transformative social innovation theory

Configuring the Critical Turning Points data repository

Deliverable 5.2

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Focus of deliverable:

This Deliverable 5.2 describes the concept of and operational requirements for a database on Critical Turning Points in Transformative Social Innovation processes.

Reference:

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1 Introduction

This second deliverable of Work package 5 describes the main steps needed to move from the general outlines for a meta-analysis set-up (Pel et al. 2015) to specified requirements for a Critical Turning Points database. The deliverable thus lays down the general concept for such database, clarifying its envisioned future deployment by TRANSIT researchers, and by various groups of practitioners. It makes transparent what kind of knowledge infrastructure the CTP repository is meant to be, and what TRANSIT engagement strategy is informing it. On the basis of these strategic considerations we specify operational implications and requirements. These provide the terms of reference to be communicated with the party to be contracted for the actual database configuration.

The deliverable also clarifies, as much as possible at this stage, the research activities through which the database is to be populated. All database development needs to anticipate what kind of data on Critical Turning Points can reasonably be gathered in the available time. The database construction needs to take into account various practicalities of data gathering: which ways of questioning are suitable, how can respondents be recruited, how to ensure that a substantial number of different CTPs are gathered. Inversely, the set-up of the data gathering is also informed by the technical limitations and opportunities afforded by the developing database structure. In other words, this deliverable describes the database structure and the associated research activities as specifically and transparent as possible. These interrelated aspects will be fine-tuned, going back and forth between what's desirable and what's possible, into a final set-up over July-August 2015.

The indicated need for fine-tuning and iterative development also means that this deliverable provides a timeline for this process. A crucial milestone in that process is the establishment of definitive guidelines for the empirical research by end of August – as essential basis for manageable empirical research, and harmonized population of the database, from September 2015 onwards to May 2016. By end of August we come up with definitive guidelines for empirical research. Another important element of that process is the consortium consultation on the envisioned CTP data gathering, which is to take place in July 2015. The WP5 team (ULB/AAU/IHS/UM/UDC) has developed a set-up, yet the whole consortium will be involved with the CTP database – through our empirical research, but also as interested users. More generally, the deliverable will specify the process through which the database will be developed, and the activities to be done by WP5 team, and by empirical researchers. As we move from general meta-analysis set-up to construction and population of a TRANSIT database, it becomes more clearly how WP5 rests on a collective effort that needs to be organized well to succeed.

The deliverable is structured as follows. First we outline the WP5 planning. This involves explanation of the timeline towards eventual database deployment, the activities and milestones underway, and the associated roles of empirical researchers and WP5team. **(Chapter 2)**. Next, the concept for the 'CTP repository' is described. This spells out the audiences addressed, the added values it may offer them, and the aims TRANSIT has with this knowledge infrastructure. The clarification of concept provides the strategic considerations that help to formulate appropriate operational requirements **(Chapter 3)**. Crucial operational requirements stem of course from the CTP research that we envision, namely the meta-analysis of qualitative CTP data. It is therefore specified what we want to know about the CTPs, what that would require in terms of data gathering and data entry, and what database operations would be needed to satisfy our knowledge interests **(Chapter 4)**. Next, these requirements are summarized, and merged with other requirements, such as user requirements and more technical considerations and side

constraints. These are the inputs for the database construction terms of reference **(Chapter 5)**. Finally, the deliverable outlines the practical implications for the WP5 empirical research. This chapter describes how the research process between September 2015 and May 2016 will be organized. It describes the list of questions and the targeted population that will constitute the WP5 empirical reseach guidelines **(Chapter 6).**

2 Planning

2.1 Towards CTP database deployment

The construction of a Critical Turning Points database forms part of a more encompassing research process. Its planning follows from two important timelines, namely 1) the overall planning of WP5 and 2) the overall planning for TRANSIT and its various other workpackages. Both are captured in the overall TRANSIT project timeline. This timeline, as updated after the Theoretical Integration Workshop in Norwich, is presented in figure 2.1 below.

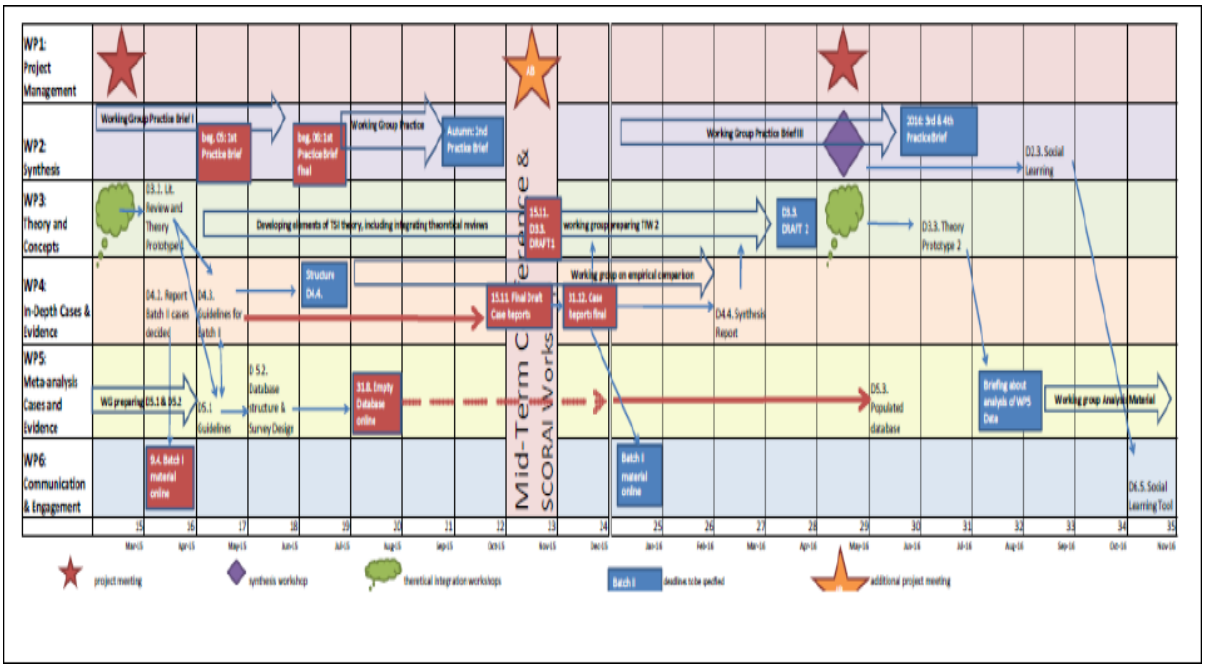

Figure 2.1: TRANSIT timeline

Even displayed without legible details, the timeline indicates that there are several milestones for WP5, and that its planning has interdependencies with other work packages. Within this bigger picture, the following timeline events, milestones and interdependencies are of particular importance:

- This second WP5 deliverable is preceded and informed by the development of TRANSIT proto-theory (D3.1-D3.2) and a set-up for meta-analysis in which the focus on Critical Turning Points is outlined (D5.1).
- Together with WP4 it forms part of a broader activity stream of empirical research, involving partly overlapping populations of researched SI actors. The period for empirical research will partly overlap with the second batch case studies (Cf. D4.3).

- The final milestone of meta-analysis conclusions (D5.4) seems far away, yet the crucial milestone is to have a database populated with a sufficient number of qualitative CTP accounts(D5.3). The milestone for that is First of June 2016.
- Considering the D5.3 deadline of 1st of June 2016, and practically speaking May 1st 2016 so as to leave a month for checking and updating of data entries, the empirical research activities should be ready to start right after the European summer break, i.e. by September 2015. Accordingly, the CTP database should also be operational by that time, as the data gathering should be guided by a fixed data entry format.

Finally, the database configuration is a preparation for D5.3 and D5.4, and thus needs to be done by looking forward to the subsequent research activities through which it will be populated, and its future deployment. Once materialized, the configuration will be difficult to adapt. The configuration creates a path dependency that as such needs to be thoroughly considered.

2.2 WP5 –activities and roles

As indicated, the configuration of a CTP online database is an activity that has to be done with a close eye on what happens after. When specifying the database inputs, it is of vital importance to mind how this translates into instructions to empirical researchers, and what the outputs will yield for CTP meta-analysis and TSI theory-building.

Before ordering all these interrelated through a timetable, it is useful to distinguish four different groups of researchers, each with their own roles to play in the WP5 process.

1. **WP5 team:** This team consists of ULB as workpackage leads, with AAU, IHS, UM and UDC as partners. This team has been occupied with developing the CTP concept and basic set-up, and the database configuration as developed in this document. Further activities are the gatekeeping i.e. quality control for the database entries, the further development of a meta-analysis framework, provision of first database entries, and the implementation and reporting on the meta-analysis itself.

2. **Researchers: This involves the whole consortium; all of us have time allocated for doing the empirical research on the CTPs** (Cf. Chapter 6)**.** Apart from generating database inputs, researchers also have a role in the promotion of the database. And of course all researchers are intended users of the database, too.

