

# **SISCODE CO-DESIGN FOR SOCIETY IN INNOVATION AND SCIENCE**

## **DELIVERABLE 2.1: SISCODE KNOWLEDGE BASE**



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## Table of Contents

Executive Summary .....	6
1. Introduction .....	7
2. Approach to creating the database.....	9
2.1. Theoretical approach.....	9
2.2. Case selection and data collection.....	11
2.3. Rationale of the survey .....	12
3. Stocktaking of practices of co-creation in SISCODE .....	14
3.1. Basic Information: The sample.....	14
3.2. Contexts I: The diversity of co-creation .....	17
3.3. Contexts II: Networks and partnerships.....	20
3.4. The process of co-creation .....	22
3.4.1. Stakeholders and their engagement.....	22
3.4.2. Tools & Methodology .....	25
3.4.3. Stages of co-creation .....	28
3.5. About the experiences.....	29
3.5.1. Barriers and mismatches in the co-creation process .....	30
3.5.2. Lessons learned.....	31
3.5.3. Diversity aspects in co-creation .....	34
4. Discussion: Entry points for case studies and beyond .....	36
5. References.....	39

## List of figures

FIGURE 1 BASIC CHARACTERISTICS OF THE SAMPLE .....	8
FIGURE 2 TEMPORAL DISTRIBUTION OF THE DATA-COLLECTION PROCESS .....	12
FIGURE 3 WHAT DESCRIBES THE CO-CREATION CASE THE MOST? .....	19
FIGURE 4 TYPE OF SUPPORT FROM PARTNER ORGANIZATIONS.....	21
FIGURE 5 NUMBER OF SECTORS INVOLVED (ACADEMIA, CIVIL SOCIETY, PUBLIC AND PRIVATE) .....	25
FIGURE 6 DID THE CASE REACH THE PHASE OF FEEDBACK/ RESTART?.....	29

## List of tables

TABLE 1 CASE SELECTION PLAN .....	11
TABLE 2 TEMPORAL SEQUENCE WP2 .....	11
TABLE 3 RATIONALE OF THE SURVEY .....	13
TABLE 4 TIMELY LIMITED PROJECT CHARACTER OR NOT .....	14
TABLE 5 FOCUS ON RRI, POLICY MAKING, BOTH OR NONE .....	15
TABLE 6 NUMBER OF COUNTRIES, THE CASE IS ASSOCIATED WITH.....	15
TABLE 7 INITIATING PERSONS OR ENTITIES .....	16
TABLE 8 DRIVERS TO UNFOLD POTENTIAL.....	17
TABLE 9 FIRST MOTIVATION .....	18
TABLE 10 SCOPE OF THE CASES .....	19
TABLE 11 NUMBER OF PARTNER ORGANIZATIONS.....	20
TABLE 12 STRUCTURAL BARRIERS ENCOUNTERED .....	21
TABLE 13 STAKEHOLDERS INVOLVED IN THE CO-CREATION ACTIVITY .....	23
TABLE 14 CIVIL SOCIETY SPECIFICATION.....	24
TABLE 15 TYPE OF SECTORS INVOLVED IN THE CO-CREATION ACTIVITY .....	25
TABLE 16 FORMS OF INVITATION .....	26
TABLE 17 TOOLS AND TECHNIQUES TO UNDERSTAND USERS.....	27
TABLE 18 CO-CREATION IN THE DIFFERENT PHASES .....	28
TABLE 19 BARRIERS IN THE PROCESS OF CO-CREATION.....	30
TABLE 20 MISMATCHES IN CARRYING OUT THE CO-CREATION ACTIVITY.....	31
TABLE 21 LESSONS LEARNED IN THE PROCESS .....	33

## Executive Summary

Amongst the main findings, able to describe the practices of co-creation in contexts are:

- Co-creative practices are from very heterogeneous character on various levels – from targeted societal challenges over organisational embeddedness to structural alignments and sectoral involvement the numbers are very equally spread;
- Co-creation seems to decisively rely on personal motivation and high interest of like-minded people and innovative environments - the combination of these two factors are a good starting point for co-creation;
- Co-creative also depends upon purposeful and needs-driven support – gaps are visible between what is provided and what is needed;
- There seem to be some pivotal moments in co-creation that decide upon the further success of the process (e.g. initial involvement of stakeholders, first meetings, feedback loops);
- While pressing local social demands are important for launching the initiative, the original impetus is seldom anchored in the local community itself;
- In the immediate process of co-creation, hampering factors are especially an insufficient integration of users perspectives and a certain inappropriateness of tools and instruments used and not having enough time for the single steps;
- This reflects in the structural barriers, hindering co-creation to unfold: the divergent conceptions towards crucial concepts might be a consequence from lacking time and opportunities to sufficiently integrate the users' perspectives;
- there seems to be a deep gap between the expectations and claims about inclusive stakeholder management and the factual inclusion that is to be seen in practice.

To examine the landscape further and to draw conclusions to better exploit co-creation as a social practice the results of this deliverable point, inter alia, at the following research questions for the upcoming research process:

- What are the relational networks behind power asymmetries in processes of co-creation? How can mismatches between stakeholder be tackled? How do they interact with normative, structural, functional and role-contexts? What is the specific role of drivers and barriers?
- How are the partnerships organized: What types of support are delivered in the different phases of co-creation? Do they learn from each other? What?
- What happens exactly while engaging stakeholders? How do the stakeholders see the process? How do they want to be approached? Are there role-taking processes?

## 1. Introduction

SISCODE was initiated to deliver insights into the use and landscape of collaborative approaches of problem solution in order to stimulate the openness towards co-creation in Policy Making and Responsible Research and Innovation (RRI). In SISCODE's lifetime, several research efforts from different character are carried out to understand contexts of co-creation in specific environments as well as insights into the opportunities these practices can hold and outcomes that can be expected. WP2 was created in order to take stock of co-creation in contexts and to generate a knowledge base for the project to enrich the experimentation process in WP3 and the playgrounds for Policy making in WP4. To fulfill these tasks, WP2 consists of three major steps: at first, a database of 100 cases of co-creation that delivers a quantitative stocktaking of co-creation in contexts is created. Secondly, 40 cases that will be examined in-depths via a case-study approach, decisively based upon participative research maxims. A third step is the integration of results of this mixed-methodological approach via a further development of an innovation biography methodology.

The deliverable at hand contains the results of the first step laid out above: a quantitative determination of cases of co-creation chosen by the project community alongside a case selection plan laid out in WP1. This empirical research phase, which builds decisively on the theoretical background and initial examinations of WP1, creates first insights to practices of co-creation in specific ecosystems alongside SISCODE's desired foci. The survey is described in its core elements and presents first quantitative results are presented, based merely upon simple frequencies. In SISCODE's further course the database will be exploited increasingly, depending on emerging new questions and arising adaptations of research patterns.

A striking characteristic of the general impression is surely the broad diversity the project members were able to display with their selection of examples of co-creation. That applies for the territorial scope, which is quite balanced between the EU regions, as well as for other descriptive attributes, like the organisational embeddedness or societal challenges the cases want to tackle with their intervention. Furthermore, the respondents made rich use of several opportunities to give qualitative answers in free text form within the survey. For a very brief overview, the following figure holds some more information on the overall characteristics of the SISCODE sample of 138 cases of co-creation concerning the geographical distribution of cases, the societal challenges addressed and crosscutting-themes, playing a role in the initiative.

Geographical distribution	Societal Challenges	Crosscutting-themes
<ul style="list-style-type: none"> <li>• 19 cases from North EU countries;</li> <li>• 13 from East EU countries;</li> <li>• 30 from the southern EU regions;</li> <li>• 42 from western EU;</li> <li>• 16 cases are related to two or three EU regions;</li> <li>• 5 operate in all over Europe and</li> <li>• 5 other cases have no regional affiliation at all</li> <li>• 8 cases are located in non-EU countries.</li> </ul>	<ul style="list-style-type: none"> <li>• 62,2% of cases (90 out of 138) address health, demographic change and/or wellbeing issues;</li> <li>• Europe in a changing world is a point of reference to 50% (N=69) of the cases;</li> <li>• Also important are the issues of climate action and environment (36 cases) and food security and sustainable resources (29 cases);</li> <li>• Efficient energy, smart transport and secure societies are a rarer subject to SISCODE's cases.</li> </ul>	<ul style="list-style-type: none"> <li>• A very equal share amongst cross-cutting themes is visible</li> <li>• A vast majority of 117 cases stated to address more than one cross-cutting theme;</li> <li>• The three most frequently mentioned cross-cutting themes are: 1) Social Science and Humanities; 2) Gender/ Diversity/ Inclusion/ Intersectionality and 3) Small and medium sized enterprises;</li> <li>• Solely intellectual property reached a share of under 10%.</li> </ul>

Figure 1 Basic characteristics of the sample

Given this broad diversity of attributes and characteristics of the examined phenomenon, it is important to be clear on terms used; definitions laid out and how the referenced contexts may be understood. Therefore, chapter 2 sums up the overall approach to the online-questionnaire that was used by the SISCODE community to collect and describe cases of co-creation, which can be considered as able to provide insights into manifestations of co-creation in practice. Chapter 3 delivers a first stocktaking of the practices of co-creation gathered whereby a focus lays on describing contexts (chapter 3.1-3.3) and the immediate process of co-creation, including participating stakeholders, tools and methodologies as well as the stages of the process. Moreover, chapter 3.5 is dedicated to the experiences and learnings that were drawn from the efforts. The discussion in chapter 4 is very oriented towards the further working progress, as it describes the main outcomes of this deliverable in relation to the further research in WP 2. With regard to the upcoming second empirical working phase in WP2, the 40 case studies, conclusions are drawn towards necessities and preconditions for a fruitful selection plan in chapter 4.



