At the same time, an unquestionable benefit of the proposed typology is that it divides up the whole ESPON space (as opposed to the areas specified in particular transnational co-operation programmes, which are not mutually exclusive) in a complete and exclusive manner.

In case of INTERREG IIIB, the typology of areas of preference in co-operation within particular programmes seems to form functional areas (see Map 9), such as the Baltic Sea basin, the North Sea basin, the Alpine Space, the Mediterranean coast, the Atlantic coast, hinterland areas of Spain and France, and the European Pentagon area (but excluding its southern part). Of particular interest is the division in the area of the countries included in whole or in significant part in more than one programme. Therefore, in the case of Poland one can clearly see sensible and obvious division into the northern part predisposed towards co-operation with the Baltic Sea area and the southern part co-operating with the Central and Eastern European regions. The typology resulting from the analysis of INTERREG IVB is very similar (see Map 10). Larger differences are connected with changes in the programme areas. This applies in particular to the division of the CADSES programme (from INTERREG IIIB initiative) into two programmes, Central Europe and South East Europe, as well as combining two previously separate areas of the Western Mediterranean and Archimed into one area of the Mediterranean programme. The pattern emerging from the analysis of predominance of INTERREG IVB programmes is less pronounced than in the case of the previous initiative. This results from the fact that the programmes are still under implementation and therefore the number of partners and projects taken into account is two times lower than in the case of INTERREG IIIB – it would be expected that once all projects are taken into account, the coherence of the areas thus established will increase.

Map 9: Dominating INTERREG IIIB programmes



Map 10: Dominating INTERREG IVB programmes



Source: Authors' elaboration

The presented simple typology seems to support two findings. First, **areas of particular programmes are determined quite broadly,** and second, that **such delimitation allows (or rather, does not prevent) the entities implementing the projects to reconstruct the functional areas of co-operation**.

2.4 Typologies of regional determinants of territorial co-operation

The aim of the typologies was to link territorial co-operation indicators (developed in Sections 2.2 and 2.3) with the socio-economic indicators underpinning such co-operation. The techniques used for creating the typology were: correlations (between indicators of TC and regional determinants of TC), principal component analysis (for grouping variables into homogenous determinants of TC) and cluster analysis (for classifying regions according to socio-economic factors of TC determinants).

Data used for the typology included co-operation indicators for Twinning Cities, INTERREG III and IV strands B and C. Due to the limited availability of statistical data, the spatial extent of the analysis was narrowed to the regions of the EU Member States. Nevertheless, whenever possible, and

particularly with regard to the presented typologies of the determinants of co-operation, the situation in all the ESPON countries was discussed (i.e. with the addition of Norway, Switzerland and Iceland). The data was collected for the NUTS2 level, although some supplementary analyses were conducted for selected large cities for which the Urban Audit data was available.

The socio-economic determinants of TC used in the analyses were based on suggestions from the project's literature review (see Scientific Report). They represented indicators grouped into five thematic blocks: (i) transport accessibility (nationally: measured by distance to national capital; at European level: measured by distance to Brussels as a proxy for EU centre; globally: indicated by category of international airport in the region valued on 5-grade scale); (ii) level of socio-economic development in terms of: demographics (i.e. population density, population change and its components, and the old-age dependency ratio); economic potential (GDP per capita, GDP purchasing power parity (PPP), national averages and GDP dynamics); economic structure (measured by six sectors) and labour market (employment figures and unemployment rates); (iii) role of local governments / financial resources (in terms of municipal population, shares of territorial governments in national revenues and expenditures – as a proxy for their financial independence); (iv) language competences of the region's inhabitants (understood as teaching of major foreign languages at school and their declared knowledge by adults); and (v) tourism potential (expressed by the actual bed occupancy and the percentage of foreign tourists). Analysis of the correlation between the indicators of co-operation (measured by various types of TC per capita, per GDP, per local government, etc.) and the above variables of potential determinants of TC revealed significant mutual interrelationships, which are presented in Table 3.

Table 3: Significant correlations between indicators of TC and determinants of TC*

Indicators of TC **Determinants of TC**	Twinning cities per 100,000 population	Twinning cities per 1 mill EUR GDP	Twinning cities per local government	INTERREG projects per 100,000 population	INTERREG projects per 1 mill. EUR GDP	INTERREG projects per local government	Percentage of municipalities with twinning cities	Average number of twinning cities	Share of linkages beyond the ESPON area	Average distance between twinning cities within ESPON area
Share of taxes in LG revenues	**0.35**	*0.14*	*0.07*	*0.07*	*0.02*	*0.13*	*0.12*	*0.06*	*-0.15*	**-0.33**
GDP per capita 2008	*-0.08*	**-0.57**	*0.08*	*0.08*	-0.29	*0.22*	*0.22*	*-0.13*	*-0.05*	*-0.07*
Inhabitants per municipality	**-0.20**	*-0.03*	**0.79**	*0.04*	*0.01*	**0.62**	0.76	0.32	0.25	*0.11*
Distance to the ESPON centre	*0.02*	0.32	*0.04*	**0.43**	**0.55**	0.22	*-0.09*	0.24	**0.34**	**0.42**

* significant correlation are bolded
Source: Authors' elaboration

The significant correlations from Table 3 can be interpreted as follows:

- The greater the financial independence of territorial government, the stronger is the co-operation with the twinning cities (Pearson's correlation r=0.35).
- Less-developed regions show a greater propensity to engage in territorial co-operation than well-developed regions (r=-0.57).
- The more populous the municipalities are in a given region, the more twinning agreements they would sign (r=0.79). This is due to the fact that twinning city co-operation was mostly pursued by large cities, and scattered municipalities had less opportunity to engage in territorial co-operation. This suggests that the administrative systems in place in individual countries can potentially strongly affect the scale of transnational territorial co-operation.

- More INTERREG projects are located in the peripheral rather than the central part of the ESPON area (r=0.43, r=0.55).
- More populous municipalities have more INTERREG projects (r=0.62).
- There is a strong correlation between the peripheral location within the ESPON area and co-operation beyond the ESPON area (r=0.34). In particular, municipalities located in the peripheral regions – on the edge of the ESPON area – had an advantage in establishing co-operation with twinning cities located beyond the ESPON area. In practice, two groups of regions could be observed: one group pursued co-operation over a substantial distance (regions of Ireland, Scotland, Wales, northern England, Bretagne, Finland, Portugal, Greece and some regions of Poland, Bulgaria and Romania) and the other group over a considerably shorter distance (some Central European regions: from the Czech Republic, Slovakia, Hungary, former GDR, Austria).
- There was also a positive statistical correlation between the distance from the centre of the ESPON area and the percentage of twinning cities located beyond this area. This could be explained above all by co-operation with the neighbouring countries not being a part of the ESPON area (land or sea borders), pursued mostly by the regions of the border countries. However, being located within the ESPON area did not affect in any way the percentage of twinning agreements of a transcontinental nature which, as noted above, were in most cases concluded by large cities.

The applied factor analysis (Principal Component method) facilitated the reduction of a large number of variables representing determinants of co-operation into four components – uncorrelated between each other but internally homogenous. Based on the values of the components, the regions were divided into four groups as well.

- Component 1: core vs. peripheral regions ('core character')
- Component 2: attractive regions ('attractiveness')
- Component 3: problem regions within countries ('problem character')
- Component 4: metropolitan regions ('metropolitan character')

The first component illustrates the classical bipolar dimension of the disparities of European space, associated mainly with the level of economic development measured by GDP per capita, which was typically accompanied by: modern economic structure (low share of GVA generated by agriculture), high level of economic activity (employment rate) and high-quality human capital (education, foreign language skills). The second component highlighted the 'attractiveness' of regions, understood, on the one hand, as an increase of the population owing to a positive balance of migration and natural increase, and on the other as their attraction for tourists, including those from abroad. This was coupled with a boom in residential housing development and a parallel weakness in other economic sectors, particularly industry. In addition, local government expenditure in these regions included significant outlays on administration. The third component identified the 'problem character' of regions, understood as a high share of public services in gross value-added, coupled with a low rate of economic development, high rate of unemployment and in many cases low development level in comparison with the national average. The fourth component indicated the metropolitan character of a given region, particularly in the national context. It was associated with a high development level as compared with the rest of the country, location of a major international airport, high population density and a large number of the population per territorial government. All this suggested the existence of large cities in the region, notably the capital city, which would additionally attract foreign tourists. High values of this component typified regions where the European metropolitan growth areas (MEGAs), defined in ESPON 1.1.1, were located. Regions at the other end of the spectrum were usually direct neighbours, probably due to the so-called 'shadow of the metropolis' effect.

Altogether, the adopted components explained approximately 60 percent of the variance of European regions, which points to the existence of other reasons determining the specific character of individual

countries and macro-regions of the European continent that were not taken into account in the analyses.

The four components distinguished within the European space were, however, rather weakly correlated with the indicators of territorial co-operation (see Table 4).

Table 4: Correlations between co-operation indicators and principal components

Component	Twinning cities per 100,000 population	Twinning cities per 1 mill. EUR GDP	Twinning cities per local government	INTERREG projects per 100,000 population	INTERREG projects per 1 mill. EUR GDP	INTERREG projects local government	Percentage of municipalities with twinning cities	Average number of twinning cities	Share of linkages beyond the ESPON area	Average distance between twinning cities within ESPON area
'core-periphery'	*-0.09*	**-0.55**	*0.03*	*-0.02*	**-0.35**	*0.13*	*0.14*	**-0.20**	**-0.19**	*-0.14*
'attractiveness'	**-0.20**	**-0.33**	**-0.19**	**0.36**	**0.22**	*0.13*	*-0.15*	-0.10	**0.23**	**0.18**
'problem character'	*-0.04*	**-0.20**	*-0.13*	*-0.05*	*-0.15*	*-0.08*	*-0.01*	**-0.31**	*-0.15*	*0.02*
'metropolitan character'	*-0.16*	*-0.11*	**0.20**	-0.07	-0.07	0.13	**0.24**	**0.21**	**0.20**	*-0.02*

Source: Authors' elaboration.

The strongest negative correlation could be observed between the first component, i.e. the 'core character', and the number of twinning cities per 1 million EUR of regional income (GDP). This correlation comes from the fact that the new Member States have a large number of twinning cities while at the same time they have relatively low regional incomes. The same (although on a smaller scale) could be observed in the case of INTERREG projects. In addition, it was visible that more peripheral regions, i.e. those situated near the boundaries of the ESPON area, which had a lower level of development, would more frequently become involved in co-operation with countries from outside this area and that municipalities engaged in territorial co-operation had signed more twinning agreements.

There were also observable links between the regions' 'attractiveness' and the number of INTERREG projects per capita and also in relation (though not as marked) to the regional product. On the other hand, the 'attractive' regions were less interested in pursuing co-operation as part of twinning cities co-operation. This could mean that tourism regions show more interest in territorial co-operation funded from external sources, a situation that could be explained for example by their wish to transfer knowledge and experiences via INTERREG B and C programmes. At the same time, in the case of those regions, twinning cities' co-operation is effected over larger distances within the ESPON area, with a discernibly higher share of linkages reaching beyond this area.

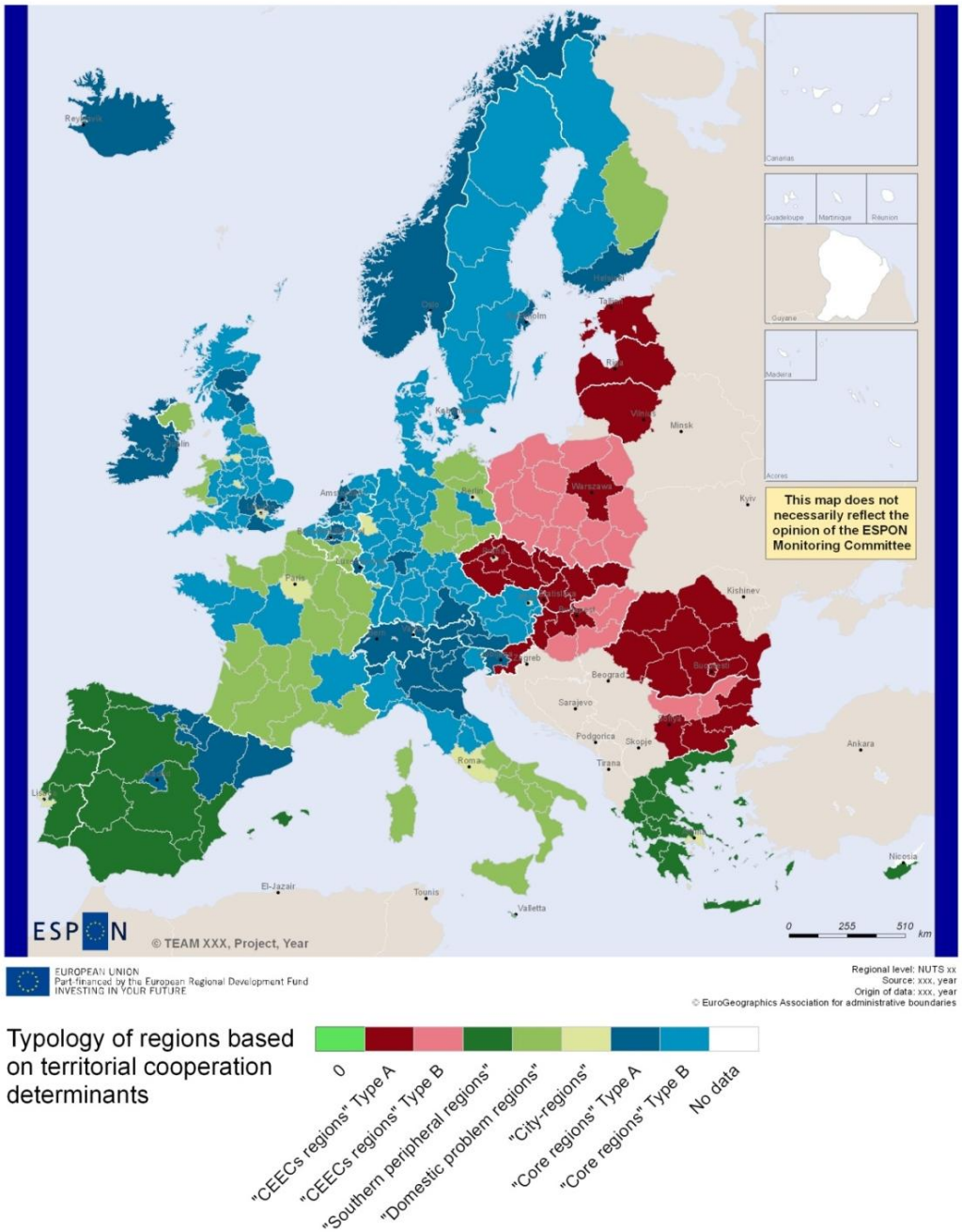
On the other hand, in the case of 'problem' regions there existed a weak, though statistically significant, negative correlation between the degree of their 'problem character' and the number of twinning cities per territorial government involved in such co-operation. This also applied (though not as strongly) to the number of twinning cities per regional income, which suggests in turn that the main obstacle hindering such co-operation was the poor financial standing of the local governments or that they gave preference to other types of expenditure, associated for example with specific social problems .

The last component of the spatial differences was the least (i.e. on the verge of being statistically significant) correlated with the intensity of transnational co-operation, understood as the percentage of municipalities maintaining partner relations, and with the total number of such relations per one unit of territorial government. This could mean that the relatively high development level provided sufficient funding for such co-operation, with the facilitating factor in the form of good accessibility by air transport.

The identified principal components (i.e. factors of differences in socio-economic determinants of TC) were used further for the classification of regions within hierarchical cluster analysis (Ward's method). In effect, several distinct clusters of components having a similar structure in relation to the analysed indicators were created. Based on the analysis of the average indicator values and following the analysis of their spatial distribution, these clusters were named accordingly. As a result, a typology was created consisting of seven subtypes from the three main ones (see Map 11).

The first type included practically all of the **'Central and Eastern European regions'** (with the exception of western Slovenia and the city of Prague). However, the subtypes A and B that were identified for this type did not easily yield to interpretation. Within this type, (A) twinning city co-operation per the number of the population, and (B) the regional income and number of municipalities, were the strongest.

Map 11: Typology of regions based on territorial co-operation determinants



Source: Authors' elaboration

The second type was strongly differentiated internally, hence conclusions must be discussed separately for each of the three specific subtypes. The first one included the **'Southern peripheral regions'** of countries such as Greece, Portugal and the majority of the Spanish regions excluding Madrid, Catalonia, Navarra and the Basque Country. On the one hand, they were characterised by the largest average distance between the twinning cities within the ESPON area and a very high share of linkages reaching beyond this area. On the other hand, however, transnational co-operation per inhabitant, regional income or the number of territorial governments was poorly developed. The second subtype, **'problem region'**, comprised eastern Germany and southern Italy on the one hand, and on the other hand the majority of the French and Walloon regions of Belgium and certain regions in the United Kingdom. In these regions, transnational territorial co-operation was well-developed in terms of the demographic and economic potential, but remained one of the weakest if compared to the number of municipalities. Likewise, the spatial extent of this co-operation was rather modest both within and beyond the ESPON area. The third subtype, which could be termed **'city-regions'** – as it mainly comprised regions encapsulated within the boundaries of large cities – quite distinctly differed from the former two. Unsurprisingly, co-operation per territorial government in this particular subtype was the most extensively developed.

The third type could be named **'core regions'**. It included, one the one hand, a subtype of the 'direct core' regions, comprising the metropolitan regions of Germany, capital city regions of the Nordic countries, northern Italy, western Austria, Spanish regions not included in the 'peripheral' subtype referred to above, Ireland, south-eastern England and the metropolitan regions of Scotland. The second subtype was made up of the remaining regions of the best-developed countries, with the exception of regions classified as 'problem' regions. Nevertheless, in terms of transnational territorial co-operation, no fundamental differences could be observed between these two subtypes. It should also be noted that both the intensity and the scope of transnational co-operation in these subtypes was quite similar to the European average.

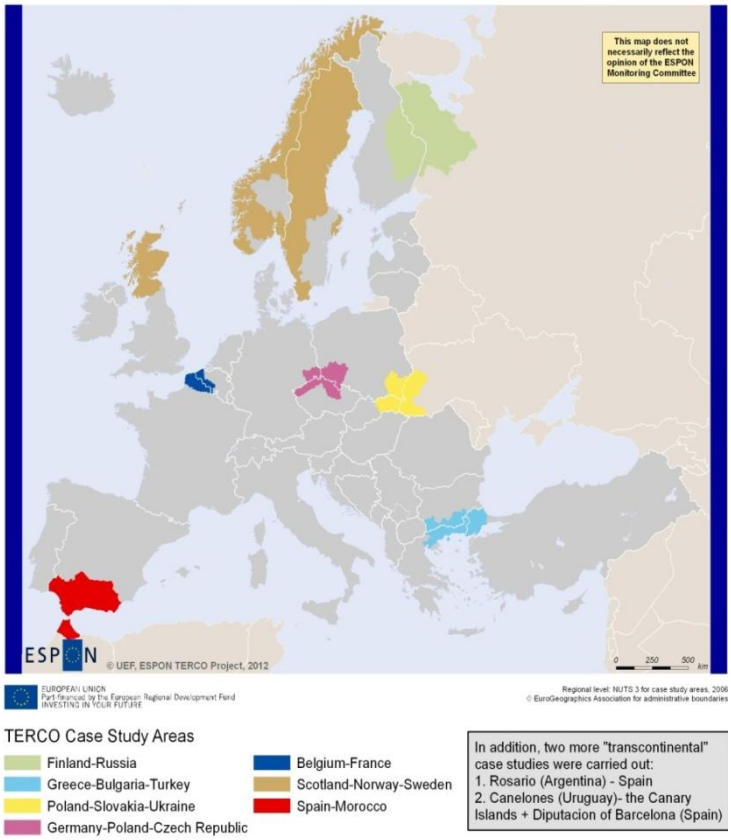
2.5 Case Studies

Nineteen countries were analysed, grouped into nine case studies (CSs): (a) Finland-Russia, (b) Poland-Ukraine-Slovakia, (c) Poland-Germany-Czech Republic, (d) Scotland-Sweden-Norway, (e) Belgium-France, (f) Greece-Bulgaria-Turkey, (g) Spain-Argentina, (h) Spain-Uruguay, and (i) Spain-Morocco. CS areas capture examples of all possible combinations of the old and new Member States as well as co-operation between the Member States and non-Member States (i.e. EU external neighbours). They also include co-operation over land and sea of the European and transcontinental borders (see Figure 5).

The case study analyses were based on local statistical data, standardised computer-assisted web electronic interviews (CAWI) and in-depth interviews (IDI). CAWI questionnaires and IDI scenarios were translated into 16 national languages and applied to all cases (with small modifications in transcontinental cases). The questions referred simultaneously to five types of TC defined in the project but also asked about co-operation beyond ETC. CAWI's blocks of questions were consistent with the TERCO-SEM model, so included questions on: (a) domains prevailing for each TC, (b) scope of co-operation by TC, (c) determinants of TC, (d) resources utilised in TC, (e) involvement of TC stakeholders, (f) governance issues of stakeholders initiating TC, (g) socio-economic impact of TC, (h) value-added from TC, and (i) future domains of TC. The English versions of CAWI and IDI are presented in Annex 1.

CAWI targeted local officials within CS municipalities or LAU2 areas involved in TC. CAWI also targeted institutions that had not participated in any territorial co-operation in order to investigate the reasons. Directed at the municipalities, CAWI was conducted in all of the NUTS2 regions embraced by the CSs. This allowed for an estimation of the 'geographical penetration' of cross-border contacts as well as other types of TC within those areas. All in all, 549 CAWIs were collected and 269 interviews were carried out within nine case studies.

Figure 5: TERCO Case Study Areas



Border/ Member State	New-New	New-Old	Old-Old
INTERNAL	PL-CZ PL-SK	PL-DE CZ-DE BG-EL	GB-SE BE-FR
EXTERNAL	PL-UA SK-UA BG-EL	EL-TR GB-NO FI-RU ES-LAT.A. ES-MA	

BE – Belgium, **BG** – Bulgaria, **CZ** – Czech Republic, **DE** – Germany, **ES** – Spain, **FI** – Finland, **FR** – France, **EL** – Greece, **LAT.A.** – Latin America, **MA** – Morocco, **NO** – Norway, **PL** – Poland, **RU** – Russia, **SE** – Sweden, **SK** – Slovakia, **TR** – Turkey, **UA** – Ukraine, **GB** – Great Britain.

Source: Authors' elaboration.

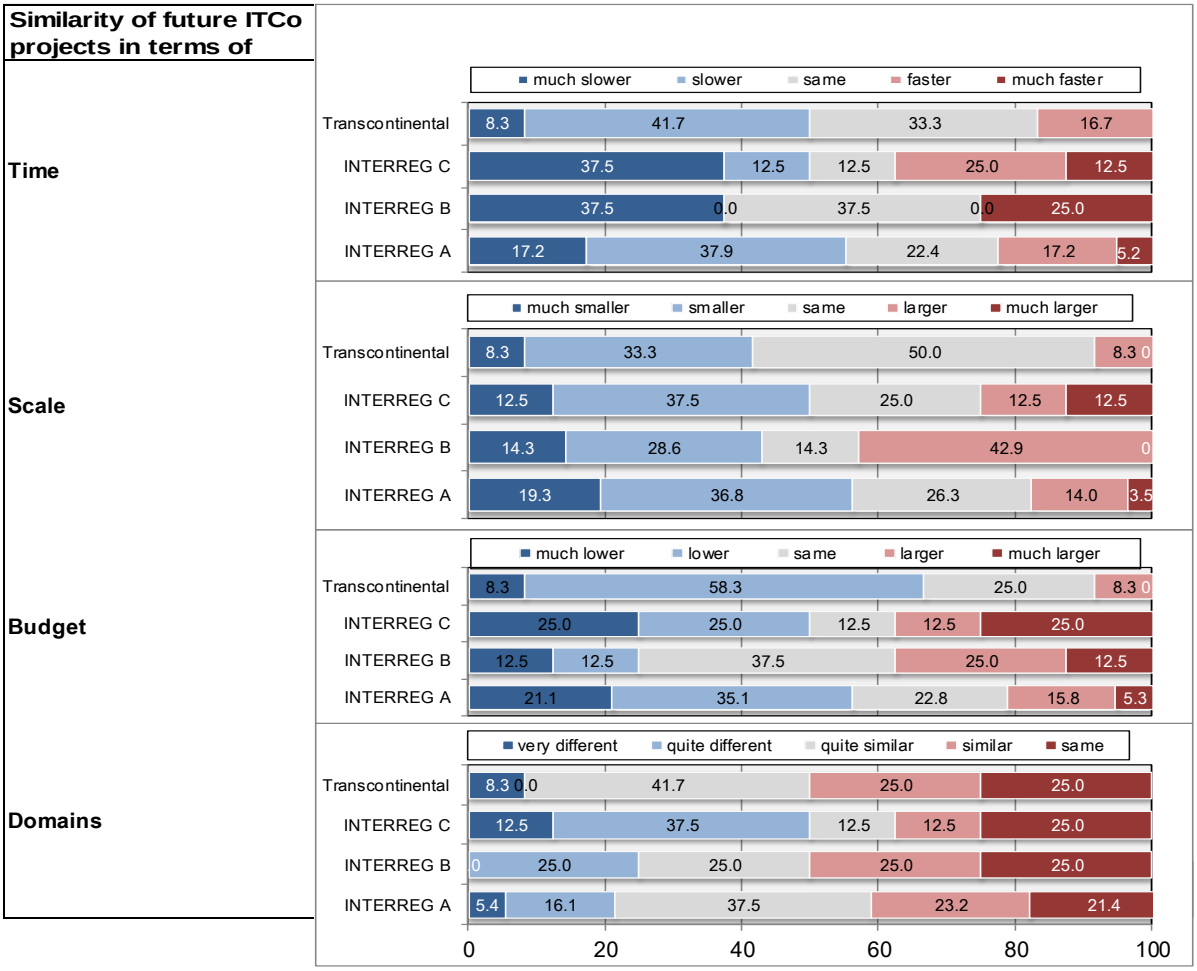
Value-added from TC in terms of time, scale, budget and domains

The main finding of this analysis is that **if territorial co-operation funds were unavailable, the co-operation activities would not be undertaken by the majority of the current TC project participants.** This finding can be interpreted as a sign of inability to undertake similar projects based on domestic funds only. In more detail, and in relation to INTERREG A, the highest frequency of 'no' is found in the old Member States (75 percent), followed by non-Member States (58 percent), while for new Member States the negative responses are slightly lower (51 percent). It is remarkable that all the respondents from the new Member States would not undertake TC activities similar to INTERREG B without financial support from ETC. The same is true for INTERREG C and Transcontinental co-operation. This evidence clearly reflects the vital role that EU funding plays in territorial co-operation.

