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Territorial Impact Assessment and Cross-Border Cooperation

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Impact Assessment procedures have gained increasing attention from the European Commission (EC), as fundamental tools in providing evidence of the potential impacts of European Union (EU) financed projects/programmes/policies. Yet, only recently, the Territorial Impact Assessment (TIA) of EU directives and Policies have gained a broader support from the EC, as a result of pivotal contributions from several ESPON projects in producing adequate TIA techniques/tools/methods (TEQUILA, Quick Check, EATIA). In the meantime, these tools are being perfected, alongside others (like the TARGET_TIA), in order to provide a more efficient and broader analysis of the evaluated project/programme/policy territorial impacts. Furthermore, there is a general agreement that TIA needs to take on account the different territorial levels (EU, national, regional, local), and should be applied in specific sector policies/programmes, which require more holistic evaluation procedures, as they have a strong territorial dimension. This is clear in the case of the Cross-Border Cooperation (CBC) programmes, due to their large scope of interventions on providing territorial development of the border areas, which in the EU encompass more than 60% of its territory. In light of this, this article proposes an adaptation of the TARGET_TIA technique to assess the territorial impacts of the CBC programmes, by focusing on the evaluation of the components of the CBC programmes specific goals: barrier effect reduction and territorial capital valorisation.

Keywords: territorial impact assessment; cross-border cooperation; territorial cooperation; border regions; INTERREG-A; TARGET_TIA.

1. Introduction and methodology

There are only three mandatory Impact Assessment procedures in the EU. The Strategic Environmental Impact Assessment (SEA), the Environmental Impact Assessment (EIA), and the IA (Impact Assessment) (see Tscherning, König, Birthe, Helming, & Sieber, 2007). The first two cover, as their names imply, the environmental dimension of territorial development. The latter, amplifies its spectrum of analysis to the social and the economic dimensions, as expressed in the updated 'Impact Assessment Guidelines' (EC, 2009). As it stands, the Territorial Impact Assessment (TIA) is a non-mandatory procedure, even though it has all the ingredients to replace the above mentioned three procedures. Why? Because a robust TIA tool should encompass all the dimensions of the territorial development, as the TEQUILA (ESPON 3.2, 2006) and the TARGET_TIA (Medeiros, 2013a) tools do.

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Additionally, a TIA tool must be flexible enough to assess territorial impacts at the different spatial levels (World, European, National, Regional and Local), and also be adaptable when analysing a myriad of sector policies and programmes, namely the ones which have a clear territorial dimension (e.g. transport, environment, research, information society or health policies – see EC, 2010a). Here, we do not necessarily agree that these TIA tools have necessarily to be pain-free in their operationalization, since an effective and relevant impact assessment study makes use of an immense set of qualitative and/or quantitative data. Consequently, expert personnel are expected to produce the end results of this type of evaluations, in order to bring together information in a coherent package.

Beyond these simplified prerogatives, we agree with the ESPON TIA practical guide main conclusions, that a TIA tool would gain: (i) by implementing a multi-level participatory approach, with a final goal of improving cooperation between tiers, in the context of multi-level governance; (ii) by having a wider role in improving policy-making, its transparency and the vertical and horizontal coordination of policies and actions; and (iii) by being used within the process of realising territorial potentials and improve people's lives (ESPON, 2013, p. 8).

If follows from all these assumptions that EU Territorial Cooperation programmes fit well in this need to assess territorial impacts. In particular, because: (i) they have a clear territorial dimension and their scale varies from small-size border areas into huge macro-regions; (ii) they have specific end-goals or dimensions, with related components, which should be assessed individually; (iii) they focus on one of the four main dimensions of territorial cohesion, according to Medeiros (2012).

In this article, we will give particular relevance to use of TIA tools in the Cross-Border Cooperation (CBC) programmes, simply because they have been, since very beginning of the modern phase of the EU Cohesion Policy (1989), the most financed strand of the INTERREG Community Initiative and the present European Territorial Cooperation goal of this policy.

Hence, in synthesis, this article touches two extremely relevant topics related with the operationalization of EU policies. Firstly, the implementation of CBC programmes on the EU (internal and external) border regions, which encompass around 41% of the EU total inhabitants and 60% of its territory (nute3 level). Equally, this manifested importance of cross-border cooperation process in the EU can be witnessed by the exponential growth of cross-border structures in Europe (working communities, Euroregions and European Groupings of Territorial Cooperation – EGTC) (see Medeiros, 2011).

On its part, there is a similar growing interest on the use of TIA procedures in assessing EU programmes and policies, since most of them have impacts of several dimensions of territorial development (social cohesion, economic competitiveness, territorial governance, spatial planning, and environmental sustainability). One reason behind this growing attention to TIA procedures is the recognition, by the Lisbon Treaty (EC, 2010b), of the need to promote territorial cohesion, alongside economic and social cohesion. Also, a huge indication of the regard given to this more complete comprehensive impact assessment procedure by the EC can be seen in the release of two consecutive TIA guidelines (EC, 2005; EC, 2009), and a latter operational TIA operational guidance, with a view to make this procedure more simple to understand (see EC, 2013).

Concerning the organization of this paper, in the first topic we provide a broader discussion around the main types of territorial cooperation and its prominent role in promoting the territorial cohesion. The second topic discusses, in more detail, the need for TIA procedures to provide more adequate and complete evaluations of the EU

policies, while comparing some of the existing TIA tools. The following section presents a synthetic view of the main aspects of the proposed methodology (TIA tool) to assess the territorial impacts of the CBC programmes (TARGET_TIA), while presenting the main goals, dimensions, and components which should be assessed through this TIA tool, when evaluating such programmes. Finally, the last section outlines the adaptation of this TIA tool to the specificities of the Cross-Border Cooperation programmes, and provides more detailed information on how to use the TARGET_TIA on such a context.