## **2. Approach to creating the database**

Chapter 2 briefly sums up the theoretical, methodological and procedural approach behind the survey and database. In 2.1 main aspects from previous deliverables of WP1 are retained to provide a shared understanding of the main targets in WP2. Section 2.2 holds main information concerning the processes of case selection and data collection, including some process data from the survey. 2.3 finishes this chapter with an extensive overview on the rationale behind the questionnaire and its development.

### **2.1. Theoretical approach**

SISCODE's overall aim is to better understand co-creation as a bottom-up and design-driven phenomenon. By analyzing co-creation's potential, RRI practices and policies are supposed to be cross-fertilized in a long-term perspective. In order to achieve this overall aim, co-creation approaches and ecosystems are described in WP2 to better understand the dynamics and outcomes of different forms of integrating society in science and innovation.

The current discourse on co-creation is working on a reconciliation between the two dominant approaches of bottom-up and top-down approaches. However, there has been a lack of consistent and suitable definitions and frameworks on how to effectively create an environment where co-creation can unfold its full potential. In SISCODE's WP2, cases of co-creation in different settings are examined in order to learn from the practices and procedures carried out in order to draw conclusions for the assessment and creation of policies.

In its previous deliverables (D1.1-D1.3), SISCODE pointed out that there are common themes connecting different perspectives on co-creation, suitable enough to be elements for a shared basis of understanding: "Co-creation is a non-linear process that involves multiple actors and stakeholders in the ideation, implementation and assessment of products, services, policies and systems with the aim of improving their efficiency and effectiveness, and the satisfaction of those who take part in the process." (cf. D1.2). The close relationship between 'good' and promising cooperation among different actors and the question of how to plan and implement such a process under the perspective of design studies was a focus of D1.2. It was concluded that both policy makers and designers alike strive to find the 'right' ways of facilitating processes of co-creation to construct better solutions. Co-creation is already used in public services reform and reconfiguration as well as in welfare innovation, urban planning and territorial development efforts (cf. chapter 4, D1.2). Still, drivers and barriers of effective co-creation have not yet been empirically analyzed. The same goes for the most effective ways of using design knowledge, tools and instruments. In a similar way, RRI also aims to enable all stakeholders from an early stage to gather the information necessary to assess "the outcomes of their actions and on the range of options open to them" (Expert Group on the State of Art in

Europe on Responsible Research and Innovation, 2013; cf. D1.2). Different approaches of finding the right ways are already tried and carried out in everyday practices of policy making and RRI. When analyzing co-creation cases for the areas of RRI and policy making, it needs to be kept in mind that the successful implementation of co-creation is believed to be “based on the interaction between policy and context” (D1.2, p. 11). So as a result of previous work in SISCODE, the empirical framework comprehensively refers to the ecosystemic settings where co-creative practices and processes take place. In order to understand the individual journey, the potential, limits and challenges co-creation cases face in their diverse settings, the survey is designed to take an ecosystemic perspective. As an analytical frame, the ‘Onion model’ introduced by Kaletka, Markmann, and Pelka (2017), differentiating four interrelated context levels of SI ecosystems: ‘roles’, ‘functions’, ‘structures’ and ‘norms’, is applied. It will be further elaborated in the upcoming case studies and biographies. This ecosystemic model, originally designed by Weischenberg (1990) for the analysis of media selection processes, was adopted in order to understand the complex environment in which social innovation initiatives are created, develop and flourish on the one hand and take effect or perish on the other hand. Each layer of the ‘Onion’ describes its one distinct, yet interconnected context of drivers and barriers, factors supporting or impeding the development of initiatives and can be used as a framework for identifying driving and hindering factors in development processes:

1. Context of roles: socio-demographic factors and roles of stakeholders and beneficiaries;
2. Context of functions: management procedures, collaborations, business and governance models;
3. Context of structures: constraints and path dependencies of existing institutions, economic, political and technological imperatives;
4. Context of norms: professional and ethical standards, historical and legal conditions, codes and other accepted social standards (cf. Eckhardt et al 2017: 85).

It is the overall aim of the empirical phase to generate results in the form of a comparative understanding of the interactions between these different social dimensions on macro-, meso- and micro-level and specifically to find out as much as possible about the modalities of how stakeholders and their everyday practices interact with environmental factors.

Overall, SISCODE follows a mixed-methods approach to examine co-creation in contexts to better understand the co-creative ecosystems. The task of T2.1 in WP2 (Meta-analysis and knowledge base development) is to carry out a first explorative quantitative meta-analysis of forms and functioning of co-creative environments and their drivers and barriers within specific contexts, based on the theoretical outline produced in D1.1 and D1.2, which anchors the whole process in these theoretical insights.

## 2.2. Case selection and data collection

In order to initially describe the landscape and allow for a quantitative description based on variables laid out in D1.3, a case selection plan and a list of possible sources (containing e.g. databases from other projects), was developed to guarantee a uniform approach amongst the project partners (see D1.3 for detailed information). In order to establish appropriate, easy-to-apply criteria, a communication process with all consortium members was conducted during several events. The following table summarises the criteria the consortium has agreed on and that were fixed in October 2018:

A case is an initiative/project/organisation, that:	
<b>Not optional</b>	Follows one or more principles of co-creation and is defined as a 'case' by the researchers
	Offers sufficient data to hold the potential to be turned into a case study
<b>Optional</b>	Follows design principles, either ex- or implicitly
	has a special focus on Policy Making and / or RRI

Table 1 Case selection plan

Supportive elements to the case-selection plan were a 'case selection guideline' handout and the list of sources already mentioned as a leaflet to support the partners in finding, identifying and selecting the 'right' cases for the project's interests (cf. annex of D1.3). Furthermore, a file with the entire printable questionnaire was sent to the partners in order to let them know what type and categories of information will be asked for. The following table sums up the process of case selection and the activities carried out:

Time	Activity
Oct 11 <sup>th</sup>	Workshop on WP2 during SISCODE-meeting in Barcelona, Kick-off to case-selection (goal: 7 cases per partner organization)
Nov 7 <sup>th</sup> – 12 <sup>th</sup> 2018	Pre-test open to partners for comments and suggestions
Nov 16 <sup>th</sup> 2018	Skype-call: TU DO summarized pre-test comments and asked for last remarks
Nov 19 <sup>th</sup> 2018 – Jan 14 <sup>th</sup> 2019	Online-survey open, reachable via Link posted on the project communication-platform Basecamp
Jan 14 <sup>th</sup> – 27 <sup>th</sup> 2019	Analysis and interpretation, production of this Deliverable

Table 2 Temporal sequence WP2

138 cases were collected by 20 multisector SISCODE partner institutions, whereby no tendency was found to select cases from a similar background as the own from the partner initiatives. All cases matched the described criteria. Several partners chose to first collect all relevant data before filling in the questionnaire. Some partners filled in the questionnaire step by step. Figure 1 illustrates the temporal distribution of the data-collection process, set between 19<sup>th</sup> of November 2018 and 14<sup>th</sup> of January 2019, to give some more insight into details of this working step (X-axis = date, Y-axis = No. of cases).