An interesting issue for examination is to explore which type of territorial co-operation brings the highest value-added in terms of time, scale, budget and domains (see Figure 6). Focusing on INTERREG A in particular, and examining the dimension of time, empirical evidence suggests that the majority of the municipalities that would be able to undertake territorial co-operation of a similar kind would, however, implement those activities at a slower pace in new and non-Member States, but in the same pace in old Member States. This evidence indicates that the public local actors in the former two groups would not be able to carry out the projects as fast as they can now with the INTERREG support. In terms of *scale*, the old Member States would implement a TC project at the same or smaller scale, and a similar pattern is detected in the new Member States. For the non-Member States, it is worth noting that most of the municipalities would implement projects of a smaller, indicating that TC programs are necessary for the implementation of successful co-operation at large geographical scales. As far as the *budget* is concerned, the findings show that the vast majority in all three groups would have a lower, much lower or the same project budget. It is thus a clear-cut observation that the level of TC budgets is strongly influenced by the existence of funds,

revealing the funding-driven nature of TC activities. Looking at *domains*, it is evident that municipalities from the old and new Member States would initiate the same fields of territorial co-operation implemented so far. As far as the non-Member States are concerned, the perceptions appear to be slightly different, since one-third of the municipalities would undertake quite different cooperating initiatives and another third would undertake quite similar domains. Based on insights gained from this evidence, one could argue that a challenge for ITC in future is to set out common approaches for all the domains that can easily be applied to a wide range of different territorial units in Europe. To sum up, the accumulated empirical evidence suggests that TC programs bring high value-added since they allow for larger scale, faster changes and richer budgets, and this is especially true for new Member States and non-Member States.

Figure 6: TC projects without EU funding



Source: Based on TERCO Case Studies.

2.5.1 Contribution of TC to territorial keys

In order to increase the territorial dimension of Europe 2020, five major 'territorial keys' were formulated by Böhme, Doucet, *et al.*, (2011) during the Polish presidency of the EU. They included: accessibility, services of general interest, city networks, functional regions, and territorial capacities. The keys aim to bridge the Europe 2020 and TA 2020 priorities through different types of policies. Some evidence was found in the case studies on how activities financed by European Territorial Co-operation policy support (or should support) those territorial keys.

Accessibility

Accessibility is a major theme within the case study of Scotland, Norway and Sweden. Many regions are peripheral and have low multimodal accessibility scores. Several strategies such as the Northern

Scarcely Populated Area Strategy, Northern Dimension and Arctic strategy address these issues directly and give them a transnational focus. The construction of well functioning East-West transport corridors is a key priority for Norway and Sweden in order to improve access. Many of the INTERREG programmes that are active within the area include accessibility issues as a key priority. For example the Northern Periphery Programme's accessibility priority states its aim 'to facilitate development by the use of advanced information and communication technologies and transport in the programme area'. Roadex is a 'best practice' example of a concrete project in this area. It aims to implement the road technologies developed by ROADEX on to the Partner road networks to improve operational efficiency and save money.

Low levels of accessibility (global, national and regional) are also a fundamental feature of the case study area (CSA) covering Eastern Finland and the Russian Republic of Karelia. On the one hand, vast distances and low population densities make physical exchanges within the CSA difficult. On the other hand, the limited number of crossing points in the external EU border (two in approx. 200 km) is a major obstacle, as well as the underdeveloped secondary road network on the Russian side. Additionally, from the European perspective, this north-eastern edge of the EU is distant and difficult to reach from major economic and population centres and markets. Therefore, physical infrastructural investments are seen as necessary for the development of the CSA and for an increased 'territorial cohesion' across the border. The most important elements of such investments would be the modernisation of existing border crossings and the establishment of new ones in the region, the opening of passenger railway connections from the Eastern Finnish regions to the Karelian Republic, and larger-scale development of the freight railway lines crossing the border here (from Western Europe to Russia) for the transport of containers. Among the developments that have been supported by INTERREG/TACIS and non-EU-funded cross-border projects, border crossing points are seen as the most beneficial ones. Besides, with regard to e-connectivity, ITCs have considerably improved conditions for communication between actors in the CSA and are still seen as an important part of future development. Cross-border communication skills (i.e. language, e-skills and other aspects) are seen as vital for enhancement, and they have undergone some improvement through CBC projects.

Service of general economic interest

The Northern Periphery Programme can serve as an example of an INTERREG programme that focuses on these issues in relation to scarcely populated areas. It aims to include 'private, public and voluntary sectors co-operation and networks to develop new and innovative service solutions for remote and peripheral regions'.[3] For example, in relation to improving health services in scarcely populated areas, the programme envisages projects that bring together private medical firms and medical research staff – to take advantage of potential economies of scale and to implement measures aimed at increasing efficiency of healthcare delivery to rural and peripheral regions. It advocates a 'triple helix' approach to improving these services.

Under the current ENPI Karelia programme, all six themes can be linked to 'services of general economic interest', especially objectives of social wellbeing and culture. Social wellbeing includes, for instance, the development and modernisation of social services, the creation and improvement of regional models for welfare services, the promotion of models to adjust social services to the conditions of long distances, sparse population and cold climate, and the development of entrepreneurship in the welfare sector. The local government system and administrative division in Finland are in flux due to demographic challenges to even basic service provision. Accordingly, healthcare and social services, also because of the challenge of an aging and declining population in the CSA, were also important targets of territorial co-operation in previous programmes and initiatives. The DART project (INTERREG IVC, 'Declining, Ageing, Regional Transformation'), in which two regional authorities from the Finnish side of the CSA took part (Kainuu and Pohjois-Karjala), is a good example of knowledge and good practice exchange among 13 European regions, exploring

[3] NPP OP.

potential solutions to this widespread problem. Cultural and educational CBC projects have also been very common and are seen as important in preparing human capital for co-operation in business and economic development.

From the Greece-Bulgaria co-operation, good examples include the creation of a network for the transfer of technology and innovation aiming to develop enterprise in the Greece-Bulgaria cross-border area and implementation of advanced methods in computer sciences and the use of grids with applications in the physical sciences and engineering.

In Polish-Czech co-operation, such provision mainly relates to flood prevention and dealing with flood aftermath (discussing and planning hard investment together; information, warning and evacuation systems).

Use of territorial assets

There is an increasing focus on Arctic issues, not least because of the vast wealth of natural resources the area possesses and which are unlocked by climate change (fossil fuels, renewable energies, marine resources). Existing territorial co-operation programmes in North Sweden and Norway are well placed to facilitate and provide resources for cross-border and transnational co-operation and have been asked to explore these possibilities. To date, no comprehensive strategy exists for the Arctic, but on 20 January 2011 the European Parliament adopted a resolution that emphasises the need for a united, coordinated EU policy on the Arctic region, in which the EU's priorities, the potential challenges and a strategy are clearly defined. Furthermore, there is an Arctic focus in the Northern Dimension framework. A coordinated transnational approach which includes non-EU states such as Norway, Greenland, Iceland, Canada, Russia and the United States is required in order to ensure that the resources the Arctic offers are managed in a sustainable manner.

There is a lot of concentration by recent TC and CBC projects in the CSA on how to utilise the special resources of the North shared by the regions covered by the CSA for raising the competitive profile of the regions and to facilitate sustainable socio-economic development. The main natural asset, the vast area of boreal forests, is seen as a resource to be used in multiple ways for different innovative branches of the wood-processing industry, climate-friendly bio-energy, environmental protection and research (i.e. biodiversity), as well as high-quality nature tourism. Considerable knowledge exchange and innovation is expected from the utilisation of this natural resource, reflected by the high number of related TC projects and the separate theme defined within the current ENPI Karelia programme ('Forest-based co-operation'). The common 'Karelian' cutural-historical resources of the CSA are utilised by a range of CBC projects in culture, education and tourism development. Also, turning around the rhetoric about northern and eastern peripherality, the idea of being the 'northern gateway to the east' has been taken up by actors in the CSA from time to time during the past two decades as a geographical-locational asset to draw upon as well as an aspect of special know-how (familiarity, experience) related to Russia to capitalise on.

In the Greek-Bulgarian case, the evidence of TC based on territorial assets relates to the development and implementation of a common system for monitoring water quality and quantity and the situation of the Strymonas river between Greece and Bulgaria. Other examples include the creation of an integrated system for the monitoring and management of the cross-border river basin of the river Nestos, and a mobile centre for information on environmental awareness-raising for the Kerkini–Petritsi cross-border area of ecological interest.

In the Poland–Czech Republic–Germany case study, the evidence of asset-based co-operation comprises: investments into new and restructured recreational and tourism infrastructure and products such as historical parks, mansions; a system of post-military pre-war bunkers; swimming pools, walking, skiing and biking trails; information and promotional activities (maps, brochures, websites, festivals etc); popularisation, and protection of historical and natural heritage.

City networking

On the Finnish side of the case study area, the larger towns (regional centres) have considerable experience in the networking type of TC. These are usually thematic networks, such as the 'WHO European Healthy Cities Network' (consisting of more than 90 cities and towns from 30 countries) of which Kuopio (the centre if Pohjois-Savo) is an active member. These networks provide good opportunities for the towns in this distant European periphery to be part of knowledge flows, exchange good practices and internationalise their business lives as well as their non-profit sectors. Traditional partnerships between Eastern Finnish and Russian Karelian towns (e.g. Sortavala-Petrozavodsk-Joensuu; Kajaani-Kuhmo-Kostamuksha) can also be mentioned in terms of CBC, which could be the beginnings of a wider network among Finnish and Russian towns in relative proximity to the border; however, they currently remain limited to bilateral relations, such as friendship-towns and co-operation agreements in the fields of culture, education and, to a lesser extent, economic development.

In the area of Greek-Bulgarian co-operation, a structure for the common recording and promotion of cultural elements in the cross-border area between Agistro in Serres (Greece) and Koulata in Bulgaria has been established. Other examples in this area are the creation of a network of cultural historical monuments in the southern Balkans and restoration of the 'Arsana' listed building.

With regard to networking cities fulfilling local needs and aspirations for closer and deeper co-operation, an initiative known as a 'Little Triangle' was established in 2001, comprising a Towns' Union linking three adjacent towns of Zittau (DE) – Bogatynia (PL) – Hradek nad Nisou (CZ).

Functional regions

No relevant examples were identified.

2.5.2 Different potentials of co-operating areas

According to TA2020, different regions cooperate in different ways depending on their mutual relations. In particular, 'territories with **common potentials or challenges** can collaborate in finding common solutions and utilise their territorial potential **by sharing experience.** Territories with **complementary potentials**, often neighbouring, can **join forces and explore their comparative advantages** together creating additional development potential' (TA2020, p.4). TERCO brings some more insight into how it works in practice.

Regions with common potentials (PL and CZ): Tourism potential of Sudety mountains

The first example of regions with common potentials comes from Poland and the Czech Republic, two countries that border the mountainous region with a long tradition of tourism, in particular Spa-type treatment in Lądek Zdrój/Landeck (from XVI century). Over time, the Sudeten Mountains became one of the Europe's most popular tourist destinations in Central Europe where natural assets (not only Sudeten) are a major strength. On that basis, high-class cultural tourism (concerts, festivals etc) and active sport tourism (ski, biking, canoeing etc) have been developed. As the regions on both sides of the border have similar touristic potential, they started co-operation. Within the new tourism paradigm, the adjacent areas faced the same problem of the need to develop a rich and differentiated range of tourist services that would, first, fit the needs of a target group that was differentiated and expected high-quality products, and second, ensure provision of interesting activities and events throughout the year. It was much easier to organise it at the scale of the whole border region, rather than separately, and so they have cooperated to achieve synergy. They developed new (or modernised) tourist products and infrastructure which are interconnected and complement each other, thus widening the options for visitors (and increasing endowment). This is supported by a tourist information system, maps, brochures and other promotional materials prepared in at least two languages and made available on both sides of the border. Upgrading of the transport infrastructure has also helped to improve accessibility. The IDIs show that the **prevailing way of co-operation there is *exchanging experience* and *jointly implementing common actions* addressing tourism*.***

Regions with common challenges (PL and DE): Oder river challenge

The Germany-Poland border area that was the subject of the case study is located along the upper Nysa/Neisse river and its tributaries. Due to the mountainous character of most of the area, where rainfall is high and the water level rises fast, and due to environmental pressures related to the existence of large-scale brown coal mines on the Polish side and a power station on the German side (deforestation), plus a high level of urbanisation along the river and main roads (including A4 transport corridor), the whole area is exposed to flood risk. Over last few years, serious floods hit the area 2-3 times a year. Despite large and differentiated flood prevention and anti-flood investments (infrastructural, monitoring and information systems, rescue system), floods pose a serious problem, in particular on the Polish side, where more investment is needed. Success in coping with the floods requires very close, formal and informal co-operation on both sides of the border (as well as in the Czech Republic, as some river-heads are located on the Czech side, but flow north, to Poland and Germany). From this point of view, cross-border co-operation helps to maintain direct, personal contacts that may be a key asset in emergencies. Improved information systems, whatever their objectives, prove vital in the face of unpredictable, stormy floods, and improved transport networks help to secure logistics/evacuation lines, if and when needed. This is one aspect of building functional areas based on interconnections, common planning in a growing number of spheres, and common action. Floods were extremely dangerous, but rescue operations, with support from German medicopters (fitted with night thermo-location vision systems), helped to save lives on the Polish side as well. And their assistance was triggered by one phone call. The interviewees from that CS area declared that the **prevailing form of co-operation in those regions with common potential is *sharing tools to tackle a common problem,* i.e. sharing equipment and know-how to deal with flood prevention*.**

Regions with complementary potentials (EL and BL): health and social protection services

In the framework of INTERREG A Greece-Bulgaria, a large number of projects were implemented as part of a joint solution of cross-border health problems associated with the mobility of people, goods, and animals (such as the creation of the Cross-border Centres for Public Health, Cross-border Veterinary Centre for Rare Diseases, etc.), as well as problems related to the pollution of water, air and soil (such as the creation of the Laboratory for Molecular Biology). There were several issues that concerned the health authorities on both the Greek and Bulgarian sides of the border. For example, the Bulgarian part was placing high emphasis on infectious diseases whose mortality rates were significantly higher in their part of the border in comparison with the other side. Also, for that part of Greece, the levels of Hepatitis B were detected as higher than the country's average. Furthermore, there was a need to jointly keep animal diseases under control, such as foot and mouth disease, sheep pox, swine ruminants, bluetongue, etc. The two parts of the border worked in a complementary way in terms of know-how, human resources and activities implementation (e.g. collecting samples for analysis, conducting controls on hygiene standards, etc.). **In this case study, the surveys revealed the highest share of co-operation as *jointly solving cross-border problems.***

2.5.3 Strengths and weaknesses of TC

From the case studies, the main strengths and weaknesses of TC were identified and elaborated by groups of countries (the full description for CS is in the Scientific Report).

The **strengths** identified related either directly to the TC projects and their products/results, or to wider socio-economic and cultural benefits. The former include:

- direct products of projects
  - a. more economic opportunities for local residents in the border areas through border infrastructure (PL-SK-UA)
  - b. more varied cultural choice for the local population (PL-SK-UA)
- skills and knowledge gained during realisation of the TC projects
  - a. active public sector (FI)

b. flexibility in a wide range of TC activities able to address a wide range of issues (GB-NO-SE)
c. innovative approaches in terms of achieving synergies between projects (GB-NO-SE)
d. experienced staff (GB-NO-SE)
e. pragmatic approach and long-term strategic reflection (FR-BE)
f. TC as an opportunity to transfer knowledge and innovation, and to create various synergies and strategies (EL-TR-BG)

Among the more general strengths of TC, the most common were:
• cultural background
a. utilising historical and cultural links (DE), also a long history of co-operation (FR-BE)
b. long-established framework for TC and cultural propinquity (SE-NO)
• social and mental changes and processes
a. Russian immigrants seen in Eastern Finland as an asset
b. increasing good experience of TC (RU, AR)
c. strong motivations for internationalisation and mutual interest in CBC (FI-RU), political will (FR-BE), local actors more effective in overcoming antagonistic interests at international level, functioning in a more pragmatic manner (EL, MA)
d. developing good neighbourhood and interpersonal relations (PL-SK-UA, FR-BE)
e. similarity of problems/needs (also based on similar physical features) and perspective on opportunities, willingness for TC, existence of personal contacts (PL-CZ-DE, GB-NO-SE, FR-BE)
f. creating networks for the provision of new ideas, the promotion of entrepreneurship and sustainable social and economic development (EL-TR-BG)

The most common **weaknesses** prevailing in the case study areas in relation to TC were:

- insufficient involvement of the private sector (FI-RU, GB-NO-SE), NGOs (GB-NO-SE) and other local stakeholders (EL-TR-BG)
- bureaucracy perceived as too complicated (especially for smaller actors without sufficient resources), administrative and financial burdens (FI-RU, GB-NO-SE, DE, UY)
- infrastructural projects focused on local needs neglecting cross-border effects (rather 'near border effects') (PL-SK-UA), small follow-up value-added (EL-TR-BG)
- difficulties in management of large-scale projects (EL-TR-BG), restructuring and financial problems – crisis (PL-CZ-DE, EL)
- lack of inter- and intra-programme synergies (GB-NO-SE)
- weak ties with more distant regions (lack of funds, low attractiveness of CS actors) (PL-SK-UA)
- small role of the transfer of knowledge (PL-SK-UA)
- uneven/unfair distribution of funds for infrastructure between EU and non-EU partners – it creates imbalances and undermines overall effectiveness of CBC initiatives (UA)
- differences in level of development (PL-CZ-DE), competences of local actors (EL-TR-BG) and cultural and institutional systems (MA)
- lack of longer-term view (FR-BE)
- lack of competences, visibility, formalisation and legal basis to implement concrete actions and projects (FR-BE), lack of experienced and skilled staff (TR)
- competition for investment and funds, conflicting interests (MA) – a weakness especially in EGTC where consensus from all partners involved is required (FR-BE)

2.5.4 Recommendations from CS

Based on experience from the particular CS reports (references to them are in the brackets below while full description can be found in Scientific Report, Chapter 2.3), the following key policy recommendations are proposed:

- Decrease administrative burdens, simplify and increase flexibility of procedures (FI-RU, PL-SK-UA, PL-CZ-DE, EL-TR-BG), also involve different types of partners in TC projects (GB-NO-SE, EL-TR-BG)
- Further decentralise (PL-SK-UA)
- Build capacity and human resources development to support enterprises as partners in TC projects (FI-RU, PL-SK-UA, DE), also more advanced models of governance (MLG) for more advanced projects (PL-CZ-DE)
- More equal role of non-EU partners in TC project decision-making and fund allocation (PL-SK-UA)
- More active utilisation of Euroregions for TC projects (PL-SK-UA)
- Macro-regional strategies enable synergies (GB-NO-SE)
- Longevity by supporting existing programmes and ensuring their continuity (maybe more sustainable links without external funding) (GB-NO-SE)
- Clear objectives relevant to specific territory defined through negotiations and analysis of needs (FR-BE)
- Important role of political will – from local to the highest political levels (FR-BE)
- Concentration on selected domains left to TC partners, with a strong common motivation and argumentation to back their decision (FR-BE)
- Evolution of TC from informal contacts, through formalisation, to common objectives, but no one-size-fits-all on governance issues (FR-BE)
- Dissemination of the results (easily evaluable (MA), extendable and applicable at different scales) strongly associated with the competitiveness (MA) of the co-operating regions (EL-TR-BG)
- Objectives related to daily life problems (EL-TR-BG, FR-BE)
- More information (info days), dissemination, human capital investments (EL-TR-BG)
- Latin America – transformation TC into state policy (ARG) or matching regional development strategy (UY)

3 Addressing the research and policy questions

3.1 Adequate geographical areas of co-operation

3.1.1 Current co-operation areas

In general, the **current geographical areas of European territorial co-operation (ETC) seem quite appropriate because they complement each other and also offer a good alternative for non-ETC types of co-operation**. Our analyses of territorial coverage of all TC programmes showed that due to their specific requirements they complement each other very well (see Section 3.1.2).

Our case studies confirm that most regions do not desire geographical expansion of their TC but also reveal some exceptions where such an **expansion would be beneficial particularly in the case of eligibility areas of INTERREG A and transcontinental co-operation,** as explained below.

For co-operation in general (also for transcontinental TC), areas of historical relations and cultural proximity (also in language) are important; however, economic factors have recently been increasing in importance (business co-operation of firms). At the same time, the involvement of private partners in EU-funded TC projects is very limited because of the formal restrictions and non-commercial bias. For transnational TC, adequate co-operation areas are those based on macro-regional strategies, usually related to sea basins or other geographical structures. A common strategy (not limited to EU territory) facilitates obtaining synergies. For obvious reasons, the most appropriate regions for cross-border co-operation are border regions, because in this type of co-operation partners usually have similar problems and needs (because of geographical proximity), forming one of the most important drivers of co-operation. In this type of TC, however, restrictions in EU programmes related to eligible areas of specific programmes (like INTERREG A) are seen as too rigid – they make it impossible to

co-operate with partners outside the programme area, and sometimes these partners have valuable resources that consequently cannot be utilised. It should be also stressed that, despite new technologies in communication (ICT), proximity still matters, especially when tight and intensive co-operation is considered, whereas for softer projects (related with knowledge exchange, sharing experiences etc.) co-operation with more distant regions is possible. Therefore, in defining new co-operation areas, there is a need for more flexibility and a functional approach (not based on arbitary distances from border, as currently in INTERREG A) on administrative borders and divisions. **The basis for delineation of co-operation areas should not be the NUTS system but instead specific issues or domains (such as tourism, risk prevention, environmental problems, infrastructure,** etc.). When considering any changes in EU TC programmes, links, relationships and partnerships established through previous programmes should not be lost.

A special case is represented by **transcontinental co-operation where geographical expansion would be possible and desired,** but for that to happen a specific programme would need to be established taking into account the specificity of the countries involved but with rules similar to INTERREG A (read more in Section 3.3.1).

Our IDIs revealed that the best addressed global challenge within TC is **climate change** and **specific environmental problems** such as flood prevention (CS on PL-CZ-DE), tackled *inter alia* by exchanging technology in the renewable energy sector and knowledge-intensive industries, nature protection and sustainable tourism (CS on FI-RU). In non-EU countries, these domains are seen as future types of TC initiatives that should receive more attention (e.g. in future, UA seeks more disaster prevention and increasing effectiveness of energy/resources. In new Member States, TC forms a basis for more global thinking and cross-border consideration of environmental problems (CS on PL-CZ-DE). In old Member States, this kind of thinking (and doing) is more advanced, and in these countries opportunities to increase the impact of TC are pointed out, such as linkages and synergies with other TC programmes as well as Structural Funds programmes, and wider strategies are required in order to ensure impact (GB-NO-SE), positioning of metropolitan areas or harmonisation of EU legislation (BE-FR). Generally, it seems that global challenges are better addressed by TC in old Member States rather than in non-EU and new Member States.

3.1.2 Establishing new co-operation areas throughout Europe

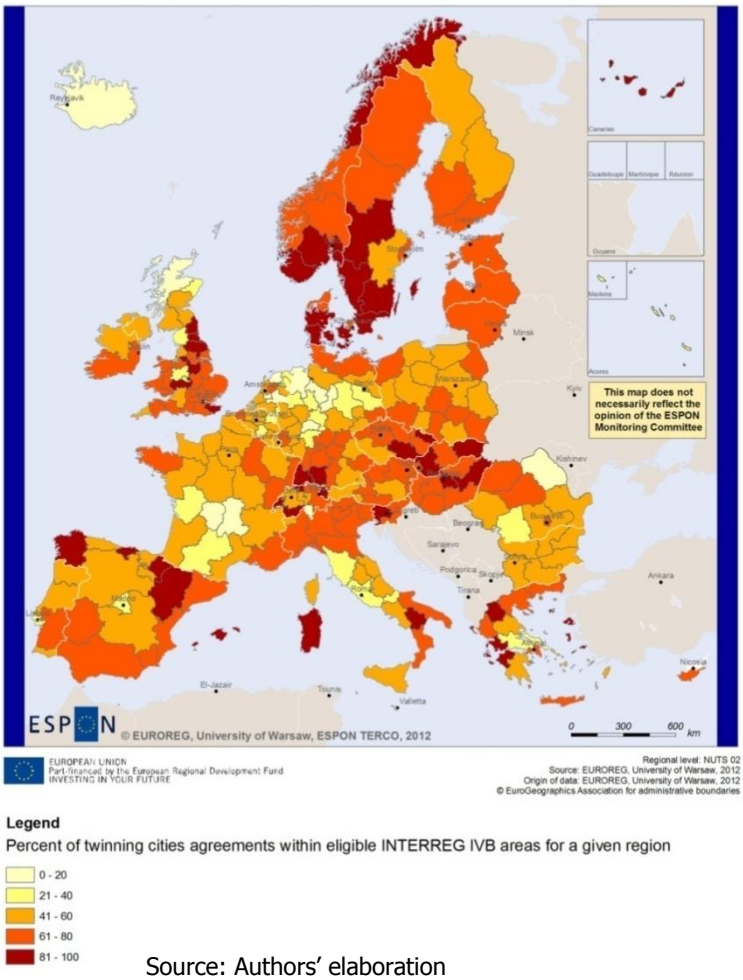
In order to identify potential new co-operation areas, the current territorial coverage was analysed for INTERREG C and INTERREG B versus Twinning Cities. The idea was to confront the free-will type of co-operation, as with Twinning Cities, with policy-regulated interregional and transnational co-operation in order to find out whether the geographical patterns differed. If so, we could claim that there were some geographical areas that would like to cooperate but for which there are no organised EU programmes within ETC.