2. Territorial cooperation: a major dimension of territorial cohesion

The increasing attention given to territorial related issues, in the last decades is, in part, associated with the profound territorial transformations induced by the globalization process and the emergence of the internet (Delaney, 2009). A direct consequence of such changes can be detected in the growing density of international and supranational institutions, which have led to a decreasing significance of the state borders (O'Dowd, 2005). Indeed, in the EU Space, the support given to the territorial cooperation process, through the INTERREG Community Initiative, has been instrumental to reduce the barrier effect and to achieve the goals of the European Spatial Development Perspective – EDSP (ESPON, 2007).

Curiously, and parallel to this increasing ‘(re)bordering process’ in Europe, a growing number of European states have joined the European Union (EU) which, compared with other similar organizations (ASEAN, NAFTA, MERCOSUR - See Dicken, 2011), has reached a quite strong level of territorial integration, by establishing an economic union (Rodríguez-Pose, 2009). Even so, by August 2013, only 17 out of 27 EU member states have adopted a common currency (the euro), which goes to say that the economic integration is not yet fully achieved. In other words, the economic integration stage, understood as the final level of territorial integration, and characterized by a completely unified economic policy, has not yet been attained in the EU.

This brief introduction to key territorial actors and processes in the world geography intends to show the complexity of the territorial cooperation process, and the several territorial scales involved. Nonetheless evident is the fact that nation states and regions are in a permanent competition, for better socioeconomic standards, in a global economic arena. Here, the territorial cooperation process is becoming a key tool, as some territories strive to become global (Johnson, 2009). Similarly, the modest progress made in reducing socioeconomic inequalities in the world, since 1970 (Mackinnon & Cumbers, 2011), has created the need for a stronger territorial collaboration between less developed regions, in a joining effort to counteract the growing influence of main World decision centres. In this regard, the European border regions are a prominent example of the on-going territorial collaboration of areas which share similar characteristics and problems.

These growing territorial interdependencies make the process of transnational territorial governance increasingly necessary (Zonneveld, De Vries, & Janssen-Jansen, 2012) despite the fact that territoriality, understood as a formal regulative authority in a certain area, can rarely be found in transnational spaces (Chilla, Evrard, & Schulz, 2012, p. 962). Indeed, as Faludi (2010, p. 117–178) reiterates, European territorial governance is no longer marked by ‘full borders control’ over firms investments. Consequently, this new panorama generates a need to cooperate across borders at many policy levels and sectors. In this stance, transboundary territories can be understood as soft spaces of governance, which represent not only new opportunities to territorial development and

public engagement, but also opportunities to create new arenas for regional identity resurgence and cross-border planning.

In this regard, at present, there is still little evidence of the ‘impacts of territorial cooperation on planning practices and policies across Europe’ (Dühr, Colomb, & Vincent, 2010, p. 351), despite the fact of its importance in intensifying spatial development practices across national borders, especially at the subnational level (Fricke, 2014), and also in stimulating socioeconomic and cultural exchanges, as well as new relationships and policy transfers (Barca, 2009, p. 97–98). Further, it is important to mention that transnational forms of governance can be keys to ‘ensure accountability towards citizens and socio-economic actors and make certain that they are acknowledged and receive support at a regional and national level (Peyrony & Denert, 2012, p. 229).

All things considered, one can regard the territorial cooperation process as a fundamental political procedure to promote territorial integration (Knippschil, 2011) by reducing the barriers posed by all sorts of borders, and by promoting territorial development (Van Well, Ballerino, & Sterling, 2007) through the financing of cross-border, transnational, interregional, and macro-regional cooperation programmes/projects, which have, generally, significant impacts in several dimensions of territorial development.

In simple terms, a territory “delimits the spatial scope and limits of sovereignty, jurisdiction, administration, and citizenship” (Delaney, 2009, p. 196). Hence territorial cooperation means that some of these aspects will have to be ‘touched’ and ‘minimized’ by this process. In a general assumption, territorial cooperation can be viewed as a ‘breaking barriers process’, and in Europe, according to the Association of European Border Regions (AEBR, 2008, p. 14), to a large extent, many of these barriers still persist:¹

- Different administrative structures and competences;
- Dissimilar fiscal and social legislation;
- Different spatial planning and laws;
- Varying environmental and waste legislation;
- Currency disparities;
- Different transport systems;
- Diverging labour markets, wage structures and social systems at external borders.

Territorial cooperation, as the name indicates, can be defined as a process of collaboration between different territories or spatial locations. Hence, the ‘spatial dimension’ is of utmost importance when it comes to analysing this process (Figure 1). Roughly speaking, this collaboration can take place at different scales, from a global into a local scale, involving for instance, partnerships between small and medium-sized towns through joint projects and mutual exchange of experience:

- Global: collaboration between places located in different continents. It usually involves associations between several entities/countries. Example: OECD, G20.
- Transnational: collaboration between places located in different countries in the same continent. It usually involves spatial continuity. Yet, sometimes there are cases where the collaboration does not involve spatial continuity, as in the INTERREG strand C (interregional cooperation). It includes the EU meso and macro-regional strategies (e.g. Baltic Sea and Danube) (Medeiros, 2013b). The EU, the NAFTA and the ASEAN institutional macro-structures can also be included in this transnational territorial cooperation process.