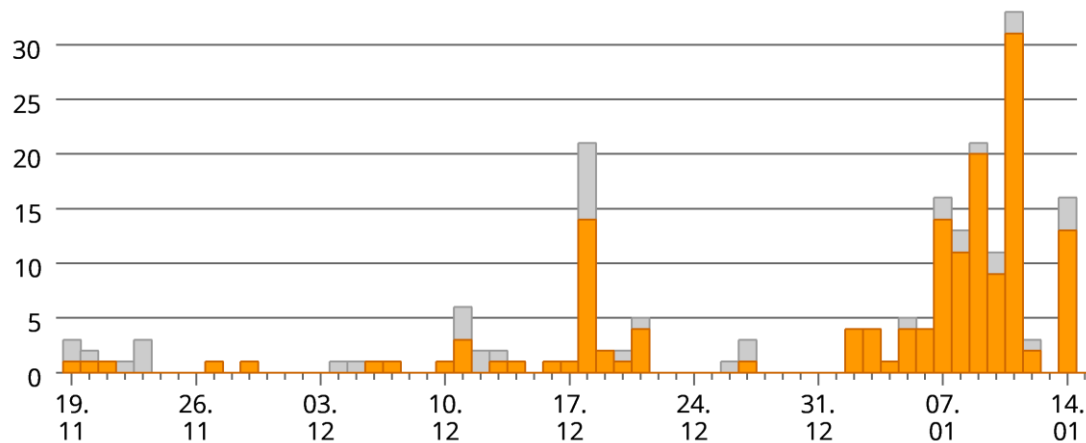


Figure 2 Temporal distribution of the data-collection process

### 2.3. Rationale of the survey

As comprehensively described in Deliverable 1.3 (see chapter 4: Analytical Grid), there are seven main categories leading data collection exercises in SISCODE's WP2, Task 1:

- Basic Information concerning the case;
- Networks and partnerships;
- Pathway;
- Drivers and barriers;
- Processes and practices of the process of co-creation;
- Tools and instruments used;
- and the lessons learned from practicing co-creation.

A larger number of parameters have underpinned these main categories, guiding explorative research process of WP2 in more detail. Based on the seven segments above, the online questionnaire was created in consultation with WP1 and WP 2 partners. To enhance its comprehensibility, the main categories were reduced to the four themes: 1) Basic Information; 2) Context Information; 3) Co-creation activity; 4) Lessons learned and experiences. Table 2 sums up the rationale of the survey. It also shows the type of questions (e.g., open questions, multiple or single choice etc.).

Block	Desired information	Type of question
<b>I Basic Information</b>	Name of the case; contact information; short description and key idea related to the process of co-creation	<i>Open, free text</i>
	Countries related to the case	<i>Multi choice</i>
	Societal challenge(s) & crosscutting themes addressed	<i>Multi choice</i>
	Special focus: RRI and/or Policy/ none of these; timely limited Project character or not	<i>Single choice</i>
	Stakeholders and sectors involved in the co-creation process	<i>Multi choice</i>
	Type of organisation/ embeddedness of the practice (Number of partners, type of support they provide)	<i>Multi &amp; single Choice</i>
<b>II Context Information</b>	Scope (e.g. neighbourhood, region, nation)	<i>Single choice</i>
	Drivers and barriers for the project/ organisations	<i>Mixed</i>
	Responsible person/ entity for launching the activity	<i>Multi choice</i>
	Motivation for the initiation of the co-creation practice	<i>Multi choice</i>
	Background information: Importance of specific cultural values	<i>Scale</i>
<b>III Co-creation activity</b>	Co-creation phases of feedback and iterate	<i>Multi and single choice</i>
	Drivers and barriers in the co-creation process	<i>Multi choice</i>
	Tools and techniques: Stakeholder involvement and user understanding	<i>Multi choice</i>
	Mismatches between stakeholders in co-creation	<i>Multi choice, free text</i>
	Sectors involved in the activity (Academia, Civil Society, Public, Private)	<i>Multi choice</i>
<b>IV Lessons and experiences</b>	Mismatches encountered in the co-creation activity	<i>Multi choice, free text</i>
	Gender and Diversity: Lessons learned regarding gender and/or diversity dimensions	<i>Open answers</i>
	Lessons learned in Bulletpoints	<i>Up to 5 free aspects</i>
	Personal interests regarding results & additional remarks	<i>Free text</i>

Table 3 Rationale of the survey

### 3. Stocktaking of practices of co-creation in SISCODE

The focus in presenting the key findings of the SISCODE survey is demand-oriented towards the main research interests of the project consortium and theory-driven in accordance with the theoretical synopsis of Deliverable 1.3.

#### 3.1. Basic Information: The sample

In general, the cases are characterized by a broad diversity in terms of the cases' regional origin, aims and objectives and combination of stakeholders involved on different levels – levels meaning the sectoral affiliation as well as the spatial dimension with actors working in urban, regional, national, or international settings. A decisive analytical pitfall that plays a recurrent role in this Deliverable and maybe in the whole project needs to be mentioned before starting to describe the facets of co-creation that can be found in the SISCODE database. The differentiation between projects, initiatives or institutionalized practices remains more or less unclear. It may be a future task to analyze the differences between these.

Nevertheless, table 4 shows that the cases collected are foremost timely limited projects (N=97). It was not asked whether they are still active or not. 38 of the cases are of other character, for example non-government or non-profit Organizations (NGO's/NPO's), located directly in an administration or grassroots' initiatives. Still, it should be noted that the analytical pitfall described above is an unresolved issue that matters in drawing this distinction: It may be possible that a case is a project carried out within or through an organization and has therefore a stable and institutionalized background. Results related to this issue have to be handled with adequate caution and will be addressed in the case studies analysis as the upcoming step of WP2.

Timely limited project?	Number of cases	%
Yes	97	71,9
No	38	28,1
total	135	100

Table 4 Timely limited project character or not

Concerning SISCODE's main topics, RRI and policy making, it can be said that most of the cases have a relation to one or both of these areas, with a dominance of RRI as 52 of the sample belong to that field of action. 24 cases are subordinated into the field of policy making. With a number of 32 not few cases also tackle RRI and Policy making at the same time, while there are 28 cases in the database that are related to none of these. Most likely they were chosen by the SISCODE partners because they provide an outstanding example of co-creation.

Focus	N	%
RRI	52	37,7
Policy making	24	17,4
Both	32	23,2
None of these	28	20,3
Missing	2	1,4
total	138	100

Table 5 Focus on RRI, Policy making, both or none

As shown in table 2, a share of 81,2% (N=112) of the cases is associated with only one country, while 20 cases are related to 2-13 different countries. One case spreads over 29 nations and for four cases it was stated that there is no affiliation with any country. The latter four cases are web-based solutions accessible and potentially used worldwide through the web focusing the issue of RRI. The case related to 29 nations was a travelling exhibition dedicated to promoting RRI in 29 European countries.

Number of countries related	N	%
0	4	2,9
1	112	81,2
2-5	15	10,9
7	4	2,9
11	1	0,7
13	1	0,7
29	1	0,7
total	138	100

Table 6 Number of countries, the case is associated with

The next interesting finding is related to the initial starting point of the co-creation initiative and the entity responsible for that. As visible in table X, by far the most important driving factor to start a co-creative solution process is the individual engagement of motivated individual, be it as single persons or as an alliance in groups. Nearly half of the cases (N=62) stated to have been started in this way. Further important factors to get co-creation off the ground seem to be research agendas/ needs from research (34,8%), the existence of previous activities or

preceding projects (32,6%) or specific funding schemes delivering the necessary financial resources (29,7%). Seemingly, at least for SISCODE's sample, NGO's/ NPO's and direct requests from affected groups play not a very significant role in initiating co-creation.

Initiating entity	N	% of cases
A motivated single person / group	62	44,9
A research agenda or need from research	48	34,8
Previous activities / projects	45	32,6
A funding scheme	41	29,7
A policy program	34	24,6
An NGO/NPO	32	23,2
A request by stakeholders (e.g. citizens)	22	15,9
Other, please specify	6	4,3
total	138	

Table 7 Initiating persons or entities

Launching an initiative effectively appears to be heavily dependent upon the personal engagement of motivated individuals or groups of individuals with a shared goal, as multiple results point in the same direction.

Taking a closer look at the aspects that worked as drivers for the single cases, it becomes evident, how the most important boosting factor to unfold the co-creative process' potential is the individual commitment and interest of individuals, networks and groups. A very large proportion of 72,5% of cases were indicated to be driven by individuals, networks or groups.

Another driving factor that is more related to the contextual development and immediate infrastructure is 'an overall innovative environment' which helped 63,8% of cases to unfold their respective potential. It is striking how the other items in this category were selected much less frequently, but range in very similar proportions. New possibilities offered by new technologies, governance/ politics and financial resources are drivers to roughly 40% of cases.



Drivers to unfold potential	N	% of all cases
Individuals, networks or groups	100	72,5
An overall innovative environment	88	63,8
Possibilities through ICT	55	39,9
Governance and politics	53	38,4
Financial resources	53	38,4
Urgent needs and demands	46	33,3
Other, namely	15	10,9
Number of cases	138	

Table 8 Drivers to unfold potential

Several cases specified their answers in free text form. Accordingly, an innovative environment is especially characterized through openness, transparency, and strong support systems from various stakeholders within the networks. Also, alliances and unusual cooperation, e.g. between academics/ researchers and manufacturers were frequently described as important pillars in leveraging co-creation. Furthermore, individual courage and vigor to press ahead with a certain cause is not negligible. Seemingly, this goes hand in hand with a certain intrinsic persuasiveness of persons dedicated to an idea and, concomitant, key figures in decision-making positions who are allies in following the desired goal.

