SHARING
Stocktaking and assessment of typologies of Urban Circular Collaborative Economy Initiatives

Targeted Analysis

Inception Report
Inception Report

This targeted analysis activity is conducted within the framework of the ESPON 2020 Cooperation Programme.

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08/02/2019

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The final version of the report will be published as soon as approved.
Table of contents

List of Figures ................................................................................................................................. ii
List of Tables ................................................................................................................................. ii
Abbreviations ................................................................................................................................ iii

1 Feedback on comments received on the tender during the kick-off meeting ...................... 1
   1.1 Refined objectives and scope of the study ........................................................................ 1
   1.2 Main methodological amendments to the proposal ......................................................... 1
      1.2.1 Task 1: Methodological framework and needs analysis ........................................ 2
      1.2.2 Task 2: Analysis of existing and emerging patterns of Urban Circular Collaborative Economy ................................................................. 3
      1.2.3 Task 3: Case studies .................................................................................................... 4
      1.2.4 Task 4: Identification of good practices and policy proposals ................................ 4
      1.2.5 Overarching activities ............................................................................................... 4
         1.2.5.1 Spatial mapping and analysis .............................................................................. 4
         1.2.5.2 Website and dissemination ................................................................................. 5

2 Overview of stakeholder’s political objectives and policy needs ........................................... 8

3 Differences and communalities in definitions and approaches to circular and collaborative economy .......................................................................................................................... 9

4 Methodological framework ...................................................................................................... 14
   4.1 The overall framework ....................................................................................................... 14
   4.2 Criteria for the typologies .................................................................................................. 15
      4.2.1 Business or organisation models of UCCE initiatives .............................................. 15
      4.2.2 Usage ......................................................................................................................... 16
      4.2.3 Territorial characteristics ......................................................................................... 16
      4.2.4 Policy framework ..................................................................................................... 17
      4.2.5 Typologies of UCCE ............................................................................................... 17
      4.2.6 Impacts of UCCE initiatives .................................................................................... 18

5 Revised workplan and project implementation ......................................................................... 20
Annex 1: List of criteria for the typologies .................................................................................... 21
Annex 2: Summary of each territory’s objectives and needs ...................................................... 22
Annex 3: Literature review outline and literature grid ................................................................. 39
Annex 4: List of sources for the literature review ......................................................................... 41
Annex 5: List of databases and data sources .............................................................................. 48
Annex 6: Kick-off meeting minutes .............................................................................................. 49
List of Figures
Figure 1: Outline of the proposed methodology .......................................................... 2
Figure 2: Sequential order for the development of the indicators .................................. 3
Figure 3: Illustration of the concept of UCCE as defined in the study ............................. 11
Figure 4: Relationship between the SDGs and the circular economy .............................. 13
Figure 5: Draft conceptual framework for UCCE typologies and assessment of impacts..... 15
Figure 6: Updated workplan .......................................................................................... 20

List of Tables
Table 1: First draft of typologies ...................................................................................... 18
Table 2: Example of indicators for bikesharing ............................................................... 19
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>UCCE</td>
<td>Urban Circular Collaborative Economy</td>
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1 Feedback on comments received on the tender during the kick-off meeting

1.1 Refined objectives and scope of the study

This section presents the main revisions and additions to the objective of the study taking into account the feedback received during the kick-off meeting.

The ultimate objective of this ESPON Targeted Analysis is to create a common understanding of the Urban and Circular Collaborative Economy (UCCE) in European territories. As further emphasised during the kick-off meeting of the project, the goal is to support policymakers with territorial evidence on the impact of UCCE initiatives, going beyond the large collaborative economy platforms (“centralised and for profit”)

1 and taking into account smaller and local initiatives. Existing tendencies should be analysed in correlation with territorial features (e.g. economic, social, political, cultural) and policies in place, as required by the ToR.

One of the main outcomes of the study will be a knowledge pack on the collaborative/circular economy including recommendations for policy makers at different levels. The study will privilege a bottom-up approach in order to better capture local initiatives and take into account the stakeholders’ territories’ characteristics. Integration within the framework of the United Nations’ Sustainable Development Goals (SDGs) will also be explored.