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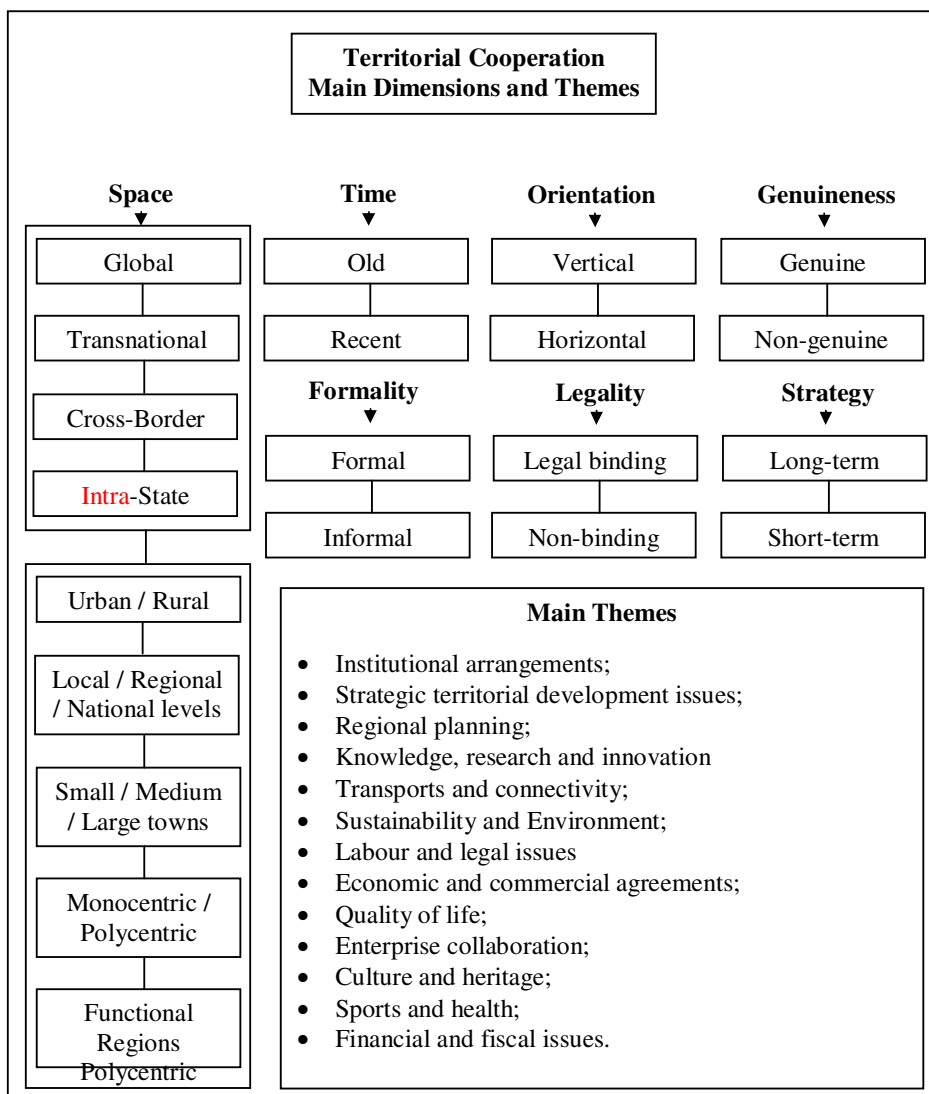


Figure 1. Territorial Cooperation dimensions and themes – Author elaboration.

- Cross-border: collaboration between border areas, located in two or more countries. It could be included in the transnational type of territorial cooperation. Yet, this type of territorial collaboration has gained a prominent place in the territorial cooperation discussion, especially in Europe, due to the presence of numerous cross-border projects and entities. It usually involves spatial continuity. In the EU the criteria for the delimitation of the border area is usually the NUTS III level. It includes Euroregions, European Groupings for Territorial Cooperation (EGTC), and networks of cities (e.g. Eixo Atlântico in Iberia Peninsula).

- Intra-state: collaboration between places/entities located in the same country. It usually involves collaboration between regions (metropolitan areas), municipalities (intermunicipal agreements), and cities (city networks).

This thickening web of territorial agreements and collaborations, at different territorial scales, can take several nuances, even inside those four main types of spatial collaborations (global, transnational, cross-border and intra-state). As Perkmann (2007a, p. 255) puts it, ‘scale solidifies existing power relationships, regulates forms of cooperation, and defines power strategies’. On another perspective, the analysis of the territorial cooperation process involves much more than the mere ‘spatial dimension’. As a matter of fact, the partnership between different territorial levels can be distinguished according to, at least, six other dimensions: time, orientation, genuineness, formality, legality, and strategy (Figure 1).

For instance, time has indeed a special importance in cementing territorial bounds. Usually, the longer the territorial cooperation process has been established, the stronger the relationship and collaboration between the involved members is. A good example is the comparison between the CBC process in Scandinavia, which has reached a high maturity level due to a long lasting collaboration process, and the quite recent and immature similar process in the Iberian Peninsula (see Medeiros, 2010).

This ‘time’ dimension is closely related with the ‘genuineness degree’, and the ‘strategic guidance’ of the territorial cooperation process: the longer it has been around, the more genuine will be the motivation to cooperate, and the longer-term will be the strategic vision to implement this process in the border area. Also, when a ‘high genuine and mature’ territorial cooperation process is undergoing, a multilevel cooperation orientation (horizontal and vertical) prevails, and a more formal and legal-biding type of cooperation is easier to be obtained, instead of the informal and non-legal-biding territorial cooperation procedures, which tend to be less and less the norm in the EU territory.

Having scrutinized the main dimensions of territorial cooperation, it is now important to link it as one of the main pillars of the EU territorial cohesion objective of ensuring a harmonious development, by reducing the existing differences between the various EU regions (EC, 2010a, p. 49). In this particular issue, the first Territorial Agenda sees a future task of ‘Territorial Cohesion’ as a permanent and cooperative process, involving the various actors and stakeholders of territorial development at political, administrative and technical levels, and it argues that Territorial Cohesion can only be achieved through an intensive and continuous dialogue between all stakeholders of territorial development (EC, 2007, p. 1).

