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Introduction: A handbook on Territorial Impact Assessment (TIA)

Eduardo Medeiros

Why this book?

Policy evaluation procedures are, by now, deeply rooted into sub-national, national and transnational territorial development strategies and processes. However, unlike the plethora of published books on Environmental Impact Assessment (EIA) and other Impact Assessment (IA) methodologies, until presently, no TIA handbook was published in any major international publisher. As such, this TIA Handbook intends to fill a void in available literatures by presenting the interested reader the most relevant TIA methodologies being produced so far. Furthermore, all the book chapters, being written by the authors of each presented TIA methodology, provide a detailed, updated, and scientifically accurate explanation of their particular purpose and methodological operation. In the end, the reader is confronted with a complete set of TIA methodologies, which he can select based on their advantages/disadvantages for a particular case-study. For a better understanding of how all the presented TIA methodologies work, concrete examples are presented by in each Chapter.

Echoing the recent interest on the use of more broad and holistic policy evaluation methods to assess the main impacts of public funding, at all territorial levels, this TIA Handbook complements the presentation of mainstream TIA methodologies with others focused on more specific policy sectors and programmes (cross-border cooperation, smart specialisation, etc.). In this light, this TIA Handbook attracts a wide audience, from academics to practitioners, interested in assessing the full scope of the impacts of implemented projects, programmes and policies, in all territorial levels. In this context, this TIA Handbook also intends to serve as a TIA bible for the next decade, and to instil an increasing interest on the use of TIA methodologies in all continents and territorial levels.

The genesis of TIA methodologies and a chapters' introduction

TIA had its roots in the concerns about the limited policy evaluation scope of two European Union (EU) mandatory IA procedures: the EIA and the Strategic Environmental Assessment (SEA). As their name indicate, the latter two are particularly concerned in assessing the field of environmental sustainability and tend to target programmes and projects, rather than policies (ESPON 3.2, 2006). Unlike the EIA, however, which emerged in the 1960s, in the United States of America (see Petts,

1999), the notion of TIA is primarily European (read EU). In this regard, there is no doubt of the crucial influence of the European Spatial Development Perspective (ESDP - EC, 1999) in opening the avenues for EU Member States to develop, implement and intensify TIA processes, experiences, regulations and instruments (Medeiros, 2016a).

On a practical level, however, the genesis of the TIA methodologies resulted from the European Territorial Observatory Network (ESPON) Programme intense search for univocal causality relations between territorial development processes and public policies investments. Initiated in 2002, the ESPON programme financed the elaboration of the first TIA tool (the TEQUILA TIA tool - see Chapter 3) which was presented in 2006 (ESPON 3.2, 2006). The TEQUILA was specifically built to assess the ex-ante impacts of EU directives. Since then, European entities, such as the European Commission (EC) and the Committee of the Regions (CoR) have tested and applied ESPON TIA methodologies to assess the ex-ante impacts of EU directives and other EU financed programmes.

As expected, this ‘new kid on the block’ of IA methodologies experienced several methodological developments since its genesis. This can be witnessed by the creation of new TIA methodologies and the perfection of existing ones, most of these resulting from ESPON financed projects. Besides the already mentioned and pioneering TEQUILA TIA methodology, several others were, later on, introduced to stakeholders. These include the STeMA (see Chapter 4), the EATIA (see Chapter 5), the ARTS and the related Quick_Check TIA.

In this context, the first part of this book is dedicated to present the three most relevant ESPON TIA methodologies produced so far. Firstly, we highlight the already mentioned TEQUILA TIA tool, which introduced crucial elements for properly assessing the main impacts of policies, such as an ‘evaluation policy impact score’ (from negative to positive impacts), as well as the ‘policy intensity’ and the ‘regional sensibility’ evaluation parameters. Instead, the STeMA TIA tool facilitated the use of a vast array of policy indicators to assess territorial impacts of policies. Built and an alternative option to existing ESPON TIA tools, the EATIA introduced an interesting bottom-up approach to TIA procedures, as well as the notion of cumulative territorial impacts. Instead, the ESPON Quick_Check TIA was built with an erroneous rationale in which it is possible to assess territorial impacts in a quick and dirty way. It is not. As is widely recognised within the ESPON programme, the Quick_Check TIA is a simplified first step to obtain ex-ante impact scores of EU directives. Hence, in our view, it is not appropriate to be explained in a TIA Handbook as a viable, sound and relevant TIA tool. Moreover, an overview of studies which used the Quick_Check TIA to assess territorial impacts, show that this TIA methodology is plagued by a largely non-transparent way on how it aggregates information and reaches the presented potential impact scores.