As regards the scope, the study will focus on the following six stakeholders: The Hague (Netherlands), Prato (Italy), Maribor (Slovenia), Porto (Portugal), Flanders (Belgium) and Greece. The city of Olso (Norway) may also be included in the project or some of its activities, upon confirmation of the stakeholder and ESPON EGTC’s approval, and provided the budget allows it.

1.2 Main methodological amendments to the proposal

This section presents the revised methodology per Task as discussed during the kick-off meeting. The four-task structure presented in the proposal is illustrated again in the figure below. It should be noted that, as there are strong interdependencies between the Tasks, the research will be done taking into consideration the global picture of the study since its start, instead of respecting a strict sequential order.

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1 See the classification of the Urban Agenda for the EU Partnership on Circular Economy. Available at: https://ec.europa.eu/futurium/en/circular-economy/better-knowledge-draft-action-8-develop-collaborative-economy-knowledge-pack-cities
The section below presents the main methodological amendments per Task.

1.2.1 Task 1: Methodological framework and needs analysis

The methodology of Task 1 presented in the proposal is as follows:

- **Sub-task 1.1:** Overview of the stakeholders’ objectives and needs
- **Sub-task 1.2:** Literature review on existing research on UCCE initiatives
- **Sub-task 1.3:** Elaboration of the conceptual and methodological framework

During the kick-off meeting, the research team has discussed with the stakeholders (in group and bilaterally) about their expectations as regards the study and specific needs. Interviews have been conducted via phone with the cities of Porto and Maribor, whose representatives could not attend the meeting in person.

This has allowed to gather information on the current situation of the UCCE in the territories, main initiatives already in place and main obstacles to their development, data sources available, stakeholders to contact and suggestions of initiatives for the case studies. A summary of the stakeholders’ objectives and needs presented in Annex. This summary has been taken as a starting point for the elaboration of the methodological framework, and will be further developed in the case studies.

In the inception phase, the research team has collected sources for the literature review and performed a review of current definitions (please see Chapter Error! Reference source not found. of this report). This, in combination with the information on the stakeholders’ territorial characteristics, has allowed to elaborate the list of criteria that will serve to develop the typologies of UCCE initiatives presented in Chapter Error! Reference source not found.. The full outline of the literature review is presented in Annex, as well as the literature grid used to gather literature.
1.2.2 Task 2: Analysis of existing and emerging patterns of Urban Circular Collaborative Economy

The methodology of Task 2 presented in the proposal is as follows:

- **Sub-task 2.1:** First elaboration of typologies of UCCE initiatives according to their impacts and correlations with multi-level policies and cultural dimensions
- **Sub-task 2.2:** Overview of data sources to describe, measure and compare UCCE initiatives in the stakeholders’ territories and across European cities
- **Sub-task 2.3:** Inventory of UCCE initiatives in the stakeholders’ territories

One of the study’s main objectives is to elaborate a typology of UCCE initiatives and define a set of indicators to measure their impacts in the stakeholders’ territories. As agreed during the kick-off meeting, the typology developed in the study covers large platforms and initiatives but also smaller and local business models.

After approval of the typologies, Task 2 will develop indicators to measure the impacts of the different typologies of UCCE initiatives. As emphasised during the kick-off meeting, indicators are developed to fit the stakeholders’ territorial specificities, but still allow comparability across territories and replicability beyond the study’s stakeholders.

In a sequential way, we first develop the criteria that will allow to differentiate the typologies. The indicators will link to each typology and will be established taking into account the data available in each territory, as the figure below shows. The criteria are presented in Chapter Error! Reference source not found. of this report and in Annex.

*Figure 2: Sequential order for the development of the indicators*

This process allows to benefit from the insights of the full literature review and interviews with experts conducted in Task 2, in order to develop indicators that are measurable in each territory.

As agreed during the kick-off meeting, indicators will link with the ones developed by the Urban Agenda Partnership on Circular Economy. Primary indicators will focus on the circular economy, but the study will also take into account other impact areas than environmental and economic, such as social, cultural and political impacts. The study will also review the SDGs indicators and enquire on how the UCCE can contribute to fulfilling the SDGs.