### 3.2. Contexts I: The diversity of co-creation

A first hint towards the surrounding conditions of the co-creation projects and initiatives might be the triggering causes that led to the cases founding in the first place. Table 8 displays how general societal challenges like the demographic/ climate change and also single, innovative ideas led to the initiations of the SISCODE cases in a vast proportion (~ 47%). Also, pressing local social demands play a significant role in starting a co-creative activity, as stated by 39,1% of the cases. In accordance to ICT as an overall driver in 40% of the cases (see table 7), it is moreover also a significant first leverage point (35,5%). Policy incentives are from lesser importance as initial motivation, but still visibly represented with 30 cases (21,7%).

In contrast, the influence of social movements in founding co-creative practices seems to be almost negligible. Only 11 cases stated to have their roots in these in a social movement like i.e. open democracy or civil rights movements.

Amongst the answers in the specifications of the 'others'-category were especially references to economic and research interests that were not part of the items listed. From the open answers,

a high desire to enhance mutual understanding between different interest groups became visible, be it to create better products out of economic goals or to create new responsibilities and public consciousness for shared values and societal cohesion.

First motivation	N	% of cases
Societal challenges (e.g. demographic change or climate action)	65	47,1
A single new, innovative idea	64	46,4
A pressing (local) social demand	54	39,1
New technologies of any kind	49	35,5
Policy Incentives	30	21,7
A social movement (e.g. LGBTQ, Social Democracy...)	11	8,0
initial Motivation: Other, please specify	21	15,2
Number of cases	138	

Table 9 First motivation

To get closer to the character of co-creation, it is important to know how these practices are embedded. Therefore, the rather vague question was asked, which form of organisation describes the case the most, whereby multiple choices were possible. There were 224 answers given, with the majority (75 cases) choosing only one option. 46 cases chose two options, 11 cases three and 6 cases chose four options. The general relatively equal distribution of answers amongst the different items reflects the broad variety of the cases in the database as visualized in table 6. Accordingly, a majority of 52 cases are located in a NGO or NPO (37,7%). There are 42 cases which were described to be influenced in any way by a research organisation, “that stands behind it”. The character of influence is not clear, though, and will surely be a topic for the upcoming case studies.

39 cases stated that they are a grassroots initiative or that they are associated with one. Furthermore, there is a nearly equal share of cases which are set in a political/ public and/or municipal setting (N=35) or related to a business/ for-profit body (N=32). A relation to a subordinate public organisation (e.g. administrative schools) was stated by 17,4% of respondents (N=24).

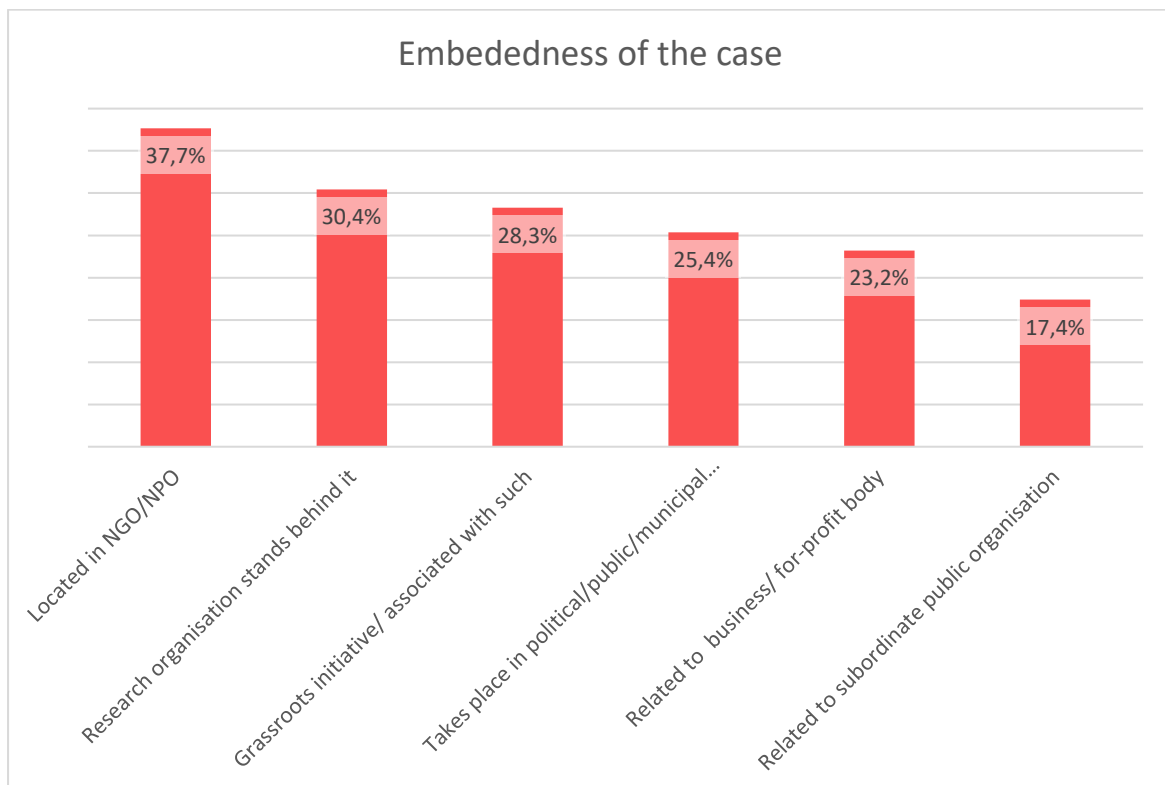


Figure 3 What describes the co-creation case the most?

Another indicator for co-creation's heterogeneous modes of work and forms of existence is the scope the initiatives and projects want to reach. 55 cases focus on the immediate living environments of the people, either the neighborhood, the urban district, or the city. 53 cases are going beyond that scale and try to address issues on the regional or national level. At least 30 cases can be characterized as international initiatives as they either tackle the EU level (21 cases) or have a worldwide scope (9 cases).

Scope	N	% of cases
City	34	24,6
Nation state	30	21,7
Region	23	16,7
EU	21	15,2
Neighborhood	12	8,7
Urban district	9	6,5
World-wide	9	6,5
total	138	100

Table 10 Scope of the cases

### 3.3. Contexts II: Networks and partnerships

Examining the contexts of co-creation implies to get closer to the networks and partnerships the initiating body upholds. The majority of cases in SISCODE are characterized through a wide cooperation with multiple partnerships in a broad network. Table 10 shows that only 3 cases operate alone (all of them are experimental research projects, testing co-creation in specific settings). With a number of 55 cases, the greatest share stated to have one to five partner-organizations, followed by 46 organizations obviously embedded in a very big network of more than 10 partners. The cases in which it was “impossible to tell” how many partner organizations the initiative has where mostly centers for social innovations, active for a longer time with a wide territorial scale or part of event-driven movements (e.g. Hackathons).

Number of partners	N	% of cases
0	3	2,2
1-5	55	39,9
6-10	24	17,4
More than 10	46	33,3
Impossible to tell	10	7,2
total	138	100

Table 11 Number of partner organizations

It is apparent; various support arrangements are made between the co-creation project or organization and their partners. As visible in figure 5, it is by far the provision of knowledge, which is delivered most commonly by the partner organizations involved as 111 of the given answers are allocated to this category. That means 80,4% of cases stated to be supported from their partners through specific forms of knowledge. Another important field of support is the development of ideas – whereby it is not clear if that implies the initial idea for the co-creative process or the general form of the initiative or project. The least mentioned support-type is lobbying, e.g. in political structures.