From this perspective, which takes the Territory as a rich complex system of public and private actors (Faludi, 2004, p. 1353), territorial cooperation brings an additional contribution to the Territorial Cohesion by enhancing a more integrated territorial approach through the development of multi-level spatial development strategies. Here, the latter renewed EU Territorial Agenda considers that ‘the integration of territories through territorial cooperation can be an important factor in fostering global competitiveness’ (EC, 2011, p. 8). Equally, Gualini (2008) also suggests that territorial cohesion can only gain effective meaning through its appropriation and enactment by local-regional governance actors.

Furthermore, the Green Paper on Territorial Cohesion identifies the territorial cooperation as a process to overcome divisions, and as one of the three main ‘goals’ to achieve a more balanced and harmonious EU territory, together with the objectives of concentration (overcome differences in density) and connectivity (overcome distances).

In this regard, it states that the problems of connectivity and concentration can only be effectively addressed with strong cooperation at various levels (EC, 2008a, p. 7). In this context, we can regard territorial cooperation, together with territorial governance, as one of the four main dimensions of territorial cohesion, alongside the socioeconomic cohesion, polycentrism, and environmental sustainability dimensions (Figure 2).

On the whole, it seems that an increasing territorial cooperation process will implicate changes in the territorial governance process. One idea put forward is that the national level could take the role of moderator, mediator or catalyst to promote the region's endogenous potential (Brenner, 2000). In the same light, it is recognized that the linking up of municipal groupings across borders enhances the legitimacy of their claims (Perkmann, 2007a). Consequently, according to the same author, cross-border regions 'represent a specific challenge within public governance due to their atypical, non-nested territorial setup: as their constituent parts – municipalities, districts and other subnational jurisdictions – belong to different nation states, they do not operate in a conventional context of public administration defined by legal competencies and decision-making mechanisms rooted in public law' (Perkmann, 2007a, p. 259).

The formal territorial cooperation process in Europe, at the cross-border level, dates back from the 1950s, with the set-up of the Euregio in 1958, in the Dutch-German Border (Perkmann, 1999; Valls, 2004). Nevertheless, the attraction of more determined and motivated actors in developing cross-border networks (Lawrence, 2011) was boosted with the implementation of the INTERREG-A Community Initiative, since 1990. More recently, the cooperation on territorial development became a target of its own for the European Commission (Graute, 2007), as the European Territorial Cooperation became one of the three Cohesion Policy main objectives for the current programming period (2007–2013).

Needless to say that, despite the recent establishment of transnational cooperation strategies (e.g. Danube and Baltic Sea macro-regions), cross-border cooperation is still the main 'motor' of the territorial cooperation process in Europe. Nonetheless, this type of cooperation is often conceived to be 'difficult' and 'complex' (Van Houtum, 2001), even though the declining of border impediments differs between border and non-border regions (Niebuhr, 2004). Still, 'successful Euroregions establish themselves as important players within the overall context of cross-border strategies in a given border area' (Perkmann, 2007b, p. 867), thus justifying the EU financial support to such structures, which are invoked as models and engines of European integration (Anderson, O'Dowd, & Wilson, 2005; Church & Reid, 1996; Popescu, 2008).

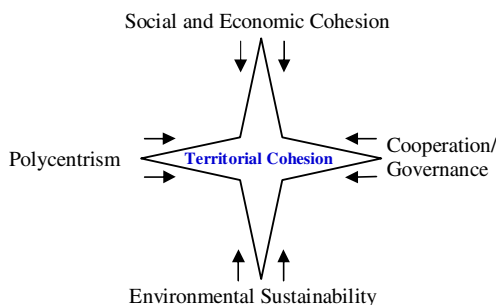


Figure 2. The territorial cohesion star. Source (Author, 2012) – adapted.

In sum, cross-border cooperation has a high potential to explore the added-value of network building, of social entities, individuals, cities (Strihan, 2008) and firms in developing capacities of the border regions (Krätke, 1998). Conversely, Van Houtum (1999) remembers that cross-border cooperation between actors in border regions should not be overestimated. In concrete terms, the perception and strategic intentions of the INTERREG-A participants focusing in polycentric territorial development is quite limited, when compared with the INTERREG-B programmes, given their more limited territorial scope (ESPON, 2007, p. 56).

3. The Territorial Impact Assessment (TIA) in the EU Policies

The evaluation process has been a growing concern of the European Commission since the 1980s. Specifically, in the field of the EU Cohesion Policy, it has been applied steadily from 1998 onwards, with three main goals in mind (EC, 1999, p. 24–25):

- Verifying that public action replies to uncovered or insufficiently satisfied needs;
- Improving interventions;
- Assessing accountability.

In effect, policy evaluation is a topic of growing importance for the European Commission and for the EU Cohesion Policy in particular, since vast amounts of public funds are being used with the ultimate goal of correcting regional imbalances, which need to be constantly and thoroughly scrutinized (see EC, 2010c). Moreover, a wave of concern on the effects (results and impacts) has marked several evaluation studies associated with the otherwise known as EU Regional Policy, even though, on the whole, there is general agreement on positive results so far (see Molle, 2007). In this context, the new programming period of the EU Cohesion Policy (2014–2020) proposals has strengthened the need to be more result oriented and for the financed programmes to better define clear objectives and wanted results (see EC, 2014, p. xxi).

