

# Retrofitting TIA

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## Abstract

Within the scope of a research project, the integration of territorial impact assessment (TIA) into existing administrative processes was ill-informed by an apparently innocuous informal process diagram. The situation was detected during the preparation of a formal extended process diagram (EPD), asking all the relevant questions.

## 1 Introduction

Common, informal practice in the diagrammatic representation of processes tends to give attention to the actors (e.g. institutions) by placing them at the nodes of ‘box-and-arrow diagrams’ — Figure 1. Important information such as the action (i.e. tasks) and intermediate stages of the process (e.g. drafts, revised drafts, and final versions of documents) can be easily omitted.



FIGURE 1 Common practice tends to focus attention on the actors

Systems Planning process diagrams state their information requirements clearly and in advance (Figure 2), whether expressing a global view of the process (Perdicoulis, 2011, 2013b), or a personalised partial view of the process (Perdicoulis, 2013c) from the point of view of one or more actors.

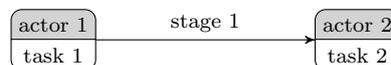


FIGURE 2 Systems Planning process diagrams state their information requirements clearly

While simpler to create, informal process diagrams such as Figure 1 do not tell a ‘full story’ when describing a process. On the other hand, Systems Planning process diagrams (CPD, EPD, or PPD) require a little more investment — like learning a language at school rather than at home — but convey a more complete and articulated story. Let us see the experience from a recent R&D project on territorial impact assessment (TIA).

## 2 About TIA

Territorial impact assessment (TIA) is a policy assessment instrument under development, from the same ‘impact assessment’ family that includes the ‘environmental’ EIA and the ‘strategic’ SEA (Fischer and Gore, 2012). One of the interesting features of TIA is that it considers space (i.e. ‘territory’) as a system, in the spirit of Systems Planning (Perdicoulis, 2013a). Some of the most recent TIA research and development projects have been fostered by the European Observation Network for Territorial Development and Cohesion (ESPON, website). The case study presented here is from the elaboration of the EATIA project of ESPON (Fischer and Gore, 2012).

## 3 Placing TIA

During the EATIA project, it was necessary to describe the process in which EU directives were being produced, so that TIA could identify the most suitable pathways to make its contribution. Figure 3 emerged by a project team as the representation of interactions at three levels (EU, national, and local/ regional) within which TIA operations were placed.