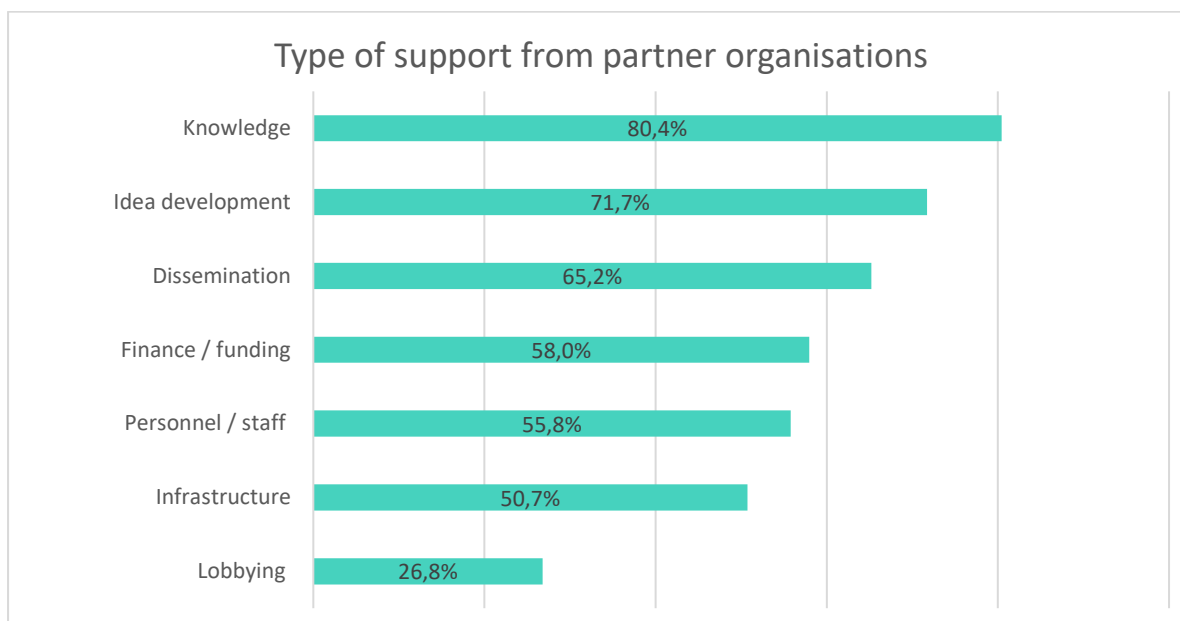


Figure 4 Type of support from partner organizations

These relationships will certainly be of great importance in the further course of examining co-creation in contexts. It is for example very interesting, which types of support are needed/ provided during the different phases of the co-creation cycle and if there are gaps between what is needed by the initiatives and provided by the partners. In example and in accordance to the 58% of cases that receive financial support, 39% stated a lack of funding as a barrier in their initiative (cf. table 11).

Structural barriers	N	% of answering cases
Lack of financial resources	40	39,6%
Knowledge / competence deficits	37	36,6%
Missing political support	30	29,7%
Lack of staff (also volunteers)	27	26,7%
Lack of stakeholder engagement	23	22,8%
Lack of institutional access	21	20,8%
Legal restrictions	17	16,8%
Political opposition	4	4,0%
Other, please specify	17	16,8%
N of answering cases	101	

Table 12 Structural barriers encountered

And although around 80% already receive support in terms of knowledge, there are still roughly 37% that encounter deficits in competence and/ or specific fields of knowledge. Numerous cases did not provide an answers in this category or specified their answers in form of free-text in the 'others' category. Here difficulties were mentioned concerning the intra-organizational work between the project partners, because they are geographically separated or have problems in finding a suitable common understanding regarding how the process should be carried out. In general, the answers are again very equally spread amongst the response options. Multiple entry points for the further research process become apparent at this point. Drawing conclusions on how to stimulate co-creative practices in Policy Making and RRI needs also relies on the reciprocal relationship between drivers and barriers and how support systems might be of real benefit to the co-creative practices. Therefore, these issues should be of special interest in the subsequent step of WP2, namely the research design of the 40 case-studies. Moreover, the vague category of knowledge provision needs specification: Which types of knowledge are provided by the partner organizations? Is it specialist knowledge in any form or rather the provision of structural knowledge related to the organization of a specific setting (e.g. a municipal administration or an economic segment).

### **3.4. The process of co-creation**

This paragraph may be seen as the heart of this deliverable as the process of co-creation itself is the focus of interest of the researchers who completed the survey. In the following, the participants of the immediate process of co-creation are examined as well as the form of their initial engagement is described in its quantitative extent as shown in the cases (chapter 3.4.1). Also, the tools and methodologies to engage users in the first place are displayed, as well as the main channels to create user understanding are listed (chapter 3.4.2). Lastly, chapter 3.4.3 describes the stages of the co-creation process as experienced oriented alongside the phases of the design circle and whether or not a phase of feedback and restart was reached.

#### **3.4.1. Stakeholders and their engagement**

In general, the co-creative processes are designed to involve at least two target groups: Single citizens and interest groups are addressed by a vast majority of cases (84,8%), but also the for-profit sector seems to be a regular participant of processes of co-creation as it was named in 62,3% of the cases. Obviously, an important sector was not part of the standardized items: 41 open answers were given in the 'others' section and they mainly listed the academic sector or research partners as participants in the process of co-creation (see table 8).

Here, it is important to keep in mind that researchers can also belong to the items listed; a representative of persons with disabilities might be a researcher as well as a member of a societal interest group. For an overview of sectors involved in the immediate process of co-

creation see chapter 3.4.2 table 15. It must be stated that this question also does not indicate the roles taken by the single entities, for example if they were initiators or moderators and if their participation was active or not. It just informs about the general involvement. Information beyond that and concerning the interrelations and importance of specific stakeholders needs to be further examined in the subsequent case studies.

Addressees/ users/ beneficiaries	N	% / cases
Single citizens/ interest groups	117	84,8%
Civil Society Organizations	82	59,4%
Consumers/ Users of a specific product	73	52,9%
Business/ Economy	86	62,3%
Employees and volunteers	75	54,3%
Affected populations (e.g. people with disabilities, refugees etc.), namely	61	44,2%
Others, please specify	41	29,7%
total	138	

Table 13 Stakeholders involved in the co-creation activity

On average, 3,87 addressees with different backgrounds are involved in one co-creative practice, whereby it is possible that one stakeholder qualifies as a member of more than one group. That means there are nearly four addresses entities per initiative, which speaks for multi-directional efforts, aiming on fulfilling diversified needs.

Civil society organisations are obviously an important pillar in co-creation. With a filter-question, they were asked to specify their character. Among the most frequent specifications were Non-government (NGO) or Non-profit organisations (NPO) (N=63), Community organisations/ grassroots' actions/ activist groups (N=56), social enterprises (N=33) and makerspaces/ fablabs (N=26).

CSO specification	N	% of valid cases
NGO/NPO	63	78,8%
Social Enterprises	33	41,3%
Community organisations/ grassroots' actions/ activist groups	56	70,0%
Trade unions	13	16,3%
Sport/ social/ hobby clubs	7	8,8%
Makerspaces (incl. FabLabs i.a.)	26	32,5%
Other, please specify	11	13,8%
total	80	

Table 14 Civil Society specification

The follow-up question addressed the sectors which are directly involved in the co-creative processes the organization or project carries out. Alongside the basic assumptions from social innovation research and the quadruple helix model, the sectors academia, civil society, the private and the public sectors were differentiated. The figure below visualizes the prevalence of an involvement of all four sectors in co-creation. 38,4% of the cases (N=54) indicate an involvement of academia, civil society, the private and public sector, 28,3% (N=39) have three sectors participating, 26,8% (N=37) are a two-sector cooperation and only 5,3%, a number of 8 cases, are carried from one sector. Most of these one-sector cases fully belong to the Civil Society, they were initiated and carried out by stakeholders in a bottom-up way. Some of them are also experimental cases where co-design is tried out in a municipality and involves e.g. public administration and municipal staff alike.



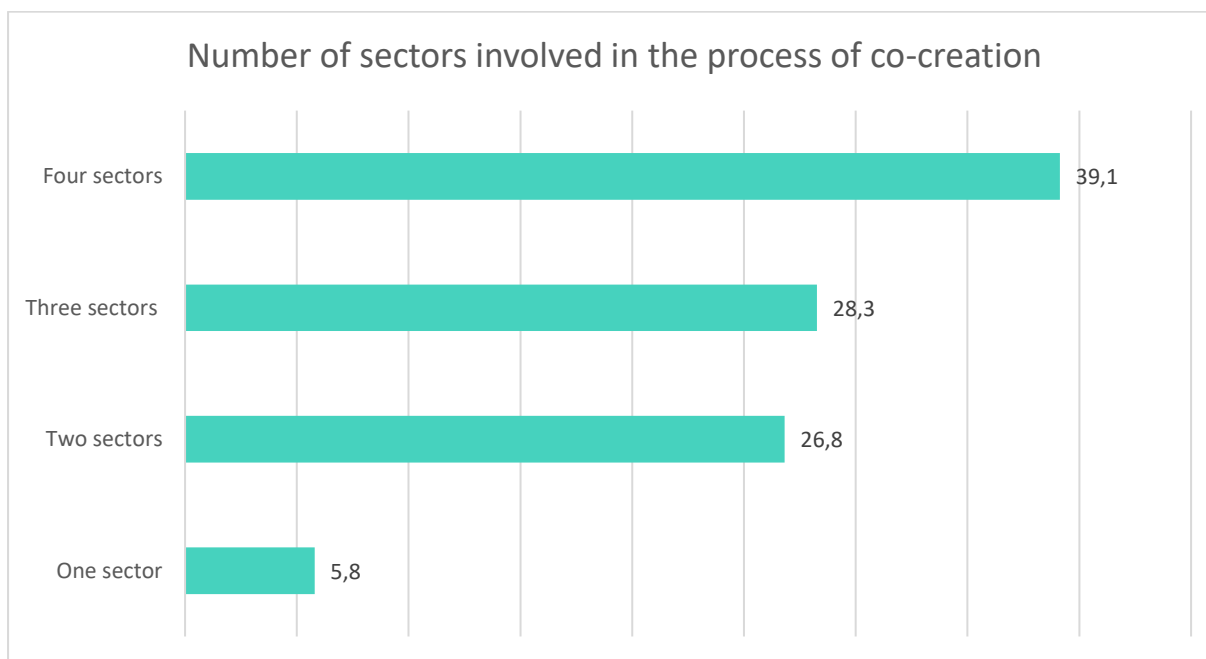


Figure 5 Number of sectors involved (Academia, Civil Society, Public and Private)

Taking a closer look at the sectors it becomes evident that the academic/ research sector and the private/ for profit field are slightly less involved than Civil Society and Public sector. In the vast majority of 115 cases Civil Society is directly involved in co-creation and 103 of 138 cases involve the public sector.