In the end, the evaluation process needs to be useful and usable, and to be ‘seen as an integral part of decision-making and management and indeed the entire process of democratic accountability’ (EC, 2008b, p. 7). Other than that, it has to have a major role in improving policies over time, by intervening in the programme design stage, and by contributing to the selection of more appropriate instruments or interventions within the general scope of a programme. But, top of it all, is the role of this process in identifying outputs, results and impacts of the evaluated projects/programmes and policies.

In simple terms, impacts, within the evaluation terminology, represent the medium-long term consequences of the evaluated policies/programmes/projects after the completion of the intervention, which affects the related beneficiaries (enterprises, territories, etc.). Also, it should be noted that the ‘impact assessment process’, contrary to the ‘results assessment process’, requires a certain amount of ‘time’ (usually no less than five years) to be implemented, and should offer larger windows of analysis, by focusing on the territorial development scrutiny.

Having this in mind, the EC defined a series of guidelines for the impacts assessment procedures in 2005 (EC, 2005), which were, later on, updated in 2006 and replaced in 2009, with the purpose of serving the Commission staff in preparing impact assessments. In brief, this updated document defines the ‘impact assessment process as ‘a set of logical steps to be followed when you prepare policy proposals. It is a process

that prepares evidence for political decision-makers on the advantages and disadvantages of possible policy options by assessing their potential impacts' (EC, 2009, p. 4).

Notwithstanding, the EC impact assessment guidelines document fails, in our view, in putting the territorial dimension to the fore, as it basically suggests an approach of the impact analysis based on three territorial development dimensions only: economic, social and environmental. It goes without saying that 'Territorial Analysis' is far more complex than that. For that, and other reasons, several reports have been published within the ESPON (European Spatial Planning Observation Network) programme, where numerous Territorial Impact Assessment (TIA) tools and techniques were proposed, developed, and tested, in several EU policies and regions (see Table 1).

Amongst those tools and techniques one stands out as, in our judgement, as the one with better rationale and simplicity: the TEQUILA model (ESPON 3.2, 2006). For short, this model was conceptually built upon three identified dimensions of the territorial cohesion (territorial quality, territorial efficiency and territorial identity), it is not too complicated to put in practice, as it defines an evaluation scale of the potential impacts (-5 to +5), and it implies the use of a (i) sensitivity (the impact may differ according to regional specificities), and a (ii) policy intensity (the intensity of the policy application may be different in different regions) adjustment factors.

Nevertheless, and despite all these positive aspects and the improvements made to the model in the TEQUILA version 2 (see ESPON TIPTAP, 2010), we decided to build our own TIA technique for the following reasons: (i) we have a different view of the main dimension supporting the 'territorial cohesion' concept (see Author, 2013a); (ii) we

Table 1. TIA tools and Territorial Cooperation.

TIA tool	Territorial Analysis	Possible Advantage(s)	Possible Disadvantage(s)
TEQUILA	Interesting rationale on Territorial Cohesion - Does not regard territorial cooperation as a main evaluation dimension	Use of balanced elements such as regional sensibility and policy intensity	Impossibility to use it on an ex-post evaluation mode
EATIA	Lack of a holistic territorial analytic view. Too much focused on economy, society and environmental aspects, while adding the administrative dimension to the mix	Emphasis on a participatory and bottom-up approach	Does not regard important territorial development dimensions such as territorial governance and urban networks arrangements.
STEMA	A pure socioeconomic plus environment analysis. Not very adequate for territorial cooperation analysis	Makes use of a vast array of statistical analysis	Excessively simplistic evaluation procedure with no potential impact evaluation scale.
ARTS	Also, a pure socioeconomic plus environment analysis. Not very adequate for territorial cooperation analysis	Makes use of interesting elements such as concepts in the evaluation processes, such as: vulnerability, exposure and territorial sensibility	Excessively time consuming procedure, and also does not contemplate territorial governance and urban networks arrangements.

Source: Author's compilation based on testing all these TIA tools.

believe that the ex-post quantitative/qualitative assessment can also be feasible alongside the ex-ante qualitative one, and (iii) we support the idea that the TIA must not only be a 'multidimensional' tool, but also a 'multivector' one, and include, besides the positive versus negative evaluation effects, several other elements associated with impact assessment procedures, like the substitution, the multiplier, the deadweight and the displacement effects (EC, 1999, p. 113).

4. The TARGET_TIA in a nutshell

In simple terms, the TARGET_TIA (named after its resemblance with a TARGET) is an ex-ante or/and ex-post multidimensional and multivector TIA tool, which aims to give a general territorial impact value (from -4 to +4) to an evaluated project/programme/policy. At first glance, the observation of the TARGET_TIA elements and formulas (Figure 3) might chase away the average official and politician, who mainly seek a simplified operational tool to assess territorial impacts. Yet, they should rest assure that this proposed tool is not as complex as it seems, as we shall demonstrate in the following lines. Even so, one thing should be emphasized: no one can expect valid and solid ground 'territorial impact assessments' without an extensive, detailed, and thorough territorial analysis, which includes:

- A vast collection and examination of statistical data (quantitative elements);
- The conducting of the necessary number of interviews (qualitative elements);
- The reading of a vast set of bibliography related with the territorial scope and the subject being evaluated (reports and books).