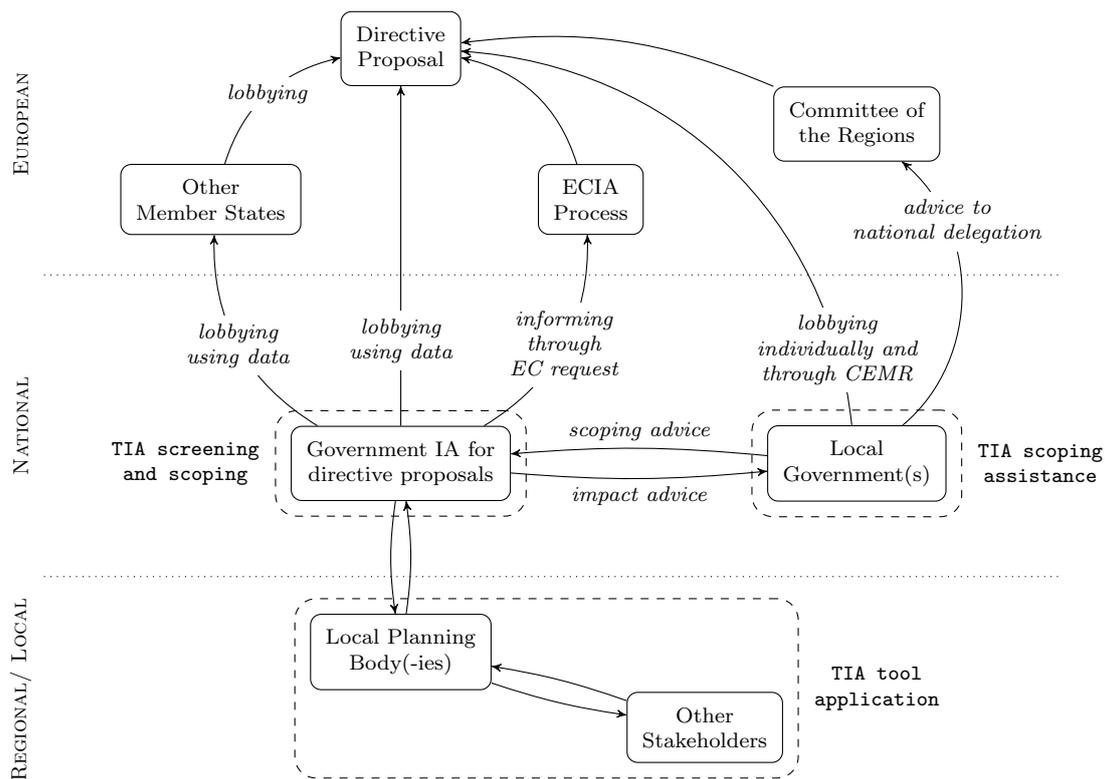


FIGURE 3 Original framework placing TIA in context for one member state

Upon reception, Figure 3 raised some questions to some project partners — for instance: What is the order of the entries in the ‘Directive Proposal’? Are all entries equivalent? Why are there no exits? Do rounded-edge rectangles represent actors, documents, and processes alike?

## 4 Getting the act together

To answer these questions and understand better the process intended by Figure 3, the original diagram was re-created as an extended process diagram (EPD) by merging actors and their respective tasks at the nodes (Perdicoulis, 2013b) — Figure 4.