Sources for the data collection will include those encountered in the literature review, those suggested by the stakeholders in the bilateral discussions, input from different sharing economy networks (e.g. I-share), and the self-registration tool as part of the website. The website’s proposition has been refined and is presented in Chapter 1.2.5.2 of this report.
1.2.3 Task 3: Case studies

The methodology of Task 3 presented in the proposal is as follows:

- **Sub-task 3.1**: Selection of the initiatives
- **Sub-task 3.2**: Identification of impacts and SWOT analysis of UCCE typologies
- **Sub-task 3.3**: Drafting of the case studies

The reflexion around the case studies has started already in the inception phase in parallel with the development of the typology. This is expected to give more flexibility and time to screen the initiatives, and to select the initiatives with highest impacts. The case studies will focus on some specific aspects of the collaborative economy and take into account stakeholders’ interests and suggestions.

A proposal on the case studies will be sent to ESPON EGTC and the stakeholders a week before the inception meeting in order to discuss it during the meeting and finalise it shortly after.

1.2.4 Task 4: Identification of good practices and policy proposals

The methodology of Task 4 presented in the proposal is as follows:

- **Sub-task 4.1**: Cross-analysis of case studies and elaboration of conclusions for the research
- **Sub-task 4.2**: Identification of good practices and policy proposals
- **Sub-task 4.3**: Elaboration of the “Practical Guide” and dissemination of results

The results of the study will allow to elaborate practical guide (or “knowledge pack”) on the collaborative/circular economy including recommendations for policy makers at different levels.

Task 4 also comprises the dissemination activities, including a project validation workshop, the Sharing Cities Summit, the ESPON Seminars in Romania and Sweden, other multi-stakeholders’ events, as well as the website. This is presented in Chapter 1.2.5.2 of this report.

1.2.5 Overarching activities

1.2.5.1 Spatial mapping and analysis

Spatial mapping and analysis will contribute to multiple tasks within the project, however the starting point for the application will be the case studies as agreed in the kick-off meeting. Analysing territorial patterns connected to UCCE initiatives can provide input especially for the drivers and preconditions of creating such initiatives, but given the low territorial scale of most case study regions (i.e. single cities) there are certain constraints related to the data available. The approach for data collection is laid down in Task 2, the results of which will set the framework for what can be actually mapped and analysed within the project. Additionally, we are in contact with the stakeholders that indicated territorially differentiated data to be available through specific sources within their region, to investigate the opportunities created through that.
Within the case studies, we aim to identify territorial patterns in the distribution (e.g. measured by the operational area) and in the uptake (e.g. measured by the number of peer consumers/peer providers or the number of transactions) of UCCE initiatives. This will enable us to analyse in which regions which types of initiatives following the typology developed in Task 2, are active and quantify the uptake compared to other regions or other initiatives. If significant spatial variations are identified in that way, they can be tested against context indicators (e.g. population density, cultural dimensions, income distribution) which are suspected to create certain preconditions for UCCE initiatives. In that way, input for the identification of both preconditions for increased uptake of UCCE initiatives in general as well as preconditions for certain types of UCCE initiatives can be created.

This will further on serve as a contribution to the policy recommendations, as spatial variances in the preconditions should be taken into account when formulating policies on city- or especially on regional level. The concrete approach however will largely depend on the data which can be collected, and thus may vary between case studies. We will keep in close contact with ESPON EGTC about the compliance with the required layout elements and mapping guides for all maps intended for publication, as there is no standard template available on the territorial scale required for this project.

1.2.5.2 Website and dissemination

We have come up with an alternative plan for communication and dissemination, based on input from the extensive discussion in the kick-off meeting and further research. It involves a shift from having one single project website, to working with existing websites (ESPON and local ones).

Before continuing we want to highlight the different aspects of the dissemination. There is 1) dissemination in relation to data collection, and 2) dissemination in relation to getting the (preliminary) results, the “knowledge pack” to the policy makers at all levels. It is important to see this distinction as they require a different approach.

Dissemination & data collection

One single website does not “cut it” nowadays. A website today is like a flyer in the past; it needs to be actively disseminated for the target audience to notice it. Considering the fact that we have to move quickly in gathering data – which has to be collected before October 2019 – the aim should be to maximise the reach. Since the target regions are spread out across Europe, the risk is that one (centralised) website will not get the attention of everyone.