In parallel, other TIA tools were produced outside the ESPON auspices, with a view to assess, not only ex-ante, but also the ex-post impacts of projects, programmes, policies, in a more robust way. From these, the first part of the book presents one example: the TARGET_TIA (Chapter 2). In synthesis, TARGET_TIA is as an alternative mainstream, sound, flexible, and relevant TIA tool to existing ESPON TIAs. By now, TARGET_TIA was successfully tested in assessing the main territorial impacts of EU financed programmes (INTERREG-A cross-border cooperation) and policies (EU Cohesion Policy) in different countries (Portugal, Spain, Sweden and Norway) and territorial scales (regional, national and European).

In a context of emerging policy evaluation methodologies specifically designed to assess the main impacts of EU cross-border cooperation (CBC) programmes, the second part of the book is dedicated to present three potential TIA techniques to assess their implementation. Existing literatures show how the territorial impacts of CBC programmes can be also appropriately assessed with the TARGET_TIA (see Medeiros, 2015; 2017; 2018a). Though in very different modes, the three Chapters of this second part of the book can be regarded as alternative holistic policy evaluation methods to assessing the main potential impacts of specific policy aspects of CBC programmes. Firstly, in Chapter 6, a methodology developed by the Maastricht University (ITEM) shows how to specifically assess the impacts of legislation in border regions. This is particularly important as the ultimate goal of CBC programmes is the reduction of border barriers, and the legal-administrative ones are still the most important barriers across EU border areas (Medeiros, 2018b). An enduring view holds that CBC processes are also intended to increase territorial integration and development processes across border areas. In this light, Chapter 7 presents a holistic and sound alternative policy evaluation tool developed by CESCO, which has been used to assess the main territorial impacts of Hungarian CBC programmes. On the flipside, Chapter 8 summarises the results from the use of the ESPON TIAs in assessing the main impacts of EU CBC programmes, from the perspective of the EC.

Finally, the third part of this book presents alternative generic models and complementary approaches to assess territorial impacts of policies to the mainstream TIA methodologies presented in the first part of the book. To start with, in Chapter 9, Spatial Foresight develops an interesting methodology to assess territorial foresights. Just like the ESPON TIAs, this alternative TIA tool is largely based on a profuse use of cartographic analysis, as a way to present the obtained potential impact scores in a more comprehensive manner. Likewise, the LUISA Territorial Modelling Platform, analysed in Chapter 10, and developed by the EC Joint Research Centre, places the widespread use of online cartography of a vast territorial database at all territorial levels, including the urban scale. This LUISA platform does not exactly function as mainstream TIA. Instead of producing TIA scores, it

uses mathematical calculations to forecast territorial trends over the years, making it a particularly useful tool when associated with TIA tools to assess potential ex-ante territorial impacts.

The final chapters discuss complementary aspects associated with the implementation of TIA methodologies. In essence, Chapter 11 presented by the Universities of Brno and Prague, brings to the fore a concrete example of how to assess to appropriately assess the territorial effects of EU Cohesion Policy. Finally, a last Chapter (12 – Évora and Brussels Universities) demonstrates on how to apply TIA methodologies to assess the main impacts of Regional Smart Specialisation Strategies, which is especially relevant for the EU context.

Why the need for TIA methodologies?

What is the ultimate goal of public investment? In general, one can conclude that public investment ultimately aims at promoting, directly or indirectly, positive territorial development trends (Medeiros, 2019; Potter et al., 2008) and, ideally, territorial cohesion processes (Faludi, 2006; Medeiros, 2016c; Medeiros and Rauhut, 2018). Put differently, large scale infrastructural projects, as well as growth/development/cohesion programmes and policies hold the potential to create either negative or positive potential impacts in several policy sectors and territories. The salient point is that such projects, programmes and policies have a clear territorial dimension (Medeiros, 2017a). Taking the example of EU Cohesion Policy, its main impacts do not only encompass the environmental dimension of development, but also entail potential impacts in socioeconomic, governance, and spatial planning related components. The same goes for the impacts of the construction of an international airport, or the implementation of an EU funded programme such as the INTERREG-A (cross-border cooperation) (Medeiros, 2017b).