Hence, the first comparison was co-operation within INTERREG C (III and IV) with Twinning Cities. The results of the analysis based on Pearson's coefficients showed very low correlation between the two programmes. For three countries (Iceland, Germany, and Poland), the correlation coefficient was a bit higher (though still low) at about 0.3 (the highest value is for Iceland, 0.34). For the remaining countries, the values were much lower (see Scientific Report). This means that the spatial patterns of co-operation (or the co-operation networks) at regional level in both analysed forms are rather different. This is, to some extent, connected with the different character of the analysed forms of TC. Co-operation within Twinning Cities is largely influenced by spatial proximity, whereas in the case of INTERREG C spatial closeness is not important, and in fact quite the contrary: the preferred projects are those joining partners from different parts of the continent. **The results indicate that there is a high complementarily in terms of co-operation areas involved – within Twinning Cities the co-operation takes place with spatially close partners, but in the case of INTERREG C the spatial scope of co-operation is significantly broader.**

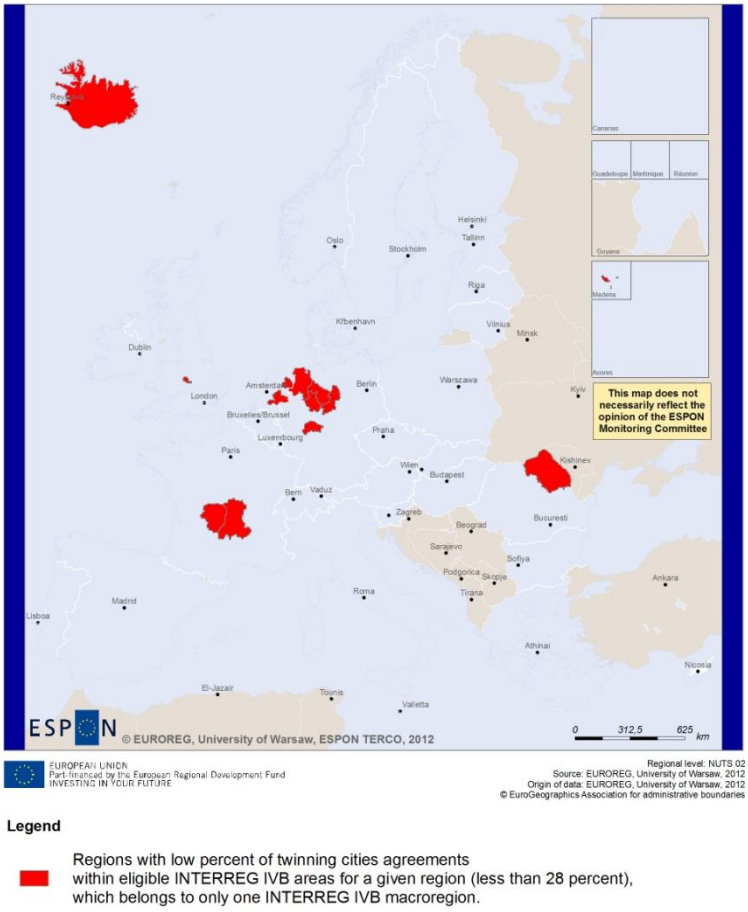
Secondly, the spatial pattern of Twinning Cities co-operation was compared among cities located within INTERREG IVB. Of course, the specificity of INTERREG B was that this co-operation must take

place within predetermined macro-regions, and the Twinning Cities located there could co-operate wherever they wanted. The results of the analysis show that in a significant majority of regions the co-operation within Twinning Cities is limited to INTERREG IVB macro-regions to which they are ascribed; in other words, they could go beyond the region, but they do this only to a very limited extent. In the case of some macro-regions, the index of coverage by Twinning Cities within the same region is very high, and exceeds 80 percent. Only for a few regions is the index lower than 40 percent and 20 percent. The latter pertains in particular to the central and north-west regions of Germany, regions of the Massif Central in France, the Romanian North-East region, northern peripheries of Scotland and to Iceland (see Map 12).

Map 12: Twinning cities agreements within eligible INTERREG IV B areas



Map 13: Areas that potentially could be extended to two INTERREG B programmes



Source: Authors' elaboration

The results presented can be interpreted firstly, as **confirming a good delimitation of INTERREG IVB across macro-regions, because they correspond to the preferences regarding the directions of co-operation expressed in grassroots relations** in the form of twinning cities. Secondly, in any consideration regarding **new areas for co-operation** the candidates are within INTERREG B, among the regions that are restricted to only one INTERREG programme, but which are active in unrestricted cooperation such as twinning cities. Accordingly, two criteria for the delimitation of new areas of TC are: (a) belonging to only one INTERREG B programme, and (b) having a Twinning City co-operation network that operates beyond the assigned macro-region. Map 13 shows those new areas of co-operation that **would most probably benefit from extended eligibility of INTERREG B to more than one macro-region**. They are: **north-west regions of Germany, regions of the Massif Central in France, the Romanian North East region, northern peripheries of Scotland and Iceland**.

3.1.3 Prospects for competitiveness and cohesion driven by TC

Joint co-operation actions can in principle increase the competitiveness of the actors/regions involved. However, competitiveness has a different meaning in different groups of countries in relation to TC. In non-EU countries and new Member States, competitiveness is very often identified with the development of infrastructure (since it is often the major barrier for regional development there) or common spatial planning. In old Member States, the impact of TC on competiveness is identified with joint business promotion, technology transfer, social services or utilising complementary assets (also to reach a 'masse critique' needed for investment). In many cases, it is hard to observe or indicate any impact of TC on competitiveness, partly because of the non-profit character of EU programmes (so competitiveness cannot be measured by profits) and relatively small budgets of the programmes (so no substantive impact is actually possible). More direct effects are observed in national policy programs which directly devoted to increase in competitiveness. It is also visible that in old Member States there is a more strategic approach to TC, and TC projects are viewed as one of the measures for meeting global challenges such as global competitiveness, cohesion or climate change, e.g. seeing TC projects in the context of wider strategies, positioning cross-border metropolitan areas in the global economy, and harmonisation of EU legislation. Participation in TC projects also has a very significant impact on improving and intensifying working relations between actors within and between co-operating regions (especially in EU Member States). Although there is some (currently rather limited) impact of TC on competitiveness, some measures and solutions can increase combined competitiveness through joint actions, such as: greater involvement of the private sector (especially in new Member States and non-EU countries), more emphasis on economy, innovation and promotion, infrastructure development (especially in non-EU countries), higher programme budgets and linkages with mainstream Structural Funds, joint spatial planning, and management of development activities.

Physical barriers to co-operation

Based on all the case studies, it can be stated that physical barriers (mountain ranges, rivers etc.) are regarded as an opportunity for TC rather than a constraint. They are simply geographical structures along which common problems and concerns exist, but there are also potentials that create the basis for TC initiatives on both sides of the borders. However, in addition to natural barriers, problems relate to distance, remoteness, e.g. almost uninhabited areas (in Finland-Russia CS), issues related to the external EU border – Schengen zone limitations, strict border regime, overstretched border infrastructure, corruption, low administrative capacity etc. Some of these barriers can be overcome by TC developments and technological means (internet).

3.2 Adequate domains for territorial co-operation

We agree with Böhme, Doucet *et al.* (2011) that efficiency requires 'issue-based' concentration of funds, and this is more meaningful than thematic concentration of domains. In other words, it is better to focus on the issues that TC should tackle rather than domains, because one issue can refer to many different domains. However, we analysed a wide variety of domains, where some were one-theme domains (e.g. infrastructure) and others were multi-theme domains (e.g. education, which could involve infrastructure, cultural exchange and job mobility), so the latter in fact addressed the issues and not only the themes of TC.

3.2.1 The right scales and themes for territorial co-operation by TC types

The most popular domains of TC, in all types of CS areas, are culture, education, tourism, environmental protection and infrastructure development. Much less popular are domains/issues such as social and health care, technology transfer, spatial planning, cross-border employment, mobility and transport, sustainable management of the rural character and economic exchange. All these domains can be addressed appropriately by different types of TC, since it is always a matter of the specific situation – problem to be solved, domain of the project, scale of the investment etc. However, twinning cities are seen as better adapted to soft projects and issues (such as cultural and

sports events, establishing and maintaining good neighbourhood relations, educational exchanges), INTERREG A to most typical, local problems (such as local physical, environmental and social infrastructure, cultural and natural heritage protection, tourism products development, environmental and economic activities), and INTERREG B and C to more advanced and macro-level issues (business co-operation and entrepreneurship, exchanging experience, macro-economic and environmental issues, innovation and sustainable development). The most desirable domains of future TC projects were those related to economic growth and competitiveness, such as innovation, R&D, tourism services and business co-operation, but also environment, renewables, maritime, and risk management and environment, especially within more strategic projects.

Since each project is unique and dependent on the local situation, it is very difficult to point out specific domains for which synergies can be created. Generally, **synergies can occur among any domains that complement each other to resolve a specific problem**. What is observed is that in most old Member States (and also in Norway) synergies between different projects and domains are planned at the very early stages of programming new TC projects. By contrast, in new Member States synergies are investigated *ex post* after completion of the projects, and in non-EU European countries synergies are rather rare. In old Member States, synergies are considered unnecessary at the single project level but appropriate for groups of projects or even the whole programme, and the role of higher-level institutions (e.g. regional councils, joint technical secretariats) is often very important in this process. In other cases, it is based on informal activities and reflection, evolving towards a stable framework such as the EGTC and national and international positioning. In these cases, the synergy effect is often one of the factors taken into consideration during programming and planning, e.g. pro-active project clustering in which programme bodies identify projects with similar themes that can address a strategic issue in the programme area and make available some additional budget. In new Member States, synergies are not often considered, not only before but also after a project's completion. And because of the lack of comprehensive planning and reflection in this regard, some synergistic effects are obtained accidentally. Nonetheless, some synergies do occur in these countries: in space (within one country and cross-border), in complementary domains (culture-education-tourism-infrastructure, risk prevention-disaster management-education, social infrastructure-social entrepreneurship), and over time (follow-up projects, exchanging experience, building mutual trust).

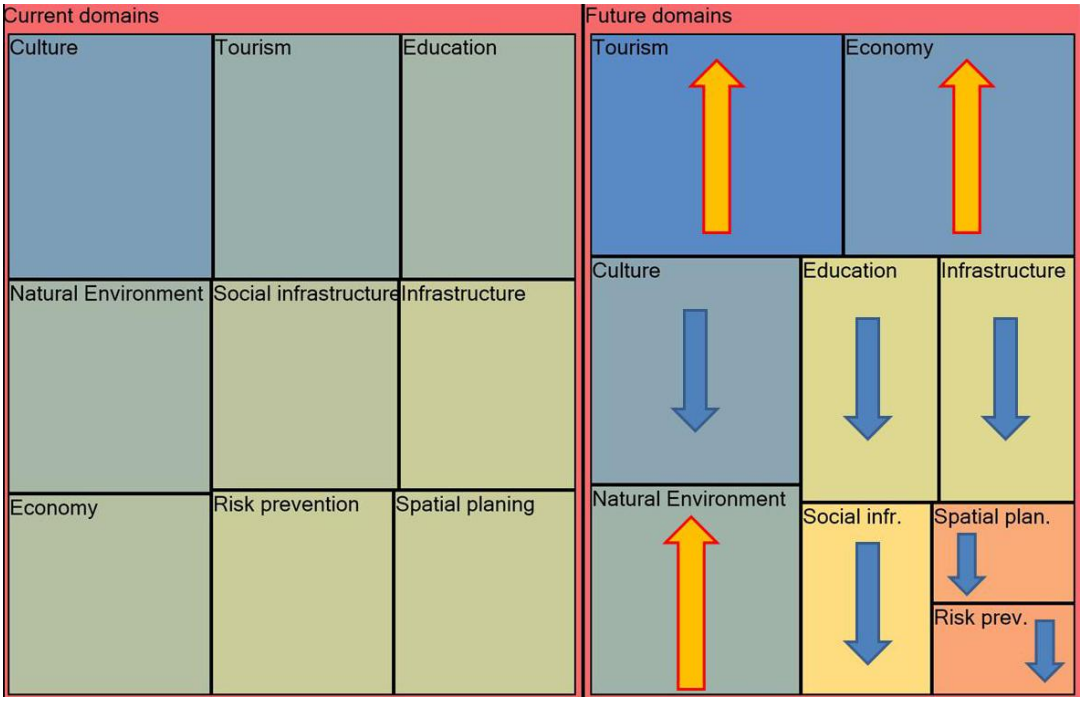
Current and future domains of TC

Actors with experience in TC co-operation have slightly different preferences regarding future domains, and accordingly there could be a shift in themes of TC programmes in future compared to the current ones (see Figure 7).

The domains that will gain more attention in future include: economy, tourism and natural environment. Domains that will probably lose popularity in future are: risk prevention, infrastructure and spatial planning.

In more detail, the three most important domains perceived for the future of Twinning Cities are *Cultural events*, *Tourism* and *Educational exchange*, though a range of variations are detected among particular groups. In the case of INTERREG A, the most desired domains in the future are *Tourism*, *Economy* and *Natural environment*, whereas in INTERREG B, *Economy*, *Natural environment* and *Tourism* appear to be the most important. In the case of old Member States, *Natural environment* is in first place, while for new and non-Member States *Tourism* takes the lead. Similar to strand 'B' of INTERREG, *Economy*, *Natural environment* and *Tourism* seem to be the most important domains for future development within INTERREG C. Exactly the same order is detected for old and new Member States, and for non-Member States *Natural environment* takes first place. At the Transcontinental level, the most important domains generally appear to be *Economy*, *Tourism* and *Social infrastructure.* The least important domains in the future seem to be *Joint spatial planning* and *Risk prevention*.

Figure 7: Current domains of TC vs domains desired in the future (based on CAWI)



Source: Authors' elaboration based on TERCO CAWIs.

Nevertheless, we still believe that this is only a rough generalisation, and at the local level the domains will depend on the particular issues addressed.

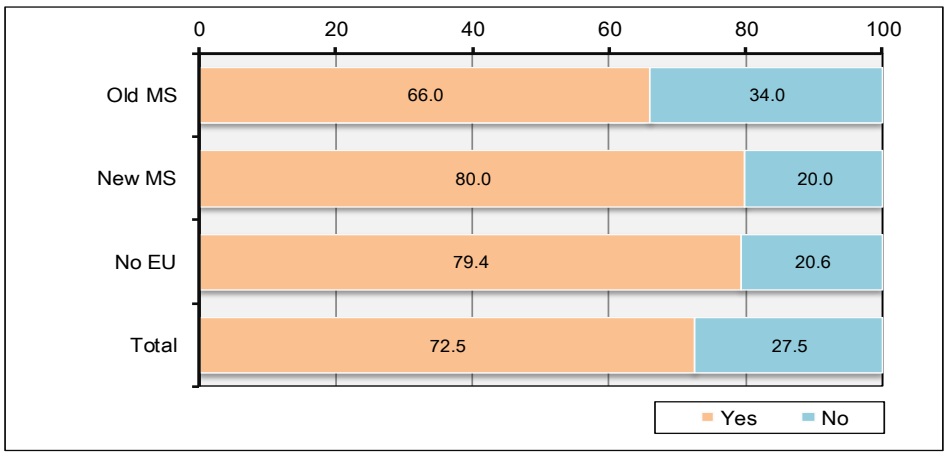
3.2.2 Infrastructure investments

Should infrastructure be a theme in TC?

Infrastructural investments, even if losing importance as a theme of TC (as explained above), still seem to be an appropriate domain of TC programmes. In our electronic survey (CAWI), the majority of the respondents were involved in this type of activities, and 72 percent of them stated that infrastructure investments should constitute a theme for TC programmes (see Figure 8).

Those most in favour of infrastructure were new Member States (80 percent) and non-Member States (79 percent); old Member States were less in favour, though majority of respondents (66 percent) still wanted infrastructure to be a theme of TC.

Figure 8: Should infrastructure be a theme in TC?



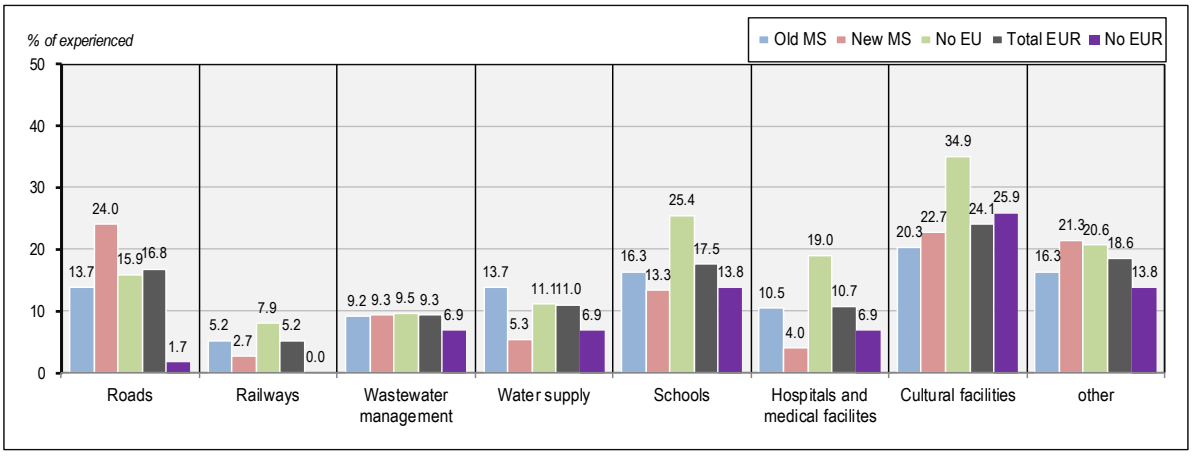
Source: Authors' elaboration based on CS.

In relation to the type of infrastructure investments, Cultural facilities comes first, followed by Schools and Roads, while railways represented the least important theme.

In more detail (see Figure 9), the old Member States have their greatest investments in Cultural facilities and Schools and the smallest percentages in railways. In comparison, the new Member States have been more involved in Roads and Cultural facilities, and the smallest percentages recorded by this group were in Railways and Hospital and medical facilities. The non-Member States indicate the Cultural facilities and Schools, while the smallest percentages account for Railways and Wastewater management.

In relation to the Non-continental group, the 'experienced' respondents indicated their implication firstly in Cultural facilities (26 percent) and Schools (14 percent), while the category Roads seems to have had a very small implication on behalf of the respondents (1.7 percent).

Figure 9: Involvement in joint international infrastructure investments

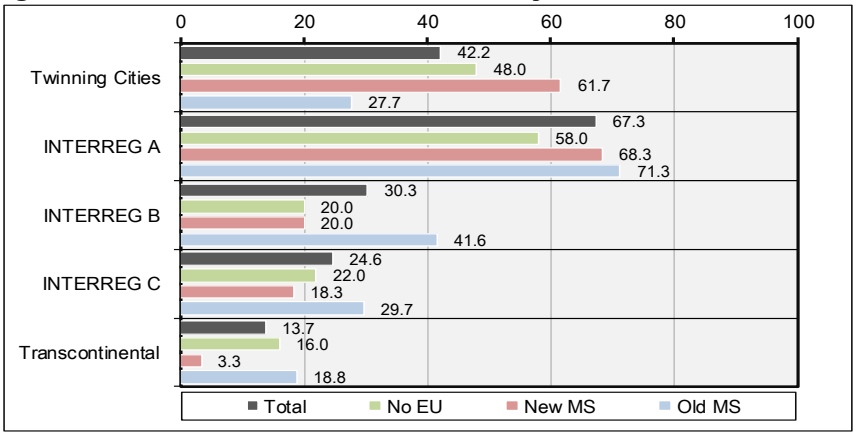


Source: Authors' elaboration.

Within which type of Territorial Co-operation should infrastructure occur?

The majority of respondents identified INTERREG A as the type of co-operation in which infrastructure should occur, followed by Twinning Cities and INTERREG B. The percentage of respondents favouring INTERREG A is greater in the old Member States than in the new and non-Member States, while Twinning Cities is favoured more within the new and non-Member States (see Figure 10).

Figure 10: Infrastructure investments as subject of TC



Source: Authors' elaboration

It should be noted that the above findings are in line with the main objective of INTERREG A, to assist border areas in overcoming their continued and observable 'isolation' caused by borders, physical geography and distance. To achieve this, INTERREG A should focus its support upon both physical and social infrastructure.

The IDIs broadly confirm the findings from the electronic questionnaires. There is a general tendency that support for infrastructure as a TC domain is stronger in non-EU countries and new Member States rather than in old Member States. But even in the latter group, the attitude towards this issue is diversified: from focusing directly on border infrastructure or small projects due to small budgets, through infrastructure investments under TC projects or infrastructural investments in pilot projects that can be 'scaled up' in mainstream/domestic programmes, to support for large-scale infrastructural projects within TC, but only if they support an EU dimension (e.g. missing links in EU networks). This positive attitude towards infrastructural investments is evident in the new Member States, especially for investments dealing with environmental problems and when a lack of infrastructure or its poor condition (especially in transport) present real barriers for development. In almost all the old Member States, the respondents pointed out that they have access to more appropriate funding mechanisms and sources for infrastructural projects, especially for large-scale investments.

Hence, it can be concluded that infrastructure is generally an important theme of TC, first because it contributes to one of the territorial keys (accessibility), and second, because the programme participants want it, especially in new and non-Member States. Furthermore, supporting infrastructure is consistent with the ESDP agenda, which states that, within territorial co-operation, 'support should be given to actions that seek to improve the physical interconnection of territories (e.g., investments in sustainable transport) as well as intangible connections (networks, exchanges between regions and between the parties involved). The actions envisaged include cross-border sections for the prevention of natural hazards, water management at the river basin level, integrated maritime co-operation and R&D/innovation networks' (CEC 2005: 32).

3.3 Specific border situations and territorial structures of co-operation

In the electronic survey, the most frequently mentioned structures of TC were natural territorial structures – mountain ranges, river basins, natural parks – which are the focus of TC projects mainly because of their potential (tourism) and associated requirements (flood prevention, environment protection, transport infrastructure). Respondents from old Member States also mentioned functional structures not related to the natural environment – urban and rural/peripheral areas, and metropolitan area transport corridors. At the same time, respondents stressed the need for flexibility and openness and a more functional, rather than administrative, approach in defining TC areas (also in the context of eligibility).

3.3.1 Co-operation with non-EU countries

The increasing significance of co-operation among cities and regions geographically located outside of the European continent requires that Transcontinental Territorial Co-operation (TTC) is specifically taken into account in the creation of European Territorial Co-operation policy. This necessarily requires an evaluation and reflection on the accumulated experience acquired over the years of practice in co-operation, both within the EU as well as with other non-member European countries. The rules have to be robust, predictable, transparent and sustainable over time. However, the challenges involved in this type of co-operation are often greater than within EU TC, because the participating agents generally belong to different cultures and institutional and legal systems, even to different economic frameworks. Thus, the model of TTC should have the following characteristics:

- The model should be flexible in order to accommodate the multitude of possible practices within the ambit of co-operation, as well as the plurality of circumstances and contexts in which co-operation takes place. Although it would be difficult to foresee all the circumstances that could arise, a catalogue of co-operation profiles should be included in the model.
- The two basic types of co-operation, centralised and decentralised, should be adequately defined and clarified. Since centralised co-operation is already sufficiently developed and its

legal and administrative practices are well-known and managed, the model should place particular emphasis on analysing and evaluating the results of decentralised co-operation and extracting conclusions from its good practice for application in future. Concretely, decentralised co-operation lacks an adequate framework to involve participants in the optimal management of its actions.

- Decentralised co-operation should encourage participation, basing the willingness to co-operate on the principles of freedom, autonomy, legitimacy and responsibility of the participating actors. The objective is to achieve non-exclusive co-operation aimed at autonomous individuals or groups, on both sides of the co-operation, with the will and the capability to carry out actions. Co-operation can only make sense within the framework of bi-laterality in which both parties are aware that there is an exchange of culture, projects, ideas, information and values that benefits both sides and whose cost both parts should support, although not necessarily in equal proportion. This requires separating the concept of co-operation from that of aid with no return. In some of the TTC examples, the interviewees, and by extension the agents involved, expressed the opinion that any co-operation should never infer that the receiving party participates from a situation of inferiority, as in the case of Morocco, or presuppose that the receiving party does not wish to participate on an equal footing, including financing, as in the case of Canelones.
- The sustainability of co-operation over time is essential for TTC. Predictability implies that the concept of co-operation as a basic tool to solve common projects, of whatever type, will consolidate group actions thus improving relations among participants. And this basis will, in turn, lead to increased exchanges and improved mutual awareness among the population as well as an improved standard of living for all.

Development opportunities along EU external borders

European co-operation with the regions/countries on its western maritime borders and with North or South America would best be designed under centralised agreements between the European Union on the one hand and groups of Latin American countries on the other. Clearly, co-operation between nations can be carried out, provided some coordination regarding policy development is in place in order to avoid, redundancies, high administrative costs, and lack of evaluation, which often occur in co-operation. If there is to be a significant impact on resources and projects within the regions, the co-operation should be centralised.

Centralisation does not contradict the development of specific policies for specific sectors or domains. Moreover, central agreements should provide the parties with the flexibility to undertake micro-actions based upon the demands and opportunities of local actors in the territory. Ideally, this would combine a top-down centralised agreement to ensure economies of scale and scope with bottom-up policies to meet the needs, desires and opportunities of local actors.

In the case of Latin America, there is an urgent need to **ensure coordination of co-operation in three key areas: migration, the goods and services market, and cultural co-operation**. The migration flow towards Europe is already subject to the rules of the Schengen Territory by the EU, but this is obviously a unilateral agreement by one of the parties with, in principle, no reciprocity. An alternative that is already underway, albeit tentatively, will articulate the employment demands of specific European sectors, which would allow derivation of a temporary migrant quota. In that way, migration flows could become more coordinated and the profiles of the migrant workers better selected according to real needs.

The EU should deepen bilateral agreements among the parties on goods and services markets, beyond the status quo reached by the World Trade Organisation (WTO). Thereafter, local officials and private agents would be responsible for developing specific contracts and accords. This has already been achieved with countries in Latin America. The same applies to cultural relations. It would be very useful to have an idea of the total impact (in resources and projects) that the UE and its member countries are making in Latin America.

In the context of future EU enlargement, current co-operation with non-EU regions is seen as an opportunity to develop contacts and good relations with partners from outside the EU and in this way is becoming an intermediary or gateway between EU and non-EU countries. Other opportunities relate to strengthening economic co-operation (new markets, maritime routes, natural resources), exchanging experiences/knowledge, improving neighbouring relations, and cultural exchanges. Joining TC projects also improves 'external' relations by increasing mutual understanding, breaking stereotypes, building mutual trust and informal contacts (among officials and inhabitants), although sometimes 'national interests' predominate over the local actors' will. As for transcontinental co-operation, economic domains such as international commerce and productive complementarity are important.

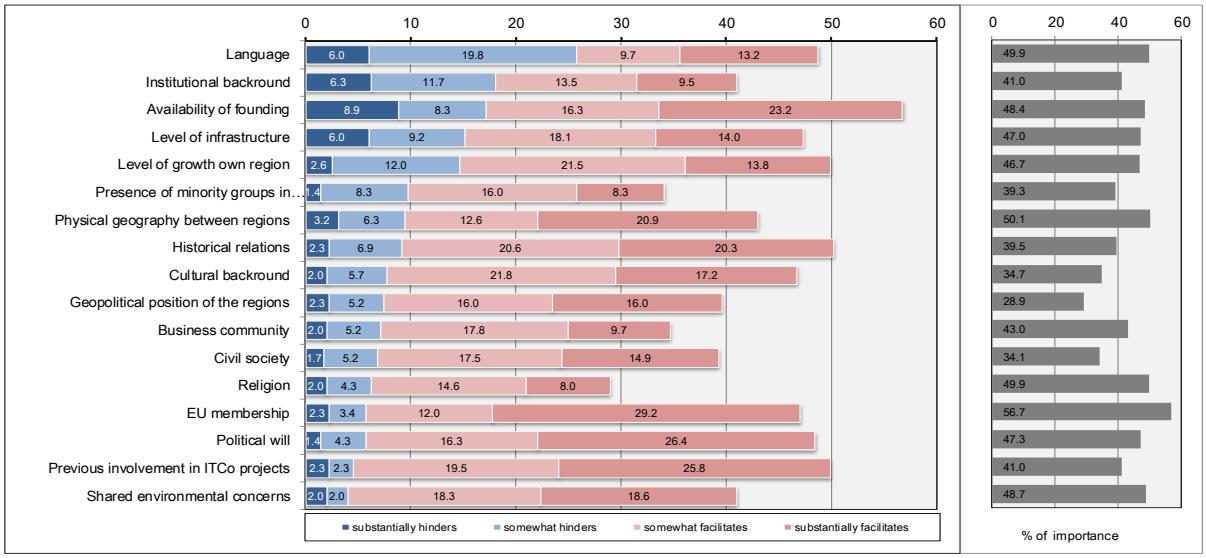
The IDI respondents also mentioned challenges involved in TC across external EU borders: formal restrictions (visa and border-crossing procedures related with Schengen zone rules, formal restrictions in EU programmes); differences in administrative, institutional, planning and legal systems, physical, cultural and institutional distance; different goals (infrastructural vs people projects); differences in financial capacities to co-fund TC projects; limited ability of non-EU counterparts to influence decision-making in EU TC programmes; lack of will to co-operate and lack of political will; psychological factors (uncertainties, tensions, prejudices, cultural differences); and lack of skills and competences (relevant knowledge, language skills).