3. **WP5 guidance team:** The data gathering on the Critical Turning Points will be described in final research guidelines to be disseminated end August 2015. Still, it is important that researchers are guided in this process, to resolve practical difficulties and to ensure that data entries are harmonized and comparable. Several members of the WP5 (ULB, assisted by AAU andUDC) will provide guidance of groups of researchers, similar to the modus operandi of WP4

4. **Engagement & communication (WP6).** The CTP database is to be practically useful to various groups of practitioners. Whilst constructing it, populating it and doing the meta-analysis through it, it is also an important vehicle for the engagement and communication activities of WP6. This is mainly a task for the WP6 team.

These activities, and the researchers involved, and displayed in a timeline below (table 2.2). For the researchers, the time period between September 1 2015 until June 2016 is by far the most important and intensive period for WP5 activity. The process of data gathering will be recapitulated and discussed in more detail in Chapter 6.

Time	Activity	Researchers involved
July 2015	Consultation WP research	WP5 team/researchers
July/Aug. 2015	Consultation 'Knowledge Group'	WP6
August 2015	Establish final research guidelines	WP5 team
August 2015	Establish CTP 'brochure'	WP5 team
August 2015	Database structure operational	WP5team
Sept. 2015	Publish CTP repository blog	WP5 team/WP6
Sept. 2015	Selection first CTP respondents	researchers
Sept. 2015	Guidance research planning	WP5 guidance team/researchers
Sept./Oct. 2015	Approach interviewees	researchers
Sept./Oct. 2015	Entry CTP examples	WP5 team
Oct. 2015-	Develop meta-analysis procedures	WP5 team
Nov. 2015	Skype first CTP entries	WP5 guidance team/researchers
Nov. 2015-	Test and deploy database with practitioners	WP6
Jan./Feb. 2016	Communication database progress	WP5 guidance team
May 2016	Database populated	researchers
June 2016	Deliver D5.3	WP5 team
June 2016-	Conduct meta-analysis	WP5team

Table 2.2 Timeline WP5 activities

3 CTP repository: Aims, audiences and added values

3.1 Introduction: meta-analysis and broader aims

The CTP concept is grounded in TSI proto-theory. But besides this function for the TRANSIT consortium and its TSI theory development, it's also important to have a broader outlook on the CTP repository to be developed. After all, the CTP repository is to materialize the engaged, 'critical friend', transformation-oriented and co-production-oriented ways in which TRANSIT seeks to interact with the SI actors that it studies (Cf. Zuijderwijk et al. 2014, TRANSIT research philosophy as described in Pel et al. 2015).

This chapter outlines the general concept of the CTP repository. It considers the broader set of aims behind it, the audiences (groups of users/producers) supposed to be involved with it, and the added values that we intend the CPR repository to offer. Before operationalizing its various aspects, it is worthwhile to consider these 3 A's, and to realize that the many technical possibilities for databasing can serve different purposes but not all at the same time. The CTP depository is a classical 'boundary object' (Star & Griesemer 1999; Star 2010). It is aimed to serve at least two different deployments, namely meta-analysis and provision of practically relevant insights. The first may involve different audiences (TRANSIT researchers, but possibly other researchers as well) and the latter may involve different groups of practical audiences. This chapter therefore describes first the theoretical relevance of the CTP repository **(3.2)**, and then the practical relevance **(3.3)**. Finally we provide a brief overview of reference databases. As these already existing or developing databases share certain aspects with our concept, they can provide useful examples in the further database development process **(3.4)**.

3.2 Theoretical relevance

The main audience for the CTP repository are the TRANSIT researchers. It is intended to bring substantial added value for the development of TSI theory, mainly by providing overview and comparative insights on TSI processes. The main aim for CTP development is to have this knowledge infrastructure as support for systematized, generic insights on TSI processes.

The more specific aims and intended added values have earlier been described in Pel et al. (2015). The general understanding is that the CTP repository should support TSI theory development, in line with the TRANSIT research philosophy and the TSI proto-theory developed thus far. It also should be of added value to the various attempts undertaken to 'map' social innovation and transformation, and undertaken to explain its drivers and dynamics. In that regard there are several more specific considerations that inform our CTP repository concept, and that translate into specific requirements. The repository should:

- Facilitate the development of *process theory*, rather than variance theory. We want to develop a set of diverse SI processes which are nevertheless comparable as sequences of

events. This adds the needed sense of dynamics to the various factsheet-overviews and assessments of decisive factors.

- Facilitate theory building based on the *lived –through experiences of situated actors* and the framings and narratives that they construct of those. This is theory formation that takes the challenges and dilemmas of SI in-the-making as a starting point – rather than as practicalities and contingencies that need to be abstracted from.
- Facilitate theory building that gives a balanced account of the *many origins, agents and circumstances that together 'co-produce' TSI*. Even if SI initiatives are the actors we focus on in our empirical investigations, and if these are the key partners in our knowledge production, the repository should bring out further that these groups of actors are not acting in isolation. This allows for a nuanced view of where the 'heroes' of TSI could be found.

The theoretical relevance of the CTP repository thus resides partly in the aims for theory- building that is practice-oriented, and that helps to come to grips with the practical challenges of being immersed in TSI processes. Indeed, we focus on the turns these processes may take, and on their critical significance to the actors involved. The next section provides further specification of this practical relevance.

3.3 Practical relevance

What knowledge provision is to be considered 'practically relevant' is a non-trivial question. Investigation of, communication about and giving exposure to SI initiatives are 'performative' acts, describing social realities but also creating them to a certain extent (Pel & Bauler 2015).

In TRANSIT, we therefore approach 'practical relevance' as the enabling of reflection onto TSI processes, and also as something that is constantly 'in the making'. What is practically relevant and useful knowledge is developed in a joint process with various actors, in which researchers are only one of the contributors (Olivotto & Zuijderwijk 2014, Zuijderwijk et al. 2014). Our knowledge production is informed by several considerations: In the first place, we situate ourselves and our knowledge production in the field of transformative social innovation, and enabling of *reflexivity* on these processes is a key goal (Cf. Jørgensen et al. 2014, Pel et al. 2015). In the second place, we argue that practical relevance is not a matter of unilateral knowledge transfer from researchers to practitioners. We understand relevant knowledge generation to rely on joint knowledge production and exchange between researchers, SI initiaves, policy-makers and other actors. In the third place, and related to that, we develop TSI theory on the basis of a relational understanding, in which transformative social innovations are crucially co-produced through diverse and dispersed agents (Haxeltine et al. 2015). An implication of that is that we also consider our own research as one source of knowledge provision in TSI processes, amongst and interaction with others[1].

[1] Nussbaumer & Moulaert (2007) also employ the perspective that social innovation processes rely on the development of social bonds created by people who circulate in many networks and who are willing to share their knowledge, influence and social links. The notion 'co-production of knowledge' is very central in the domain of social innovation (see Voorberg et al (2013) for a review).

As part of transformative social innovation processes, we seek to shape our knowledge production in line with the new science-society interfaces this arguably requires (see Zuijderwijk et al. (2014) for a more extensive account). So to a certain extent we still see the merits of a 'Mode 1' way of knowledge production, in which the scientist is perceived as the principal source of knowledge-provision, acknowledging a boundary zone between science and society. After all, we start from a CTP concept that is firmly grounded in our TSI theorizing. Yet beyond that cience-cenetered approach, we also operate in more 'Mode 2'-science, 'process-oriented' (Rydin 2007; Schmale et al. 2013; Wittmayer & Schäpke 2014) fashion. We acknowledge that other stakeholders than ourselves are the primary problem-owners, and therefore we consider that the definition of these problems should be opened up to joint knowledge production. Even if self-conscious and confident about our scientific TSI theory production, we acknowledge that science and society overlap (Nowotny et al. 2001; Miller 2013). Finally, we are actively exploring what could be called 'mode 3' models of knowledge production, in which the fluid roles and relations of researchers and the 'Others' are explored (see also Avelino & Wittmayer 2014: 16 – 17).

So, even if the first objective of the database is to facilitate TSI-theory-development, and its 'mode 1' science transfer to non-academic audiences, its construction and deployment is also meant to move towards joint knowledge production and exchange. Indeed, its construction is informed by a knowledge production strategy, but also helps shape it. Summarizing our considerations, we propose that:

1. First and foremost, the database needs to facilitate the TSI-theory development, in which we are interested in Critical-Turning Points.
2. The database as a product can facilitate reflexivity of different actors onto TSI processes, and the systems, actors and developments involved.
3. TRANSIT-researchers engage with other actors to consult on the inputs, outputs and deployment of the database – aiming for a collective process within the practical and conceptual limits of the TRANSIT project.
4. The database is to be complementary with the TRANSIT-website. This Resource Hub already provides various knowledge-resources on (transformative) social innovation, which the CTP repository could help to disclose in an insightful and exciting way.
5. The CTP concept needs not only to be explained, but also possibly to be developed further for it to connect with various audiences and their knowledge interests.

These general considerations on our knowledge production describe how we want to take into account and jointly develop knowledge with various non-academic audiences or stakeholders. We identify seven categories of stakeholders, each of whom might bring forward specific knowledge interests. Next to the TRANSIT-researchers themselves, these include the social innovation initiatives and networks that we co-operate with, other social innovators and entrepreneurs, policy-makers, other (academic) researchers, intermediary organisations – such as funders or network-organisations, and the 'wider audience'[2]. On the basis of a preliminary stakeholder mapping, we have assessed the various stakeholder groups' knowledge interests as indicated in table 3.1 below.