In short, the basic argument for using TIA methodologies, instead of EIA and SEA tools, is that a TIA tools can provide a complete picture of the potential impacts of the analysed project, programme or policy, whereas EIA and SEA are only designed to capture the main environmental impacts. This is a useful starting point to claim for the replacement of the legal requirements to use EIA and SEA methodologies, with the more complete and holistic TIA methodologies. In this new potential scenario, however, the credibility of TIAs should be safeguarded. On the whole, in our opinion, the use of quick, dirty and shallow TIA methodologies, such as the ESPON Quick_Check TIA, need to give way to relevant, sound and credible TIA tools. Only by then, TIAs can enjoy a rapid progress in their overall acceptance as the optimal policy IA tool, for all involved in policy evaluation processes.

Rather than proposing a consensus to unifying singular TIA approaches, this TIA Handbook presents to the interested reader the main characteristics, as well as the strengths and weaknesses of several TIA methodologies. Being around for a bit more than a decade, TIA methodologies are now coming of age. Their infancy phase has passed with the typical growing pains. By now, several matured and perfected TIAs are out on the market to be used when there is a need to assessing the main territorial impacts of basically every project, programme and policy with a territorial dimension. Being largely a European construct, there is no reason for TIA methodologies not to expand their use into other territories. Crucially, we expect this Handbook to serve as fundamental vehicle to Europeanise the use of TIA methodologies in other continents. At the same time, we expect to see an increasing use of TIA tools by national and sub-national entities, and in a wide variety of projects, programmes and policies all across the world.

Bibliography

- ESPON 3.2 (2006) *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy*, Volume 5 – Territorial Impact Assessment, Final Report, October 2006, ESPON, Luxembourg.
- Faludi, A. (2006) From European Spatial Development to Territorial Cohesion Policy, *Regional Studies*, 40(6): 667-678.
- Medeiros, E. (ed.) (2014) *Territorial Impact Assessment (TIA). The process, Methods and Techniques* (ed.) Centro de Estudos Geográficos, ZOE, Lisbon University, 126p.
- Medeiros, E. (2015) Territorial Impact Assessment and Cross-Border Cooperation, *Regional Studies, Regional Science*, 2(1): 95-115
- Medeiros, E. (2016a) Territorial Impact Assessment and Public Policies: the case of Portugal and the EU, *Public Policy Portuguese Journal*, 1(1): 51-61
- Medeiros, E. (2016c) Territorial Cohesion: An EU Concept, *European Journal of Spatial Development*, 60 –<http://www.nordregio.org/publications/territorial-cohesion-an-eu-concept>.
- Medeiros, E. (2017a) *The Territorial Dimension of European Policies: a conceptual approach*, in Medeiros, E. (ed.) *Uncovering the Territorial Dimension of European Union Cohesion Policy*, pp 9-22, Routledge, London
- Medeiros, E. (2017b) Cross-border cooperation in Inner Scandinavia: A Territorial Impact Assessment, *Environmental Impact Assessment Review*, 62(2017):147–157.
- Medeiros E. (2018a) *Focusing on Cross-Border Territorial Impacts*. In: Medeiros E. (eds) *European Territorial Cooperation. The Urban Book Series*. Springer, Cham

- Medeiros E. (2018b) Should EU cross-border cooperation programmes focus mainly on reducing border obstacles, *Documents d'Anàlisi Geogràfica*, 64(3) 467-491
- Medeiros, E. (2019) Spatial Planning, Territorial Development and Territorial Impact Assessment. *Journal of Planning Literature*, 34(2) 171-182
- Medeiros, E.; Rauhut, D. (2018) Territorial Cohesion Cities: a policy recipe for achieving Territorial Cohesion? *Regional Studies*, <https://doi.org/10.1080/00343404.2018.1548764>.
- Petts, J. (1999) *Handbook of Environmental Impact Assessment*, Volume 2, Environmental Impact Assessment in practice; impact and limitations, Blackwell Science, Oxford.
- Potter R.; Binns, T.; Elliott, J.; Smith, D (2008) *Geographies of Development. An Introduction to Development Studies*, Third Edition, Pearson Education Limited, Essex