Sector	N	% of cases
Civil Society	115	83,3%
Public Sector	103	74,6%
Academia	96	69,6%
Private Sector	95	68,8%
total	138	

Table 15 Type of sectors involved in the co-creation activity

### 3.4.2. **Tools & Methodology**

The initial engagement of stakeholders who are supposed to be a part of the co-creation process is considered to be of high importance for the success and further course of the efforts. In accordance, numerous respondents of the survey declared their personal interest in the ways stakeholders were engaged in the initiative in the first place.

As visible in the table below (table 15), the cases make rich use of all the 'common' ways to engage people in participatory processes. Most common are personalized invitations and the

personal appeal to relevant target groups (both 69,5%) as well as the promotion on specific events (64,1%). A lesser used involvement activity are open invitations and open advertising (50,4%).

This could be a hint towards a predominately ‘targeted’ stakeholder engagement where initiators of co-creation decide who the relevant stakeholders are and approach them directly. It should be interesting and worth further examination, if this approach influences the quality of the co-creation process in terms of levels of user engagement. All answers in the ‘others’ section were somehow related to networking effects and the use of multipliers in the respective community.

Invitation forms	N	%
Personalized invitations	91	69,5
Personal appeal to relevant target groups	91	69,5
Promotion on specific events	84	64,1
Open invitation per mail shots/ open advertising	66	50,4
Other, please specify	8	6,1
total	131	

Table 16 Forms of invitation

Surely, an exhaustive compilation of the single cases’ tools and methods cannot be provided through a quantitative and descriptive overview like this. Nevertheless, several hints were generated towards entry points for the case studies and for an initial glimpse into the modes of work within co-creation activities. Although it was not a mandatory aspect in case-selection, around 70% of cases stated to apply co-design tools in user understanding activities in co-creation efforts. The concrete examples of prototyping and testing and visual and/or tangible outputs were selected in around 65% of the responses. Furthermore, or rather additionally, interview techniques are a common instrument to facilitate the understandings of stakeholders involved in collaborative processes of problem solution – 61% rely on results generated from interviews with focus groups or single persons to understand the users’ perspectives. After these categories, within which answers are equally spread a significant gap to the last predefined option of gamification techniques is visible: Only 31 cases (22,8%) have these in their repertoire. Maybe this is because Gamification is a relatively new tool in co-creation and requires a set of infrastructural resources.

Tools for user understanding	N	%
Co-Design Tools	95	69,9
Prototyping and testing	90	66,2
Visual/ tangible outputs (e.g. audio clips, drawings, writing, photo diaries...)	86	63,2
Interview techniques (e.g. focus group interviews, narrative interviews with end-users...)	83	61
Gamification techniques (e.g. Lego Serious Play)	31	22,8
Other, please specify	35	25,7
total	136	

Table 17 Tools and techniques to understand users

Most of the respondents specified their answers in free text-mode. As the interest in the tools and instruments is very high within the SISCODE-community, the statements are summed up and reorganized below in detail:

#### **Visual and/or tangible output (e.g. audio clips, drawings, writings, photo diaries...):**

- Point of care, posters, feedback on walls;
- visual ethnography, cultural probes, mapping;
- Customer Journey;
- Innovative systems were used to turn 'images' or 'drawings' into a project structure.

#### **Co-Design Tools:**

- Design Game, human-centered design;
- Link: <http://institutewithoutboundaries.ca/what-we-do/tools/>
- Link: <http://mind-lab.dk/en/methods>
- the internal platform as main tool of co-creation;
- Maps, a generic, uncomplicated platform which allows people with limited literacy collect, analyse and share data;
- MaRS tools, Link: <https://www.marsdd.com/systems-change/mars-solutions-lab/mars-solutions-lab-approach/>
- Card sorting;
- policy action plans were intermediary objects of design and collaborative governance model; Constellation Model of Collaborative Governance;

- SWOT analysis; future scenarios vignettes.

There were also forms of use-understanding efforts mentioned, which could roughly be categorized as qualitative research tools from ethnography and participative action research. Namely these are:

- Observation, contextual inquiry (e.g. in care homes);
- participative conferences; Participative workshop facilitation methodologies: World Café, Structured Democratic Dialogue, Focus Group, Science Café;
- Participatory forums (live and online); assessment meetings (with relevant stakeholders, for feedback on ongoing work);
- Personas, textiles collage; brainstorming;
- Story telling/ Character Profiles;
- Sounding boards, most important thing is the conversation (if the tool gets in the way, ditch it), time (giving it to them so they can talk about what they want to);
- So called "participant facilitation"/"honest brokering".

Additionally, the general lessons learned and learnings in the area of gender and diversity display further notable aspects regarding the suitable application of tools and methodologies (cf. chapter 3.5.2 and 3.5.3).

### 3.4.3. **Stages of co-creation**

The multiple choice question regarding the phases in which co-creation took place shows how most of the co-creation practices in the SISCODE database are applied to nearly all four phases identified in WP 1. It is an open question, whether or not cases that do not include problem identification/ understanding can be considered as co-creation.

Co-creation phase	Cases	%
Problem identification/ Understanding	112	81,2
Ideation	112	81,2
Prototyping	100	72,5
Verifying/ Testing	98	71
total	138	

Table 18 Co-creation in the different phases

A phase of feedback and restart is believed to be a mandatory feature of a complete process of co-creation. It is an open question whether or not a co-creative activity must be regarded as

somehow incomplete or failed, if no such phase has been reached. In the SISCODE sample, just 16 cases of all 138 stated to not have been able to reach a feedback and restart co-creation loop, and, additionally, 26 case were not able to provide any information regarding this issue. If the SISCODE partners agree to include cases of incomplete co-creation in the further course of WP2's research process (case studies and biographies), this could be a useful item to select cases for the upcoming case studies. Furthermore, it points towards an important topic for discussion and encourages to pose question towards the sharpening of the working definition of co-creation.