[2] The seven groups are derived from the Communication & Dissemination Strategy (D6.1, 2014: 17), in which we distinguish policy-makers, social innovators and entrepreneurs, academics and the wider audience.

Audience/ stakeholders	**Knowledge interests**
TRANSIT-researchers	- store data retrieved from research - retrieve data from the database in order to perform analyses that contribute to TSI-theory - Quality-management of data
Networks and local iniatives that we co-operate with	- present themselves to a wider audience through the database - reflect on CTPs of their initiative. - compare their CTPs with those of likewise organisations and learn from this - comment on and share their own experiences with other SI-initiatives - get in contact with SI-initiatives, policy-makers, intermediary organisations and researchers
Other social innovators and entrepreneurs	- see a presentation of CTPs of other likewise organisations - compare their CTPs with those of likewise organisations and reflect on this - comment on and share their own experiences with other SI-initiatives - get in contact with SI-initiatives, policy-makers, intermediary organisations and researchers
Policy-makers	- understand, reflect on and learn about the role of policy and policy-makers in CTPs - comment on and share their own experiences with others - get in contact with SI-initiatives, policy-makers, intermediary organisations and researchers
Intermediary organisations	- understand, reflect on and learn about the role of intermediary organisations in CTPs - comment on and share their own experiences with others - get in contact with SI-initiatives, policy-makers, intermediary organisations and researchers
Other (academic) researchers	- compare their data with TRANSIT-data - Quality-management of data - make use of available data for their own research-interests - comment on and share their own experiences with others - get in contact with SI-initiatives, policy-makers, intermediary organisations and researchers
Wider audience	- see examples of social innovation-iniatives to better understand social innovation - see CTP's which different SI-initaitives and networks find on their way and understand what CTP's are

Table 3.1 – CTP repository and knowledge interests.

This preliminary mapping of stakeholder interests suggests that the CTP-concept – as outlined in Pel et al. 2015 -could indeed serve a variety of practical knowledge interests, next to the academic aims described in the previous section. This relevance can be substantiated and increased through an active process of engagement, along the process of database development and deployment. This will allow for better understanding of interests and ways to satisfy them. What is more, as the database is meant to have an existence beyond the limited lifetime of the TRANSIT project, it is of vital importance to consider how lasting relevance could be sustained over the longer term.

In order to ensure practical relevance, beyond this initial assessment of knowledge interests, we will undertake several activities:

- Develop a 'use case'[3] with representatives of our stakeholder groups to verify and specify the identified knowledge interests, and to consider how these can be satisfied through the CTP repository.
- Communicate our assessment of knowledge interests in a blogpost on the TRANSIT website and via social media, inviting further inputs.
- Organize a focusgroup (together with other SI networks and IHS contacts) in Brussels. EU-officials and various 'SI practitioners' could take place as to identify their further knowledge needs; and provide feedback on functionality.
- Run a test with the database during the Mid-term conference so that people are enabled to get introduced to the database and give feedback on functionality.

3.4 Reference databases

The above considerations of audiences, aims and added values describe what kind of knowledge infrastructure the CTP is aimed to be, and what the general concept behind it is. This is important to identify, as it will be launched into a mediatized world in which many efforts have been and are being waged towards roughly similar knowledge infrastructures. This makes the questions on added value so important to answer. Yet the identification of our general concept is also important as it helps to find reference databases that share certain aspects, and that can be learned from. Moreover, similarities between databasing concepts may open up possibilities for collaboration.

Without providing an exhaustive benchmarking, we can sketch how our choices of aims, added values and audiences relate to to similar databasing exercises, and to some broader trends in SI 'mapping'. The following can at the very least be mentioned, and serve as reference during the actual database construction process. All of these different motivations help us to clarify what we want our repository (not) to be and to achieve, and what practical options are available.

Relevant reference databases (and websites with similar contents) seem to be:

- **SI-DRIVE**. Our fellow SI research project has undertaken a very comprehensive mapping of SI initiatives, providing regional and policy field classifications, a criteria-based assessment system that allows to qualitatively describe the main dimensions of the mapped social innovations as well as to assign quantitative scores to these dimensions. The database includes the interesting possibility to nominations SI initiatives for inclusion. (SI-DRIVE 2015)

[3] 'Use cases' are profiles of the target groups that are used to identify which type of information or data they are interested in and how they search for that. 'Use cases' give insight into how we can disclose the information and data to the user. For more information, see the example of 'making a reservation in a hotel' via https://www.visual-paradigm.com/tutorials/writingeffectiveusecase.jsp, on 26th june 2015.

- **CRISES Montreal**. This 'Centre de recherche sur les innovations sociales' is an interuniversity and multidisciplinary research centre on SI. Its members play a central role in networking with civil society and in the transfer of knowledge to the community. In 2011, CRISES began to build up a database of social innovation. The database now includes more than 300 cases studies from Quebec and is being used to enable the longitudinal, sectoral and spatial analysis of social innovation in a regional context. It is also relational (as opposed to a 'flat' database), which allows the researchers to look at the logical relations and interdependencies between the data. One of the challenges related to this approach relates to the 'triple interpretation' of the data – at the level of interviewees who provided the data for the original case studies, the researchers who developed the case studies and the researcher in their team who are reconceptualising and organizing the information from the case studies for the creation of the database. (Cf. Bouchard & Trudelle 2013 and Browne 2015b)
- **The Minnesota Innovation Research Program (MIRP).** This vast research program became famous for its framework on 'innovation journeys'. More generally, this program has been groundbreaking for the development of process theory (Langley 1999; Sminia 2009) and especially the efforts towards explanatory process theory – identification of patterns in otherwise seemingly chaotic processes. As discussed in Pel et al. (2015), researchers within that program have set an important example for TRANSIT by creating databases on the basis of case reports or 'process narratives' (Pentland 1999).
- **Thresholds database.** This database, supported through the resilience alliance that unites different institutes worldwide that research system transitions and resilience in social-ecological systems, is a relevant reference database. Even if it is more objectivist-physical sciences oriented in approach than the more constructivist theory-building of TRANSIT, it shares some essential traits. First of all, the process-oriented approach, and the focus on turning points that mark the transition between phases or 'system states'. Second, there is the shared attention to transformative change, and third, there is the shared attentiveness to changes that are –co-produced or emergent from co-evolving developments. The database is also interesting as a collective effort, i.e. as an initiative that is meant to carry, unite and systematize research beyond the efforts of a singular institute. (Resilience Alliance 2015; Walker & Meyers 2014)
- **SEiSMiC-project Social Innovation Acceleration in Cities (SIAC)**. This initiative aims at starting a trans-national learning and working network of incubators or labs on Social Innovation and social entrepreneurs. The idea is based on the proven example of the Flemish Social Innovation Factory. The SIF seems to meet a number of missing elements in the labs we know so far. Such as: an effective and accessible exchange of knowledge, experience and capacities in the social innovation community, the introduction of 'a coin' to stimulate the reciprocity and the valuation of the exchange of knowledge, experience and capacities, effectively coping with the problem of free riders and the strong link with the system world of local, regional and national policy and politics. (Bosschart et al. 2015).
- **SIX (Social Innovation Exchange)**. One interesting feature is the way in which questions are linked to media content articles ("read"), videos ("watch") and events ("attend"), related to individual cases or specific themes. (SIX 2015)
- **Social Innovator**. The material on whis website is intended to guide and support the practice of all those who can contribute to this social economy: Policy makers who can help to create the right conditions; foundations and philanthropists who can fund and support; social organisations trying to meet needs more effectively; and of course entrepreneurs and innovators themselves. This site focuses on three key areas: The process of social innovation; connecting people, ideas and resources; ways of supporting social innovation. Each of these

areas include various sub-chapters, as well as illustrative examples or case studies (without going much into depth). Four sectors are taken into account as differentiated fields with specific characteristics, in relation to the kind of support social innovations need per sector. (Social Innovator 2015)

- **Drawdown**. Drawdown describes how one hundred solutions deployed at scale can alter the composition of our atmosphere and forge a path towards reduced carbon dependency. Each solution is given a two-page spread with enlightening graphics that detail its history, impact, path to adoption, how it works and where it is implemented. The goal of the book is to introduce solutions, provide the data that underpin them and show readers what is possible. (Drawdown 2015)
- **Digital Social Innovations**. This website offers the possibility for joining the network, by creating a profile with information about the organization. Information is visually represented and the data provided is freely available & open to everyone, published as Linked Open Data under a Creative Commons Public Domain Dedication licence. The provided information can be used to build a community of digital social innovators across Europe, learn about DSI and emerging technology trends to enchance their support, or to provide policy recommendations to the European Commission. The site allows the user to check or uncheck certain areas or technology focus topics, to refine the search and the map updates automatically (Digital Social Innovations 2015).