3.4 Driving forces for territorial co-operation

Constraints and facilitators of territorial co-operation

Most of the factors investigated, following suggestions from literature, were perceived by institutions as facilitating territorial co-operation rather than constraining it (see Figure 11). The only exceptions were Language and Institutional background, which are evaluated as constraints mainly in the old and non-Member States.[4]

Figure 11: Factors as driving forces in ITC



Source: Authors' elaboration based on CS.

In the Twinning Cities type of co-operation, the most important facilitating factor is the *Previous involvement in TC,* followed by *Shared environmental concerns* and *EU membership*, while the least

[4] From the statistical point of view, it should be noted that half of the respondents declared that these specific factors had no influence on TC whatsoever.

important factor is *Institutional background*. The only hindering factor in this type of co-operation is *Language* (for new Member States only).

In cross-border co-operation, the most important factors considered as facilitators (from a medium to a substantial extent) are *Previous involvement in TC, Shared environmental concerns, EU membership* and *Political will.* The next in importance are *Cultural background*, *Historical relations*, *Physical geography between regions* and *Level of growth of own region*. At the end are *Availability of funding*, *Level of infrastructure* and *Institutional background*. The parameters of *Business community*, *Religion*, *Presence of minority groups (in any of the neighbouring regions)*, *Geopolitical position* and *Civil society* are considered to a large extent as non-influential factors (neither facilitate nor hinder) cross-border co-operation.

In INTERREG A, the most important facilitating factor is *Political will* (indicated by almost 90 percent of the respondents from all three groups (old, new and non-Member States), followed by *Previous involvement in TC* and *Shared environmental concerns*, while the least important aspect is the *Level of infrastructure*. Hindering factors in this type of co-operation (for new and non-Member States only) comprise *Language* and *Institutional background*.

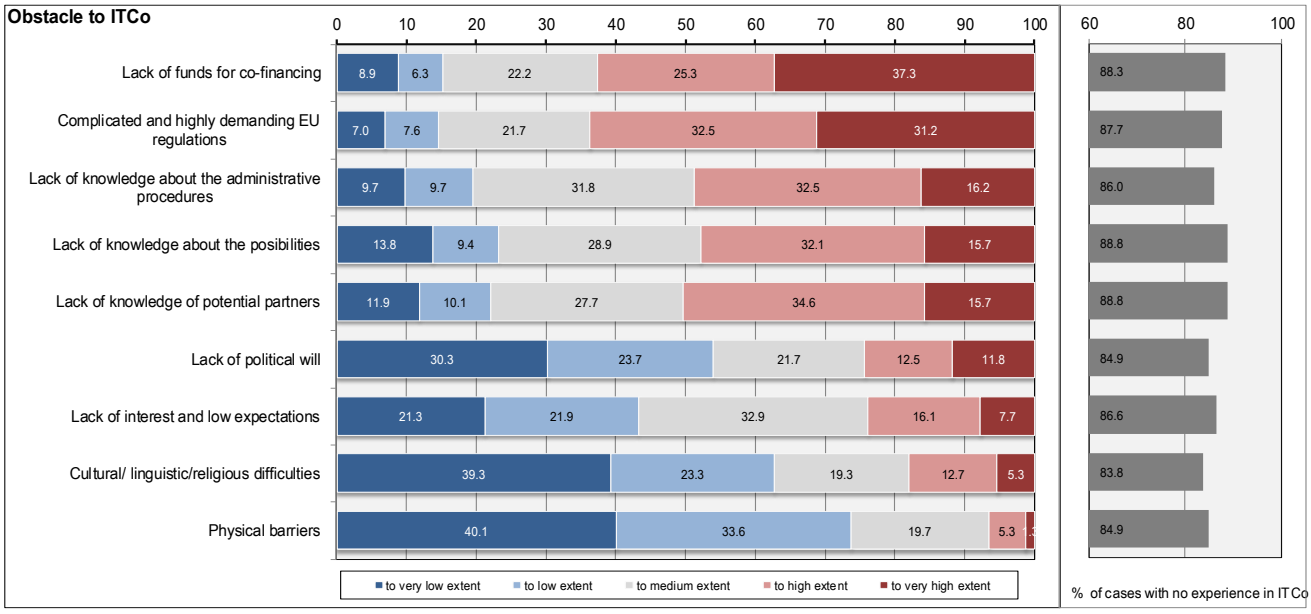
In INTERREG B, the most important facilitating factor is *Political will* along with the *Previous involvement in TC projects* and *EU membership*, while *Availability of funds* is identified as the least important factor. *Language* and *Institutional background* are also considered to be hindering factors in this type of co-operation.

In INTERREG C and at the Transcontinental level, the samples of responses for all three groups are low, and consequently no sound conclusions could be drawn.

Obstacles in TC participation

Analyses of municipalities that have not participated in TC reveal the main obstacles to active involvement of local government in TC. The most severe ones include *complicated and highly demanding EU regulations*, signifying the need for simplification and flexibility in implementing rules, adapted to the characteristics of each group of territorial units (see Figure 12).

Figure 12: Participation obstacles in ITC



Source: Authors' elaboration based on CS.

Lack of funds for co-financing is also considered to be a constraint, revealing the fund-driven nature of territorial co-operation, on the one hand, and the inability of most of the municipalities to support such actions with their own resources, on the other. Other parameters that hinder TC concern the

lack of knowledge among municipalities in specific areas that may involve finding potential partners, tackling administrative procedures and being aware of the possibilities of territorial co-operation. It is worth noting that all the above parameters were indicated as highly significant by the non-Member States, reflecting different levels of awareness among different groups of local governments. On the other hand, *physical barriers, cultural/linguistic/religious difficulties* and *lack of political will* are indentified by all groups of municipalities as the parameters with the lowest weighting as obstacles to TC participation. Based upon the latter evidence, it is obvious that physical geography does not constitute a barrier in the contemporary era of technological tools (i.e. e-mail, Skype and other means) which eliminate all kinds of such obstacles. The fact that different cultural backgrounds (in terms of language or religion) is not perceived as an obstacle indicates that, eventually, local actors overcome social and cultural stereotypes, functioning in a more pragmatic manner. As far as lack of political will is concerned, its low relevance among factors that hinder ITC suggests that there is a fertile ground for co-operation among local authorities in different countries, beyond the State's context.

Investments needed to facilitate territorial co-operation

The most preferable type of investments facilitating TC comprises **investments in human capital.** That would include training, development of human resources, and language courses. Another type is investments in **information technology and dissemination**, which would include activities increasing awareness of TC in society, especially among children, identifying TC opportunities, disseminating best practices, and cross-border communication. **A lower priority, but still desirable, are investments in hard infrastructure**, such as border crossings (Finland-Russia, Turkey-Bulgaria) and infrastructure dedicated to TC meetings and cross-border mobility.

3.5 Governance structures of TC

One of the key considerations for TC is the **legal framework** in which it operates. There has been an increasing focus on the barriers to effective TC that the legal framework creates. Across the EU, the Member States' rules and regulations and administrative frameworks vary. As most co-operation initiatives have no legal personality and no public law status, they sometimes lack the legal instruments to implement decisions (Assembly of European Regions, 1992). Inherently, TC operates in more than one legal framework, encountering administrative, implementation and management challenges.

There has been an increasing drive for further harmonisation of legal frameworks in order to facilitate TC. The development of the European Grouping for Territorial Co-operation (EGTC), which was introduced in 2006, provides a new opportunity to organise TC. An EGTC has full legal personality and its intention is to further harmonise legal frameworks for TC across the EU. However, to date the instrument has only been used sporadically, and it has faced certain challenges:

- Member States have adopted the regulation at different speeds;
- the regulation allows for 'national provisions', and this has led to divergent implementation in Member States;
- the regulation was adopted too late to be considered for the 2007-2013 INTERREG programming period (except for the Greater Region Programme);
- some countries (particularly in northern Europe) already have established tools for TC;
- the regulation has not resolved the issues around staffing and contracting that it had intended to address;
- it is not yet fully acknowledged as a tool for TC by some EU institutions; and
- an EGTC cannot be implemented between a single Member State and non-Member State; as a minimum, two Member States are required.

In September 2011, there were 23 EGTCs. Almost all involved cross-border co-operation – including an INTERREG managing authority. Despite the fact that some EGTCs cover quite extensive territories,

only two 'network' (with no geographical proximity) EGTCs have been established. **Governance structures** are quite diverse. Only six EGTCs can be described as real Multi-Level Governance structure, involving different levels of public authorities on both sides of the border, and only two of them include the national state as a member. The research shows that EGTC provides added value for cross-border co-operation programmes. It further institutionalises existing efforts and hence improves the sustainability and stability of TC efforts. It also shows that it is a flexible tool which is applied to different TC structures that involve a range of actors. However, its added value in terms of 'network' or 'transnational' TC that has no geographical proximity is not clear. Further research in this area would be valuable.

Whereas legal frameworks and regulations have an impact on TC, they have a more pronounced impact in certain phases of the programme and project cycle. Legal frameworks are important in the project and programme initiation stage as well as in relation to the financial management of activities. However, in relation to the day-to-day running of TC and its implementation, formal and informal contact between partners across borders are more important than the legal framework in which they operate.

Examples of instruments and governance structures identified in the case studies include Euroregions, local governance systems (with various degrees of decentralisation), local leaders, local cross-border initiatives and organisations, and NGOs. In addition to the actors and stakeholders that are the beneficiaries of TC programmes, there are also structures that support TC projects (Joint Technical Secretariats, INTERREG contact points, macro-regional strategies, EGTCs). On external EU borders, there are also neighbourhood programmes (such as Euroegio Karelia) and some special structures related to transcontinental co-operation (Unasur, Mercosur and Co-operation Treaties in ARG, FAMSI for Andalucía in Spain, Conseil Regional for Morocco and the United Nations Development Programme).

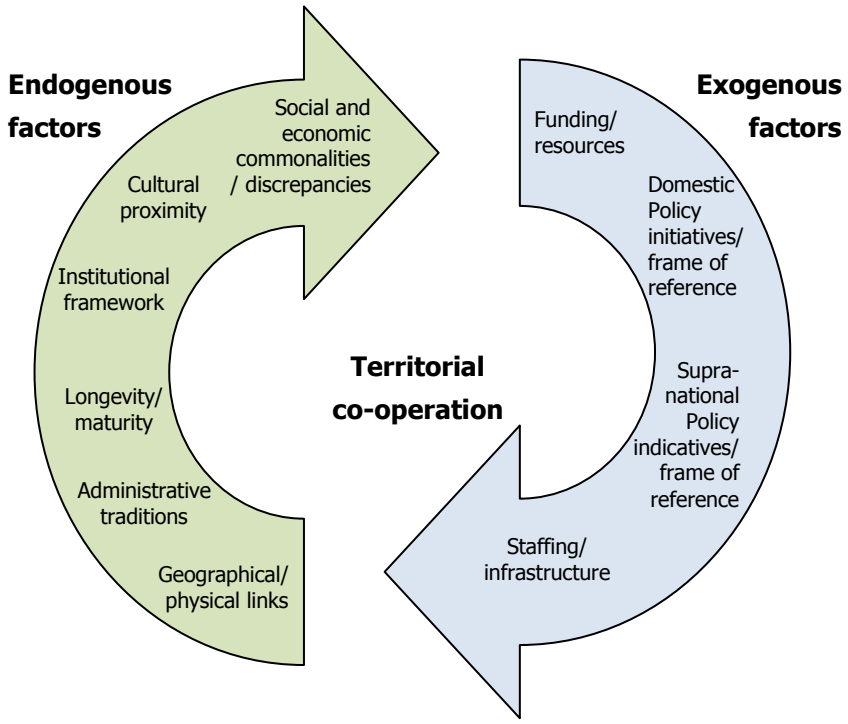
3.5.1 Favourable framework conditions and models of good governance for TC

In the theoretical literature, a range of **favourable framework conditions** for territorial co-operation is identified. The key drivers are: longevity/maturity of co-operation (Panteia, 2010, p.13); geographic conditions; socio-economic disparities between regions (Taylor *et al.,* 2004; Krätke, 1999); culture in its broader sense (e.g. language, traditions etc.) but also in a more narrow sense relating to cultural differences in administrative practices (Hofstede, 2001; Ratti, 1993a); and the institutional framework in which TC operates in terms of local and regional institutional development (Bachtler *et al.*, 2005). Furthermore, clear political direction and policy initatives at the domestic/ national level (Blatter, 2003; Thant, 2007) as well as on the supra-national level are important drivers. Additionally, the availability of resources/funds are a key driver for TC (OECD, 2006), and sufficient staffing and infrastructure for the TC institutions are an important determinant.

These factors can be categorised into two types: exogenous and endogenous factors (see Figure 13). Endogenous factors such as administrative traditions, historic/cultural ties, institutional framework, economic disparities and geographical/physical links between co-operation efforts are innate; they can only be directly influenced to a very limited extent. On the other hand, exogenous factors such as policy initiatives, resources and staffing can be influenced in the short term and therefore directly support territorial co-operation efforts. There is cyclical and reflexive relationship (a positive feedback loop) between these two sets of factors. If endogenous factors are favourable, this will make 'investment' in exogenous factors more likely; and vice versa if exogenous factors are favourable, which will indirectly improve endogenous factors.

This framework to a large extent applies to many other forms of economic development policy. However, there are some specific challenges and opportunities to be taken in to account in relation to endogenous factors. These have been summarised in Table A6.

Figure 13: Endogenous and exogenous determinants for TC



Source: Authors' elaboration.

This demonstrates that TC partners find exogenous determinants to be particularly important drivers for TC. The policy implications of this are that in areas where endogenous factors are weak, but where TC investment activities are initiated, higher levels of exogenous investments are necessary in order to achieve successful co-operation programmes. However, as the framework above suggests, the impact of such investments are often less apparent, at least in the short term.

Governance structures, legal instruments and institutional frameworks play a key role in territorial co-operation efforts. However, there is **no ideal model of co-operation**. As illustrated in Figure 13, a range of different factors need to be taken into account; what works in one case does not necessarily work in another. A key consideration is that TC efforts are 'phased' (Perkmann, 2003) and a certain level of maturity is reached through experience and negotiation between partners (Gabbe and von Malchus, 2008; INTERACT, 2006). When evaluating TC activities, such differences in maturity should be taken into account (AEBR, 1997).

Conceptually, three phases – new, consolidated and embedded TC – can be identified. In the first phase, co-operation is new; it is reliant on external funding and associated compliance requirements. At this stage, TC efforts are usually small scale and there is a lack of coordination. The outcomes of such efforts are measured using soft programme indicators (see Table 5).

In the second phase, TC efforts have been consolidated. There is a continued reliance on external funding, but commitments amongst partners and Member States is no longer fleeting. There usually is an increase in resources available for TC at this phase. Projects are implemented on a larger scale and coordination frameworks/instruments are being developed. In this phase, there is scope for using harder, more quantitative measures that focus on outputs and results.

The final phase is aspirational. TC is fully embedded and there is a strong domestic commitment for TC activities. Programmes and projects are no longer reliant on external funding. There is a comprehensive strategic framework in place which ensures that TC efforts have a high impact. TC activities are effectively coordinated with domestic regional development programmes and thematic programmes that have a regional impact, as well as other TC programmes. In this phase, there is scope to use a broader set of impact indicators.

Table 5: Phases in territorial co-operation

Phase	Maturity	Motivation	Scale	Measurement
3	Embedded	Strong domestic commitment with limited requirement for external funding	A comprehensive strategic framework is in place and TC efforts are effectively coordinated	Scope for using impact indicators
2	Consolidated	Continued reliance on external funding but emerging commitments	A more strategic approach is emerging and attempts are made to coordinate efforts	Scope for using harder quantitative measures that focus outputs and results
1	New	Reliant on external funding and compliance requirement	Efforts are usually small scale and lack coordination	Programme's impact is measured using soft qualitative indicators

Source: Authors' elaboration

Although the final stage is aspirational, the key question to ask is: are the partnerships that have been created with the help of external incentives sustainable? This question is important in the light of the current economic circumstances, and policy-makers should put more emphasis on the sustainability of partnerships in project applications and programme development in order to ensure a lasting impact.

3.5.2 Applicability of good practices and models of TC governance

Institutional frameworks for the management and implementation of territorial co-operation differ depending on the needs of the participants and the systems within which they operate (Faludi, 2007; Perkmann, 2007; ESPON 2.3.2, 2006). The key variables when differentiating between forms of territorial co-operation governance structures are: the degree of administrative centralisation or decentralisation; the levels of formality/institutionalisation; the level of 'openness' and intensity of partner involvement; and the extent to which joint or parallel structures are in place to support co-operation. Theoretical work on Europeanisation, multi-level governance and new regionalism highlights the increased role of sub-national actors in driving economic development and participating in external networking and co-operation activities (Hooghe and Marks, 1996; Keating and Hooghe, 1996; Brusis, 2002). However, in other instances, territorial co-operation has been the result of a top-down drive from central and supra-national level (Engl, 2009, p.10). Where co-operation has resulted from an 'external' initiative, it tends to be more heavily dominated by regional and central authorities (Perkmann, 1999, p.662). Overall, there is an increasingly mixed picture of dynamic 'bottom-up' territorial co-operation driven by municipal/local-level action and, at the same time, increasingly formalised and structured networks of higher regional/central level authorities primarily involved in INTERREG programmes. Furthermore, many INTERREG programmes apply both bottom-up and top-down methods in their project generation, management and implementation approaches.

In this project, the research findings related to **partners existing governance experiences** are in line with the theoretical literature. Partners[5] find that TC with a bottom-up approach that is locally driven is preferable. However, to ensure stability and consistency of TC efforts, a certain amount of rules and regulations are required in relation to budgets, as well as guidelines for co-operation. Nevertheless, TC should be flexible in terms of scope. Flexibility in size, scale and scope is required in order to adapt activities to changing economic, social and political circumstances. Having such flexibility is particularly salient in times of economic crisis. The ability to adapt TC efforts in the implementation phase to make them relevant to changing contexts adds value and increases impact. In other words, a high level of regulation and institutionalisation is favourable at the starting-up stage

[5] Partners interviewed were mainly cross-border co-operation partners.

and in terms of the financial management (closing stage) of projects, but in other stages (such as implementation) a more flexible approach is required.

Despite a preference for a bottom-up approach amongst actors involved in TC, they recognise that a top-down element to TC gives programmes a strategic focus. Therefore a 'light touch' top-down approach is recommended. Programme authorities have a key role in adding value to project applications by engaging with applicants and bringing different projects together. Many programme authorities are already doing this, but some take it one stage further. For example, for the North Sea Programme and North West Europe Programme authorities identify a strategic work package and make additional budget resources available for project partnerships that address the same themes (clustering projects). These partnerships work together to implement the work package. Such an approach allows project ideas to be developed by local authorities but is supplemented with input and expertise in order to generate projects that make a strategic contribution. This is an **example of best practice**.

In the CS areas, examples of good practices in governance usually comprise local initiatives (locally driven) in new Member States as well as some more advanced structures and governance solutions in old Member States. They include in particular:

- Co-operation within one project of authorities from different governance levels
- Inter-communal partnerships: to implement larger infrastructural projects or coordinate long-term co-operation within the same set of partners (communes)
- Availability of seed money in the Northern Periphery Programme
- Coordinating function of macro-regional strategies
- Project-clustering to ensure the achievement of strategic goals without a heavy-handed top-down approach
- Civil society forum, appreciation of importance of the process of elaborating strategy
- Multi-level governance, ENPI thematic calls developed in co-operation and negotiated with the grassroots level, regional councils as key actors (strong level in coordinating bottom-up initiatives and 'channelling down' higher-level regulation)
- Common promotion and protection of natural environment (EL), cross-border networks, initiatives and structures related to health infrastructure and health problems (e.g. prevention of transmittable diseases) and actions facing illegal cross-border activities.

Many territorial co-operation programmes are essentially 'hollow programmes', and they need to find new partners for policy delivery, as direct policy implementation is prevented by organisational and legal limitations (Perkmann, 1999, p.664). There is an apparent tension between a programme's aim to establish a broad partnership and the increasing desire to achieve strategic impact. A thematic focus that increases strategic impact comes at a cost of narrowing partnerships to those that are most likely to achieve these goals. In other words, there is a trade-off between thematic focus and establishing broad partnerships. One way to address this issue is to develop broad themes that are able to attract a diverse range of partners, but to develop clear priorities within those themes that are able to give the programme a strategic focus.

Most territorial co-operation efforts aim to form broad and inclusive partnerships that include partners from the public sector (national, regional and local) as well as broader society such as universities, NGOs, civil society, business community representatives and the private sector. Such partnerships bring certain opportunities and challenges. On the one hand, they lead to innovative project ideas, cross-fertilisation, knowledge exchange, project diversification in programmes and higher levels of publicity/public awareness. On the other hand, they present challenges in terms of institutional incompatibility between partners, lack of thematic/strategic focus, management difficulties and the time investment required to establish such broad partnerships.

INTERREG programmes, as well as other forms of territorial co-operation, are increasingly eager to attract private enterprise as beneficiaries. In the new programme period, there is likely to be an emphasis on instruments that aim to lever private-partner investment such as financial engineering

instruments (Michie and Wishlade, 2011: p.5). One of the benefits of private enterprise involvement in TC is that it ensures a **greater socio-economic impact** by focusing on end products and services. Although there are several external hurdles that in many cases prevent, or at least make it less attractive for, private enterprises from becoming partners in TC, **there are several actions programme bodies can take to facilitate their involvement**:

- Manuals and guidelines in terms of state aid and public procurement rules can be developed that make it clear when private enterprise involvement is possible.
- Private enterprise should become more involved in the early stages of programme development when the programme's strategy and priorities are determined. This ensures that these priorities are more attuned to the need of private partners.
- Certain project generation processes are better able to attract private partners. For example, pre-selection procedures require less effort in the initial stages of an application and lead to higher rates of success in the second phase. This significantly reduces the risk for private partners to commit resources to a lengthy and costly project application. Additionally, special funds for 'small' project initiatives, or that are dedicated to SME involvement, are appealing for private enterprises, particularly when the administrative burden associated with INTERREG is reduced for such funds according to proportionality.
- The type of actors that a programme wishes to involve is dependent on the goals and themes of that programme. However, there are several ways in which territorial co-operation programmes can ensure that they attract the appropriate beneficiaries. First, a programme has to consider the involvement of partners in different stages of the programme development. It is advisable for envisaged potential final beneficiaries to be involved in an early stage when the programme's strategic goals are being developed to ensure that their priorities and strategies are concurrent with that of the programme. Thus, if local government, NGOs or the private sector are envisaged to be partners in the programme implementation stage, their involvement in the strategic planning of the programme ensures 'buy in' of end-beneficiaries and increases the relevance of programme objectives.

Second, the range of project generation procedures can attract different beneficiaries. Some project generation helps 'smaller' actors to become active in territorial co-operation. For example, a pre-selection procedure reduces the risks of – and minimises the resources necessary for – a project application, and dedicated 'special funds' engage a particular group of beneficiaries. Seed funds also give organisations the opportunity to develop high-quality project applications that they would not be able to develop under a generic open-call system. However, open-call systems, strategic/thematic call systems, seed projects, shortlist projects or special funds arrangements all have both positive and negative implications in terms of the governance framework of TC. Furthermore, they also have implications in terms of administrative efficiency, visibility, transparency and equity as well as for the strategic orientation of a programme (See Annex Table A7).

Third, a programme's institutional framework is a significant factor in how territorial co-operation is operationalised. In particular, the role of the secretariat and the existence of regional or national contact points have an impact on the ability of a programme to attract different types of beneficiaries. Due to the complexities of territorial co-operation, particularly INTERREG, it is sometimes perceived as a inaccessible, and only those that have insider status are able to form acceptable applications. Pro-active contact points and secretariats improve this perception and provide support for 'newcomers'.

- There is an increasing focus on the **ability of TC programmes to create synergies** in order to ensure the impact of operations (Interact, 2010, p. 3). In fact, some observers argue that the key purpose of TC is to create synergies (Doucet, 2006: p. 1481). The new draft regulation for TC6 proposes closer links between INTERREG and mainstream funding resources (such as ESF, ERDF, FP7 and EEPR). Considering the relatively small budget that many TC programmes have, it is

[6] CEC (2011) Draft regulation on European territorial co-operation 2011/0273.

difficult to achieve impact, and therefore a link to programmes with greater budgets would be beneficial for achieving synergies. However, how such links would work in practice remains unclear. One possibility is for INTERREG programmes to pilot new innovative projects on a small scale, which would if successful be 'upscaled' in mainstream programmes that have more resources, with INTERREG programme secretariats facilitating 'their' beneficiaries' application process. Furthermore, in the application process for TC projects, more attention should be given to the future mainstreaming of projects. This would increase the impact of TC efforts and help to create more sustainable partnerships.

New forms of TC such as EGTCs and macro-regional strategies also present an opportunity for increasing synergies across territorial space. Macro-regional strategies encompass territories that include multiple TC programmes and activities. They are all required and expected to contribute to the strategy, ensuring greater impact and synergies. However, macro-regional strategies as a tool are not supported by additional resources, institutions and legislation from the EU level. Therefore, their impact is limited and not all Member States value the concept of macro-regional strategies. The recent Commission proposal on the future organisation of TC funding intends to change this, as it foresees that 'transnational co-operation can also support the development and implementation of macro-regional strategies and sea basin programmes'.[7] Nevertheless, there are key questions in relation to the delimitation of the areas to be covered by a macro-regional strategy.[8]

EGTCs also provide an impetus for synergies. EGTCs formalise relations between different levels of government across borders, and such structures are particularly valuable in relation to achieving synergies on different scales. An EGTC provides a legal framework for the organisation of multi-level governance structures. However, as of yet, only one EGTC has been set up as a managing authority for an INTERREG programme (Greater Region) and only a few EGTCs includes representatives from several levels of public authorities. The initiating, mobilising and driving forces, identified in the in-depth case studies are convergent and rely on political will at different levels. They are also closely linked to the opportunity structures in the EU framework: evolution towards no internal border, common legal background and funds.