We have to get this project attuned to the local context. We will do this by publishing the data gathering tools on local/existing websites, which already have the traffic and the reach to get to the target audience. They aim is to have some of the accompanying texts in the local language, however we would advise against translating everything. Adapting the questionnaires to the local language could turn out to be challenging when it comes to analysing the collected data and making sure the questionnaires stay exactly the same. This
could potentially skew the results. For the translations, except Dutch, we expect help from the stakeholders.

Next to using existing (local) websites, shareNL will make use of their network and the network of Sharing Cities Alliance, to spread the data collection tools across the stakeholder territories. In addition we expect the stakeholders to help us connect to their local ecosystems (networks). If it is clear for the local policy makers and city officials how it could benefit their local UCCE initiatives, we could harness their enthusiasm in spreading it further throughout the city or region (*method: snowball sampling*). ShareNL will creatively engage with local communities and help to spark collaboration across communities in and between regions. This way, the time investment asked from the people behind the initiatives gets rewarded in a meaningful way.

**Tools**

The criteria for the tools we use are:

- easy to integrate in existing websites;
- ready to use and within the budget;
- allowing for smooth data-streams to the research team;
- and easy to communicate.

Every city gets their own “landing page” – a specific web-page with a very clear call to action – on which:

- the goals are explained;
- the connection to the region is made (what is in it for them);
- a concrete call to action is formulated and the connection is made with the data gathering tools (link to questionnaire).

There will be six landing pages accessible in a similar fashion, for example [domain]/Vlaanderen. The different pages could possibly be in the native language from the specific region, if the understanding of the English language is not adequate. This is to be decided by each partner who we also ask for help in case translations are necessary. Those pages will be connected to a main page, which will contain more general – less region specific – information in English.

**Mapping & self registering**

In the phase of data collection we will not (necessary) make use of a map to visually display the different initiatives, in relation to gathering data. In a recent call with I-share, who conducted research into the the economic, ecologic and social impact of the sharing economy in Germany and displayed the results visually on a map[^1], we learned that the map did not have a noticeable effect on initiatives self registering for the research. The bulk had to be inserted manually by teams of student assistants. Given the I-share experience and the

[^1]: Available at: https://www.i-share-economy.org/atlas
feedback given during the first meeting, we propose to move away from creating new maps for each city and region.

The visualisation of data, in the form of maps, could however prove to be useful in the dissemination of the results in a more static form, but after the data collection is completed.

Dissemination of the results

For the dissemination of results, we can partially build on the existing network of contacts of the Sharing Cities Alliance (SCA). From the stakeholders, the City of the Hague (the Netherlands), the city of Ghent (Flanders Region, Belgium) and Maribor (Slovenia) are members of the SCA or in the process of joining.

Furthermore we propose to use the Alliance Lexicon (ALEX), which is the digital resource of the SCA as an openly accessible place to collect the case studies, policies and research. This way:

- everyone, including all stakeholders and people behind the initiatives will have access to a continuously evolving resource and thus get a direct reward for their collective time investment;
- the research team has a one-stop place where relevant materials are gathered;
- all cities can directly benefit from the project as their is quick dissemination;
- we have a direct link to the Sharing Cities Summit\(^3\) taking place October 2019 in Malmo, Sweden, as well as during an upcoming online seminar April 2019, both on the same topic as this project;
- and there is a guarantee that the results will be handily accessible to a global audience of cities after the project has ended.

We are also in close contact with Ouishare, through its core member Albert Cañigueral, who has committed to help the consortium in the dissemination of results. Finally, we are in close contact with Eurocities\(^4\) and the I-share\(^5\) project in Germany, which both have verbally agreed to support our consortium. This will complement the dissemination of results by the ACR+ network and within the stakeholders’ territories by the stakeholders themselves, as well as by ESPON during the ESPON Seminars.

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\(^3\) ShareNL has co-organised the world’s first and second Sharing Cities Summit (Amsterdam, 2016; New York City 2017) and is involved too in upcoming summits in Barcelona (2018, November) and Sweden (2019). These summits gather both a set of city leaders from around the world but also engage actively with activities at the local level. The cross-over between the collaborative (sharing) and circular economy is of interest to a number of partner cities within the Alliance including The Hague. The results of this project will be presented at the 2019 summit and through other activities of shareNL and the Sharing Cities Alliance such as online seminars and an online magazine for all partner cities and open database for all cities (led by the Sharing Cities Alliance Foundation). One way forward could to share the insights from this project with other cities in the Alliance and invite them to start collaborating with the cities in this project to collectively advance UCCE initiatives.