Further consultation of these reference databases and websites will be useful in the course of configuring the CTP repository. Some aspects particularly worthwhile considering are:

- The strategies towards generalizing from 'anecdotic' case evidence
- The functioning of online knowledge infrastructures as support of learning networks, and exchange of 'best practices'
- The function of databases to give exposure to SI initiatives, and also make them visible to each other.
- The attempts to 'map' the SI field, in the geographic and systematic senses.
- The commitments to 'open data' as a form of SI itself.
- The attempts to create knowledge infrastructures that last - beyond singular projects, programs or research institutes
- The responsiveness to different, well-identified audiences
- The use of mixed media (text, audio, video)
- The invitations of comments and facilitation of debate
- The invitations to 'nominate' cases/database entries

4 Research specifications: Inputs and Outputs

4.1 Introduction: Elaborating the CTP observation matrix

The CTP concept has been developed as an approach to meta-analysis that is appropriate to the kind of proto-theory developed thus far, and to TRANSIT research philosophy more generally. It constituted a divergence from classical survey set-ups deemed to be at odds with TSI development process and problematic in several practical aspects too (Cf. Pel et al. 2015, D5.1).

The observation matrix (see figure 4.1 below) was intended as a first step in operationalization. It served as a basic model for the CTP files to be created, i.e. for the concrete inputs for the repository. The matrix thus helped to imagine and specify what data would be gathered, how it would be stored and classified in the repository, what queries could be done on the data, and what kind of meta-analysis observations and conclusions would then become possible. The observation matrix helped to relate desired outputs, envisioned inputs, and the needed storage and organisation of data.

Local Initiative X ; Actor A				
	Doing	***Organizing***	***Knowing***	***Framing***
Self-organization	turning point 1	turning point 2	X	X
Interaction	X	turning point 3	X	X
Clustering	turning point 5	X	turning point 4	X

Figure 4.1 – Matrix for the identification/classification of critical turning points for Local Initiative X as revealed by Actor A. Taken from Pel et al. (2015), Ch.7

Obviously, that basic observation matrix leaves much to specify further. In particular, as the rows and columns only indicate roughly defined knowledge interests rather than clearly demarcated data entries, the matrix needs to be elaborated and adapted for focused data gathering. This elaboration is to achieve a better fit between desired outputs, workable organization of inputs, and the technical possibilities for structuring of data. These are clearly closely interrelated issues to resolve. For the sake of clarity these are discussed in separate subsections: *What are the desired outputs of the CTP repository? What do we want to know about the CTPs?* **(4.2)**. *What inputs do we need for the desired outputs? What should the files on CTPs contain? What research activities would be needed for this? What kinds and amounts of data can we reasonably expect to be gathered?* **(4.3)**. *And considering the desired outputs and the envisoned inputs, what operations should the database be able to perform? What properties and 'tags' should the CTP database entries be provided with?* **(4.4).** These specifications will be recapitulated and summarized in the next chapter. After all, they need to inform a clearly formulated set of requirements and wishes that can be communicated with a party to be contracted for database development.

4.2 Outputs

Before specifying what data we want to gather, what kind of data files we want as entries and what operations we want the CTP repository to perform, we need to have a clear idea of what we want the repository to do for our meta-analysis. *What are the desired outputs of the CTP repository? What do we want to know about the CTPs?*

We understand CTPs *as "moments or events in processes at which initiatives undergo or decide for changes of course"* (Pel et al. 2015:25). They are decisive changes, leading the local initiative in a new direction. Without it, they would be doing different things[4].

We are interested in developing insights in[5], and want the CTP repository to help structure data on…

- CTPs as **moments in time**, and as (somehow decisive) events in SI initiatives' development processes. Studied and compared as moments in processes, they could help us identify typical sequences and patterns of events that occur more often across SI initiatives' development processes.
- CTPs as **experiences** in transformative social innovation processes. We believe that qualitative data on these experiences is very important for TSI theory development, no less or even more than quantified-formalized data. Exchange of CTP experiences is also something we believe is of added value to SI initiatives and other practitioners. The focus on experiences also implies that they cannot be gathered through researchers themselves, i.e. through their interpretations of earlier gathered data (see further in 4.3 and Chapter 6).
- CTPs as **co-produced events**. According to our proto-theory, these experienced turns tend to be co-produced by other (collective) actors, or by other change processes in society (such as 'game-changers'[6]). By comparing diverse CTPs, we get a cross-section of the many forms co-production may take, and we could develop typologies and patterns of TSI co-production. Ideally, we develop multi-perspective experiences of CTPs, i.e. understandings of CTPs that include not only the experiences of SI initiatives but also those of co-producing actors[7]. This is challenging for data gathering however, as explained in Ch6.
- CTPs as **moments in network formation**[8]. In the light of our relational framework for TSI theory, it is interesting to study CTPs as events that may occur in the relations between individuals through which SI initiatives are constituted (its self-organization), but also in those through which they interact with existing/dominant institutions (interaction) and in those relations through which they become part of SI networks, movements or more loosely and

[4] Description CTP by Rene Kemp, 23/06/15

[5] How this translates in data gathering and structuring is another question – this provides a wish list only. The wish list is generated on the basis of D5.1, of TSI knowledge interests more broadly, and of the knowledge interests specifically related to CTPs as formulated by Rene Kemp 23/06/15.

[6] Gamechangers were suggested for inclusion by Jens.

[7] Such was envisioned in D5.1, yet seems practically difficult to achieve through triangulated observations.

[8] As proposed in the earlier 'observation matrix'.

distantly linked amalgams of TSI agents (clustering)[9]. This threefold distinction amounts to observing CTPs at different levels of aggregation.

- CTPs as **interrelated changes in DOFK.** Our proto-theory distinguishes Doing, Organizing, Framing and Knowing as key dimensions of TSI processes. The meta-analysis could help clarify whether these correspond with different types of CTPs, or whether CTPs typically arise from interrelated changes in several of these dimensions. In any case these are dimensions to cover in one way or the other[10].
- CTPs as **ambiguous moments** in SI initiatives' development processes. TSI theory is to give a realistic account of SI initiatives' roles in transformation processes, of their agency, and of the tensions, dilemmas, conflicts and challenges involved. A balanced 'non-teleological'[11] understanding of the CTPs should therefore be developed that articulates how they comprise both the 'positive' breakthroughs sought for as well as the 'negative' relapses and crises that one had preferred not to have experienced.
- CTPs as **moments with consequences**. Although we are interested in experiences of actors and therefore their retrospective interpretations of and ideas about CTPs, it will be useful to understand how these supposed concretely mattered – i.e., what evidence there is of certain breakthroughs with supposed societal impacts, or of changes in strategy.
- CTPs as **triggered or gestating moments in time**. The notion of a critical turning *point* is suggestive of a well-demarcated moment or date. Yet we know that such phenomena – theorized as 'tipping points' or 'punctuated equilibria' or 'transitions' - often are preceded by pressures that slowly build up. CTPs may take a certain 'gestation' period. Generic understanding of CTPs should somehow articulate how bounded momentaneous events tend to be parts of periods and episodes.
- CTPs as **contextual phenomena**. We have the idea that different countries/welfare systems or geographical contexts matter to the development process of SI initiatives, and that different SI fields or kinds of SI may also have their particular development processes and CTPs.
- CTPs as **uniquely identified**. Even when meta-analysis is directed towards comparison of CTP sets rather than the unique traits of CTPs, it remains important to make sure that observations are neatly classified and traceable in the database. The CTP entries need to have unique identifiers that classify them as pertaining to a certain SI initiative, based on a certain person's account, with an interview held on a specific date.
- CTPs as **quantified phenomena**. Even when we work towards a data repository with qualitative data, this does not mean that we need refrain completely from generating insights by counting. One can think of counting certain intervals on timelines, or occurrences of certain kinds of CTPs, or the occurrence of certain co-producing actors/processes.

The above intended outputs of the database, and the kinds of comparisons that we want to make on CTP data, constitutes only a wish list. It does not take into account how the needed data would

[9] This clustering is a key research topic for the study on SI discourse coalitions in the EU, as undertaken by UEA partners (Noel Longhurst)

[10] In the D5.1 observation matrix the DOFK distinction led to different types of CTPs, but that way of covering the dimensions seems problematic to apply in empirical investigations. The DOFK dimensions could still be covered, or taken into account in empirical rsearch –yet in other ways than forseen in D5.1.

[11] With 'non-teleogical' we mean an understanding that does not imply any self-evident and progressive series of steps, stages or phases that SI initiatives need to go through towards attaining a certain transformative goal.

be gathered, or stored and structured in a database. The next section addresses the kind of database inputs that these desired outputs and knowledge interests correspond with.