Considerable divergence between the EGTCs can also be noted. Some place themselves within a European macro-regional strategy, whereas others are more locally oriented and/or link to the functional needs of a territory (the majority, at this point). Partnerships are very diverse, from an exhaustive MLG (from state to local level, on both sides of the border) to limited local member partnerships or MLG without the local level. Diversity is also present in the way the co-operation is driven, from local to national, or an interaction of both. The motivation for further formalisation of TC efforts through an EGTC is also varied, as some attempt to reduce MLG mismatches in relation to TC and others focus more on the implementation of a specific TC programme. However, in terms of motivation for formalisation, all EGTCs converge on the visibility aspect of the co-operation territory, mainly towards EU and national level. The joint structures that are being implemented are also of a very diverse nature, some having truly joint structures whereas others – the majority – do not. Nevertheless, a further convergent point is that no delegation of competences from the domestic public bodies to an EGTC could be identified that would make an EGTC a type of supra-structure. Those diversity and convergence trends can be considered as positive. They show some permanent and shared added value of EGTC (convergence), and it proves that EGTC is suitable for a large variety of territorial co-operation (diversity). The current revision of the regulation, which is addressing several loopholes in the original regulation, will also contribute to a better implementation of EGTC.

[7] CEC (2011)/611, explanatory memorandum, p.6.

[8] See ESPON SIESTA project, which should shed light on this issue.

4 Future policy options for European Territorial Co-operation

The TERCO results indicate that the main contribution of EU-supported TC to cohesion and development lies in **institutional capacity-building**, the **professionalisation of staff**, the **circulation of innovative management ideas** and **strategies** and **education**. This is particularly the case for disadvantaged regions (such as those at the EU's external borders). Internationalisation and externally generated growth are realistic options for more peripheral regions, but only if preparation takes place through local initiatives that set basic conditions for the successful absorption of external impulses (Gorzelak, 2009). Within this context, the report by Böhme, Doucet *et al.* (2011) emphasises the strategic role of five 'Territorial Keys' (accessibility, services of general economic interest, territorial capacities/endowments/assets, urban networking and functional regions). In pursuing the goals outlined by the EU in general and specifically during the Polish presidency (placed-based strategy, performance and results-based criteria, greater flexibility) and, in terms of the five territorial keys – which are clearly interrelated – the following interrelated TC policy ideas are suggested:

1) Accessibility: large-scale investments in road and rail infrastructure are in many cases unlikely to materialise. However, accessibility in terms of improved **border-crossing facilities** and **access roads**, the development of **broadband communications** and targeted support to **new modes of public transport** via internet and phone services could be of great local benefit.

2) Services of general economic interest: new markets in social and public services such as **health, education, elderly care, child care, vocational training, and cultural activities** could be developed through targeted support according to the specific needs of the localities involved.

3) Territorial capacities/endowments/assets: this could involve programmes that directly **facilitate institutional learning** and **capacity-building,** since large heterogeneity among competencies of local actors does not allow effective tackling of common issues. Besides, further developing local assets, such as touristic potential, through greater management skills would also be beneficial.

4) Urban networking: in developing territorial capacities, results-oriented support programmes that create incentives for and routinise inter-local co-operation between different actor groups (**including business and non-institutional actors**) should be devised. To the extent that specific milieu can be identified that hold promise for job creation, bottom-up mechanisms of project development among different firms and organisations should be facilitated by EU, national and regional policies.

5) Functional regions: concentrated efforts at the national and local level are needed to combine more top-down nationally defined priorities with the flexible bottom-up definition of strategic actions in order to produce **'tailor-made' regional policies** based on existing and potential functional relationships.

Geographical areas of territorial co-operation

There is no immediate need for geographical expansion of TC programmes, because the current geographical configuration gives TC activities a distinct spatial focus. Various types of TC complement each other quite well and also correspond to types of grassroots co-operation (like Twinning Cities). However, TC efforts would benefit from increased inter-programme co-operation where programmes would not only engage in knowledge-exchange activities but would also work together on common themes and problems as well as combine resources and budgets. This would also allow for a greater involvement of partners from outside a specific programme area if they would strengthen existing partnerships. However, such outside-partner involvement should only be sought when expertise cannot be found in a programme area.

If, however, new areas of co-operation are considered within ETC, there is potential for extension within Transnational and Transcontinental co-operation. In the case of transnational co-operation, the eligible area can be extended to involve regions that are currently

assigned to one macro-region, but where the co-operation within this region (e.g. via twinning cities) extends beyond that region. Grassroots co-operation would be strengthened if such regions became eligible for financing within at least two INTERREG B programmes. Regions with such potential include: north-west regions of Germany, regions of the Massif Central in France, the Romanian North East region, northern peripheries of Scotland, and Iceland (see Map 13). In the case of transcontinental co-operation, there is interest and potential to expand areas of co-operation on both sides, especially in the fields of migration, health and social affairs. However, involving new areas in such co-operation requires the development of a special model of co-operation assuring predictability, transparency and sustainability, because this type of TC is the most sensitive to economic turbulences (crises and booms).

Decisions on eligible areas for TC programmes should depend on boundaries of the issues/problems they aim to resolve rather than on arbitrary distance or the administrative boundaries of the regions. This is especially true for INTERRG A, where interviewees constrained from including the partners they wanted due to limits imposed by area eligibility rules. In transcontinental co-operation, the eligibility of EU areas does not need to be delimited based on NUTS regions but instead on the boundaries of the problems.

Thematic areas/domains of territorial co-operation

Rethinking co-operation issues and domains could be beneficial. Since there is a need for 'issue-based' concentration of funds (Böhme, Doucet *et al.*, 2011), this research has revealed great potential in areas such as **social policy, welfare, health and economic development** for common agendas that transcend geopolitical and inter-state tensions and generate a considerable multiplier effect in terms of local and regional development. It is important to maintain support in these areas even during economic crises, which would otherwise jeopardise co-operation.

'Hard' infrastructure investments funded by TC programmes should not be a specific goal, but instead they should facilitate 'softer' investment targets such as advancing human capital, socio-economic capacity building, and community development. I in this respect, TC should **focus on innovative, small-scale pilot projects with the aim of supporting the scaling-up of successful pilot projects** for financing under other EU funding streams that have larger budgets, as well as through domestic funding.

The interest in infrastructural projects (physical and social infrastructure) varies among different groups of countries – old Member States prefer the latter while new Member States prefer the former. However, **investments in ITC and other forms of communication** would benefit all.

Governance and structures of territorial co-operation

New TC support structures could promote collaborative forms of policy formulation and delivery. There is no ideal, generic framework for TC, however, it should be based on partnerships involving the state, the private sector and foundations as well as civil society at large. This is particularly important in more peripheral regions with limited prospects for short-term returns on social investment and where multiple support mechanisms are needed to nurture entrepreneurial activity.

Co-operation partnerships, **rather than mere projects, should be a target of multiannual support.** One possible strategy would be to develop international networks between public, private and non-profit sector actors that provide assistance to emerging and future private and social entrepreneurs though a variety of means, including: support in project development, securing grants (including the provision of guarantees), assistance in acquisition and provision of loans and investment capital, and training, advisory, logistical and informational support. At the same time, such support would not only reduce one-sided grant dependency but also establish greater rapport between CSOs and local governments.

Continuity and consistency of co-operation in TC must be supported as key factors of its efficiency. The promotion and financing of concrete problem-oriented, longer-term and high-budget projects are one possible solution, i.e. those that can cover both the joint conceptual development of solutions and their pilots, including actual investments (capitalisation). This can also be achieved by **making businesses interested in the projects** and obtaining the financial **support of the private sector** for the implementation phase. Other means to achieve continuity are by establishing a stronger link between TC programme priorities and regional/local development strategies, by financing networks continuously, and by providing opportunities for exchanges between and among on-going projects and potential actors. In any case, projects must come from place-based initiatives to have a lasting impact.

A change in focus within TC opportunity structures is needed in which civil society networks and local-regional co-operation are prioritised and eligible for more generous and specifically targeted support. It is evident that the major drawback to EU-funded programmes is their increasing complexity, despite all official attempts and pronouncements to the contrary. Major efforts could be undertaken to develop new, **user-friendly delivery mechanisms**.

5 Further extensions of analytical work and European research

Analysing all groups of actors involved in TC

The case studies have shown that there is a great diversity of actors involved in TC, such as businesses, civil organisations, migrants, visitors, etc., and they have their own specific 'borderlands' – they are linked in different, partly separate and partly interconnected networks. Consequently, regional in-depth analyses of these co-operation networks (e.g. via network analysis) could provide valuable information about who/where the nodes of these collaboration are. Special attention should be given to networks of NGOs, through which the EU may be present in the internal development of neighbouring countries.

Effective ways of working with external partners

In many case studies, actors have experience of working together with external EU partners, quite often from other continents. The contribution of these external partners is often highly valued because it establishes good neighbourhood relations, provides a certain level of expertise, or helps to address common challenges. Further research should focus on **how such external relations can be initiated, managed and implemented most effectively**. Such research should particularly take into account the new TC instruments such as macro-regional strategies and European Grouping of Territorial Co-operation (EGTC) and their implications/relations for external partner participation.

How to create lasting and sustainable partnerships?

There is an important learning curve; longevity of programmes and maturity of partnership are regarded as important framework conditions for effective and successful TC. Therefore, the Commission should continue to support existing TC arrangements to ensure that such partnerships are not lost. A promising field of research is to focus on how existing partnerships can continue to work effectively and successfully whilst becoming reliant on external resources. In other words: how can TC partnerships become more sustainable in the long run?

Private-sector inclusion

Many TC programmes and actors involved in TC would like to see increased involvement of the private sector in TC initiatives, as they have the potential to make a valuable contribution to TC activities. However, private-sector engagement has in many cases proved difficult. Future research could look for ways in which this sector can be further involved in TC.

The contribution of macro-regional strategies to territorial co-operation

Macro-regional strategies are a new concept in terms of the organisation of TC between EU Member States and non-EU Member States. Currently, there is a lack of understanding of what the macro-

regional strategy entails in the EU context, let alone what it contributes to TC, and how it supplements existing TC arrangements (INTERREG). Considering the enthusiasm in the Commission and amongst some Member States for macro-regional strategies, but also at the same time noting the scepticism amongst others, further research is warranted into the circumstances under which macro-regional strategies can add value and how they can be most effectively implemented.

TC impact on flows

The research attempted to analyse impact of TC on flows such as FDI, migration and trade, but there is a lack of data on those flows. Accordingly, future analyses could be more focused on monitoring and data collection of cross-border flows at a systematic and EU-wide level.

Main definitions

Co-operation nodes – main centres of co-operation, depicted in network analyses as circles of different sizes depending on the number of co-operating regions. They indicate a degree of co-operation.

Degree of co-operation – is measured in through a network approach by the number of regions co-operating with each other. A region becomes a large node if it co-operates with many regions and is considered to have a high level of co-operation. Again, it has to be stressed that 'degree of co-operation' does not necessarily solely determine the intensity of co-operation, e.g. the degree of co-operation may be high, but its intensity low or high.

Good practice – an initiative (including methods, processes, activities, techniques, etc.) that has already proved successful and which has the potential to be transferred to a different geographic area.

Intensity of co-operation – is measured through a network type of analysis by the number of common projects between the partners (the greater the number of projects, the higher the intensity of co-operation of the region). It has to be mentioned that 'intensity' measured in this way does not determine the scope of co-operation (as defined in Colomb, 2007). In other words, the co-operation can be very intensive (involving many projects), but its scope can be limited to, for example, only exchanging experience.

Scope of co-operation – published in Colomb (2007) a five-grade scale describing scope of co-operation. The stages are as follows: (i) exchange of experience, (ii) testing or transferring different approaches to tackle a common problem, (iii) sharing or pooling tools and resources to tackle a common problem, (iv) jointly realising a transnational action/investment, and (v) jointly producing and implementing a transnational spatial strategy. In this project, one more level was added to the scope, i.e. (vi) solving cross-border (transnational or transcontinental) problems that require co-operation.

Territorial co-operation – collaboration between administrative bodies and/or political actors in Europe and beyond, representing their respective territories, which can also engage other stakeholders as long as their involvement is within the same institutionalised framework.

Abbreviations

AAP	Atlantic Area Programme
AECID	Spanish Agency for International Cooperation and Development
AR	Argentina
BE	Belgium
BEAC	Barents Euro Arctic Council
BG	Bulgaria
BID	Inter-American Development Bank
BSP	Baltic Sea Programme
BSR	Baltic Sea Region
BSS	Baltic Sea Strategy
CADSES	Central Adriatic Danubian South-Eastern European Space
CAWI	Computer Assisted Web Interviewing or 'on-line survey'
CBC	Cross-border Co-operation
CoR	Committee of the Regions
CS	Case Study
CSA	Case Study Area
CZ	Czech Republic
DCFTA	Deep and Comprehensive Free Trade Agreement
DE	Germany
DG	Directorate General
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EEC	European Economic Community
EGTC	European Grouping for Territorial Cooperation
EL	Greece
ENP	European Neighbourhood Policy
ENPI	European Neighborhood and Partnership Instrument
ERDF	European Regional Development Fund
ES	Spain
ESPON	European Spatial Planning Observation Network
ETC	European Territorial Cooperation
EU	European Union
Euroregion	A cross-border grouping of public authorities
EU2020	Europe 2020
EUSBSR	European Union Strategy for Baltic Sea Region
FI	Finland
FP7	Framework Programme 7
FR	France
FUA	Functional Urban Area
GB	United Kingdom
GDP	Gross Domestic Product
GIZ	German Agency for International Development
GRP	Gross Regional Product
GVA	Gross Value Added
HCP	Haut Commisariat au Plan (High Planning Commission)
HU-SL-RO-UA	ENPI CBC Programme Hungary-Slovakia-Romania-Ukraine
IC	International Cooperation
ICT	Information and Communication Technology
IDI	In-depth Interview
IEG	Intercommunale d'Etude et de Gestion
INDEC	National Institute of Statistics and the Census

INE	National Institute of Statistics
IPA	Instrument for Pre-accession Assistance
ITC	International Territorial Cooperation
JTS	Joint Technical Secretariat
LA	Local Authority
LAT.A.	Latin America
LAU	Local administrative units (LAU 1 – district; LAU 2 – municipality). Formerly called NUTS 4 and NUTS 5
LDA	Local Development Agency
MA	Managing Authority
MLG	Multilevel governance
MA	Morocco
MOVTMA	Ministry of Housing, Physical Planning and Environment
MS	Member State
MUA	Morphological Urban Area
NCP	National Contact Point
NGO	Non-Governmental Organisation
NMC	Northern Maritime Corridor
NO	Norway
NPP	Northern Periphery Programme
NSP	North Sea Programme
NSC	North Sea Commission
NWE	North-West Europe
NWEP	North West Europe Programme
NUTS	Nomenclature of Units for Territorial Statistics (three levels plus 2 local levels called LAU 1&2)
OP	Operational Programme
OSC	Civil Society Organisations
PHARE	Poland and Hungary: Assistance for Reconstructuring their Economies
PL	Poland
PL-UA-BL	ENPI CBC Programme Poland-Ukraine-Belarus
PL-SK	CBC Programme Poland-Slovakia
PPP	Public-Private Partnership
RCP	Regional Contact Point
RDA	Regional Development Agency
ROP	Regional Operational Programme
RU	Russian Federation
SE	Sweden
SEM	Structural Equation Model
SME	Small and medium-size enterprise
SK	Slovakia
TA	Technical Assistance
TA2020	Territorial Agenda 2020
TACIS	Technical Assistance to the Community of Independent States
TC	Territorial Cooperation
TR	Turkey
UA	Ukraine
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
URBACT	European Sustainable Urban Development Programme
UY	Uruguay
VA	Value -Added

Bibliography

Association of European Border Regions / CEC Commission of the European Communities (1995, 1997, 2000): *LACE-GUIDE – Practical Guide to Cross-border Co-operation (1st edition 1995; 2nd edition 1997; 3rd edition 2000).* Brussels: AEBR and CEC.

Bachtler, J., Quiogue, N. and Michie, R. (2005) *Update of the Mid-Term Evaluation of the Interreg IIIB Northern Periphery Programme*, Report to the NPP Managing Authority, Sweden.

Bazin, A. (2003) Germany and the enlargement of the European Union to the Czech Republic. *In:* RUPNIK, J. & ZIELONKA, J. (eds.) *The road to the European Union, Volume 1: The Czech and Slovak Republics.* Manchester: Manchester University Press.

Blatter, J. (2003), 'Beyond hierarchies and networks; institutional logics and change in trans-boundary spaces', *Governance: An International Journal of Policy, Administration and Institutions*, 16(4), October 2003.

Böhme, K. Doucet, P., Komornicki, T., Zaucha, J. and Świątek, D. (2011). How to strengthen the territorial dimension of 'Europe 2020' and the EU Cohesion Policy? Report based on the Territorial Agenda 2020 prepared at the request of the Polish Presidency of the Council of the European Union

Dijkstra, L. and Poelman, H. (2011) Regional typologies a compilation, Regional Focus, available on: http://ec.europa.eu/regional_policy/sources/docgener/focus/2011_01_typologies.pdfDOVAL, V. (2007): 'Las Ciudades en el Sistema Internacional', en Revista Contexto Internacional. Año 6 - Nº 19. Rosario: Fundación para la Integración Federal.

Doucet P. (2006) 'Territorial Cohesion of Tomorrow: A Path to Co-operation or Competition?', *European Planning Studies*, Vol. 14:10.

Farinós Dasi, J. (ed.) (2007): Governance of Territorial and Urban Policies from EU to Local Level. Final Report of ESPON Project 2.3.2. Esch-sur-Alzette: ESPON Coordination Unit.

Gabbe, J. & von Malchus, V. Frhr. (2008) Zusammenarbeit Europäischer Grenzregionen. Bilanz und Perspektiven. Baden-Baden: Nomos.

Hofstede, G. (2001) *Cultures consequences: Comparing values, behaviors, institutions, and organizations across nations,* Thousands Oaks, Sage.

INTERACT (2006) *Study on Indicators for Monitoring Transnational and Interregional Co-operation Programmes* (Vienna, INTERACT Programme Secretariat). Available at http://www.interact-eu.net/download/application/pdf/1120816.

Kätke, S. (1999) 'Regional Integration or Fragmentation? The German--Polish Border Region in a New Europe' *Regional Studies,* vol. 33**,** 631-641.

Michie, R. and Wishlade, F. (2011) 'Between Scylla and Charybdis: Navigating financial engineering instruments through Structural Fund and State aid requirements', *IQ-Net Thematic Paper* No. 29(2), European Policies Research Centre, University of Strathclyde, Glasgow.

OECD (2006), *Territorial Reviews of Competitive Cities in the Global Economy*, OECD. Paris.

Panteia (2010) *INTERREG III Community Initiative (2000-2006) Ex-Post Evaluation Final Report*. Zoetermeer.

Ratti, R. (1993a). How can Existing Barriers and Border Effects be Overcome? A Theoretical Approach. *In:* Cappellin, R. and Batey, (eds.) *Regional Networks, Border Regions and European Integration.* London: Pion.

Perkmann, M. (2003) Cross-border Regions in Europe: Significance and Drivers of Regional Cross-Border Co-operation, *Europan Urban and Regional Studies*, vol. 10: 153.

Taylor, S. *et al.* (2004) *A Study of the Mid-term Evaluations of INTERREG Programmes for the Programming Period 2000-2006*, Report to the INTERACT Secretariat by the European Policies Research Centre.

Thant, M (2007), 'Governance Issues in the Region', in proceeding of International Seminar on Cross-Border Co-operation Between Cities in East Asian Countries in Dec. 2007 in Jeju of Korea, Ministry of Land, Transport and Maritime Affairs (MLTM), Gwacheon City, Korea.

Annex to B Report

Table A1: Research, Policy and TERCO-specific questions

	Research Questions (Project Specification)	**Policy Questions** (Project Specification)	**TERCO Questions** (Project Proposal)
Geographical areas of co-operation	RQ1.1 **What European regions** are from a scientific view most **appropriate for territorial co-operation** a) transnationally, b) interregionally, c) across borders, and why (taking into account that cooperation requires equity in opportunities)? (See section: 3.1) RQ1.2 Where would a **joint performance** of regions across different territories and/or across internal/external and/or maritime borders **facilitate increasing the combined competitiveness** by performing together? Could such cooperation arrangements also contribute to more European cohesion and to better European competitiveness in the world? (See section: 3.1.3) RQ1.3 How could **physical barriers** like maritime borders be overcome to enable cooperation? (See section: 3.1)	PQ1. Are existing territorial **cooperation areas still adequate** to meet current challenges of territorial development (e.g. global competitiveness, cohesion, climate change, demographic change), and if not, why is that so? (See section: 3.1.1) PQ2. What could be more meaningful **new cooperation areas** throughout Europe on transnational, interregional as well as cross-border (internal and external) level? (See section: 3.1.2) PQ3. Is it possible to facilitate more European strategies such as the Baltic Sea Strategy by means of territorial cooperation and cohesion? (See section: 3.1) PQ4. What would be the right scale for territorial cooperation? Which themes are appropriately dealt with in territorial cooperation and on which scale? (See section: 3.2.1)	T2.1 To what extent do existing types of TC address the **real needs and challenges of the cooperating units**? (See section: 3.1, 3.2) T2.2 What is needed to assure that **territorial cooperation better addresses the needs** of cooperating units? (See section: 3.1, 3.2) T2.3 **Which areas of co-operation are desirable**, but underdeveloped within currently supported programs? (See section: 3.1, 3.2) T3.2 Which **types and domains** of TC have the highest potential for cooperation in terms of developing and implementing shared strategies and contributing to territorial integration? (See section: 3.2)
Domains/themes of the co-operation types	RQ2.1 Which **domains are most appropriately addressed** in the identified territorial cooperation areas? (See section: 3.2) RQ2.2 For which **domains synergies can be created** and/or better exploited? What are the benefits for the EU as a whole, deriving from such synergies? (See section: 3.2.1) RQ2.3 Should **infrastructure investments** play a role in this respect (in old and/or new EU Member States)? (See section: 3.2.2)	PQ5. Should cooperation programmes include **infrastructure investments**? (See section: 3.2.2) PQ6. What kind **of infrastructure is needed** where to enable fruitful cooperation arrangements? (See section: 3.2.2) PQ7. Is a different approach required in this respect regarding **old and new EU Member States**? (See section: 3.2.2)	T3.3 What is the relationship between the different territorial TCs and their **intensity, scope and domains**? (See section: 3.2.1) T3.4 What, if any, are the differences in **successful cooperation** with regards to New Member States vs Old Member States, supporting hard investments (e.g. infrastructure) vs soft measures (e.g. cultural exchange)? (See section: 3.2)
Territorial structures for TC and specific border situations	RQ3.1 **What territorial structures** (e.g. river and maritime basins, Euro-corridors, urban areas) and typologies can be recognised as suitable areas for cooperation and which strengths, weaknesses, potentials and challenges do they share? (See section: 3.3) RQ3.2 What are the specific development **opportunities along external EU land** and maritime borders (incl. demographic development, accessibility, SMESTOs, etc.) that could provide a strategic basis for cooperation arrangements? In this respect, the EU's Western external borders should be looked at, too, due to the existing strong functional ties with North and Latin America. (See section: 3.3.1)		

Identification of driving forces and governance structures for cooperation	RQ4.1 What are the **driving forces behind** and the **determinants** of cooperation? (See section: 3.4) RQ4.2 What kind of **investments might be needed** to facilitate territorial cooperation? (See section: 3.4) RQ4.3 Which **legal instruments** and **governance structures** are in place in different cooperation areas? Are specific legal instruments and governance structures more appropriate for territorial cooperation than others? (See section: 3.5) RQ4.4 What roles do **institutional framework** conditions like national laws, regulations, etc. play in cooperation? How can potential institutional difficulties be overcome? (See section: 3.5) RQ4.5 Can 'models of cooperation' be derived that **work in practice**? (See section: 3.5.1)	PQ8. What are **favourable framework conditions and good governance models** (at different scales) for territorial cooperation to be realised and to succeed? (See section: 3.5.1) PQ9. What are existing **governance experiences** (both, positive and negative) in territorial cooperation in Europe and what can be learnt from them? (See section: 3.5.2) PQ10. Can **cases of best practices** be translated to and applied in other (potential) cooperation areas? (See section: 3.5.2)	T3.1 What are the **key determinants of cooperation** that bring development and value added at the same time? (See section: 3.4) T4.1 To what extent do **governance structures** and **institutional frameworks** vs routines and day to day practices influence the cooperation at different TTC levels? (See section: 3.5) T4.3 How different are **governance structures** (models) in INTERREG programs and other cooperation programs? (See section: 3.5) T4.4 What forms and structures of governance of TTC constitute **'good practice'**, in terms of their contribution to socio-economic development in different types of territorial situation? (See section: 3.5.2) T4.5 How to **achieve/increase synergies** between different types of TTC? (See section: 3.5.2)
Impact of territorial co-operation on socio-economic development			T1.1 Which types/**determinants of TC** proved most relevant to boost economic growth, create new jobs, or improve the quality of life? (See section: 2.1) T1.2 Which type of **TC brings the highest value added**? In other words, without which TC type would certain goals not have been achieved at all or to the same scale, time, or quality? (See section: 2.5) T1.3 What factors explain the general and specific **interrelationships between TC and regional development** (e.g., location, level and structure of development, governance system and performance and types of TC in which they are active)? (See section: 2.4)

Table A2: Co-operation programs/activities mentioned in CS

Cooperation Type/Programme	Country
Frame Programmes, European Parliament Programmes	Germany Greece
Urbact, Eurocities, other cities information networks	Scotland Norway France Sweden
Education cooperation & exchange: Erasmus, Leonardo da Vinci, LifeLong Learning, etc.	Finland Sweden Greece Norway
ESPON	Norway
ICLD (Swedish International Center for Local Democracy) Partnership	Sweden
Norway Grants	Sweden
European Social Fund, Regional Operational Programs	Sweden Spain
Cooperation within Euroregion & Regional Development Agencies	Poland Slovakia Belgium
Municipalities' agreements (other than Twining Cities)	Poland Sweden Slovakia Ukraine Spain
Indirect cooperation projects	Spain
Transboundary Job Informations	France
Baltic Sea States Subregional Co-operation (BSSSC)	Norway
Europe for Citizens	Greece
Intelligent Energy Europe (IEE)	Greece
ENPI	Spain
UNESCO	Norway
NORAD and QA projects	Norway

Source: Based on TERCO CS.