\(^4\) [https://www.i-share-economy.org/en](https://www.i-share-economy.org/en)

\(^5\) [https://www.digitallytransformyourregion.eu/](https://www.digitallytransformyourregion.eu/)
2 Overview of stakeholder’s political objectives and policy needs

This chapter is the summary of bilateral discussions with the stakeholders during the kick-off meeting or separate calls.

It seems that most of the territories have developed or are in the process of developing their own strategies for the circular economy. Some of the existing local strategies (e.g. Porto, Maribor) make clear reference to the United Nations Agenda 2030 which sets the SDGs.

Regarding the stakeholders’ interests in the study:

- All stakeholders highlighted that the study should focus on domestic (especially local and regional) initiatives rather than big international ones to stress on the bottom-up character of UCCE initiatives. The study should develop on the roles that public authorities can play in the development of the UCCE initiatives from a bottom-up perspective.
- Special attention should be paid to public-private partnerships in the development of the UCCE initiatives (e.g. bikesharing systems). Also, the supportive role of the local authorities for the development of UCCE initiatives (e.g. policy measures, regulatory measures, funding) is very important. Especially, the stakeholders emphasised the importance of funding modalities available for the UCCE initiatives. Thus, the study should analyse the tools that the cities and territories could develop to promote and support the sharing and collaborative economy activities.
- It is also important that the study identifies existing barriers that limit the development of UCCE initiatives in the territories. Subsequently, the study should aim to bring up possible solutions to these barriers as well as identify relevant stakeholders responsible for solving out of these limitations.
- Finally, most stakeholders have expressed an interest for economic and social impacts of UCCE initiatives, i.e. as help to combating poverty and fostering job creation. Nevertheless, it seems also important to take under consideration eventual negative impacts of UCCE initiatives such as poverty trap, deregulation of the labour market or personal security.

Regarding the current state of UCCE use, many examples can be found in the stakeholders’ territories: car sharing, food waste, community-supported agriculture, shared libraries and various cooperatives (e.g. energy cooperatives, co-housing, neighbourhoods’ cooperatives or consumer cooperatives). The majority of the territories have noted an increased number of initiatives in the field of energy, especially energy cooperatives.

Some stakeholders suggested some initiatives that could be the topic of a case study. In addition, the stakeholders emphasised the importance of developing personal contacts with the actors of the circular and collaborative economy in the case studies (through on-site visits and workshops).

The main stakeholders’ needs and expectations for the study are summarised in Annex.
3 Differences and communalities in definitions and approaches to circular and collaborative economy

Definitions of the collaborative economy

The collaborative economy has been subject to many definitions and is interrelated to different concepts, such as the sharing economy, gig economy, peer-to-peer economy. The expression “collaborative consumption” has been coined by Botsman and Roger (2010) as “systems that reinvent traditional market behaviours – renting, lending, swapping, sharing, bartering, gifting – in ways and on a scale not possible before the Internet.”

The European Commission (2016) defines it as “business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals.” The collaborative economy involves three categories of actors: (i) service providers who share assets, who can be private individuals (“peers”) or professionals (ii) users of these, i.e. consumers; and (iii) online platforms acting as intermediaries to connect the two. Collaborative economy transactions generally do not involve a change of ownership and can be carried out for profit or not-for-profit.

This definition partially overlaps with the one of the sharing economy, which key characteristics are: the exchange of unused or under-utilised assets (“idling capacity”), whether monetised or not and whether mediated through a platform or not. Contrary to collaborative economy transactions as defined by the European Commission, the sharing economy can also occur offline: for instance, the French initiative Lulu dans ma rue uses old newsstands in the city of Paris as meeting points for consumers and providers willing to exchange small services, such as housekeeping or DIY. The sharing economy is linked to broader concepts such as efficiency, sustainability and community (Rinne, 2017).

Other authors have a broader conception of the sharing economy that includes multiple dimensions. For instance, Agyeman et. al (2013) define the sharing economy as sharing “things” (cars, tools, books etc.), sharing services (premises, places to sleep, etc.), and sharing activities (notably political activity, but also others such as leisure). This definition also includes both sharing between private individuals, and collective provision of resources and services for sharing: e.g. green space, sanitation, city bikes, child care. This is especially relevant in an urban context, where sharing can occur at different levels in organisation of different kinds.