4.3 Inputs

As the 'observation matrix' captured our main research interests in a table, it was a stepping stone for starting to imagine what data would be needed to satisfy those interests, and to imagine how these could be generated through interviews. It amounted to different kinds or aspects of CTPs that we could ask interviewees about. Yet in the end we concluded that the categories were hard to work with when filling in such observation matrices, that database entries would therefore be difficult to harmonize, and that the meta-analysis eventually would suffer from subtle yet important inconsistencies in the data entries[12]. Other considerations were that the observation matrix would excessively force interviewees' accounts into pre-fabricated categories (i.e. it was considered that the interviews and the data entries should have a much more open structure), and that it left much of our research interests unsatisfied[13]. These considerations indicate the need to come up with clear ideas of what data we need and what we think that can reasonably be gathered. *What inputs do we need for the desired outputs? What research activities would be needed for this? What kinds and amounts of data can we reasonably expect to be gathered? What should the files on CTPs contain?*

These questions can be addressed best when considering all the listed research interests together. After all, we also need to take into account how it all adds up: We should avoid winding up with gigantic files, overly lengthy interviews, incomplete or only very superficially written CTP files, or a number of CTPs that is too low to justify database construction. Another aspect to consider is the form in which the inputs could be provided. For database structuring it will be important whether they could be counted or expressed ordinally, for example, or whther they would require extensive quotations or summarized researcher interpretations. It is also worthwhile considering if they offer opportunities for visualization, or could be linked to related literature, video or audio files available in the TRANSIT Resource Hub. Furthermore, we need to consider to what extent they can be elaborated into interview questions that can be answered easily *for any kind* of SI initiative, and within limited time.

Knowledge interests/ intended outputs	**Needed data inputs**
CTP as **moments in time**	CTPs marked with (estimate) dates.
CTP as **experiences**	Telling quotations in texts, possibly videos[14] or audio podcasts. Accounts of CTPs as they were experienced (or overlooked) at the time, and as they are reconstructed in hindsight.

[12] Cf. Comments Jens Dorland 22/06/2015. This also a challenge underlined by Bouchard & Trudelle (2013).

[13] Comments Rene Kemp 23/06/2015.

[14] See for example the videos of social innovation actors made for the Congres Interdisciplinaire de Developpement Durable conference (May 2015), recorded in the areas where they're working. https://www.youtube.com/watch?v=woT8DqWrKBE at about 22:40.

	Interviewees' accounts, researchers' interpretations clearly separated in layered or otherwise composite CTP files.
CTPs as **co-produced events**	Actor map, or map of the constellation of actors and processes through which CTPs were co-produced. Ideally through standardized format. Tags for the occurrence (involvement) of certain categories of co-producing actors and processes (e.g. certain pre-defined game-changers, types of organizations, etc.)
CTPs as **moments in network formation**	Self-organization, Interaction and Clustering covered by interview questions.
CTPs as **interrelated changes in DOFK**	DOFK dimensions covered through/taken into account with interview questions. DOFK as characteristics/tags of CTPs.
CTPs as **ambiguous moments**	Accounts of both negative and positive CTPs.
CTPs as **moments with consequences**	Background documentations to substantiate consequences, counterfactuals[15] (respondents' accounts of what would have happened otherwise).
CTPs as **triggered or gestating moments in time**	Related (e.g. building up towards CTP) events in time, marked with estimate dates.
CTP as **contextual phenomenon**	CTPs marked with countries, geo-locations, 'SI field' category.
CTP as **uniquely identified**	Name interviewee, name initiative, relation interviewee to initiative, date of interview, name interviewer.
CTP as **quantified phenomenon**	Yes/No answers to interview questions, CTP properties that occur Y/N

Figure 4.2 – Desired outputs/knowledge interests and needed inputs

4.4 Database operations

Having considered what CTP data is needed and arguably possible to gather, it becomes in turn easier to specify the kind of database operations that we would like the CTP reporistory to fulfil.

Considering the desired outputs and the envisoned inputs, what operations should the database be able to perform? What properties and 'tags' should theCTP database entries be provided with?

These questions are answerd by taking stock of the various inputs envisioned under 4.3. There are various tags or labels through which we want to be able to find and associate CTPs, for example. Furthermore there are various topics that we deem interesting, and which should searchable in the text files as well. But besides these queries in texts, there are also ideas forother than textual database outputs: Timelines, as visualizations of the processes in which CTPs are the key moments, but also network graphs of the forces that produced the CTP, or basic calculations on the frequency with which certain CTP characteristics occur.

Knowledge	Data inputs	Database operations

[15] Comments Rene Kemp 23/06/2015

interests/ intended outputs		
CTP as **moments in time**	*time markers with (estimate) dates.	*Automatic timeline generation * Graphic interface
CTP as **experiences**	*Telling quotations (texts) *possibly videos[16] *audio podcasts. *layered/segmented entries: 1. Interviewees' accounts, 2. researchers' interpretations	* Text search * Linkage to TRANSIT Resource Hub/ *queries for interviewees accounts, researcher interpretations, background infomations
CTPs as **co-produced events**	*Actor graph of actors and processes through which CTPs were co-produced. Ideally through standardized format. *Tags for the occurrence of certain categories of co-producing actors and processes	* Automatic network graph generation * Graphic interface * Queries for categories of co-producing actors and processes * Or queries for PDFs of maps
CTPs as **moments in network formation**	* tags pertaining to Self-organization, Interaction and Clustering	* queries pertaining to Self-organization, Interaction and Clustering
CTPs as **interrelated changes in DOFK**	* DOFK as tags of CTPs.	* queries on Doing, Organizing, Framing and Knowing dimensions of CTPs
CTPs as **ambiguous moments**	*tags for 'negative' and 'positive' CTPs, e.g. 'crisis'/'breakthrough'	
CTPs as **moments with consequences**	*Background documentations, *counterfactuals[17] (respondents' accounts of what would have happened otherwise).	* queries for CTP counterfactuals
CTPs as **triggered or gestating moments in time**	*Related (e.g. building up towards CTP) events in time, marked with estimate dates.	*Automatic timeline generation * Graphic interface
CTP as **contextual phenomenon**	*tags for countries, geo-locations, 'SI field' category	*queries for countries, geo-locations, 'SI field' category
CTP as **uniquely identified**	*Name interviewee *name SI initiative *relation interviewee to initiative *date of interview.	*queries for SI initiatives
CTP as quantified	* CTP property occurring Y/N	* statistics on CTP properties

[16] See for example the videos of social innovation actors made for the Congres Interdisciplinaire de Developpement Durable conference (May 2015), recorded in the areas where they're working. https://www.youtube.com/watch?v=woT8DqWrKBE at about 22:40

[17] Comments Rene Kemp 23/06/2015

		(basic Excel operations)

Figure 4.3 – Knowledge interests, data inputs and needed database operations

As said, the above table of interests, data inputs and needed database operations is to a certain degree only a wish list. It needs to be specified further which of the items are absolute requirements, which are highly desirable, and which are desires that just cannot be satisfied.

This selection will be an iterative process, in which the wishes will be checked against and balanced with on the one hand the technical constraints of database structure, and on the other hand with the practical possibilities for investigating CTPs.

The first have been explored on a fairly general level (Cf. 3.4), and discussed with a database developer in an orientation meeting (Cf. Zuiderwijk et al. 2015). This has led to the conclusion that the described wishes are not very demanding each of them separately, but crucially should not be adding up in a structure of database relations that will become too complex in the end.

The second source of constraint, the practical possibilities for investigating CTPs, has been considered more thoroughly. The earlier 'observation matrix' (Cf. Pel et al. 2015, D5.1) has been tested and thought through for its practical implications, for example. This had led us to discard it as format for empirical investigation. Instead, we have distinguished knowledge interests, the associated data to be gathered, and the kinds of operations that could be performed on them. All of this was done whilst keeping in mind how this would translate in activities for TRANSIT empirical researchers. The organization of the empirical research is described separately in Chapter 6. After consultation with the researchers involved, i.e. the whole TRANSIT consortium, this chapter will be updated into final research guidelines, and disseminated by end of August 2015 ultimately.

5 Database Requirements

As described in Chapter 3, the CTP data repository has several aims to fulfil. Chapter 4, clarifying the so important relations with what we want to know and what data we can reasonably gather as researchers, has brought forward further requirements. In this chapter we summarize the various considerations, and express them as concretely as possible as required and desired functionalities. Next to these research-related and practice-related user requirements, there are also other side constraints and requirements to take into account. Listing those, we develop the terms of reference for a party to contract for the actual database construction (see also Zuiderwijk 2015). That construction will take place in July/August 2015.

Requirements and desired functionalities from research point of view.

- Automatic timeline generation
- Graphic interface for timelines
- Text search
- Linkage to TRANSIT Resource Hub
- Automatic network graph generation
- Graphic interface for network graphs
- Queries on various CTP properties (Cf. table 4.3)
- Statistics on CTP properties (basic Excel operations)

Requirements and desired functionalities from practice point of view.