Put differently, the European Commission desire in using 'fast food' TIA techniques, which could afterwards be used by untrained EU personnel, can turn out to be more hazardous to the territorial development decision-making process than expected, even though they are clearly less onerous, financially speaking. This is the reason we have large reserves on the delivering results from the 'TIA quick check tool' proposed in another ESPON report (ESPON ARTS, 2012). Far more interesting is, in our view, the bottom-up approach used in another ESPON report (ESPON EATIA, 2013), which defined several preconditions to build a TIA technique:

- Should be prepared with the needs of national, regional and local authorities of EU member states in mind; TIA should be an instrument helping those authorities to identify positive and negative, deliberate and unexpected, long and short as well as direct, indirect and cumulative territorial impacts;
- Should be simple and straightforward; national, regional and local level authorities should be able to apply TIA without having to acquire complex expert knowledge;
- Should be as 'pain-free' as possible; this means there should be no new formal requirements for TIA (i.e. TIA should not become a highly formalised and legally required instrument); the resources required (e.g. data) to conduct TIA should be minimal;
- Should be robust and replicable throughout the EU, whilst allowing for some flexibility to reflect specific policy-making and planning traditions; outcomes of TIAs conducted in different member states on the same draft directive / policy need to be transparent and comparable.

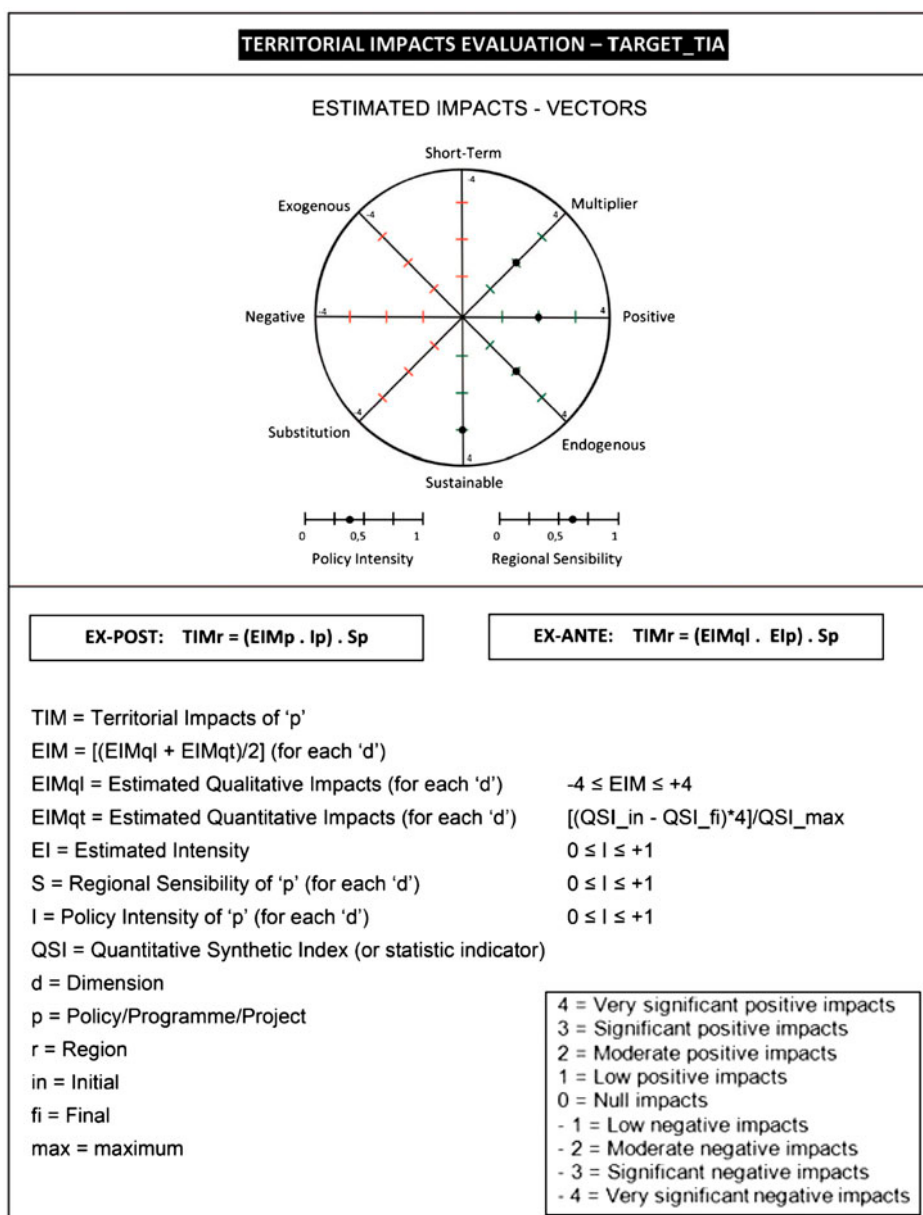


Figure 3. The TARGET_TIA elements and formulas. Source (Author, 2013a) - adapted.

Nevertheless, all these pre-conditions are easier said than done. In fact, they follow the EU rationale of the need for a simplified and 'press-a-button' way of operating. Needless to say that this approach is far from an appropriate one when it comes to territorial analysis, since it encompasses numerous and inter-dependent elements. Even so, when 'building the TARGET_TIA technique, we had in mind the need to make it as simple as possible to operationalize.

To make it easier to understand the TARGET_TIA, let us take a practical example, based on the use of this technique in assessing the ex-post territorial impacts of the EU Cohesion Policy in a hypothetical EU Member-State. Here, the main goal could be to check the relevance and the impacts of the investments related with this policy, at a national scale, in the last couple of decades (1990–2010), in the main components of the four dimensions of the Territorial Cohesion concept (see Figure 2).

Taking the investments in the ‘education domain’, as a concrete example, and after a series of interviews, evaluation reports readings, and statistical analysis, it was possible to understand that the investments from the EU Cohesion Policy in that country were largely relevant in this domain, and that they had **a significant positive impact** in increasing the levels of education of its population, at all educational stages (basic, secondary, tertiary). Yet, at the **endogenous/exogenous vector** the impacts were less positive, simple because quite many individuals who received EU support to have a better education were forced to leave the country. Consequently, the positive impact of this highly qualified generation of young workers is being collected elsewhere (exogenous impact).