The definition of the collaborative economy used for this study will be broader than the one of the European Commission, using the exchange of unused or under-used assets as a starting point. As defined by Voytenko Palgan et. al (2016), “the sharing economy is defined as a

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6 Available at: https://www.luludansmarue.org/
variety of bottom-up initiatives, public-private-people partnerships, business start-ups and local government schemes, all of which utilise the idling capacity of our material world."

Definitions of the circular economy
The circular economy concept was developed as an alternative to the traditional linear consumption patterns (“take-make-dispose”), which in the long run constrain the availability of natural resources. The circular economy promotes sustainability in the use of resources and adheres to the concept of closing loops in the industrial ecosystem by minimising waste.

The circular economy is defined by the Ellen MacArthur Foundation (2013) as “an industrial system that is restorative or regenerative by intention and design” and that replaces the “end of life” concept with new ones, based on renewable energy and the elimination of waste. It aims to reduce, to the extent possible, “new inputs of materials and energy, while reducing environmental pressures linked to resource extraction, emission and waste”.

According to the European Environmental Agency (2015), this concept can be applied to “all kinds of natural resources, including biotic and abiotic materials, water and land”. The circular economy model encompasses therefore both technical (restoration of products via reuse, repair, remanufacturing and recycling) and biological (composting or anaerobic digestion of biologically based material) cycles.

Further than a concept, the circular economy can be understood as a practice, promoting closed material cycles by focusing on multiple strategies from material recycling to product reuse, as well as rethinking production and consumption chains toward increased resource efficiency (Moreau et. al., 2017). The circular economy as new model for the production and consumption of goods has therefore important political implications, and has attracted wide political attention as a strategy toward sustainability (Bruel et. al., 2018).

Differences and commonalities between the two concepts
Collaborative economy and circular economy are relatively recent terms. Both terms have their roots in other research fields, in particular industrial ecology. While the circular economy is based on the parent research field of industrial ecology, the collaborative economy is closely related to product-service systems.

What the collaborative economy and the circular economy have in common is the more efficient use of resources. On the one hand, the collaborative economy can trigger in change

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10 Ellen MacArthur Foundation website. The circular economy – Concept. Available at: https://www.ellenmacarthurfoundation.org/circular-economy/concept
in using products or processes which can contribute to a more efficient use of resources. If that is the case collaborative economy initiatives become circular economy initiatives.

While the circular economy focuses on the product itself and on the resource use caused in production and usage, the collaborative economy is more interested in the transaction relationship between consumers and providers and involves the use of a platform (online or offline) as intermediary. Unlike the circular economy, the collaborative economy also covers services. Therefore we can refer of the circular economy as “the end”, while the collaborative economy would be “the mean” to achieve it.

Such collaborative economy initiatives with an impact on cities and enforcing the circular economy are designated as **Urban Circular Collaborative Economy (UCCE) initiatives** and constitute the topic of this study. Because the scope of the study strongly relates to urban development, the term UCCE can also be linked with the concept of “urban sharing” as coined by Zvolska et al. (2016) which encompasses “a wide array of communal and commercial urban sharing organisations that employ ICT to reduce transaction costs and make sharing of resources among peers easily accessible.”

The figure below shows the interrelationship between the circular and the collaborative economy, which bring to the concept of UCCE.

*Figure 3: Illustration of the concept of UCCE as defined in the study*

<table>
<thead>
<tr>
<th>THE END</th>
<th>THE MEAN</th>
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<tbody>
<tr>
<td>CIRCULAR ECONOMY</td>
<td>COLLABORATIVE ECONOMY</td>
</tr>
<tr>
<td><img src="image_url" alt="Illustration of the concept of UCCE" /></td>
<td></td>
</tr>
</tbody>
</table>

**Global implications and links with the Sustainable Development Goals (SDGs)**

In 2015, the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted. The SDGs are the blueprint which aim at achieving a better and
more sustainable future for all by addressing global challenges, notably poverty, inequality, climate, environmental degradation, prosperity as well as peace and justice.\textsuperscript{11}