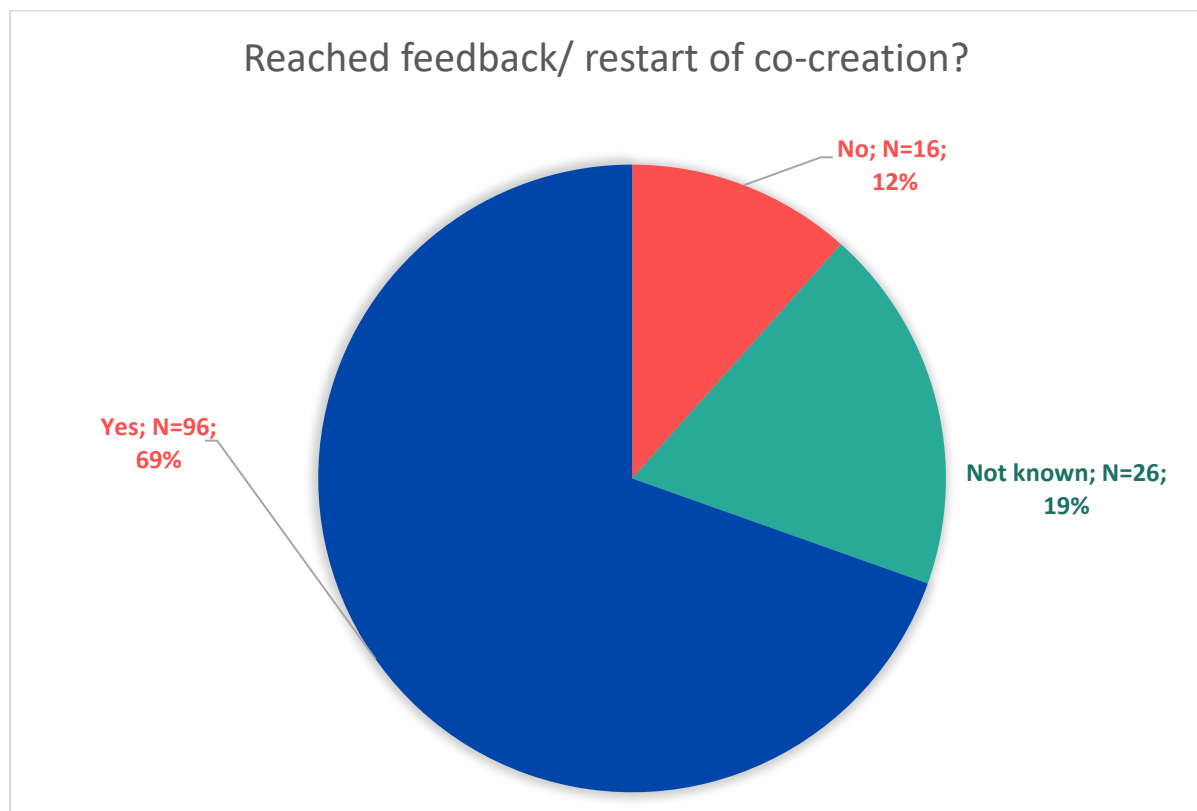


Figure 6 Did the case reach the phase of feedback/ restart?

### 3.5. About the experiences

The following description deal with the experiences and learnings from carrying out co-creation in its various facets shown in the database's cases. Firstly, barriers and mismatches encountered in the direct process of co-creation are described, whereby the barriers describe structural and organizational obstacles in initiating the process and mismatches concern the co-working of different stakeholders. Furthermore, this chapter contains a summary of the overall lessons learned provide in five Bulletpoints by the respondents of the survey. The closing paragraph reflects upon the lessons learned regarding the integration of a diversity approach in the everyday work – a filter question asked to those who stated to have diversity, inclusion and gender as a crosscutting theme in their co-creation case.

### 3.5.1. **Barriers and mismatches in the co-creation process**

To explore the difficulties experienced in the direct process of co-creation, the survey included a question about the mismatches that occurred between the participating stakeholders and the barriers that hampered the process on a more structural and organizational level in terms of coordinating the process. Here, it became obvious that a concrete designation of barriers on the coordinative level seems to be difficult. Only 75 cases answered this question, the highest rate of non-response in the whole set. Moreover, the category 'others' accounted for the highest share of answers with just 27 cases (36%). Many initiatives provided their answers freely. Especially timely constraints were described in unfolding the co-creation fully. Furthermore, a preexisting disillusion towards co-creation hampered some practices. From the predefined items, a somehow insufficient integration of the user's perspective was stated as problematic as well as a certain inappropriateness of methods or strategies. The wrong selection of stakeholders or lacking of transparency proved to be from lesser importance. Alas, numerous free answers pointed towards the importance to obtain more knowledge on these issues in the course of the case studies in the further proceeding of WP2. Especially the problem of user understanding and the integration of the beneficiaries' perspective seems to be worth closer examination (e.g. if a lack of participation and insufficient user integration results from not sending open invitations).

Barriers	N	% of valid answers
Insufficient integration of the user perspective	24	32
Usage of insufficient methods or strategies	23	30,7
Lack of opportunities for participation	22	29,3
Wrong selection of stakeholders	12	16
Lack of transparency	9	12
Other	27	36
total	75	

Table 19 Barriers in the process of co-creation

Obviously, the survey's participants were more likely to answer related to hurdles experienced in the process of creation and if specific mismatches occurred between the stakeholders involved. Here, the focus is driven to the way the co-creators interact and conflict or not. It seems to be very relevant to take a certain amount of time to clarify mutual understandings towards crucial concepts and the wording used in the process. In these areas, the most mismatches were found by the projects and initiatives.

Power asymmetries were also described, as well as ideological mismatches, but considering the number of missing answers, these numbers have to be treated very carefully. 33 cases stated to have experienced no mismatches at all, also an interesting number, and worth to keep in mind for the case-study selection.

Mismatches	N	%
Divergent conceptions towards crucial concepts	40	37,7
Wording and language were not compatible	34	32,1
Power-asymmetries	33	31,1
Ideological mismatches	25	23,6
No mismatches at all	33	31,1
Other, please specify	11	10,4
total	106	100

Table 20 Mismatches in carrying out the co-creation activity

### 3.5.2. **Lessons learned**

Far-reaching answers were given with regard to the learnings obtained during the co-creation process. The respondents were asked to provide “lessons learned” in up to five Bulletpoints and made rich use of the free-text form. The answers were clustered into 5 categories:

- 1) Normative setting;
- 2) Organizing and coordinating the process;
- 3) Preconditions;
- 4) Methodology and tools;
- 5) Roles of the stakeholders and relationships.

Overall, many answers pointed into the direction of a general necessity of changing societal mindsets towards the possibilities and benefits of co-creation. This would go hand in hand with a stronger institutionalization of co-creation in society and societal sub-systems.

Furthermore, numerous ‘lessons learned’ reflected on the positive outcomes of the co-creative activity. Some pointed e.g. towards the hidden efficiency of co-creation – although the process as itself might be time consuming and requires various resources, outcomes can be produced in a shorter time in relation to other non-co-creative processes. Table 22 presents an extensive overview on the responds provided in the questionnaire.

Lessons learned	
Normative setting	Bureaucracy of engaging minor youth/students (12-16, 16-18) in co-creation is time consuming and unpredictable
	Consider the respective legal background, especially in cross-national initiatives
	Generate a deep understanding of public procurement and its legal regulations
	Co-creation may be in contradiction with current legal framework that regulate the service delivery in public sector
	Clear expectation reconciliation with and better information to parents from the beginning in order to engage a diverse group of kids from all genders and addressed ages
Coordinating the process	Expectations, goals and values must be discussed and pursued together.
	Having a deep needs analysis done is an important pillar
	High importance of engaging desired stakeholders very early – be as open as possible but as selective as necessary – align overall goals and stakeholder selection carefully
	Planning enough time for the single steps
	Diversity has to be reflected in the team carrying out the co-creative process to enhance credibility
	Design language needs to be translated to stakeholders from other fields – this applies to other specialist jargon as well
	Facilitate peer learning especially in health and well-being
	Well-structured and clearly communicated methodological process, right balance between coordination and flexibility/ freedom to have leeway for innovation and ideas
Preconditions	Creating a pleasant, trusting and safe working atmosphere through mutual support to avoid power dynamics/ asymmetries (Strengths based approach)
	A follow-up is important to check the effectiveness and sustainability of the project
	Political support and management back-up need to be ensured , especially in co-creation efforts in policy making
	Building up trust in co-creation means to take effort in persuasion on the spot, where the people live
	Openness and transparency as well as general willingness to make generated knowledge available open source



	Strengthen the importance and promotion of social innovation in society and develop supportive infrastructures to empower citizens and co-creation: e.g. introduce a system of valorization of voluntary work and support an inclusive participation in the network that not only recognize technical skills, but all the activities that are collateral to the development of the community
Methodology & tools	“Cultural heritage is a powerful tool to overcome prejudices and to counter racism”
	Showing off best practices and successful processes of co-creation is useful to convince possible political stakeholders as well as financial backers
	Design tools (e.g. holistic analysis with consultation, gap analysis, redaction of action plan, systematic experimentation, innovation loop) can be seen as bridge builder and catalysts
	Other methods and tools are for example podcast, videos, social networking, gamification, hackathons, open presentations, B2B meetings, exhibition zone product shows, personal interviews and focus groups and self-assessment questionnaire
	Methods and tools can also simplify content and make it accessible to many people (e.g. people with learning difficulties) – flexible, user-friendly
	Motivate everyone to take an active role, making sure, that also the silence voices are heard
Roles & communication	Crucial role of ,right‘ communication process through the suitable (ICT-) tools – e.g. platforms
	Trust needs to be built with the community prior to potential research questions being discussed. The citizens must assume the position of the expert within the activity.
	The atmosphere should be friendly and warm in order to convince co-creators to take part and come back again
	The creation of a safe space which shifts power dynamics is important: (e.g. in one case a room was used which was decorated in the theme of wizardry and witchcraft which shifted the power dynamics of the conversation)
	Collect feedback and inform about the given feedback – stay in touch with partners as much as possible to maintain relations

Table 21 Lessons learned in the process

### 3.5.3. **Diversity aspects in co-creation**

The cases that named intersectional dimensions as crosscutting themes in their work were asked to provide further insights into their experiences. For this deliverable, the open answers were clustered around three categories: 1) basic assumptions to diversity, 2) efforts to create diversity and 3) techniques to handle diversity. Thereby, special notice is taken towards gender, age, race and dis-/ability as dimensions of inequality that proved to be of special importance here. In the following, recurring narratives concerning the cases basic assumptions and forms of practice towards diversity issues are listed without fulfilling the scientific demand of an extensive qualitative analysis.