Furthermore, the lack of a clear territorial development strategy from the national authorities led to the construction of several educational infrastructures which were closed soon after. In addition, a substantial amount of university degrees are in a different alignment with the national economic structure. Put simple, overall, the investments in the educational component in this member state cannot be regarded as a good example of a sustainable investment. Hence, in the **Sustainability-Short Term vector** of the TARGET_TIA, it would receive a low positive impact value, at best.

Finally, in the last vector of this technique (**multiplier/substitution**), we came to the conclusion that, over the last decade, the positive impacts on the territory were substantial, simply because the increased levels of education have profound multiplier impacts in many other territorial development components, despite the negative effects of the increasing brain-drain observed in this hypothetical member state.

In the following, a mathematical average is obtained from the classification of all these four evaluation vectors in the education component, (from -4 to +4). Afterwards, this result will be multiplied by the regional policy intensity (0–1) and the regional sensibility (0–1) factors. Let us explain this step better by using the same example of investments of the EU Cohesion Policy in education. Here, the policy intensity is related with the amount of investment allocated in this area, which was quite substantial. On the other hand, the glaring deficiencies registered in the educational level, in this member state, lead us to put the regional sensibility at its maximum level (1).

Understandably, this evaluation process is done on the remaining components of the four dimensions of the territorial cohesion concept. In the end, the use of the formula will give us the average general territorial impact of the evaluated project/programme/policy, and the impacts on each evaluated dimension. Suffice to say that, in all this process, the most important element is the quality of the information available to give the most appropriate evaluation in each of the selected components.

In short, the main advantages of using the TARGET_TIA procedure, when compared with other existing TIA tools are: (i) it not only covers the three EU political correct dimensions of development (economy, society, and environment) but also fundamental elements such as territorial governance and urban network arrangements; (ii) it not only covers the common evaluation vector of positive vs negative impacts, but also makes use of complementing evaluation elements, such as multiplier, endogenous, and sustainable impacts; (iii) it can be used both at ex-ante and ex-post evaluation

phases; (iv) it is quite adaptable to different general and sectoral policies (such as transport, innovation and entrepreneurship, employment, rural development, urban development), with potential territorial impacts.

Again, the use of TARGET_TIA ends up not being too much complex if one uses a spreadsheet with the formulas in place. In the end, what is more time consuming is the need to access valid and sound data to give the appropriate evaluation in all the fields required. And this, in our view, is the role of qualified evaluators and not necessarily policy actors. However, the end results obtained with this tool are quite simple to understand, as they produce a general territorial impact value (from -4 to $+4$), as well as alike values from all the analysed dimensions. As such, in the case of applying it to cross-border cooperation programmes, policy actors would have information on the estimated impacts on the reduction of the barrier effect in all its dimensions (Table 2), in a practical and understandable manner.

Table 2. CBC elements for a TIA procedure.

Goals	Dimensions	Components
Barrier Effect Reduction	Cultural - Social	- Shared social equipment - Cultural events - Language - Legislation (education)
	Institutional - Urban	- Cross-border structures - Urban networks - Multilevel governance - Labour market
	Economy - Technology	- Employment - Innovation - Infrastructures - Entrepreneurship
	Environmental - Heritage	- National Parks Collaboration - Tourism - Heritage Protection
	Accessibility	- Public transports - Road connections - Rail connections
Territorial Capital Valorisation	Institutional Building	- Implementation of CB Committees - Empowerment and entrepreneur culture - Increasing participation of CB actors - Attenuate legislation differences
	Socioeconomic Cohesion	- Social infra-structures - Increasing human well-being and income - Economic growth and modernization - Vocational training/qualifications
	Territorial Articulation	- Explore functional complementarities - Support polycentric structures - Promote balanced development - Normalise different transport systems
	Environmental Sustainability	- Backup the use of clean energy - Support energy efficiency - Reduce the ecologic footprint - Protect CB natural protect areas

Understandably, the selection of the adequate indicators associated with each component largely depends on statistical availability. Admittedly, some of them can be quite difficult to obtain. Yet, our previous experience in studying EU CBC programmes in the EU (see Author, 2010) provides an optimistic ground on accessing comparable and adequate data, which covers most of the selected components expressed on Table 2. However, some of the required information will have to be obtained by non-traditional (national statistic) sources, which makes this endeavour more challenging and time consuming. Despite that fact, this reality is experienced by evaluators on a daily basis, especially when using TIA procedures.

5. Territorial Impact Assessment (TIA) and Cross-Border Cooperation

As mentioned above, CBC is, by far, the most important territorial cooperation process within the EU, in terms of allocated funds (74% of the funding on the European Territorial Cooperation objective for 2014–2020 – see EC, 2014, p. 186), and involved entities. Moreover, it affects a vast area of the EU territory and population, and also touches several areas of territorial development. As such, the use of TIA procedures in the evaluation of CBC programmes has the advantage of covering a larger spectrum of their effects, otherwise not achieved with the use of typical econometric evaluation procedures.

In overall terms, the proposed process of assessing territorial impacts of a CBC programme, based on the TARGET_TIA methodology (Author, 2013a), should take into consideration each one of the components associated with the defined goals and dimensions of CBC (Table 2). Alternatively, these components and dimensions can be replaced by the ones defined in the programme strategy, depending on the purpose of the evaluation.

In simple terms, the execution of such process will imply the collection of key-data related with the cross-border programme implementation. This information should be gathered in: (i) interviews (programme secretariat, political body, project leaders, academic body, etc.); (ii) evaluation reports, and (iii) statistical data. The latter will be especially important in the ex-post phase, in constructing aggregated indexes, which will be determinant to show the cross-border region evolution in crucial development areas.