- overview of the characteristics of the listed SI-initiatives and networks
- overview of the relations between different CTPs across SI-initiatives and networks
- text-based search through the listed SI-initiatives and networks
- browsing function through listed SI-initiatives and networks via 'clicking' the relations
- comment function for making comments and sharing experiences
- listing of contact details of TRANSIT-researchers (via website) and actors involved with CTPs in the database (as far as available and disclosure is consented to).
- privacy/publicity of research data settled; should be as open as possible
- ease-of-use
- invitation to reflect, and consider different viewpoints on SI reality
- linkages to scientific work (as in Resource Hub) as deepening background to the CTPs

- guide to CTP deployment (what can be done with it)

Other requirements and desired functionalities

- Stay within budget (including maintenance/support)
- Maintain TRANSIT visual identity
- Allow for transferability/guarantee reasonable degree of independence from contracted party's content management systems
- Adhere to general (scientific) data management principles (Cf. Browne 2015)
- Collaboration and exchange(there are database initiatives in development with whom to join forces , or on whose experience to build)

6 Researching CTPs

6.1 Introduction: preparing the field work

The preparation and subsequent construction of the CTP database are obviously crucial activities for the WP5 team. By contrast, for the broader group of TRANSIT researchers it is of great importance to have an overview of the research activities they will be required to do. The D5.1 document has sketched early outlines of those, and explained the CTP concept as pertinent meta-analysis focus. Chapter 4 has specified further how the CTP repository will be developed.

This chapter focuses exclusively on the field work activities to be conducted by the whole consortium. This involves first a timeline and a general description of how the WP5 research process will be conducted and organized **(6.2)**. Next, we outline how CTPs can be recorded through interviews with representatives from SI initiatives. As the results from our CTP interviews cannot be integrally inserted into the database, this will also require that the list of questions is supplemented with a template for the eventual database entries **(6.3)**. Finally, it is exposed which kinds of respondents are to be recruited, and how we can ensure participation. Taking into account the research time available to us, this helps us estimate the numbers of CTP observations we could gather for meta-analysis, and the numbers that each of us are required to achieve **(6.4)**.

6.2 Organisation of research process

For a general planning of the research process we can use the overview of table 2.2, selecting the activities to be done by (or directly relevant for) WP5 empirical researchers.

Time	Activity	Researchers involved
August 2015	Establish final research guidelines	WP5 team
August 2015	Establish CTP 'brochure'	WP5 team
Sept. 2015	Selection first CTP respondents	researchers
Sept. 2015	Guidance research planning	WP5 guidance team/researchers
Sept./Oct. 2015	Approach interviewees	researchers
Sept./Oct. 2015	Entry CTP examples	WP5 team
Nov. 2015	Skype first CTP entries	WP5 guidance team/researchers
Jan./Feb. 2016	Communication database progress	WP5 guidance team
May 2016	Database populated	researchers
June 2016	Deliver D5.3	WP5 team

Figure 6.1 WP5 data gathering timeline

This translates into a research process that runs as follows:

Establish final research guidelines. By the end of August all researchers receive final research guidelines. We will have had our consultation Skype calls or mail exchanges over it; the best way to

ensure that all researchers are confident about doing the research. The WP5 team will also have fine-tuned the best way to enter our CTP observations into the database. Similar to the WP4 case guidelines, those guidelines will specify a template, list of questions, key words and their meanings, and explain the procedures for inserting files into the database. The research process could start by considering one's batch I case study, or other SI initiatives one has become acquainted with, and identify whether and how they fit the described population of CTP interviewees (see sections 6.3-6.4). It shouldn't be difficult to identify a few suitable initiatives and interviewees (see 6.4 for estimate numbers). Probably we even have CTPs (as described in guidelines) in mind that they seem to have undergone: We won't populate the database with our ideas about apparent CTPs – that would distort the recording of CTP experiences - but we can use these ideas to approach particular respondents.

Establish CTP 'brochure'. Meanwhile, a CTP 'brochure' will have been developed. This will help to explain the concept of our database initiative, and important issues such as disclosure of data and ways to deploy it and interact, to acquainted SI initiatives and interviewees. The brochure will help to create enthusiasm, and interest in results. It will also outline the good reasons we have for 'coming back' to certain initiatives and respondents: The database is a knowledge infrastructure serving not only the researchers themselves (see Ch3.), and the CTP questioning can be considered a reflective tool[18] . Moreover, the CTP questions are really different from the WP4 questions, and they zoom in on some particular aspects of TSI processes. As such, CTP interviews can be a step in a more sustained engagement with (individuals from) SI local initiatives.

Selection first CTP respondents. The targeted population for CTP interviews is described in 6.4. After orientation on suitable respondents and local initiatives, either already known or after broader orientation, a list of suitable initiatives and respondents can be submitted to the WP5 guidance team. The list will be discussed per Skype/e-mail, also considering how the list could be expanded (through batch II case contacts which we will have developed by then, but also through any other SI local initiative that fits the basic description and that seems interesting and accessible).

Guidance research planning. Meanwhile, WP4 second batch case studies will be in full swing for most of us. It is important to realize that these empirical research activities roughly coincide in time and have some interrelations, but they are really separate activities. They focus on different TSI aspects, they involve different and quite substantial lists of questions that really can't be dealt with within one singular interview, and they work towards different end results and deliverables. For these reasons they need to be considered as separate activities. The WP5 guidance team and

[18] The interview as a reflective tool (Adina Dumitru).The CTP perspective allows for a reflection on the factors influencing the development of a social innovation initiative, as well as a reflection on the personal involvement of respondents with it. Research on the initiatives in the first batch of case studies has provided us with first insights into motivations to join social innovation initiatives (e.g. finding a space of freedom, making a difference, having a more meaningful life etc.) and it is to be expected that the social innovation pathways are interlinked with personal and collective transformation pathways. The evaluation of CTPs –to SI initiatives but also to individuals within those- will likely generate an opportunity for reflection and reconstruction of experience which could, in itself, be a useful learning tool. Interviews relying on methods such as life histories (Portelli, 2012), have proven to be interesting reflection tools for respondents. They have the chance to approach their own experience from a different perspective and thus reconstruct events from an angle that has not been used before. This reconstruction thus becomes both a way of accessing interesting information on critical turning points, but it is also a co-creation of social innovation trajectories. We could evaluate and further develop this reflection capacity through ur social learning cross-cutting theme, and our communication and engagement activities (WP6).

researchers can jointly discuss how to organize the two streams of empirical research:How to sequence them in time, or how to arrive at efficient ways to arrange both the WP4 and the WP5 interviews.. The WP4 and WP5 teams will also discuss the coordination between these streams of empirical research. We cannot establish a generic planning that fits all, but the WP5 team can assist inmaking a planning per institute.

Approach interviewees. As always, the first interview of a research process is an exciting one. We still need to get to grips with the questions and modus operandi. Better make sure to start by approaching relatively sure-fire interviewees, i.e. interviewees who are particularly cooperative, interested and apparently having some CTP experiences to share. This helps to get a feeling for the interviewing procedure.

Entry CTP examples. Meanwhile, WP5 team will have provided examples of the templates to be filled in[19]. This gives a start to the database-population, and serves as an example of how to fill in the template. By this time we should all be able to do our first CTP interviews, and process them into database entries.

Skype first CTP entries. The first entries (filled in templates) for the database will be submitted to WP5 lead ULB. They will be gatekeepers for the database, making sure that we end up with comparable, harmonized accounts of CTPs. The first entries will be important to discuss; later entries could do without this.

Communication database progress. All empirical researchers will have their targets and duties, but also hopefully a certain commitment to populating the database with interesting and numerous CTP accounts. The WP5 guidance team will come up with regular updates on how we're progressing – also highlighting what we can find in our joint knowledge repository, and how we can use it (e.g. for joint publications, or for dissemination of research more broadly). The drafting of respondents will arguably become easier once we have more results to show online.

Database populated. Once we get past the more difficult task of achieving the first database entries, it will become easier to provide the next ones. As second batch case studies proceed, these will also become easier to 'mine' for CTPs. Meanwhile, the WP5 guidance team will be checking by early 2016 to what extent we are on course towards achieving a decent number of database entries. Where needed they will arrange talks with researchers to plan the last phase of the research towards the crucial milestone, namely the populated database.

Deliver D5.3. The milestone of a populated database is a joint responsibility of us all, yet the WP5 team makes sure to produce the deliverable D5.3 to report on it. This will also involve checking and possibly adapting the database entries. The WP5 lead partner ULB is responsible for harmonized CTP entries, and quality control.

[19] These examples will also have been used for testing purposes during database construction.

6.3 CTP interview Questions

The focus on CTP experiences implies data gathering by interviews, either face-to-face or by telephone. The list of interview questions is therefore a most important part of the meta-analysis set-up. This is even more the case than for the WP4 case studies, as the data gathering needs to be harmonized (Cf. Bouchard & Trudelle 2013). From the reflections on our first batch case studies we know already that such harmonization is not easy to achieve (Jørgensen et al. 2015). On the other hand we also need to realize that we should not 'colour' the data in any way, influence the words interviewees use to describe their initiative, or create analytical straightjackets that prevent us from recording rich CTP experiences. So questions need to be specific to ensure harmonized and focused data gathering, yet they also have to be sufficiently open. Finally, we need to keep in mind that we are aiming for a certain *quantity* of CTP observations – initially we strived for 10x20=200 'survey' observations, for example. Without a certain quantity it would also hardly make sense to build a database. Furthermore, it is desirable to have interviewees talk about several CTPs in the history of an SI initiative, so that we can develop timelines that contain multiple events (i.e. patterned processes).