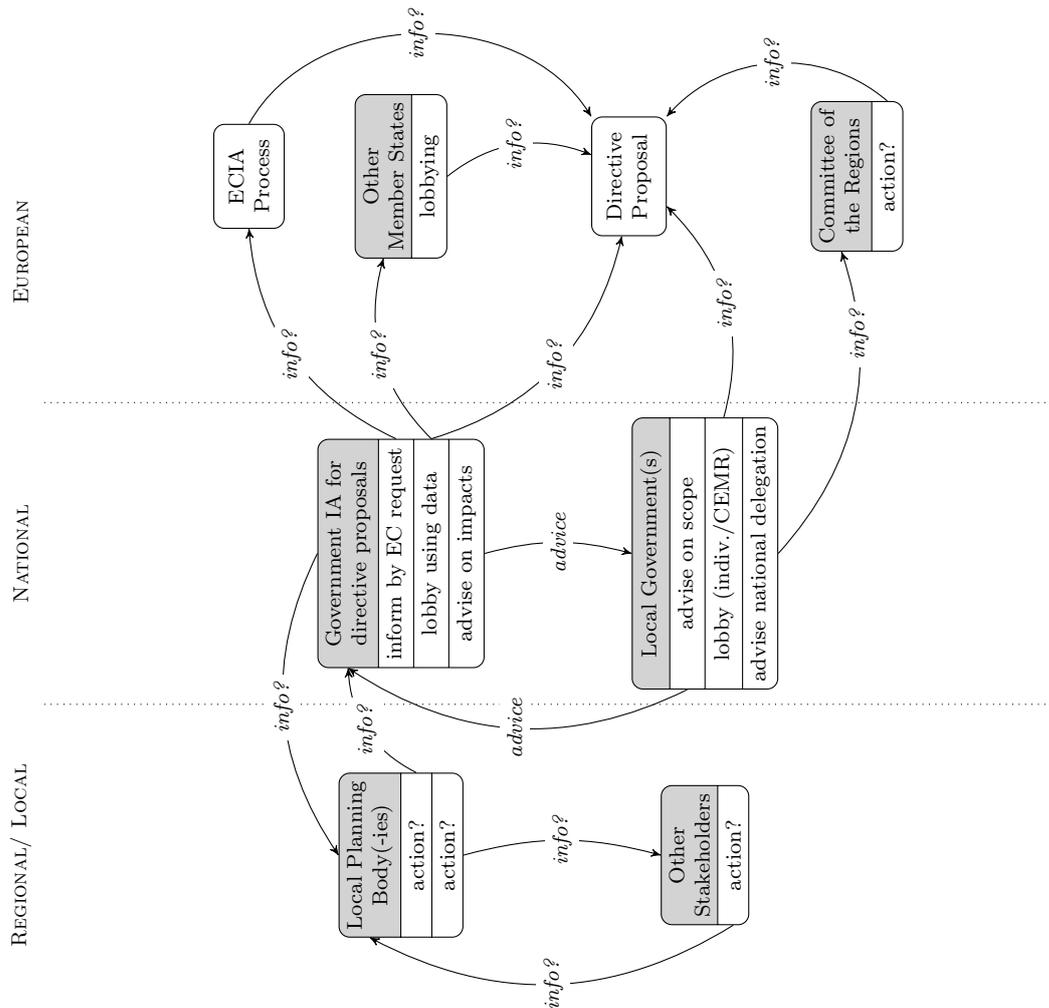


FIGURE 4 First transformation: actors are still at the node positions, but now next to their actions

Let us register some observations at this stage. Figure 4 maintains the nodes in the same positions as in the original diagram, but rotated by 90° CCW to avoid line crossing. Multiple actions per actor appear to create large and ‘busy’ nodes. Information about the order of execution of the tasks would have been useful from an operational perspective. The co-existence of actors and non-actors (i.e. documents and ‘processes’) at the node positions is also maintained, but with semantic distinctions regarding the rectangle types. The scarce information of the original diagram regarding documents is more pronounced in Figure 4.

## 5 The feedback loop

To give attention to the documents of the process, we would have to invert the entities on the nodes and edges. And since TIA is meant to provide *feedback* to the preparation of EU Directives, then a loop process similar to Figure 5 would be expected, starting and finishing with the proposal of the directive.