Although circular and collaborative economy are related to the local economy and bottom-up initiatives, the practices are of great importance for the achievement of the SDGs at global level. The literature shows that there is a strong relationship between the circular economy and the following SDG targets: SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 12 (Sustainable Consumption and Production) and SDF 15 (Life and Land). Directly related to our study, the circular economy can indirectly contribute to SDG 11 (Sustainable Cities and Communities).\textsuperscript{12,13}

Especially, the recycling of household waste and e-waste, closed-loop systems for wastewater-recycling and reuse, industrial symbiosis (reuse of industrial waste), remanufacturing, repair and refurbishment (e.g. in construction sectors), reduction and re-use of product (e.g. efficiency in consumption and production and reduction of food waste) can directly and indirectly leverage the achievement of some SDGs, as illustrated in the figure below.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{11} United Nations. About the Sustainable Development Goals. Available at: https://www.un.org/sustainabledevelopment/sustainable-development-goals/
\end{itemize}
\end{footnotesize}
On the other hand, it is clear that the collaborative economy can contribute to some social and economic pillars of the SDGs, i.e. reduction of poverty and reduced inequalities. Because of the strong relationship between these concepts, this study will try to make linkages between UCCE and their impacts at local level but also in fulfilling the SDGs.

Taking into account these elements, our study will look at initiatives which will use collaborative economy techniques in order to support the reduction of resource use or the reduction of waste. The SDG objectives and the indicators of the SDGs will be used to design the indicator sets for the different typologies to also ensure data availability in the regions.
4 Methodological framework

The methodological framework presented in the inception report will be finetuned in the following stages of the project with the literature review, interviews with the different collaborative economy experts and the case studies.

The methodological framework aims to develop a typology of UCCE initiatives, which will be used to identify differences and similarities in the impact chain. The collaborative economy comprises various business models in different sectors with different usage patterns. Initiatives are also conducted in diverse areas in terms of structural characteristics and economic, social and political context. Our analysis of the impacts of the collaborative economy in the different territories needs to take these layers into account.

By enabling policy makers to understand the impact chain of UCCE activities in their territory, our typology will also enable the development of fit-for-purpose policy measures to support the activities with the highest positive impacts.

4.1 The overall framework

Building a typology of UCCE initiatives and how they compare to each other requires an understanding of the complete impact chain. UCCE initiatives and their impacts can differ because they have different characteristics, business models or usage patterns, but also because of external factors (i.e. different territorial contexts and policy frameworks in place).

The impact chain is therefore based on three criteria:

- The starting point of all impact assessment are policies at different levels (EU, national, local). These policies influence the development of UCCE initiatives and can also affect territorial characteristics (i.e. demographic, economic, social and cultural dimensions of territories).
- At the same time, territorial characteristics determine the nature and effectiveness of the policies, and the scope and breadth of UCCE initiatives. As required by the ToR and discussed during the kick-off meeting, we have a closer look at cultural dimensions of territories.
- We introduce an additional dimension, which is the usage citizens and businesses make of UCCE initiatives. Most economic, environmental, social and political impacts are not caused by the initiatives themselves but by the way people use them, especially how many people collaborate on the usage of assets. Again, the usage will be influenced by policies and territorial dimensions as they create a favourable or adverse “breeding ground” for collaborative economy initiatives to initiate and scale-up.

The impact assessment ultimately wants to draw correlations between the characteristics, usage and impacts of UCCE initiatives (i.e. the typologies), and the influence of cultural dimensions and multi-level policies (represented with the blue arrows). This draft conceptual framework presented in the proposal is illustrated below:
4.2 Criteria for the typologies

The typologies we want to develop under Task 1 should provide a good overview on the business models, usage models and their impacts under different territorial and policy circumstances. They should also enable local policy makers to gain an understanding of UCCE initiatives and their impacts in their territory. They therefore need to be broad enough to cover the most important categories of UCCE initiatives, but precise enough to allow a meaningful assessment of impacts. The sub-chapters below present the criteria used to elaborate the typology.