#### **1) Basic assumptions**

Obviously, all cases that provided answers to this question treat diversity, inclusion and/ or intersectionality as a crosscutting theme (51 cases). From their answers, basic attitudes towards Diversity as a working concept were visible. Representative for the basic tenor in looking at the heterogeneity of people is the statement that “Diversity is a value that unites rather than divides the citizens” from one open answer. In addition and for specification, the following generalization can be drawn:

- In general, Diversity in all facets is seen as a necessary precondition for successful co-creation processes as solutions are considered to work best, if they can adapt to the heterogeneity of needs in society;
- There are social inequalities resulting from diversity dimensions (e.g. class, race, gender, age, dis-/abilities) which need to be tackled and eliminated, amongst te specifically mentioned were:
  - Overrepresentation of women in lower-skilled and lower-paid areas of work as well as part-time and temporary jobs;
  - unpaid work by women in care-work and family businesses;
  - underrepresentation of women in decision-making positions.
- Diversity aspects are often hidden and it needs the respective awareness to see consequences of dealing insufficiently with Diversity issues;
- Gender awareness is important for man, too, in order to “critically deconstruct the hegemonic masculinity”;
- Intergenerational exchange is fruitful both personally for the participants and for a successful co-creation;
- Personal dispositions in terms of abilities or disabilities are a facet of diversity, empowerment, trust and confidence in the individuals is the key.

## 2) Creating Diversity

To initially build up an environment characterized through a diverse group of participants, several efforts were undertaken. It was stated several times how important it is to engage diverse stakeholders from the very beginning of the process.

- Connecting 'woman' and 'man'-connoted topics: e.g. combining digital and technological driven developments with social/care issues;
- Connecting 'youth' and 'elderly'-connoted topics works in the same way;
- Bring diverse groups of people together who might not intersect otherwise – “the needs of one group of stakeholders becomes a resource for the other and vice versa”;
- A balance has to be found between drawing attention and awareness towards diversity and avoiding stereotypes;
- Research on technologies needs to be sensitive to diversity-dimensions and more diversity is needed amongst researchers themselves, especially in tech;
- In tech and craft-driven activities the early engagement of girls proved to be difficult – lessons are to “have high focus on how to engage and inspire female participants from the beginning”, e.g. through happenings and events and to provide resources and support for gender awareness activities;
- Institutionalized people (e.g. in care homes) are often forgotten – for truly inclusive approaches they have to be involved;
- If the participants are purposefully chosen, diversity should be initiated
- Finding multipliers in the respective group might be helpful in order to attract participants: this can be e.g. a representative from a self-help organisation, persons in workers' councils, long-term inhabitants from a specific area etc.;
- If pupils/ students are or should be part of the project it is recommended to engage/ recruit in all school forms in all urban districts alike to guarantee a diversified group of participants.

## 3) Techniques to handle and exploit diversity

It was stated how important it is to try to uphold diversity throughout the whole process. Alas, there was little knowledge provided considering the day-to-day practices capable of appropriately handling diversity. Nevertheless, a few hints were given:

- Organizing focus groups in different steps of the ongoing co-creation process;
- Creating a certain mutual dependency and responsibility for the forthcoming of the overall process;

- Investing time into the structural facilitation of diversity;
- Building an environment of trust and confidence in each other's personal capabilities, skills and competencies;
- Especially in cities, intergenerational approaches are considered to be from high relevance –methodologies and co-research activities need to be adaptable to youngsters and elderly people alike.

Furthermore, the statements contain some references towards intersections of different dimensions of inequality. In example, the overlapping of dimensions of diversity may lead to the accumulation of certain characteristics. If, for example. It will be interesting to see a further examination of these issues in the case studies, especially as several respondents stated to be interested in the different dealings of Diversity issues.

#### **4. Discussion: Entry points for case studies and beyond**

In general, the database is supposed to function as an interactive instrument and tool of data generation, open and transparent to the whole community of the project. The descriptive analysis from the database of examples of co-creation compiled by the SISCODE community holds various entry points for further examination. On the one hand, it helped to initially describe the landscape of co-creation in several contexts. This involved a description of the initiatives' networks and partnerships, but also the process dimension of the initiatives' development, with a specific focus on stakeholders engagement, tools and methods used, and typical stages of co-creation. These perspectives serve as a starting ground to dig deeper into practices of co-creation through the upcoming qualitative research efforts.

It will be interesting to see, e.g., in how far a constellation/interaction of different factors at the stage of the *initiative's launch* helps to create a momentum or window of opportunity helping a case to a good start. Furthermore, it is an open question how the drivers (inter-) act and how exactly they deliver support in becoming sustainable and in creating impact. The same applies for the barriers as already elaborated in the respective chapter 3.3. The several variables and aspects have to be set into relation to one another to create an exhaustive picture of the interrelations and interlinkages in different contexts. Therefore, in a next step, the case studies will help to find out *which drivers and barriers correlate with typical settings*. Qualitative research will put a focus on the question on the settings in which initiatives are enabled to set up a multi-sectoral *playground for policy making*, and which constraints hinder initiatives in other settings from doing so.

Obviously, there is a lot of dedication to networking and exchange, as the initiatives uphold wide-reaching partnerships. In the case studies, one focus will be to understand how these initiatives *learn from one another*. In the further course, cases will be analyzed to find out what functions different kinds of partnerships fulfil and if urban or regional initiatives partner with others in different urban or regional settings to imitate good practices. This will lead to a better and deeper understanding of the *scaling-out-processes* of good practices: While it is obvious that good practice cannot be copied from one setting to another in a naïve sense, these results may tell us about opportunities to initiate reflected and adaptive imitation which requires a solid understanding of the good practice provider's and the receiver's ecosystem in which the co-creation initiative unfolds. Case studies are expected to provide deeper insights into the multi-sectoral reality of "doing co-creation", and they will underline the extended problem-solving capacities of co-creation in a specific ecosystemic panorama. This requires a thorough understanding of the four ecosystemic 'onion' layers/contexts and their interrelations mentioned introductorily. Especially the role-context must be examined through reconstructive methodologies to take the high importance of individual engagement, be it from single individuals or interest groups into account. Several results point towards a centrality of individual motivation, personal engagement and the possibility to unite in groups with like-minded people in an innovative environment.

The findings show that another focus should be on the *needs of the co-creative activities* and the provision of resources they (often) cannot provide on their own (e.g. knowledge and qualifications, infrastructure, mentality, attitude). The discovered a gap between the types of support and the needs points towards the necessity to investigate in which arrangements co-creation receives resources from external partners and why these support arrangements are sometimes misdirected.

Questions of Diversity, Inclusion and Intersectionality are a cross-cutting theme to most of the initiatives, while, at the same time, it is not clear to several initiatives how Diversity may successfully managed and exploited. A high number of cases emphasized the major significance to create diversity from the very beginning of the initiative, but little information is provided concerning the tactics followed to reach that goal. In line, the case studies should include a diversity mainstreaming approach in their overall research strategy. It may also be rewardingly to ask for written-down diversity concepts and/or awareness-concepts to undergo a document analysis on a longer term, possibly within the biographies of co-creation in Task 2.3.

Co-creation is not only a cross-sectoral process, but in many cases it involves all four sectors of society. This can be considered the most impressive result of the initial analysis: Regularly, civil society, academia, the public and the private sector collaborate in carrying out the process of co-

creation. These cases are complemented by tri- and bi-sectoral constellations and those cases in which co-creation happens within one sector, for example as a cooperation between different municipal departments. The prevalence of four-sector cases is not only a remarkable result in itself; it also raises further questions for the upcoming case studies. What is the specific potential of such cases? What makes them difficult to manage, what tools are used, and which qualifications and competences do facilitators of co-creation need in order to manage such initiatives successfully? This also includes an investigation into the organizational capacities that provide initiatives with the necessary competences to *facilitate and engage in quadruple co-creation processes* and the resources, structures, and networks needed. Another striking fact is that representatives of academia are involved in almost 70% of the cases. Another recent and comprehensive survey on social innovation initiatives around the world (the EU-funded project SI-DRIVE) showed that academia is lagging behind, as it is only involved on 15,2% of the initiatives (cf. SI-DRIVE D1.4, p. 12). Aside from a bias resulting from SISCODE's specific interests, one assumption could be the rise of transdisciplinary research projects, which co-create research together with practitioners. The specific *role of academia* in co-creation initiatives will also be examined closely in the next empirical steps of SISCODE.

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