All of this means that we cannot simply be asking directly for the 'knowledge interests' and 'needed data inputs' that we identified in Chapter 4. We'll need to satisfy those wishes through focused yet not overly directive questions. We also need to make sure that our list of questions remains concise: There are limits to the number of topics that can discussed in an interview, especially if it's per telephone. Moreover, we might try to discuss more than 1 CTP within one interview session, taking for example 20 minutes per CTP.

The table below thus serves as a checklist for the fine-tuning of such concise question list. It indicates not only what we want to know about and what kind of data we want to gather to enter into the database, but also the implications this has for our CTP interviewing.

Knowledge interests/intended outputs	**Needed data inputs**	**Questions**
CTP as **moments in time**	CTPs marked with (estimate) dates.	Essential to ask for events in time
CTP as **experiences**	Telling quotations in texts, possibly videos or audio podcasts. Accounts of CTPs as they were experienced (or overlooked) at the time, and as they are reconstructed in hindsight. Interviewees' accounts, researchers' interpretations clearly separated in layered or otherwise composite CTP files.	Instruction for way of formulation, ; not topic of questions
CTPs as **co-produced events**	Actor map, or map of the constellation of actors and processes through which CTPs were co-produced. Ideally through standardized format. Tags for the occurrence (involvement) of certain categories of co-producing actors and processes (e.g. certain pre-defined game-changers,	Essential to cover in question list

	types of organizations, etc.)	
CTPs as **moments in network formation**	Self-organization, Interaction and Clustering covered by interview questions.	Could structure the list of questions
CTPs as **interrelated changes in DOFK**	DOFK dimensions covered through/taken into account with interview questions. DOFK as characteristics/tags of CTPs.	To keep in mind; not distinctions in questions
CTPs as **ambiguous moments**	Accounts of both Negative and positive CTPs,	To keep in mind
CTPs as **moments with consequences**	Background documentations to substantiate consequences, counterfactuals (respondents' accounts of what would have happened otherwise).	Optional
CTPs as **triggered or gestating moments in time**	Related (e.g. building up towards CTP) events in time, marked with estimate dates.	Essential to ask for events in time
CTP as **contextual phenomenon**	CTPs marked with countries, geo-locations, 'SI field' category	Matter of data entry
CTP as **uniquely identified**	Name interviewee, name initiative, relation interviewee to initiative, date of interview.	Matter of data entry
CTP **as quantified**	Occurrences Y/N of CTP properties	Matter of data entry

Figure 6.2 – Knowledge interests, corresponding data inputs and interview questions

Through the above considerations, and also based on attempts to operationalize the earlier 'CTP observation matrix' into guidelines for empirical research[20], we have arrived at the following approach to the interviews.

Interviews on CTPs are preceded by –email or phone contact to identify 3 CTPs beforehand. The types of questions we want to address require a direct contact with the interviewee (per Skype if face-to-face meetings are not possible). We need preceding contacts with practitioners to make sure that we make the best out of the 1-1,5 hour generally available for an interview. As CTPs are experienced moments in time, some of which might not have been acknowledged when they happened, interviewees need some reconstruction, some retrospective, to identify them. By going directly into the interview, we would run the risk of interviewees having to improvise a discourse on critical turning points on the spot – leaving us with confused/embarrassed interviewees and somewhat artificial information. Respondents may have previously reflected on CTPS, but we don't know for sure. We should avoid a 'social desirability effect' by which respondents improvise fast answers in order to give the researcher what he/she wants or, on the contrary, to elude answering for lack of time to reflect on the topics. So we need a procedure for contacting the interviewees in advance. We should send them a brief presentation of our aims will be sent to them (a CTP

[20] Jens Dorland and Michael Jørgensen have considered how that analytical framework could be applied to their batch I cases, and what interview questions could help to gather the data. A similar 'test drive' will be done again before establishing finaol guidelines by end August 2015.

brochure, as indicated in WP5 timeline), together with the questions we will be addressing during the interview. We will ask them to personally reflect on the questions before the interview, and to identify a series of critical turning points that they experienced as members of a specific SI initiative. We think that 3 CTPs would be a suitable number of CTPs to ask. The subsequent interview could then address them one by one separately: A 3-fold mini-interview, with everytime the same basic questions. Assuming a total interview length of 1 to 1,5 hours, this implies some 20-30 minutes for each CTP mini-interview – within which the CTPs can be detailed to quite some degree.

The introductory question would be the following: **Looking back at your initiative's history, have there been any critical turning points in terms of its mission, its activities and the strategies used?** By a critical turning point we mean a decisive change, leading the initiative in a new direction. Without the critical turning point they would have continued doing the same activities or would have kept pursueing them in the same ways. A CTP can be a positive breakthrough or a negative event (i.e., also something which they wished they would not have done). Examples of CTPs are a change in mission, the introduction of impact monitoring**,** a change of strategy, a new partnership with joined-up actions**,** an 'Aha-Erlebnis' after which one sees one's own activities in a new light, a turn towards or away from market-oriented activities, or a decision to become politically active.

Assuming that there are several CTPexperiences that respondents can identify, and that seems a reasonable assumption provided we explain the concept well, we will ask the respondents to select the 3 most important ones. These form the basis for the subsequent interview, in which we raise the same questions to respond for each CTP at a time.

Preparation of interview: It is important that researchers have at least some background information on the evolution of the networks and the key events that might have influenced their development. Although this knowledge does not need to be exhaustive, interviews can be more fruitful when the researcher has done some desk research (possibly already done through batch I or II case study), and can meaningfully relate to what the interviewees are reporting. Without being able to relate them to any contextual elements, we run the risk of spending a significant part of the interview on asking clarification questions.

List of Questions: They can be summarized as addressing the topics of 1)contents of CTP; 2)its co-production; 3)its possible gestation period and position in more envompassing timeline; 4) its experienced tensions and politics; 5) its uncertainties; 6) its instructive value and relevance to present TSI activities. The list is based on the assumption of approximately 30 minutes interview time, with interviewee being prepared for these questions/topics. It is also meant to be a generic question list, covering all kinds of CTPs[21] – i.e. about more 'internal' and more 'external' CTPs, and about self-organization and interaction and clustering-oriented CTPs.

1. **What did this CTP consist of, and when (at what date or in which period) did it it happen? In what way did it constitute a CTP, and in what way was it not a CTP (what things did not change)? What would have happened in the absence of the CTP?**

[21] The instructions for respondents to identify CTPs will remind them that there are various kinds of CTPs. We could ask them explicitly to try to identify three CTPs that are quite different from each other.

2. **What particular events/people/developments/circumstances/conditions/spatial environment sparked the CTP?**
3. **What earlier events, from within or coming from outside, were crucial to the CTP to happen and when (at what date or in which period) did they occur? Which later events were evoked by the CTP and when (at what date or in which period) did they happen?**
4. **Was the CTP associated with conflicts and opposition? How strong was the opposition and why were some people (internally and/or externally) opposed to it? How was the contestation overcome? Did people who were opposed leave the initiative?**
5. **Was the CTP understood/recognised as critical at the time when it occurred or is it an understanding that developed later? Had the events/people/etc. that evoked it been foreseen or anticipated?**
6. **What are the change ambitions of your initiative, and how did the CTP make a positive or negative contribution towards achieving those? If you were to draw a lesson about this CTP, what would this be? How does it relate to the current challenges of your initiative?**

Arguably, the above questions cover a great deal of our knowledge interests. As most of them are formulated in a fairly open way and invite extensive stories and narratives rather than Yes/No answers, the answers cannot be directly entered into the database. In the process of database configuration (July-August 2015) we will therefore establish a file format or template to be filled in. This will be a standardized and quite condensed file to be filled in on the basis of more extensive interview transcripts. Testing with some example cases from own research experience, we will also consider the options of gathering both extensive empirical accounts as well as concise 'citations'.

6.4 CTP population: selection, recruitment and time allocation

As indicated, the quantity of CTP observations is important. The interviewing is therefore organized to gather several CTP observations within one interview. More generally, it is important to define our population of interviewees, and to estimate the numbers of CTP observations that can reasonably be gathered within the research time available.

A first step in defining the population has been the decision that the population of interviewees is restricted to representatives of 'local SI initiatives' as defined in Haxeltine et al. (2015). These are relatively closer to the action and the practice of TSI than the transnational SI networks, and they make up a large and sufficiently homogeneous set. The transnational networks are organizations of a somewhat different kind. This choice the focus on SI local initiatives has the advantage that the population of potential respondents is therewith really large. Researchers will have considerable choice about which contacts they deem promising to build on and develop. The foreseeable problems of non-response and 'survey-fatigue' (Pel et al. 2015, Ch.6) can thus be avoided or at least contained. More generally, this allows for considerable flexibility and freedom in setting up one's research activities.