Table A3: Impact of TC on socio-economic development by type of TC

Impact of ITCo projects in specific domains on your area		Twinning Cities				INTERREG A				INTERREG B				INTERREG C				Transcontinental			
		Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total
Economic growth	minimal	54.0	31.0	33.3	41.0	11.1	8.3	30.4	13.9	34.2	0.0	33.3	31.4	22.2	0.0	25.0	19.4	29.4	33.3	22.2	27.6
	little	32.0	21.4	33.3	28.7	27.0	16.7	13.0	21.3	34.2	25.0	22.2	31.4	40.7	60.0	25.0	41.7	29.4	33.3	0.0	20.7
	moderate	12.0	31.0	23.3	21.3	41.3	55.6	30.4	43.4	18.4	25.0	33.3	21.6	33.3	20.0	50.0	33.3	29.4	33.3	77.8	44.8
	large	2.0	16.7	6.7	8.2	20.6	19.4	26.1	21.3	13.2	50.0	11.1	15.7	3.7	20.0	0.0	5.6	5.9	0.0	0.0	3.4
	very substancial	0.0	0.0	3.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	3.4
	Subtotal	56.8	65.6	63.8	61.3	74.1	67.9	74.2	72.2	79.2	80.0	75.0	78.5	71.1	83.3	57.1	70.6	53.1	100.0	47.4	53.7
Job creation	minimal	65.1	55.3	40.0	55.0	23.8	25.0	20.0	23.3	52.8	33.3	11.1	43.8	46.4	50.0	0.0	40.0	35.3	33.3	14.3	29.6
	little	27.9	18.4	33.3	26.1	36.5	34.4	44.0	37.5	33.3	0.0	44.4	33.3	28.6	50.0	60.0	34.3	23.5	33.3	28.6	25.9
	moderate	4.7	18.4	23.3	14.4	27.0	40.6	24.0	30.0	13.9	33.3	0.0	12.5	21.4	0.0	0.0	17.1	23.5	33.3	57.1	33.3
	large	2.3	5.3	0.0	2.7	12.7	0.0	8.0	8.3	0.0	33.3	44.4	10.4	3.6	0.0	20.0	5.7	17.6	0.0	0.0	11.1
	very substancial	0.0	2.6	3.3	1.8	0.0	0.0	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	20.0	2.9	0.0	0.0	0.0	0.0
	Subtotal	48.9	59.4	63.8	55.8	74.1	60.4	80.6	71.0	75.0	60.0	75.0	73.8	73.7	33.3	71.4	68.6	53.1	100.0	36.8	50.0
Quality of life	minimal	27.8	13.2	12.5	18.7	8.1	6.7	4.0	6.8	7.7	0.0	0.0	5.7	13.8	20.0	0.0	13.2	29.4	0.0	11.1	20.7
	little	18.5	11.3	21.9	16.5	14.5	6.7	24.0	13.6	30.8	0.0	22.2	26.4	20.7	20.0	0.0	18.4	11.8	33.3	0.0	10.3
	moderate	42.6	45.3	37.5	42.4	56.5	53.3	32.0	50.8	41.0	60.0	33.3	41.5	41.4	40.0	50.0	42.1	41.2	66.7	66.7	51.7
	large	5.6	24.5	25.0	17.3	17.7	28.9	40.0	25.8	17.9	20.0	44.4	22.6	24.1	0.0	50.0	23.7	17.6	0.0	11.1	13.8
	very substancial	5.6	5.7	3.1	5.0	3.2	4.4	0.0	3.0	2.6	20.0	0.0	3.8	0.0	20.0	0.0	2.6	0.0	0.0	11.1	3.4
	Subtotal	61.4	82.8	68.1	69.8	72.9	84.9	80.6	78.1	81.3	100.0	75.0	81.5	76.3	83.3	57.1	74.5	53.1	100.0	47.4	53.7
Quality of natural environment	minimal	53.5	21.4	27.6	35.1	14.0	17.1	13.0	14.8	24.3	25.0	12.5	22.4	14.8	0.0	33.3	14.3	33.3	33.3	12.5	27.6
	little	16.3	31.0	24.1	23.7	19.3	20.0	21.7	20.0	27.0	25.0	50.0	30.6	18.5	40.0	33.3	22.9	16.7	33.3	12.5	17.2
	moderate	25.6	28.6	27.6	27.2	29.8	34.3	26.1	30.4	24.3	25.0	25.0	24.5	14.8	20.0	0.0	14.3	50.0	33.3	37.5	44.8
	large	4.7	14.3	13.8	10.5	28.1	25.7	39.1	29.6	21.6	0.0	12.5	18.4	48.1	20.0	33.3	42.9	0.0	0.0	37.5	10.3
	very substancial	0.0	4.8	6.9	3.5	8.8	2.9	0.0	5.2	2.7	25.0	0.0	4.1	3.7	20.0	0.0	5.7	0.0	0.0	0.0	0.0
	Subtotal	48.9	65.6	61.7	57.3	67.1	66.0	74.2	68.0	77.1	80.0	66.7	75.4	71.1	83.3	42.9	68.6	56.3	100.0	42.1	53.7
Service provision	minimal	48.9	26.8	18.5	33.6	10.2	22.9	8.0	13.4	24.2	0.0	0.0	18.6	16.0	50.0	0.0	16.7	37.5	33.3	28.6	34.6
	little	26.7	12.2	29.6	22.1	15.3	2.9	20.0	12.6	12.1	0.0	14.3	11.6	16.0	0.0	0.0	13.3	25.0	33.3	28.6	26.9
	moderate	20.0	36.6	25.9	27.4	44.1	37.1	32.0	39.5	39.4	66.7	57.1	44.2	48.0	0.0	66.7	46.7	18.8	33.3	28.6	23.1
	large	4.4	12.2	25.9	12.4	27.1	28.6	36.0	29.4	24.2	0.0	28.6	23.3	20.0	0.0	33.3	20.0	18.8	0.0	14.3	15.4
	very substancial	0.0	12.2	0.0	4.4	3.4	8.6	4.0	5.0	0.0	33.3	0.0	2.3	0.0	50.0	0.0	3.3	0.0	0.0	0.0	0.0
	Subtotal	51.1	64.1	57.4	56.8	69.4	66.0	80.6	70.4	68.8	60.0	58.3	66.2	65.8	33.3	42.9	58.8	50.0	100.0	36.8	48.1
Economic growth	No impact	43.2	34.4	36.2	38.7	25.9	32.1	25.8	27.8	20.8	20.0	25.0	21.5	28.9	16.7	42.9	29.4	46.9	0.0	52.6	46.3
Job creation	No impact	51.1	40.6	36.2	44.2	25.9	39.6	19.4	29.0	25.0	40.0	25.0	26.2	26.3	66.7	28.6	31.4	46.9	0.0	63.2	50.0
Quality of life	No impact	38.6	17.2	31.9	30.2	27.1	15.1	19.4	21.9	18.8	0.0	25.0	18.5	23.7	16.7	42.9	25.5	46.9	0.0	52.6	46.3
Quality of natural environment	No impact	51.1	34.4	38.3	42.7	32.9	34.0	25.8	32.0	22.9	20.0	33.3	24.6	28.9	16.7	57.1	31.4	43.8	0.0	57.9	46.3
Service provision	No impact	48.9	35.9	42.6	43.2	30.6	34.0	19.4	29.6	31.3	40.0	41.7	33.8	34.2	66.7	57.1	41.2	50.0	0.0	63.2	51.9
Involment		44.0	39.5	43.5	42.3	42.5	32.7	28.7	36.0	24.0	3.1	11.1	13.8	19.0	3.7	6.5	10.9	16.0	1.9	17.6	11.5
Grand Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' elaboration.

Table A4: Impact of Territorial Co-operation on flows and exchanges by type of TC

Impact of ITCo projects in flows/exchanges on your area		Twinning Cities				INTERREG A				INTERREG B				INTERREG C				Transcontinental			
		Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total
International trade	minimal	55.0	51.4	44.4	51.0	31.0	39.3	38.1	34.6	59.4	0.0	25.0	51.2	52.9	100.0	33.3	56.5	52.6	0.0	30.0	40.6
	little	20.0	16.2	18.5	18.3	41.4	21.4	28.6	33.6	21.9	0.0	25.0	22.0	35.3	0.0	0.0	26.1	10.5	66.7	10.0	15.6
	moderate	20.0	24.3	18.5	21.2	20.7	21.4	19.0	20.6	18.8	100.0	25.0	22.0	11.8	0.0	66.7	17.4	21.1	33.3	40.0	28.1
	large	5.0	5.4	14.8	7.7	5.2	10.7	14.3	8.4	0.0	0.0	25.0	4.9	0.0	0.0	0.0	0.0	10.5	0.0	10.0	9.4
	very	0.0	2.7	3.7	1.9	1.7	7.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	10.0	6.3
	Subtotal	45.5	57.8	57.4	*52.3*	68.2	52.8	67.7	*63.3*	66.7	20.0	66.7	*63.1*	44.7	50.0	42.9	*45.1*	59.4	100.0	52.6	*59.3*
FDI	minimal	66.7	48.6	44.0	54.1	50.0	37.9	40.0	44.7	78.6	0.0	16.7	63.9	52.9	75.0	33.3	54.2	61.1	0.0	22.2	44.8
	little	22.2	21.6	20.0	21.4	25.9	17.2	25.0	23.3	17.9	0.0	16.7	16.7	35.3	0.0	0.0	25.0	11.1	100.0	22.2	20.7
	moderate	11.1	24.3	28.0	20.4	18.5	34.5	10.0	21.4	3.6	50.0	33.3	11.1	11.8	0.0	33.3	12.5	16.7	0.0	44.4	24.1
	large	0.0	5.4	4.0	3.1	3.7	6.9	20.0	7.8	0.0	50.0	16.7	5.6	0.0	25.0	0.0	4.2	11.1	0.0	11.1	10.3
	very	0.0	0.0	4.0	1.0	1.9	3.4	5.0	2.9	0.0	0.0	16.7	2.8	0.0	0.0	33.3	4.2	0.0	0.0	0.0	0.0
	Subtotal	40.9	57.8	53.2	*49.2*	63.5	54.7	64.5	*60.9*	58.3	40.0	50.0	*55.4*	44.7	66.7	42.9	*47.1*	56.3	66.7	47.4	*53.7*
Commuting for work	minimal	61.5	56.3	42.9	54.5	23.6	53.6	16.7	30.7	64.3	0.0	16.7	52.8	47.4	66.7	0.0	45.8	61.1	100.0	37.5	57.1
	little	25.6	28.1	25.0	26.3	27.3	14.3	33.3	24.8	25.0	50.0	33.3	27.8	36.8	33.3	50.0	37.5	11.1	0.0	25.0	14.3
	moderate	10.3	12.5	17.9	13.1	32.7	17.9	38.9	29.7	7.1	50.0	50.0	16.7	5.3	0.0	50.0	8.3	22.2	0.0	12.5	17.9
	large	2.6	0.0	10.7	4.0	12.7	14.3	11.1	12.9	3.6	0.0	0.0	2.8	10.5	0.0	0.0	8.3	5.6	0.0	25.0	10.7
	very	0.0	3.1	3.6	2.0	3.6	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subtotal	44.3	50.0	59.6	*49.7*	64.7	52.8	58.1	*59.8*	58.3	40.0	50.0	*55.4*	50.0	50.0	28.6	*47.1*	56.3	66.7	42.1	*51.9*
Tourism	minimal	14.0	10.9	8.8	11.5	7.6	7.3	12.5	8.4	20.5	0.0	12.5	17.3	4.5	0.0	25.0	6.5	45.0	0.0	18.2	33.3
	little	26.0	9.1	17.6	17.3	7.6	4.9	16.7	8.4	17.9	0.0	0.0	13.5	45.5	20.0	0.0	35.5	15.0	0.0	18.2	15.2
	moderate	30.0	27.3	41.2	31.7	45.5	19.5	29.2	34.4	48.7	40.0	37.5	46.2	31.8	60.0	25.0	35.5	25.0	0.0	18.2	21.2
	large	22.0	36.4	20.6	27.3	30.3	51.2	33.3	37.4	10.3	20.0	37.5	15.4	18.2	0.0	25.0	16.1	15.0	100.0	36.4	27.3
	very	8.0	16.4	11.8	12.2	9.1	17.1	8.3	11.5	2.6	40.0	12.5	7.7	0.0	20.0	25.0	6.5	0.0	0.0	9.1	3.0
	Subtotal	56.8	85.9	72.3	*69.8*	77.6	77.4	77.4	*77.5*	81.3	100.0	66.7	*80.0*	57.9	83.3	57.1	*60.8*	62.5	66.7	57.9	*61.1*
Social commuting	minimal	29.5	17.1	24.2	23.7	24.1	9.1	16.7	18.3	50.0	0.0	0.0	39.5	31.6	75.0	0.0	37.5	63.2	0.0	11.1	43.3
	little	22.7	26.8	9.1	20.3	10.3	18.2	5.6	11.9	30.0	33.3	20.0	28.9	47.4	0.0	0.0	37.5	10.5	50.0	22.2	16.7
	moderate	22.7	26.8	36.4	28.0	43.1	42.4	38.9	42.2	13.3	33.3	60.0	21.1	10.5	0.0	100.0	12.5	21.1	50.0	33.3	26.7
	large	20.5	24.4	21.2	22.0	17.2	21.2	33.3	21.1	6.7	0.0	20.0	7.9	10.5	0.0	0.0	8.3	5.3	0.0	33.3	13.3
	very	4.5	4.9	9.1	5.9	5.2	9.1	5.6	6.4	0.0	33.3	0.0	2.6	0.0	25.0	0.0	4.2	0.0	0.0	0.0	0.0
	Subtotal	50.0	64.1	70.2	*59.3*	68.2	62.3	58.1	*64.5*	62.5	60.0	41.7	*58.5*	50.0	66.7	14.3	*47.1*	59.4	66.7	47.4	*55.6*
Migration	minimal	55.3	52.9	38.7	49.5	41.8	69.0	61.5	52.6	80.0	0.0	0.0	64.9	66.7	33.3	33.3	58.3	58.8	50.0	11.1	42.9
	little	26.3	35.3	25.8	29.1	21.8	17.2	7.7	18.6	10.0	50.0	20.0	13.5	16.7	66.7	0.0	20.8	23.5	0.0	33.3	25.0
	moderate	13.2	11.8	12.9	12.6	29.1	6.9	30.8	22.7	3.3	50.0	40.0	10.8	11.1	0.0	33.3	12.5	11.8	50.0	44.4	25.0
	large	2.6	0.0	12.9	4.9	7.3	6.9	0.0	6.2	3.3	0.0	40.0	8.1	5.6	0.0	0.0	4.2	5.9	0.0	11.1	7.1
	very	2.6	0.0	9.7	3.9	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.7	0.0	0.0	33.3	4.2	0.0	0.0	0.0	0.0
	Subtotal	43.2	53.1	66.0	*51.8*	64.7	54.7	41.9	*57.4*	62.5	40.0	41.7	*56.9*	47.4	50.0	42.9	*47.1*	53.1	66.7	47.4	*51.9*
Educational exchange	minimal	21.2	42.9	19.4	26.8	22.8	48.3	33.3	31.8	50.0	0.0	30.0	43.2	25.0	66.7	40.0	32.1	35.0	50.0	8.3	26.5
	little	17.3	28.6	25.0	22.8	21.1	27.6	4.8	19.6	15.6	50.0	10.0	15.9	20.0	33.3	0.0	17.9	5.0	50.0	25.0	14.7
	moderate	30.8	17.1	27.8	26.0	42.1	13.8	38.1	33.6	31.3	50.0	30.0	31.8	45.0	0.0	0.0	32.1	40.0	0.0	41.7	38.2
	large	25.0	5.7	11.1	15.4	12.3	10.3	19.0	13.1	3.1	0.0	30.0	9.1	10.0	0.0	60.0	17.9	15.0	0.0	16.7	14.7
	very	5.8	5.7	16.7	8.9	1.8	0.0	4.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	8.3	5.9
	Subtotal	59.1	54.7	76.6	*61.8*	67.1	54.7	67.7	*63.3*	66.7	40.0	83.3	*67.7*	52.6	50.0	71.4	*54.9*	62.5	66.7	63.2	*63.0*
Other	minimal	50.0	25.0	20.0	27.3	0.0	25.0	100.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	little	0.0	0.0	20.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	moderate	0.0	0.0	0.0	0.0	0.0	25.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	large	50.0	25.0	60.0	45.5	0.0	50.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	very	0.0	50.0	0.0	18.2	0.0	0.0	0.0	0.0	100.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subtotal	2.3	6.3	10.6	*5.5*	0.0	7.5	3.2	*3.0*	2.1	0.0	8.3	*3.1*	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	*0.0*
International trade	No impact	54.5	42.2	42.6	*47.7*	31.8	47.2	32.3	*36.7*	33.3	80.0	33.3	*36.9*	55.3	50.0	57.1	*54.9*	40.6	0.0	47.4	*40.7*
FDI	No impact	59.1	42.2	46.8	*50.8*	36.5	45.3	35.5	*39.1*	41.7	60.0	50.0	*44.6*	55.3	33.3	57.1	*52.9*	43.8	33.3	52.6	*46.3*
Commuting for work	No impact	55.7	50.0	40.4	*50.3*	35.3	47.2	41.9	*40.2*	41.7	60.0	50.0	*44.6*	50.0	50.0	71.4	*52.9*	43.8	33.3	57.9	*48.1*
Tourism	No impact	43.2	14.1	27.7	*30.2*	22.4	22.6	22.6	*22.5*	18.8	0.0	33.3	*20.0*	42.1	16.7	42.9	*39.2*	37.5	33.3	42.1	*38.9*
Social commuting	No impact	50.0	35.9	29.8	*40.7*	31.8	37.7	41.9	*35.5*	37.5	40.0	58.3	*41.5*	50.0	33.3	85.7	*52.9*	40.6	33.3	52.6	*44.4*
Migration	No impact	56.8	46.9	34.0	*48.2*	35.3	45.3	58.1	*42.6*	37.5	60.0	58.3	*43.1*	52.6	50.0	57.1	*52.9*	46.9	33.3	52.6	*48.1*
Educational exchange	No impact	40.9	45.3	23.4	*38.2*	32.9	45.3	32.3	*36.7*	33.3	60.0	16.7	*32.3*	47.4	50.0	28.6	*45.1*	37.5	33.3	36.8	*37.0*
Other	No impact	97.7	93.8	89.4	*94.5*	100.0	92.5	96.8	*97.0*	97.9	100.0	91.7	*96.9*	100.0	100.0	100.0	*100.0*	100.0	100.0	100.0	*100.0*
Involment		44.0	39.5	43.5	42.3	42.5	32.7	28.7	36.0	24.0	3.1	11.1	13.8	19.0	3.7	6.5	10.9	16.0	1.9	17.6	11.5
Grand Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

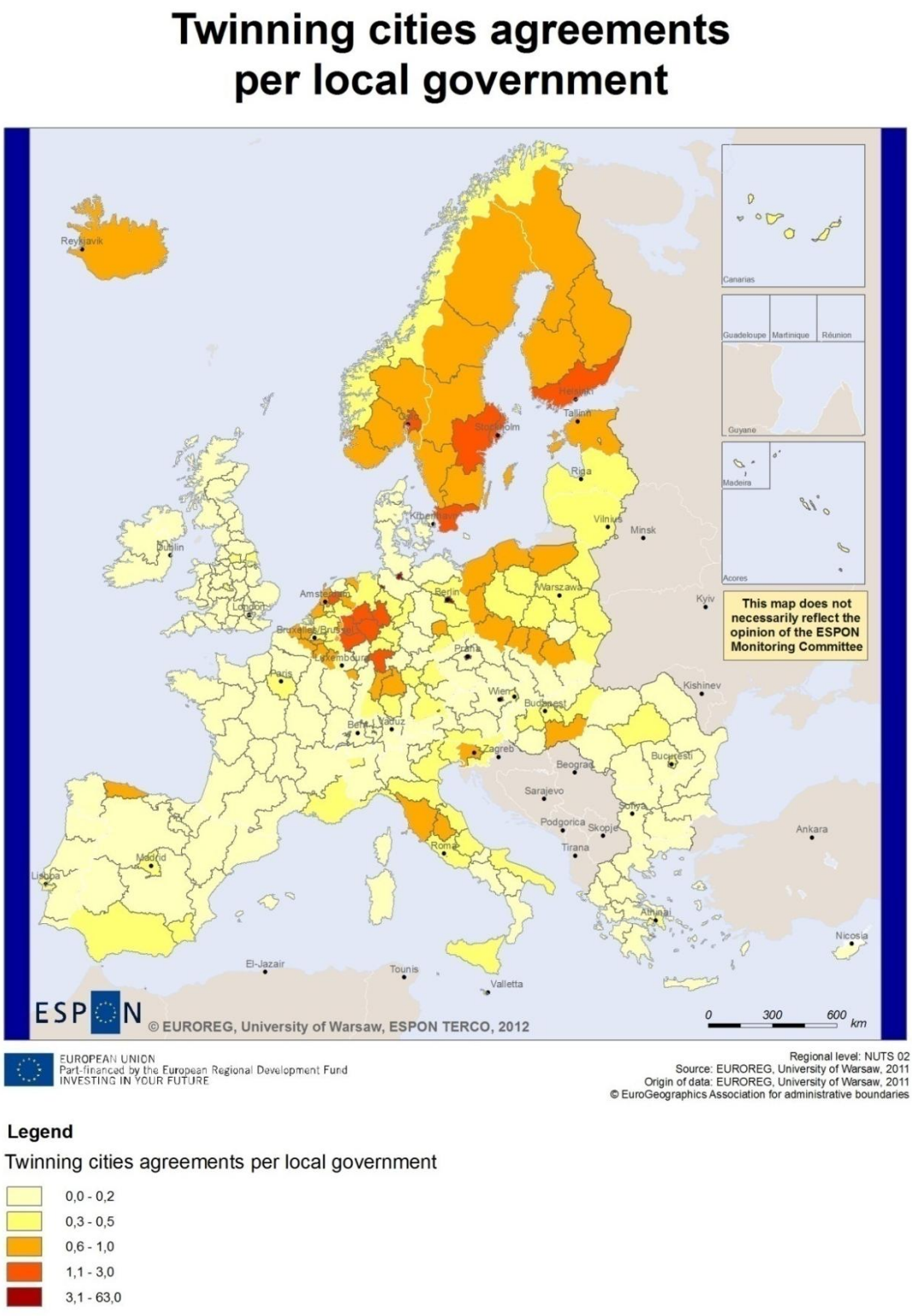
Source: Authors' elaboration.

Table A5: Impact of Territorial Co-operation on specific activities by type of TC

Impact of ITCo projects in activities on your area		Twinning Cities				INTERREG A				INTERREG B				INTERREG C				Transcontinental			
		Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total	Old MS	New MS	No EU	Total
International networking co-operation among firms	minimal	47.1	42.9	32.1	41.2	21.2	37.0	21.1	25.5	44.4	0.0	28.6	38.9	18.2	50.0	0.0	18.5	40.0	0.0	54.5	42.9
	little	32.4	22.9	25.0	26.8	25.0	14.8	21.1	21.4	7.4	0.0	42.9	13.9	4.5	50.0	66.7	14.8	13.3	0.0	9.1	10.7
	moderate	11.8	20.0	21.4	17.5	26.9	40.7	36.8	32.7	22.2	50.0	14.3	22.2	31.8	0.0	33.3	29.6	33.3	100.0	27.3	35.7
	large	8.8	11.4	21.4	13.4	19.2	3.7	21.1	15.3	14.8	0.0	14.3	13.9	31.8	0.0	0.0	25.9	6.7	0.0	9.1	7.1
	very substancial	0.0	2.9	0.0	1.0	7.7	3.7	0.0	5.1	11.1	50.0	0.0	11.1	13.6	0.0	0.0	11.1	6.7	0.0	0.0	3.6
	Subtotal	38.6	54.7	59.6	*48.7*	61.2	50.9	61.3	*58.0*	56.3	40.0	58.3	*55.4*	57.9	33.3	42.9	*52.9*	46.9	66.7	57.9	*51.9*
Networking among NGOs	minimal	26.5	27.3	11.8	22.3	24.5	22.2	0.0	19.1	37.9	0.0	14.3	31.6	14.3	25.0	50.0	18.5	18.8	0.0	11.1	14.8
	little	35.3	20.5	11.8	22.3	22.6	19.4	14.3	20.0	6.9	0.0	14.3	7.9	14.3	25.0	0.0	14.8	25.0	0.0	22.2	22.2
	moderate	29.4	29.5	41.2	33.0	22.6	41.7	23.8	29.1	24.1	50.0	42.9	28.9	38.1	50.0	0.0	37.0	12.5	100.0	55.6	33.3
	large	5.9	18.2	20.6	15.2	28.3	13.9	42.9	26.4	24.1	50.0	14.3	23.7	28.6	0.0	0.0	22.2	31.3	0.0	11.1	22.2
	very substancial	2.9	4.5	14.7	7.1	1.9	2.8	19.0	5.5	6.9	0.0	14.3	7.9	4.8	0.0	50.0	7.4	12.5	0.0	0.0	7.4
	Subtotal	38.6	68.8	72.3	*56.3*	62.4	67.9	67.7	*65.1*	60.4	40.0	58.3	*58.5*	55.3	66.7	28.6	*52.9*	50.0	66.7	47.4	*50.0*
Building mutual trust	minimal	7.0	7.4	5.4	6.8	3.0	2.5	0.0	2.3	8.3	0.0	0.0	6.4	3.7	20.0	0.0	5.7	5.3	0.0	18.2	9.4
	little	8.8	5.6	10.8	8.1	6.1	7.5	8.7	7.0	13.9	0.0	12.5	12.8	18.5	0.0	0.0	14.3	10.5	0.0	9.1	9.4
	moderate	21.1	18.5	27.0	21.6	31.8	22.5	21.7	27.1	33.3	0.0	12.5	27.7	33.3	20.0	0.0	28.6	15.8	0.0	27.3	18.8
	large	43.9	48.1	35.1	43.2	42.4	52.5	39.1	45.0	30.6	33.3	50.0	34.0	37.0	40.0	66.7	40.0	57.9	50.0	36.4	50.0
	very substancial	19.3	20.4	21.6	20.3	16.7	15.0	30.4	18.6	13.9	66.7	25.0	19.1	7.4	20.0	33.3	11.4	10.5	50.0	9.1	12.5
	Subtotal	64.8	84.4	78.7	*74.4*	77.6	75.5	74.2	*76.3*	75.0	60.0	66.7	*72.3*	71.1	83.3	42.9	*68.6*	59.4	66.7	57.9	*59.3*
Joint project preperation	minimal	17.8	3.6	9.4	9.8	3.1	0.0	0.0	1.6	11.4	0.0	0.0	8.3	0.0	0.0	0.0	0.0	20.0	0.0	9.1	15.2
	little	13.3	10.9	25.0	15.2	7.8	4.8	4.3	6.2	11.4	20.0	12.5	12.5	4.0	20.0	0.0	5.7	20.0	0.0	9.1	15.2
	moderate	33.3	16.4	21.9	23.5	32.8	23.8	21.7	27.9	25.7	0.0	37.5	25.0	44.0	0.0	60.0	40.0	25.0	50.0	27.3	27.3
	large	22.2	43.6	28.1	32.6	40.6	47.6	39.1	42.6	40.0	40.0	25.0	37.5	36.0	60.0	20.0	37.1	25.0	50.0	45.5	33.3
	very substancial	13.3	25.5	15.6	18.9	15.6	23.8	34.8	21.7	11.4	40.0	25.0	16.7	16.0	20.0	20.0	17.1	10.0	0.0	9.1	9.1
	Subtotal	51.1	85.9	68.1	*66.3*	75.3	79.2	74.2	*76.3*	72.9	100.0	66.7	*73.8*	65.8	83.3	71.4	*68.6*	62.5	66.7	57.9	*61.1*
Joint spatial planning	minimal	59.4	41.9	36.4	47.1	24.5	40.7	17.6	27.8	37.9	0.0	50.0	37.1	26.1	33.3	66.7	31.0	56.3	50.0	37.5	50.0
	little	15.6	22.6	27.3	21.2	22.6	25.9	11.8	21.6	24.1	0.0	25.0	22.9	13.0	33.3	0.0	13.8	12.5	50.0	0.0	11.5
	moderate	25.0	25.8	13.6	22.4	34.0	18.5	29.4	28.9	17.2	0.0	25.0	17.1	39.1	33.3	33.3	37.9	12.5	0.0	62.5	26.9
	large	0.0	9.7	18.2	8.2	17.0	14.8	29.4	18.6	17.2	100.0	0.0	20.0	13.0	0.0	0.0	10.3	12.5	0.0	0.0	7.7
	very substancial	0.0	0.0	4.5	1.2	1.9	0.0	11.8	3.1	3.4	0.0	0.0	2.9	8.7	0.0	0.0	6.9	6.3	0.0	0.0	3.8
	Subtotal	36.4	48.4	46.8	*42.7*	62.4	50.9	54.8	*57.4*	60.4	40.0	33.3	*53.8*	60.5	50.0	42.9	*56.9*	50.0	66.7	42.1	*48.1*
other	minimal	0.0	0.0	20.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	little	0.0	0.0	20.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	moderate	0.0	0.0	40.0	28.6	0.0	0.0	100.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	large	0.0	50.0	20.0	28.6	0.0	100.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	very sustancial	0.0	50.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subtotal	0.0	3.1	10.6	*3.5*	0.0	1.9	3.2	*1.2*	0.0	0.0	8.3	*1.5*	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	*0.0*
International networking co-operation among	no impact	61.4	45.3	40.4	51.3	38.8	49.1	38.7	42.0	43.8	60.0	41.7	44.6	42.1	66.7	57.1	47.1	53.1	33.3	42.1	48.1
Networking among NGOs	no impact	61.4	31.3	27.7	43.7	37.6	32.1	32.3	34.9	39.6	60.0	41.7	41.5	44.7	33.3	71.4	47.1	50.0	33.3	52.6	50.0
Building mutual trust	no impact	35.2	15.6	21.3	25.6	22.4	24.5	25.8	23.7	25.0	40.0	33.3	27.7	28.9	16.7	57.1	31.4	40.6	33.3	42.1	40.7
Joint project preperation	no impact	48.9	14.1	31.9	33.7	24.7	20.8	25.8	23.7	27.1	0.0	33.3	26.2	34.2	16.7	28.6	31.4	37.5	33.3	42.1	38.9
Joint spatial planning	no impact	63.6	51.6	53.2	57.3	37.6	49.1	45.2	42.6	39.6	60.0	66.7	46.2	39.5	50.0	57.1	43.1	50.0	33.3	57.9	51.9
other	no impact	100.0	96.9	89.4	96.5	100.0	98.1	96.8	98.8	100.0	100.0	91.7	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Involvement		44.0	39.5	43.5	*42.3*	42.5	32.7	28.7	36.0	24.0	3.1	11.1	13.8	19.0	3.7	6.5	10.9	16.0	1.9	17.6	11.5
Grand Total		100.0	100.0	100.0	*100.0*	100.0	100.0	100.0	*100.0*	100.0	100.0	100.0	*100.0*	100.0	100.0	100.0	*100.0*	100.0	100.0	100.0	*100.0*