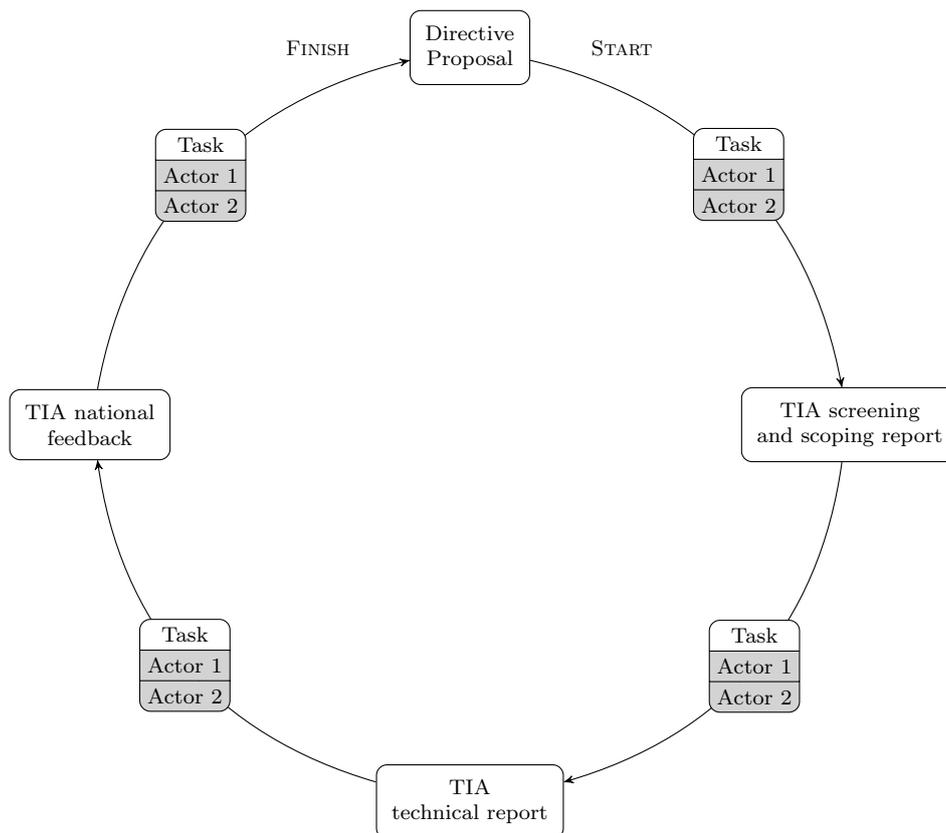


FIGURE 5 Second transformation: the TIA process is now in full view, but most information remains to be introduced

However, the original information represented in Figure 3 features no ‘exit’ from the Directive Proposal. This appears to be blocking, right from the START, everything that is to be known about the TIA process — Figure 5. At this stage, a consultation with national and/ or EU process specialists seems necessary, as attempting to extract information from the original diagram might be unsafe — and incomplete, as demonstrated.

It is likely that Figure 5 would have to be elaborated several times before reaching a mature stage, seeking and incorporating appropriate information, and verifying with specialists. This is a time consuming process, but necessary to obtain a diagram with sufficient quality of information so that it can be used reliably.

## 6 Discussion

It could be argued that diagrammatic formality is being too demanding on the original information (Figure 3). It is possible that the original diagram had some omissions and/ or mistakes. In such a case, though, Figure 3 would be but a mere draft, to be elaborated again until it provided sufficient information about the intended process. Alternatively, perhaps, the original diagram could be ‘explained’ *viva voce*, but even in this case it would have to be completed posteriorly.

Transforming diagrams from one type to another is possible, but has considerable drawbacks. First, it is time consuming. Second, it is not always safe, as omissions and mistakes are always likely to take place. If all diagrams are formal and well prepared, though, mis-interpretation should not be a significant risk. In any case, the particular modelling language or type of diagram should be identified in the documentation — for instance, ‘extended process diagram’ (EPD). With enough modelling experience, the best case scenario would be to conceive and design the most appropriate type of diagram right from the beginning. In the case of TIA, that appears to be an EPD as in Figure 5.

The technical faults of the original process diagram (Figure 3) bear similarities to those encountered in the representation of causality in the context of EIA (Perdicoulis and Glasson, 2012). It appears that even specialised and experienced professionals, acknowledged and trusted for their writings, are not sufficiently familiar with diagrammatic languages yet. Of course, this is no requirement for any profession, but the situation suggests two obvious options: either learn to draw diagrams properly, or remain faithful to text.

## 7 Conclusion

At least in the case of one member state, TIA cannot be placed in a wider process framework yet due to lack of information. More work must be done in the direction of content or substance regarding relevant process, as well as regarding the medium of expression (formal diagram or text) that would verify and convey this information appropriately.

## References

- ESPON (Website) *European Observation Network for Territorial Development and Cohesion*.  
<http://www.espon.eu/>
- Fischer, T., and T. Gore (2012) *EATIA: ESPON and Territorial Impact Assessment*. Luxembourg: ESPON.
- Perdicoulis, A. (2013c) Personalised process diagrams. *Systems Planner*, **19**.
- Perdicoulis, A. (2013b) Extended process diagrams. *Systems Planner*, **18**.
- Perdicoulis, A. (2013a) The city as a system. *Systems Planner*, **16**.
- Perdicoulis, A., and J. Glasson (2012) How clearly is causality communicated in EIA? *Journal of Environmental Assessment Policy and Management*, **14**(3):1250020 (25 pages)
- Perdicoulis, A. (2011) Application manual for the ‘Systems Thinking’ book. *Systems Planner*, **2**.
- Perdicoulis, A. (2010) *Systems Thinking and Decision Making in Urban and Environmental Planning*. Cheltenham: Edward Elgar.