Still, a second step in defining the population has been a consideration of the sub-set of SI initiatives to include in the research. Researcher freedom is a good thing, but we should not forget to consider how all individual choices add up. Similar to the set-up of WP4 we would like to have a certain spread over countries (and the 'welfare contexts' these represent), and over certain kinds of SI initiatives. The easiest way to ensure this diversity is by building on the systematic case selection we did for WP4, i.e. by taking the 12+8 SI initiatives we selected for batch I and II cases as the primary population from which to recruit. Similar to what was sketched in the earlier WP5 'survey' set-up, we can recruit local initiatives in a greater diversity of countries (e.g. Credit Unions not only in Spain and in the UK, but also in other countries). Apart from that international expansion, we can consider other local initiatives in the same country (there can be others next to the one focused on in WP4 case study). Finally, SI local initiatives could be recruited from the large set of cases that were candidated for batch II, yet did not make it to the final 8.

So there are three main groups from which respondents can be recruited for CTP interviews, and they should be considered in the following ranking order:

1. **Batch I cases.** Researchers can build on earlier established and often ongoing contacts with these initiatives. As these cases are known to a certain extent already, researchers are likely in the position to follow up on earlier ideas about the occurrence of interesting CTPs. They will have the background information that helps to be an interested, informed and responsive interviewer. They are also likely to know already which interviewees are in the position, and willing, to allow us to record their CTPs.
2. **Batch II cases.** That WP4 research process involves establishing contacts with initiatives and recruitment of interviewees, a process that starts in July 2015 already. The recruitment can therefore be combined/coordinated, as researchers will come across leads similar to those gained in batch I case study.
3. **Other SI initiatives.** Of course these need to meet the same basic description of SI initiatives and repondents, for the sake of harmonized data collection. Researchers are quite likely to have encountered other SI initiatives in the course of their research than those selected for Batch I and II case studies. These may not have been included in these case studies for the need to focus on two initiatives per SI transnational network, or due to time constraints. The CTP research actually provides a possibility to follow up on these abandoned 'leads' of case study.

A third step in defining the population has been the consideration of *representation* of SI local initiatives. This choice is important as we gather CTP *experiences*, and people have different subjective experiences of certain events. Earlier on we therefore envisioned the triangulation of observations: including accounts of actors who seemed to have been co-producing certain CTPs. However, this will probably yield too little added value for the considerable extra research time needed to generate a CTP observation[22]. Instead, a small set of different, well-chosen representatives of SI initiatives could still provide some of the nuance and different perspectives on CTPs aimed for[23] . For example, we could select a person in a leading position who has been

[22] We would be approaching actors to talk about events identified as CTP *by other actors*, and these events might not be that meaningful or 'critical' to them. In other words, this triangulation effort could easily end up wasting time of respondents. – and would have us generating a little quantity of CTP observations.

[23] Even if this does introduce a certain 'insider bias' in our CTP data gathering. That's a methodological choice we have to be aware of and open about.

around for a while, and a relative newcomer. Interviewees who have held champion roles within the network, or have been members from the beginning, are likely to have developed a network-shared and public discourse on CTPs. This is useful, but should be differentiated from a more personal (and potentially private – in the sense of not co-constructed with other network members) view and experience of CTPs.
In any case, the type of interviewee should be identified in the database, through categories of 'roles' and maybe also of 'length of membership'.

Estimates of quantities

Finally, it needs to be considered how all the previous choices add up. We have certain things we want to know about CTPs (Cf. list of questions), we envision that these can be recorded in 20-30 minutes mini-interviews (following the preparation procedure of respondents identifying 3 CTPs beforehand), and we strive to cover a diversity of SI local initiatives. This combined with the research time allotted to all of us, the total number of CTP observations that can reasonably be made can be estimated as follows.

The research will be divided over **12 institutes**, all of them involved in batch I or batch II case studies and therefore able to build on at least some established contacts and knowledge on the initiatives.

The research will comprise around **4 SI local initiatives** per institute (preferably not all in the same country).

The research will be based on interviews with SI initiative representatives that together generate around **6 CTP observations** (files to be entered into the database) per SI local initiative.

These conservatively estimated numbers together yield **288 CTP observations**, which can be considered a satisfactory quantity[24]. This estimate number is useful to keep in mind in the process of database construction, and in anticipating the eventual meta-analysis process.

Meanwhile, there are of course different ways of arriving at the (on average[25]) **24 CTP observations per institute**. The actual achievement of these estimate numbers will of course be monitored underway, and we should evaluate the first experiences with the interviewing. Individual institutes and the WP5 guidance team may also together arrive at tailored solutions towards achieving their share in CTP observations.

[24] Compared to the N=200 envisioned earlier for the WP5 'survey'.

[25] The target numbers for individual institutes will of course also be in accordance with the different amounts of person-months available to each institute (see below).

Person-Months per Participant		
Participant number [10]	Participant short name [11]	Person-months per participant
1	DRIFT	9.00
2	UM	11.00
3	UEA	5.00
4	UOS	9.00
5	ULB	17.00
6	AAU	12.00
7	UNQ	9.00
8	COPPETEC	9.00
9	BOKU	5.00
10	UDC	11.00
11	ESSRG Kft.	9.00
12	IHS	10.00

Reference List

Bouchard, M.J. & Trudelle, C. (2013), Exploring the conceptual universe of social innovation: A relational database for a better understanding of its effects on social transformation, Social Frontiers, the next edge of social innovation research

Bosschart, E., Peeters, K., van der Heijden, J. & Biemans, A. (2015), SEiSMiC-project Social Innovation Acceleration in Cities (SIAC), Starting Paper

Browne, N. (2015a), Initial observations on the context of and functional requirements for the TRANSIT CTP Repository 28/05/2015

Browne, N. (2015b), Other Social Innovation Databases, memo 25/06/2015

Capoccia, G. & Kelemen, R. D. (2007), The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism, World Politics, 59 (3), 341-369

Digital Social Innovations (2015), http://digitalsocial.eu/

Drawdown (2015), http://www.drawdown.org/

Guérard, S. , Bode, C. & Gustafsson, R. (2015), Turning Point Mechanisms in a Dualistic Process Model of Institutional Emergence: The Case of the Diesel Particulate Filter in Germany, Organization Studies 34(5-6) 781 –822

Haxeltine, A., Kemp, R., Dumitru, A., Avelino, F., Pel, B. & Wittmayer, J. (2015), TRANSIT WP3 deliverable D3.2 – 'A first prototype of TSI theory'.

Nowotny, H., Scott, P. and Gibbons, M. (2001) Rethinking science: knowledge and the public in an age of uncertainty. Cambridge, Polity.

Nussbaumer, J. and Moulaert, F. (2007), 'L'innovation sociale au cœur des débats publics et scientifiques', in Klein, J. L. and Harrisson, D. (eds), L'innovation sociale: Émergence et effets sur la transformation des sociétés, Montreal: Presses de l'Université du Québec, pp. 71–88.

Olivotto, V., & Zuijderwijk, L. Re-thinking communication & dissemination strategies: Towards practices of engagement & co-production in TRANSIT [Abstract accepted]. 11th International Conference of the European Society for Ecological Economics (ESEE), 3 July 2015, Leeds, UK.

Pel, B, Bauler, T., Kemp, R., Wittmayer, J., Avelino, F. & Dorland, J. (2015), From research design to meta-analysis guidelines, TRANSIT deliverable D5.1

Pel, B. & Bauler, T. (2015), Charting novelty or inventing realities? Framing aporias of social innovation research, paper for the Interpretive Policy Analysis conference, Lille (FRA) 8-10 July 2015

Resilience Alliance (2015), Thresholds database, http://www.resalliance.org/index.php/thresholds_database

Rydin, Y. (2007) Re-examining the Role of Knowledge Within Planning Theory. Planning Theory, 6: 52

Schmale, J et al (2013) Co-designing Usable Knowledge with Stakeholders and Fostering Ownership – A Pathway through the communication problem? Impacts World 2013, International Conference on Climate Change Effects, Potsdam, May 27-30

SI-DRIVE (2015), http://www.si-drive.eu/?page_id=15

SIX (2015), http://www.socialinnovationexchange.org/home

Social Innovator (2015), http://www.socialinnovator.info

Star, S. L. (2010). This is not a boundary object: Reflections on the origin of a concept. Science, Technology & Human Values, 35(5), 601-617.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology,translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39, Social studies of science, 19(3), 387-420.

Strasser, T. & Kemp, R. (2015), Overview of Social Innovation Databases, 19/05/2015

TEPSIE (2015), www.siresearch.eu

Voorberg, W. et al (2013) Co-creation and Co-production in Social Innovation: A Systematic Review and Future Research Agenda, Paper presented at the EGPA – Conference, Edinburgh 11 – 13 September 2013

Walker, B. & Meyers, J.A. (2004). Thresholds in ecological and social–ecological systems: a developing database, Ecology and Society 9(2): 3. [online] URL: http://www.ecologyandsociety.org/vol9/iss2/art3

Wittmayer, J.M. & N. Schäpke (2014) Action, Research and Participation: Roles of Researchers in Sustainability Transitions. Sustainability Science. 9 (4): 483-496.

Zuijderwijk, L. (eds.), Becerra, L., Juarez, P., Olivotto, V., Wittmayer, J. (2014), Part I: Towards Developing a 'Toolbox' and 'Training Programmes' in TRANSIT. TRANSIT Deliverable 6.3, TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169

Zuijderwijk, L., Pel, B. & Browne, N. (2015), Notes from database configuration meeting 18/06/2015