Beyond this, and following the TARGET_TIA rationale, all selected components will be assessed in their: relevance, sustainability, contribution to endogenous development, and possible multiplier effects. Further down, the final impact value of each of the analysed components will be refined by identifying the ‘policy intensity’ (investment weight), and the ‘regional sensibility’ (the region needs in that particular component) factors. These weighing elements are particular important in adapting the evaluation to the regional and policy profiles. Additionally, it should be noticed that the integration of both qualitative and quantitative elements, in the ex-post evaluation procedure is done in a balanced and equal measure. Put differently, the proposed formula to obtain the estimated ex-post territorial impact gives a 50% weight to qualitative assessment value, and the other 50% to the quantitative one.

In the end, a value from -4 and +4 will be obtained to identify the estimated territorial impacts of the programme. Obviously, with so many factors involved, it would be almost impossible to get an ‘extreme scale value’, both negative and positive. Indeed, the operationalization of the TARGET_TIA in large territorial areas showed that the territorial impact value usually varies between -2 and +2, because the several negative impacts are often counterbalanced by the positive ones, and vice versa.

When applying this method to assess the territorial impacts of CBC programmes, one needs to focus on the two main goals of this process: how has the programme impacted in reducing the barrier effect and in enriching the border areas territorial capital. Indeed, in our view, CBC is mostly about reducing the barrier effect provoked by the presence of a borderline, in all its dimensions, in a border area. However, this view is still far from being adopted within the territorial cooperation programmes, at least in a clear and direct form. Here, from our own experience in evaluating EU cross-border programmes, the general goal of the involved local and regional stakeholders is to develop their own part of the border, *stricto sensu*. Moreover, the influential Association of European Border Regions (AEBR) does not directly refer to the need of reducing the barrier effect, although many of the identified objectives for cross-border cooperation, in the European Charter for border and cross-border regions (AEBR, 2004), are intricately related with this goal:

- Achieve a new quality of borders: meeting spaces;
- Smooth out the interfaces of the European Spatial Development Policy;
- Overcome cross-border related disadvantages: e.g. infrastructure;
- Improve cross-border protection of the environment and nature;
- Promote cross-border cultural cooperation;
- Making realities of subsidiarity and partnerships.

As can be seen, all of these goals can be fit in the five dimensions of the barrier effect concept: (i) accessibility; (ii) cultural - social; (iii) economy - technology; (iv) environmental - heritage and (v) institutional - urban. But many more can be included. In the end, CBC programmes can only be regarded as such if they have a 'genuine cross-border projects portfolio'. Other than that, we are facing some other kind of regional or local development procedure.

Beyond this mainstream goal of reducing the barrier effect, the available funds should have a direct positive impact on the territorial capital valorisation, namely in four large domains: (i) socioeconomic cohesion, (ii) territorial articulation, (iii) institutional building, and (iv) environmental sustainability. In the end, both the reduction of the barrier effect and the territorial capital valorisation of the border area will make this region more attractive to the economic activities and dwellers.

Suffice to say, however, that the proposed evaluation components related to each of the seven dimensions (see Table 2) should be adapted to the specificities and idiosyncrasies or the evaluated border region (the place-based approach rationale – see Barca, 2009), since they face different challenges. For instance, if cross-border pollution is a major issue, then it should be included as a studied component in the environmental sustainability component. For its part, the intangible elements strongly related with the CBC process, such as values and politics, also need to be dealt in the evaluation process. This can be done, for instance, within the institutional building dimension.

Conclusions

The ongoing EU Cohesion Policy cycle (2014–2020) was presented as a new opportunity to focus on the need to achieve 'concentration' and 'results' (see EC, 2014). This suggests that the EC has given increasing importance to 'Policy Evaluation Procedures'. Here, the TIA Procedure is, in our view, the most complete and adequate existing programme/policy evaluation tool, as it takes into account all the dimensions of territorial

development and/or territorial cohesion. Hence, given the fact that CBC programmes cover a large portion of the EU territory, and the circumstance that they touch many crucial components of territorial development, we contend that there is a strong case to make use of TIA procedures in evaluating the impacts of such programmes. Furthermore, we considered the CBC process a distinctive and fundamental territorial cooperation process, especially within the EU space, as it receives more than 70% of the funds allocated to the territorial cooperation objective within the EU Cohesion policy.

As such, we proposed the adaptation of a TIA tool (the TARGET_TIA) to assess the territorial impacts of CBC programmes. The selection of this TIA tool was justified by the shortcomings presented by some other existing TIA techniques, which are either not designed to be used on an ex-post phase, or do not cover some crucial dimensions of territorial development. Plus, the flexibility of the TARGET_TIA procedure allows for the selection of tailor-made dimensions and components, which should be evaluated altogether. In this specific issue, we argue that CBC programmes have very specific goals (reducing the barrier effect and valorising the border region territorial capital), and related dimensions and components. Consequently, a TIA tool, when applied on such programmes, should give relevance to its effect on several indicators related to such components.

In a broad sense, the analysis described above proposes a more ‘focused approach’ in assessing territorial impacts of CBC programmes, by adapting an existing TIA tool, which was initially built to assess the territorial impacts of the EU Cohesion Policy, at the national and regional scales. To make the analysis more robust, we propose a general list of several components which should be assessed when evaluating the territorial impacts of CBC programmes. This list is, however, subject of adaptation to the border region specificities. In the midst of the proposed analysis we advocate the need to conduct further research on this very specific thematic of relating TIA procedures with CBC programmes, in order to contribute to a higher efficiency and effectiveness of the EU financed projects, programmes and policies.

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Note

1. Shortened and adapted by the author.

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