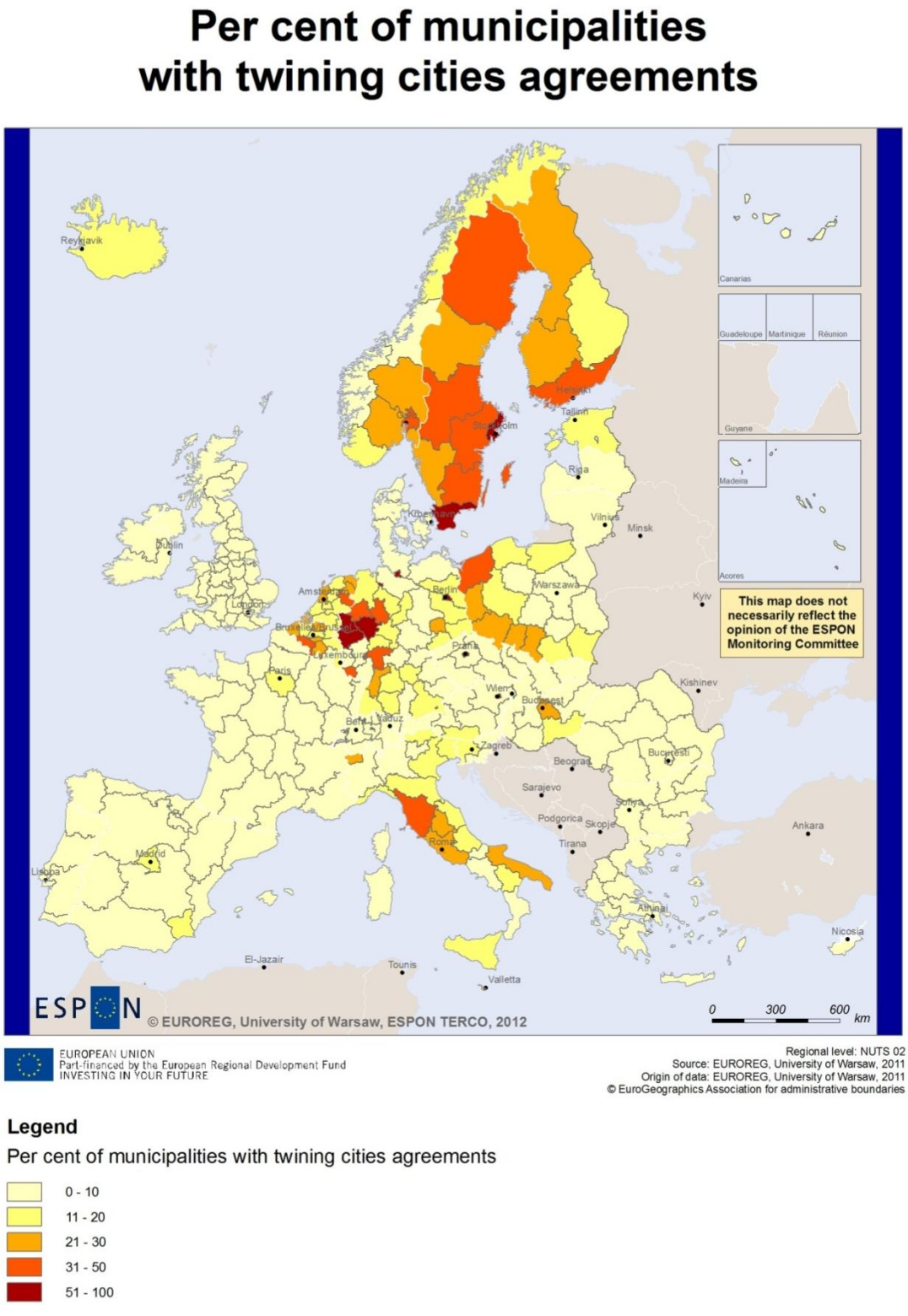
Source: Authors' elaboration.

Map A1: Twinning city agreements per local government



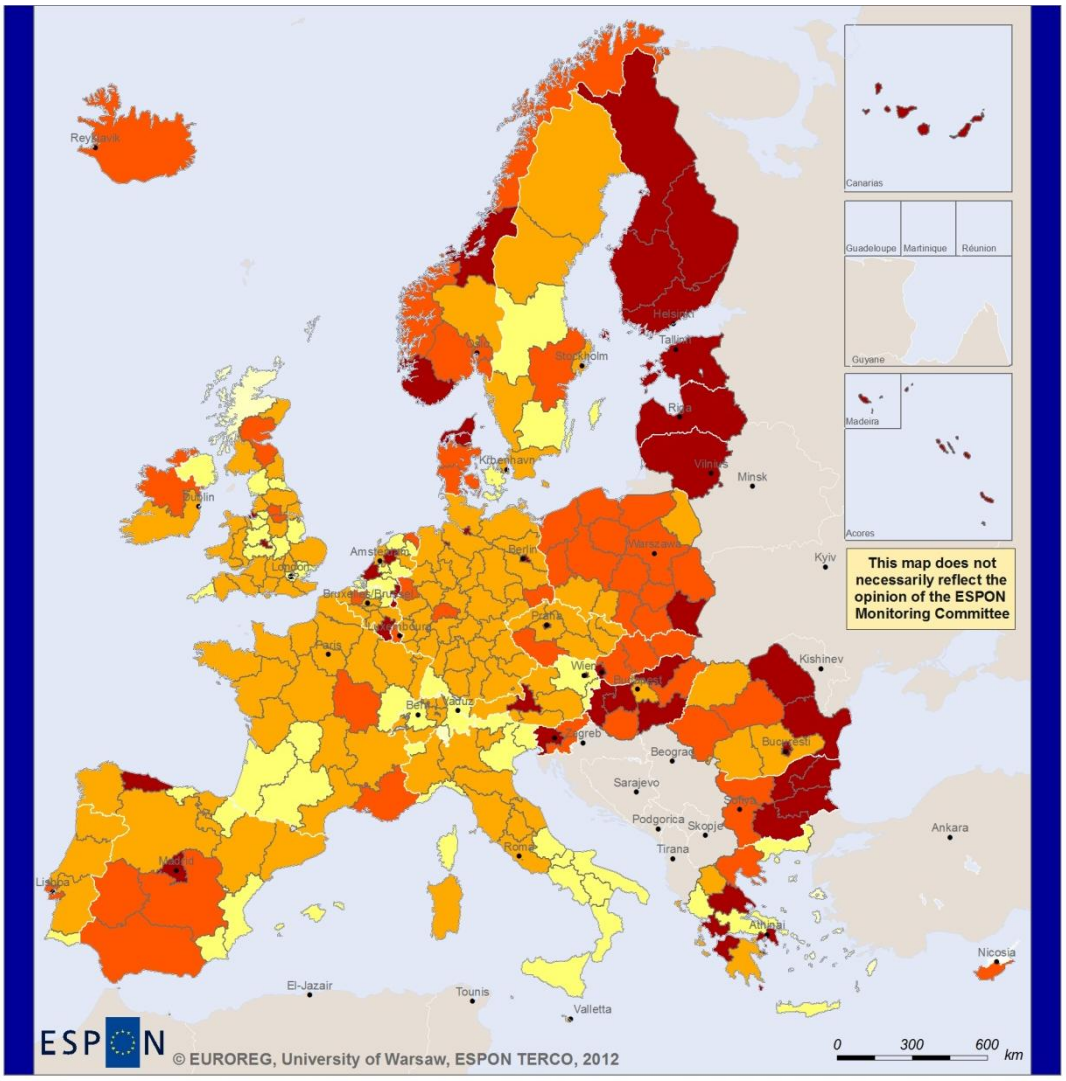
Source: Authors' elaboration.

Map A2: Share of municipalities with twinning cities agreements



Source: Authors' elaboration.

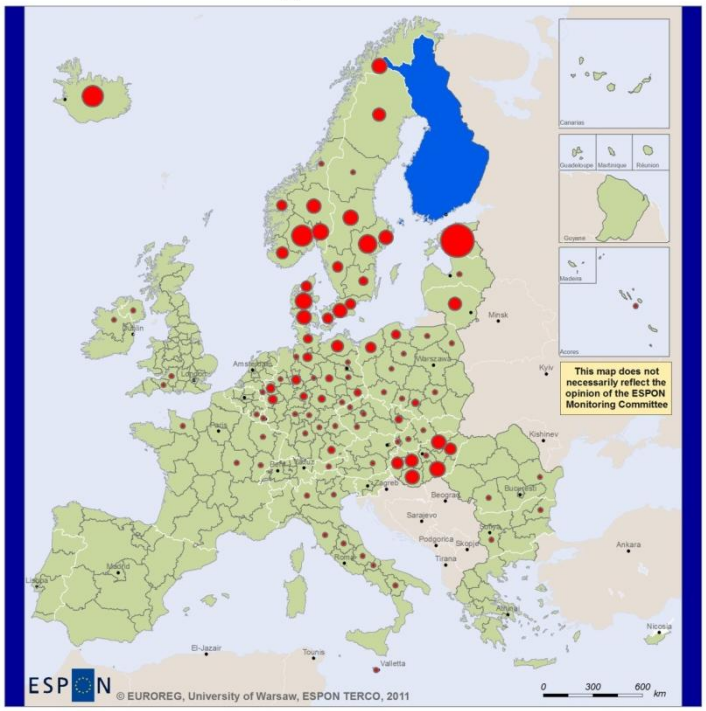
Map A3: Average number of twinning cities per municipality having twinning city agreements



Source: Authors' elaboration.

Map A4: Twinning City co-operation from selected countries' perspectives

Twinning cities - Finland



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Regional level: NUTS 02
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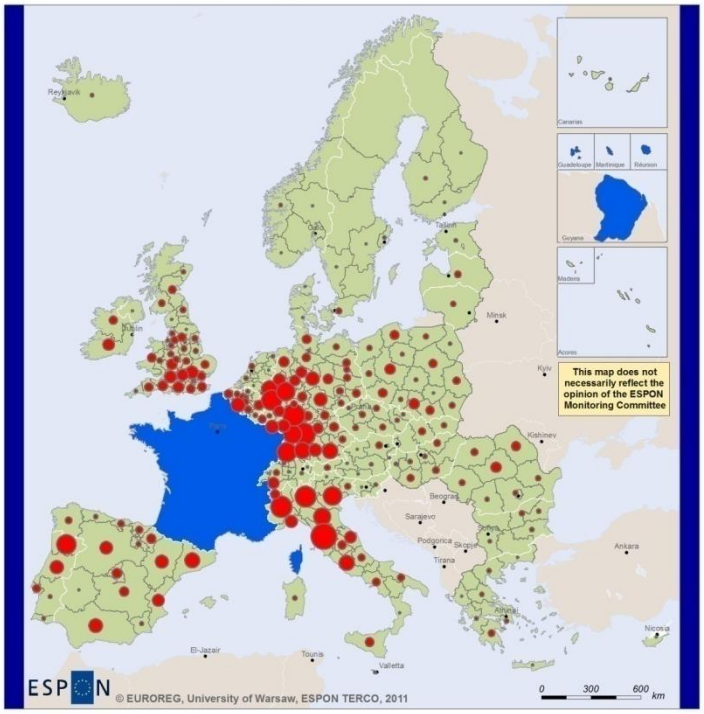
Legend

Twinning cities agreements with Finland

110

Twinning cities - France



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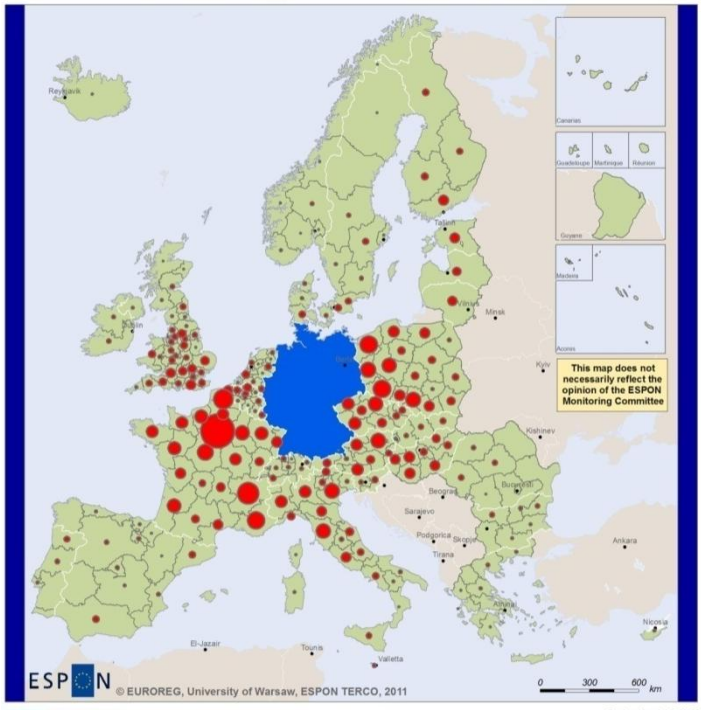
Legend

Twinning cities agreements with France

460

Twinning cities - Germany



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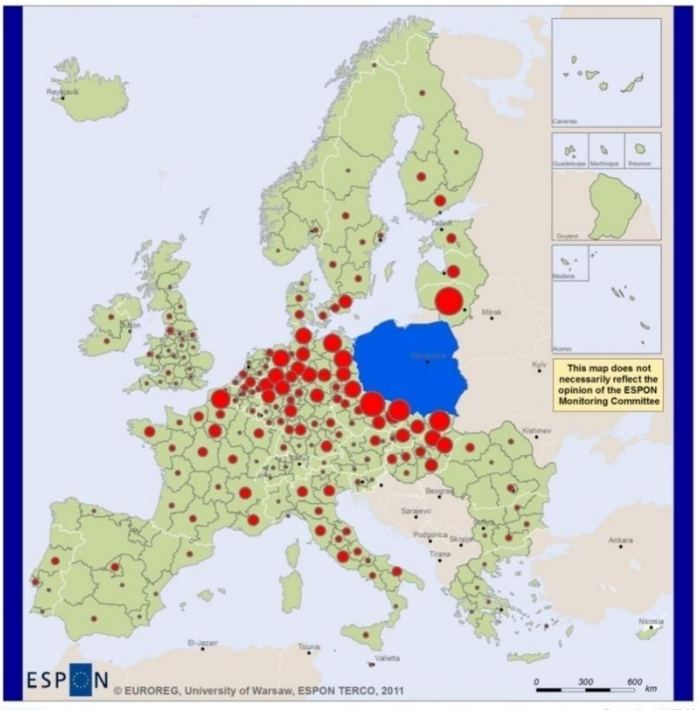
Legend

Twinning cities agreements with Germany

610

Twinning cities - Poland



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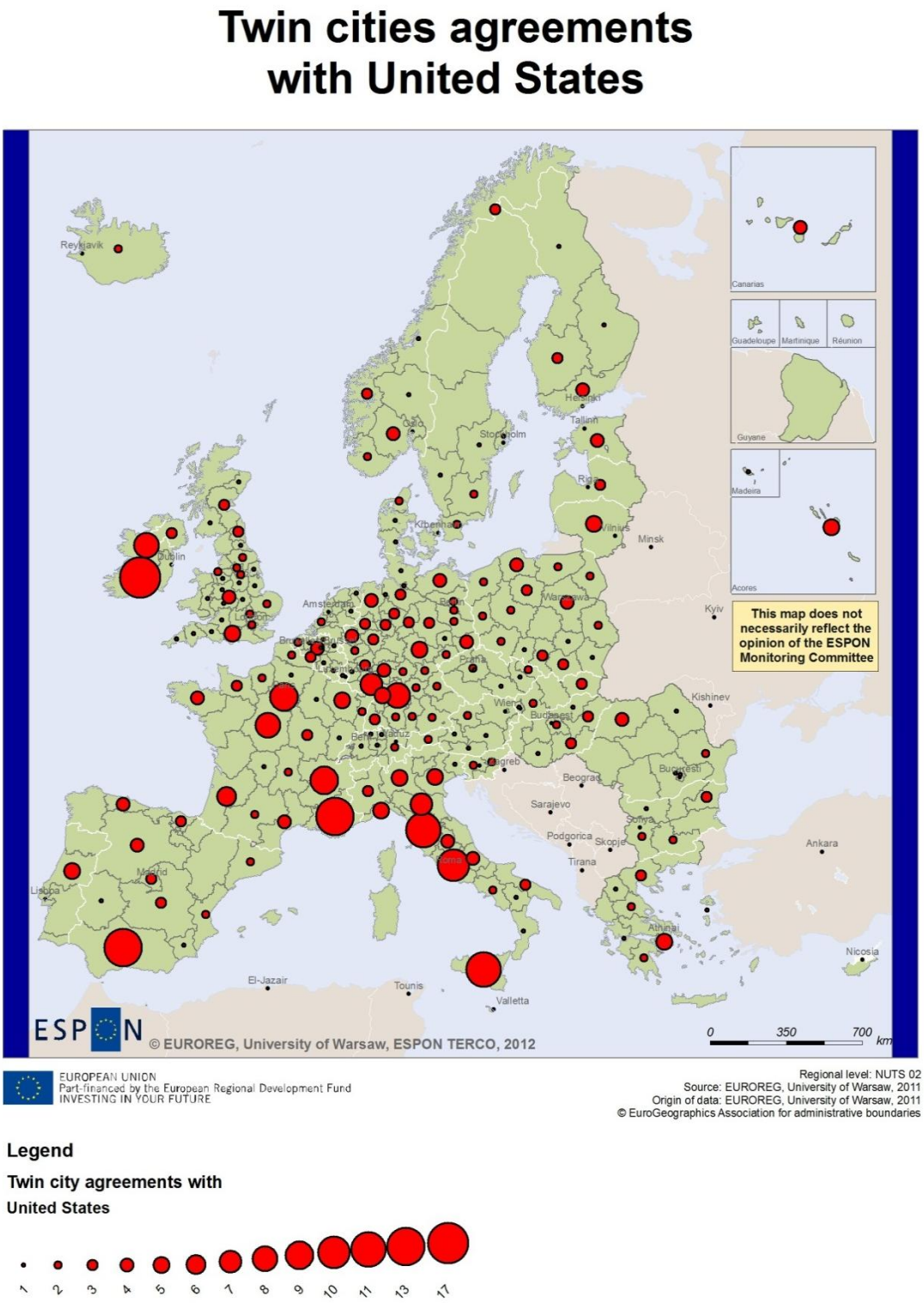
Legend

Twinning cities agreements with Poland

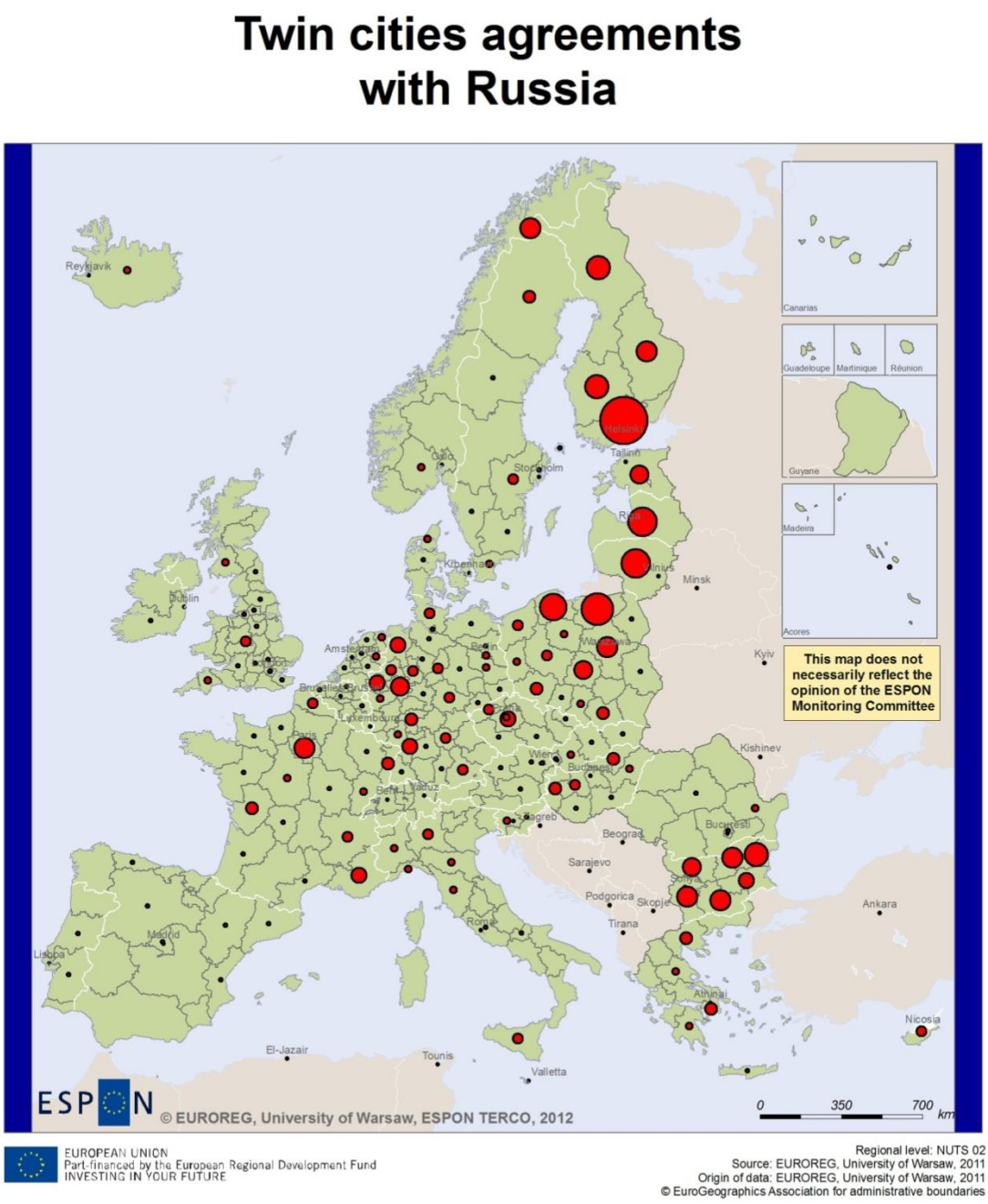
230

Map A5: Twinning Cities agreements with USA



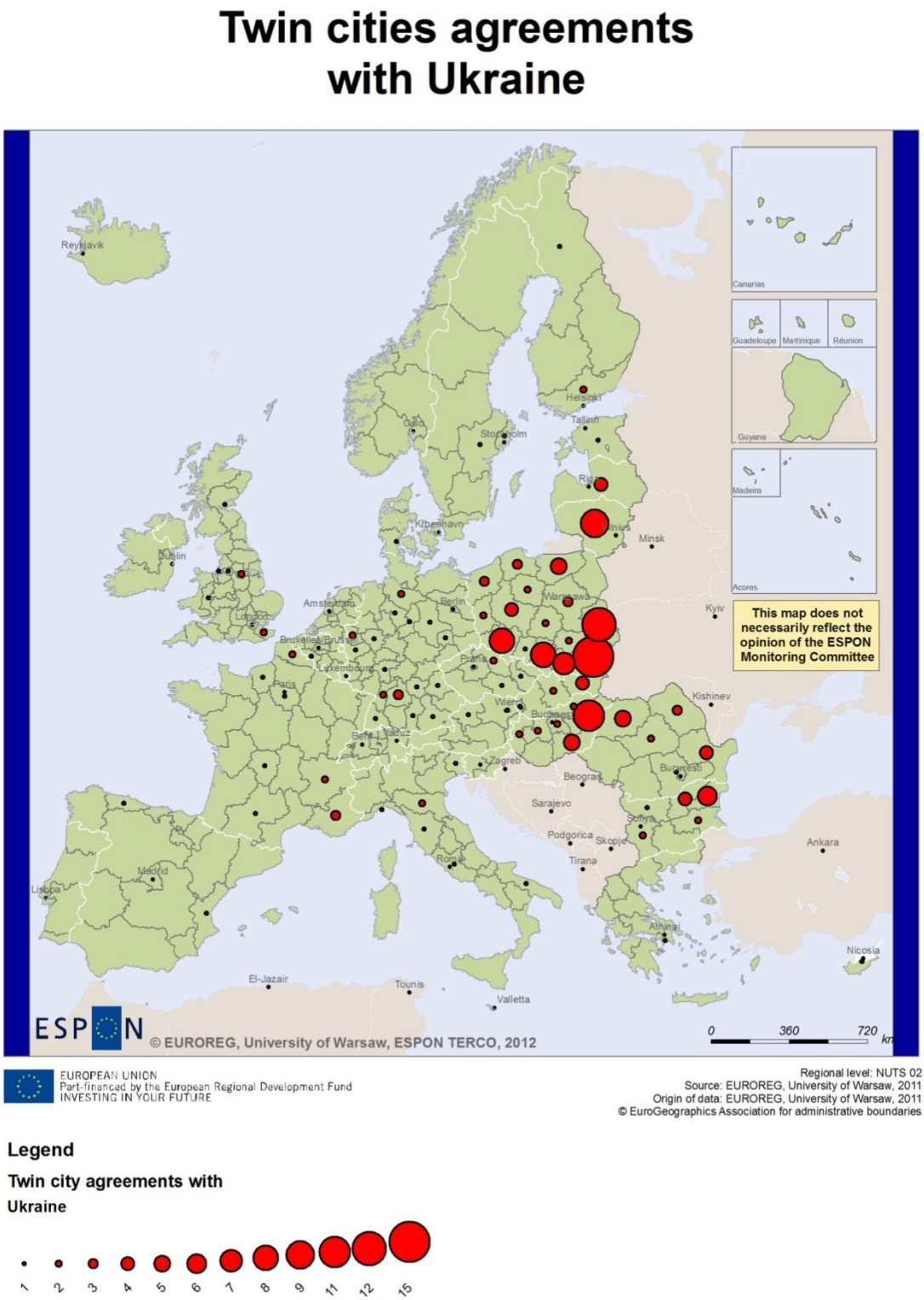
Source: Authors' elaboration.

Map A6: Twinning cities agreements with Russia



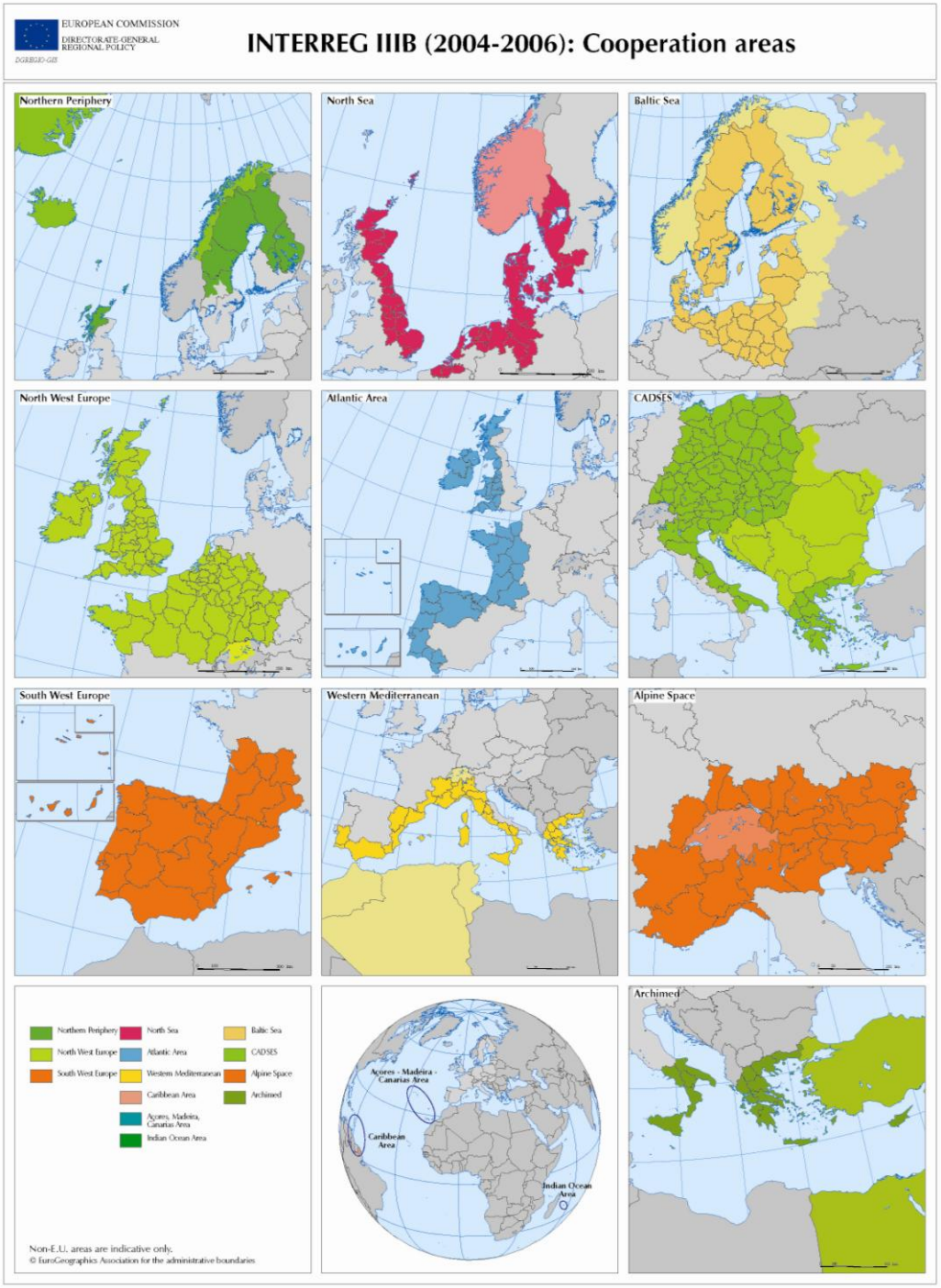
Source: Authors' elaboration.

Map A7: Twinning cities agreements with Ukraine



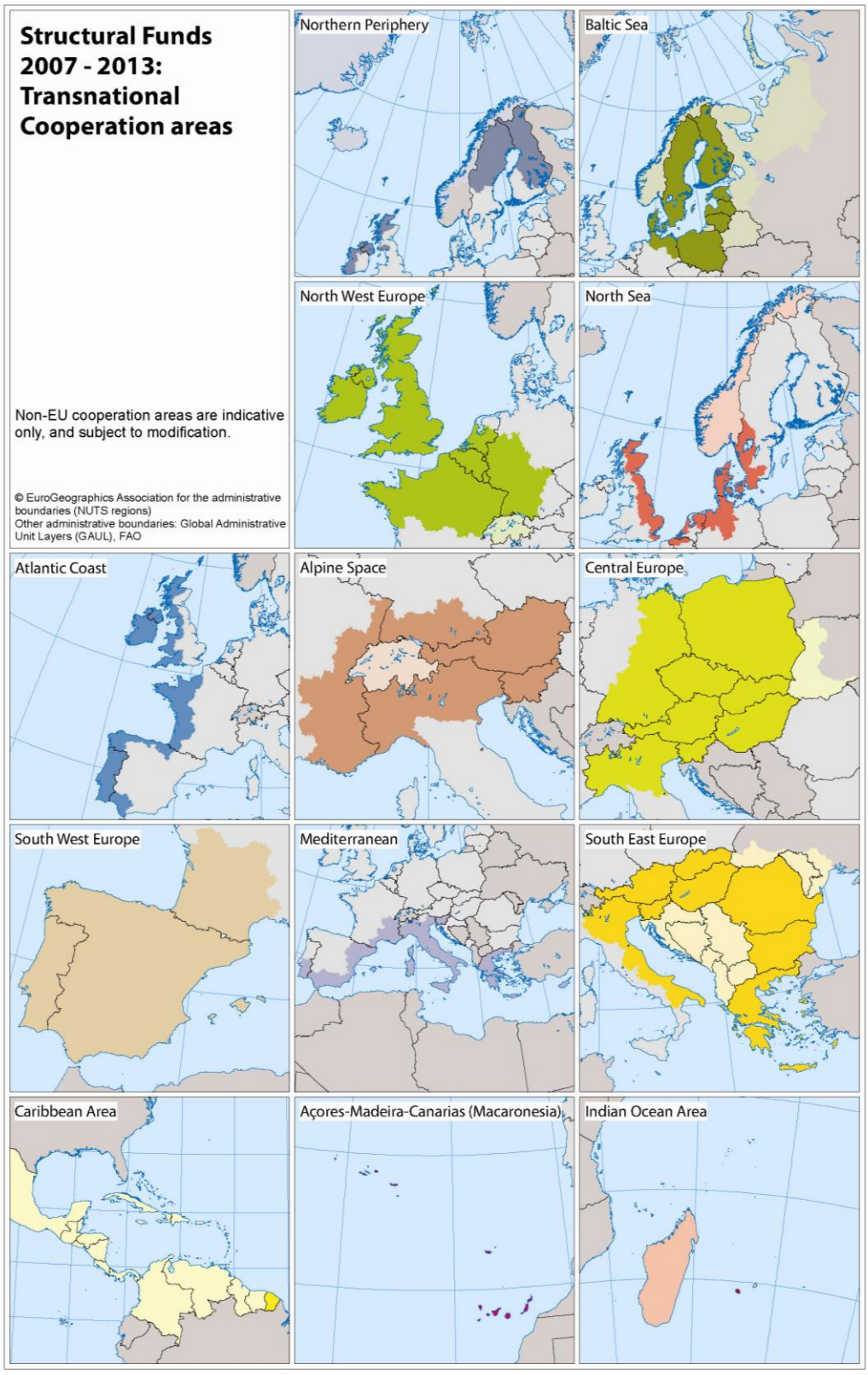
Source: Authors' elaboration.

Map A8: Eligible areas for INTERREG IIIB



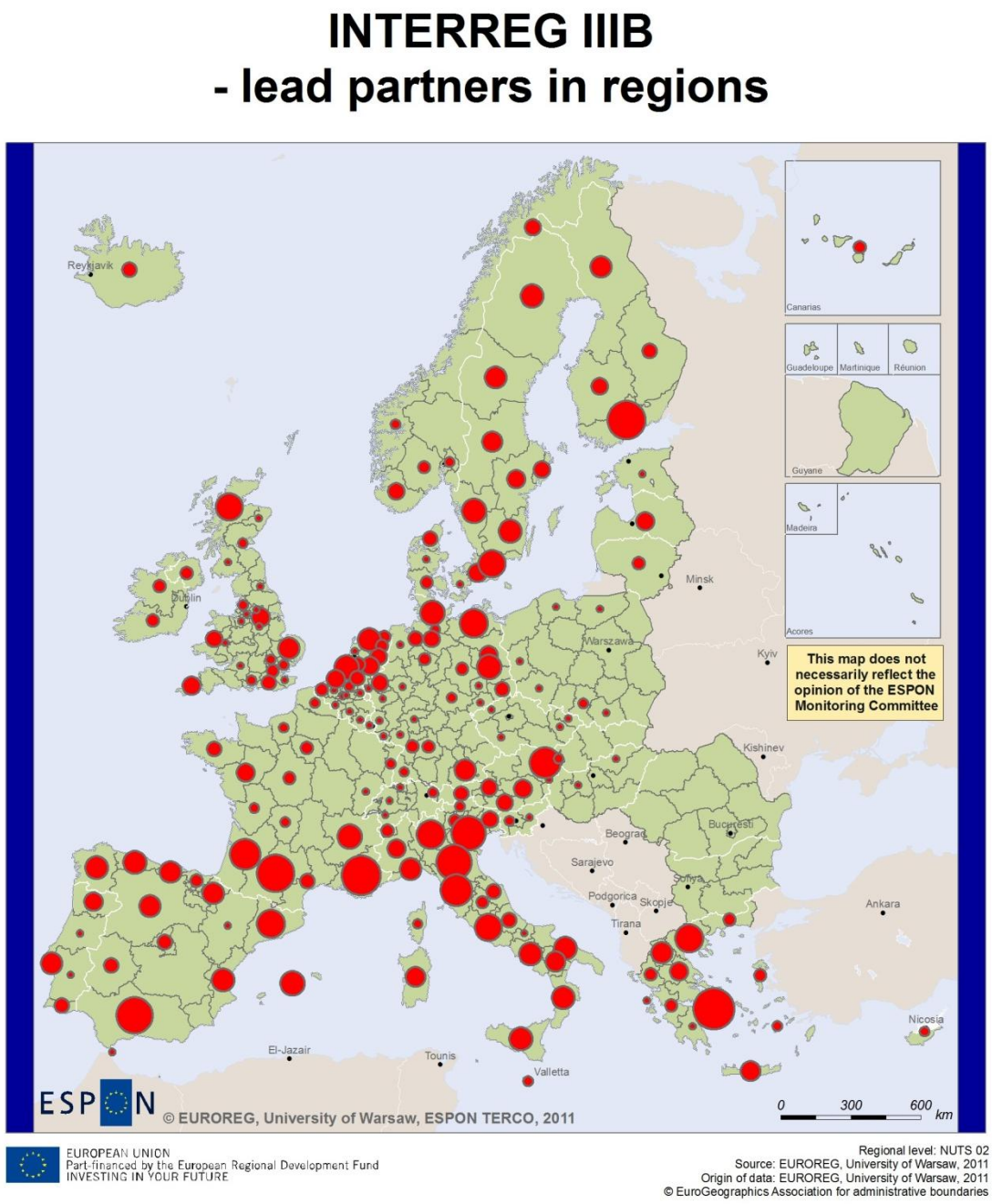
Source: European Commission.

Map A9: Eligible areas for INTERREG IVB



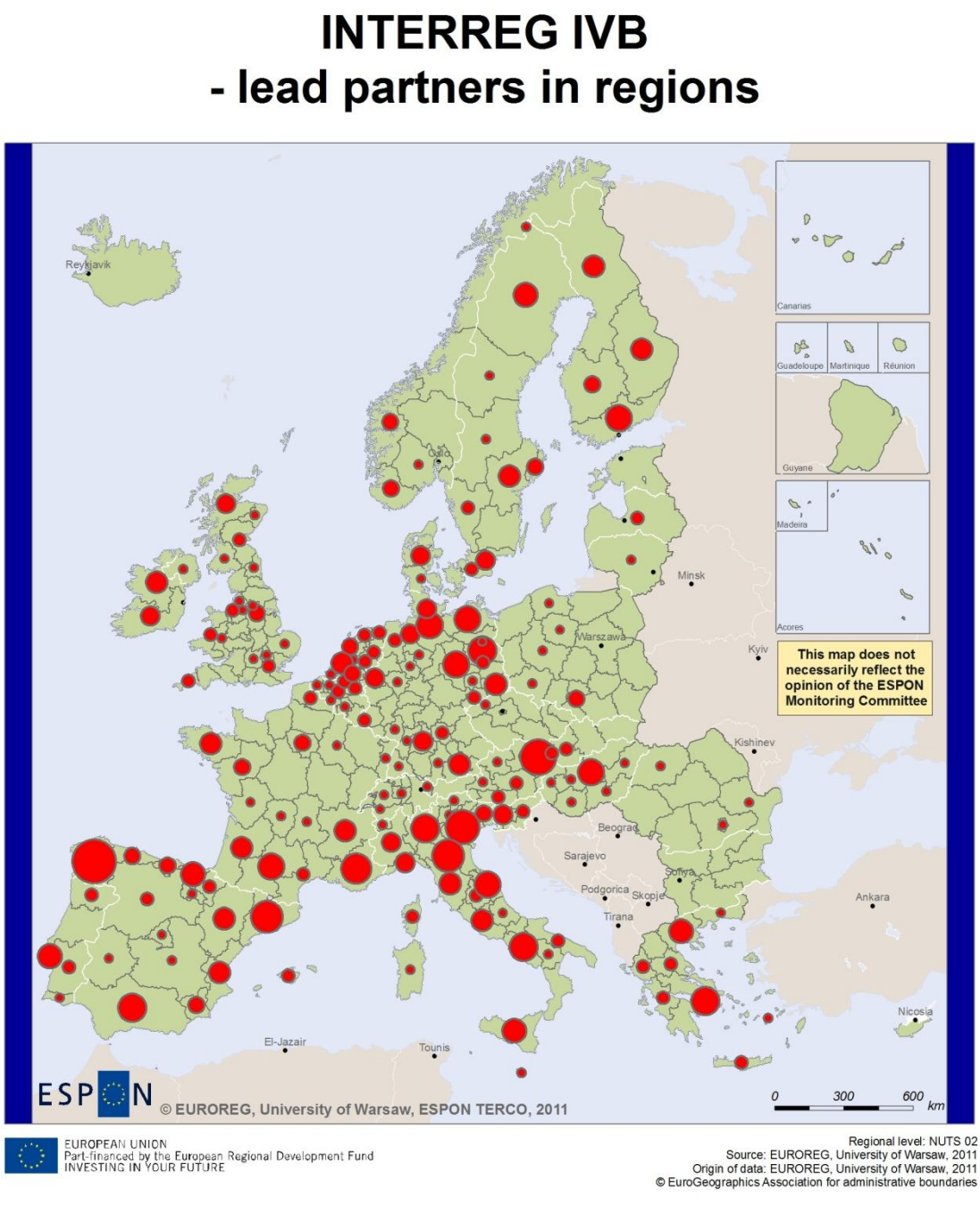
Source: European Commission.

Map A10: INTERREG IIIB lead partners by NUTS2 regions



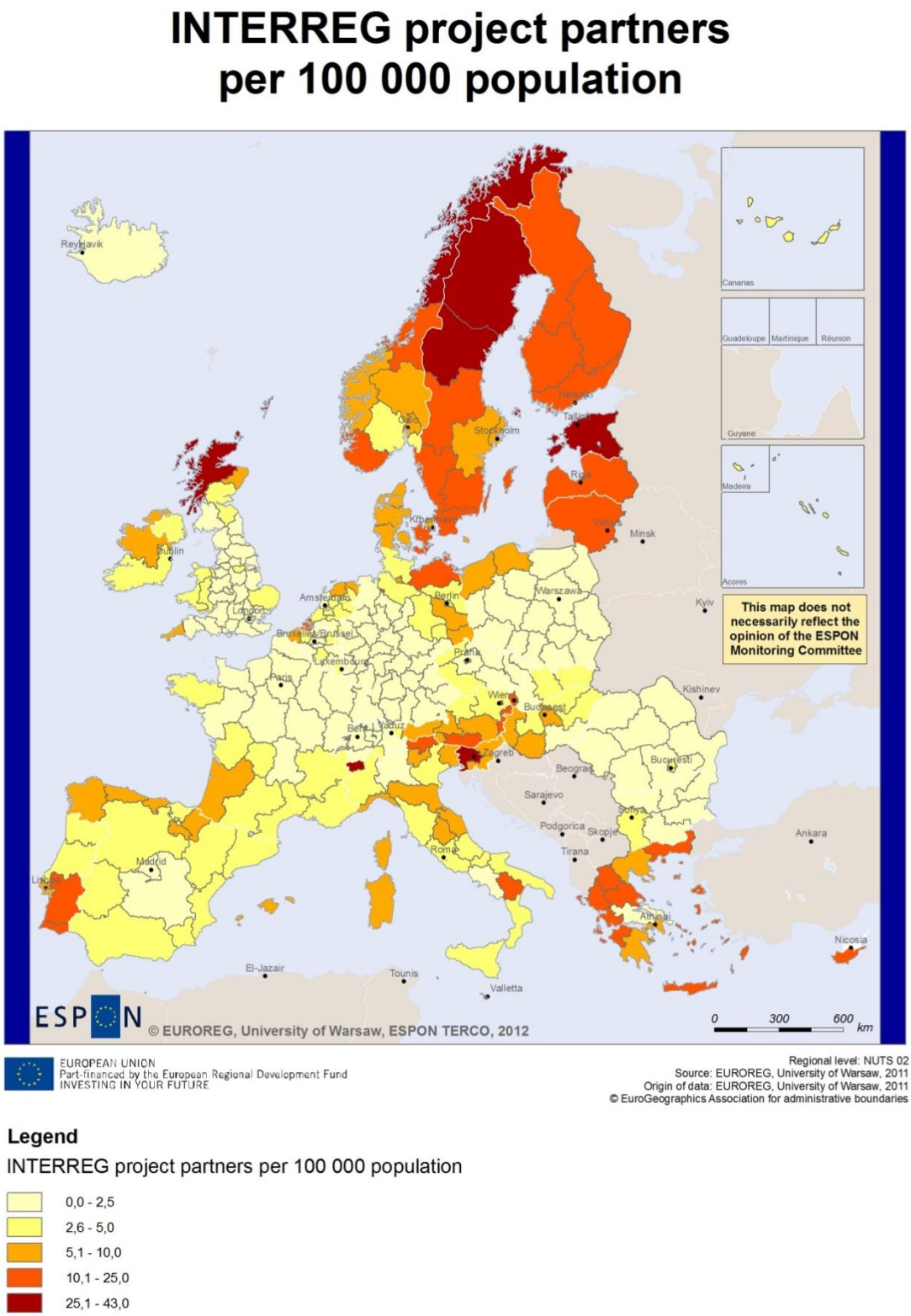
Source: Authors' elaboration.

Map A11: INTERREG IVB lead partners by NUTS2 regions



Source: Authors' elaboration.

Map A12: INTERREG B and C (III and IV) Partners per 100,000 population



Source: Authors' elaboration.

Table A6: The impact of endogenous determinants on territorial co-operation

Determinant	TC challenge	TC opportunity
Administrative traditions	- Many countries have different administrative traditions for example in terms of planning. Taylor et al. (2004) argue that TC is more likely to be successful if partners share an administrative culture.	- Different administrative traditions lead to different perspectives on challenges which can result in innovative solutions
Cultural propinquity	- The existence of linguistic and cultural barriers can lead to psychological barriers in relation to TC (Bazin, 2003).	- Cultural differences are not regarded as a key barrier by those engaged in TC. They stress the opportunity to learn from cultural differences.
Institutional framework	- TC is characterised by multi-level governance, yet the institutional framework in which TC place is not well adapted to this. - The different constitutional arrangements (unitary federal, confederal can create a multi-level governance miss match.	- EGTCs provide a framework for further streamlining multi-level governance arrangements
Social and economic disparities	- Competition between similar territories may inhibit co-operation. - Discrepancies in terms of the scale of co-operation (e.g. developed or developing)reduces the scope of TC	- Territories need to have similar challenges/ opportunities - Asymmetries in scale tend to make TC more dynamic (Taylor et al. , 2004).
Longevity/ Maturity	-	- Longevity of TC enhances quality of TC as cultural barriers are being broken down over time (Panteia, 2010, p.13).
Geographical and physical conditions	- Rivers and mountains form physical barriers for TC (e.g. lack of border crossings, infrastructure, distance).	- shared geographical features facilitate TC and provide a common purpose and identity (for example Danube region or Alpine region.

Table A7: Strengths and weaknesses of project procurement systems

	Thematic/geographic calls	Seeding projects	Shortlisting projects	Special funds	Strategic projects
Strengths	• helps meet the strategic programme objectives • increases participation of areas and groups • ensures a spatial or thematic spread of resources • can give good indication of the demand for funds • Generating innovative projects by bringing together new partnerships	• generates better quality projects • involves a larger number of partners from more regions • Can pave the way for a larger projects that face external restrictions/ delays • Useful for generating strategic projects • Particularly useful in programmes in which partners incur high travel costs due to peripherality.	• limits the complexity of the initial application • less risk of applications being excluded at a late stage • higher quality final applications • ensures high take-up of funds • allows screening of lower quality projects at an early stage • Higher levels of trust between partners and programme • can help ensuring co-financing commitments • attractive for private enterprise involvement	• high number of final beneficiaries • better chance of ensuring good geographical and community spread of resources • potentially high added value for small amounts of money • small projects could lead to more substantial or innovative future submissions • increased 'visibility' of funds • increases cross-border activities	• fewer, larger projects can simplify programme delivery • greater capacity to address strategic programme objectives • demonstrable impact • scope to enhance cross-border element • can increase synergies
Weaknesses	• may reduce scope for more innovative projects • narrows the potential range of end beneficiaries • long waiting times of bid assessment process • applicants can be under greater time pressure to develop their bids • spatial selectivity can make it difficult to involve partners from all partner areas and lead to administrative complexity	• application procedures can be overly complex relative to the amounts of money available • not all 'seeded' projects are successful in their final applications, therefore there is an element of financial risk • Less tangible results • member state specific seeding funds may lead to imbalances in the programme	• lack of transparency • longer times to develop final project applications • delays in the shortlisting/ feedback process	• reduces budget for strategic projects • potentially high administrative costs of managing and implementing a large number of small projects • limited 'reach' and impact of small projects	• limits number of beneficiaries - some groups not reached due to their resource limitations • lack of flexibility in programme • long lead-in time • potential N+2 concerns, if delays or lack of projects. • a small number of large projects can dominate resource allocation

Source: Adapted from Bachtler *et al.*, (2006).

Table A8: Administrative efficiency, strategic orientation, transparency & equity and visibility of project procurement systems

	Thematic/geographic calls	Seeding projects	Shortlisting projects	Special funds	Strategic projects
Administrative efficiency	• predictable, time limited project assessment and selection period • administrative burden of assessing large number of projects in a short period	• the administrative resources involved can be high relative to the amount of money available	• reduces the length and complexity of the initial application phase • delays in the feedback process can be a common problem	• reduced budget for strategic projects • simplified application procedures	• large projects are simpler to administer than a high number of small projects
Strategic orientation	• can be used to meet the strategic objectives of the programme, address 'gaps' in the portfolio of funded projects and commitment concerns • can lead to better, more innovative bids	• can be used to develop higher quality, more strategic projects • can be used to increase the number of project partners • not all seeded projects are successful	• higher quality final applications • ensures high take up of funds • less risk of projects being excluded at an early stage	• limited 'reach'/impact of small projects • potentially high value added for small amounts of money • high numbers of final beneficiaries	• projects developed in line with the programme goals • good way to commit large amounts of funding
Transparency & equity	• cuts out support for some areas, where demand could be higher	• supports project developers, who may not have been in a position develop a full project themselves • May lead to imbalances if member states finance preparatory costs from domestic funds	• difficulties with lack of transparency in shortlisting criteria • pressure to provide detailed feedback	• can be used to support/ encourage new beneficiaries	• can be viewed as less transparent and accountable • limits opportunities for smaller beneficiaries
Visibility	• can increase the profile of the programme in under-presented areas			• increased visibility for the programme amongst key groups	• high impact of larger projects

Source: Adapted from Bachtler *et al.*, (2006).

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ISBN