4.2.1 Business or organisation models of UCCE initiatives

The collaborative economy is active in different markets or sectors, and involves different types of transactions. Business or organisational models greatly influence the possible impacts of collaborative economy initiatives, in particular the following elements:

1. **Market or sector, and underlying asset being shared?** Collaborative transport models can involve the sharing of bikes (bike sharing schemes), cars (carsharing), or rides (ridesharing or rides-on-demand); accommodation models can involve the sharing of rooms or houses (short-term rental platforms or home exchange), or workspaces (coworking spaces), etc. The market or sector, and especially the underlying asset being shared, affects the size and the type of impact (European Commission, DG ENVI, 2018). Environmental impacts can be caused by the reduction of energy or resource usage in the process/transaction (e.g. saved fuel due to shared rides) or for the production of a tool (e.g. sharing a lawn mower between neighbours avoids to purchase one for each house).

2. **Transaction relationship and mode?** Whether the transaction is conducted between peers (P2P), businesses and individuals (B2C), businesses (B2B) or sometimes involving public sector institutions can engender economic impacts (i.e. higher or lower prices) as well as social impacts and consumer protection impacts (e.g. who is responsible in case something goes wrong). The way in which the parties
engage with each other, e.g. through sharing, renting, lending, exchanging/swapping can also trigger different economic and social impacts.

3. **Replacement activity?** Whether the activity is only enabled through sharing or whether it replaces another economic activity because of cheaper prices or higher convenience (e.g. rides-on-demand platforms with taxi services, or short-term rentals with hotels). Economic impacts but also important social impacts stem from this criterium (e.g. protest from previously established economic operators, complaints from the local community related to noise or disturbance, etc).

4. **Hiring of workers?** Whether the activity involves some form of hiring of labour or working time also has economic and social impacts, as it can constitute a form of employment (De Groen, Maselli, 2016).

### 4.2.2 Usage

Impacts of all kinds as well as the political opportunities around the collaborative economy in the territories depend on the usage of initiatives. Usage patterns can be influenced by the following factors:

1. **The size of the activity?** The size of all categories impacts depends on the number of people involved in collaborative economy activities, e.g. the number of initiatives present in the territories, and if possible the number of users and potential users (e.g. visitors on platforms) and providers.

2. **Dominant market player or niche player?** Economic and social impacts will depend on whether the initiative is dominant on the market or, on the contrary, if there are multiple players with functioning competition. Both the market position towards users and towards providers need to be considered in order to assess potential gains and losses caused by the arrival of new players in the markets. This will also affect the vulnerability of consumers and providers, i.e. if they have the choice on the collaborative economy offer.

3. **Provider of the initiative outside the territory or inside the territory?** Another important distinction is whether the provider (or organiser of the initiative) is located in the territory or outside. Economic impacts and their scale are also bound to the organiser of the initiative, and the presence of the organiser within the territory can create additional impacts (numbers of workers in the headquarters, for instance).

### 4.2.3 Territorial characteristics

On the other hand, both the scale and pace of development of the collaborative economy and its impacts are influenced by the presence or absence of some breeding ground in the territories. The following territorial characteristics are deemed to have an impact:

1. **Digital (and/or organisational) front runner or follower?** If the territory is well connected to the Internet (Internet access, broadband access), has a large proportion of early adapters of digital solutions and/or a population keen on trying new business models (Internet use, digital skills), the development the collaborative economy and the roll-out of their impacts are likely to be quicker.

2. **Labour market situation?** The bargaining situation of workers will depend on the local labour market situation and with that the ability for workers to extract rents are an important determinant of the social impacts of the collaborative economy.

3. **Competition for space?** It is also important to acknowledge that the competition for space (both floor space and ground space) is in some areas is more intensive than in others which benefits some collaborative economy models.
4. **Market size of the incumbent traditional markets?** Initiatives develop quicker and have a more important impact if the incumbent markets are more evolved, as there are more users and potential users.

5. **Cultural factors?** Cultural factors, such as the level of trust or appeal to collective activities may influence the take up of the collaborative economy. Socio-cultural factors that count most, and how to best measure them, can vary depending on the area. We can think of social progress and perception of inequalities, trust in the political and legal system, quality and accountability of government services, tolerance and inclusion (as measured by the EU-SPI), distance to power, individualism vs. collectivism (as measured by Hofstede Insights), etc. For each of these categories we will also think of adding factors specific to each territory, provided they can be measured, upon the suggestion of the stakeholders.

### 4.2.4 Policy framework

Policies can have an effect in the development of the collaborative economy by facilitating or hindering its development (European Commission, DG GROW, 2018). We will look at policies in different areas with potential impacts on UCCE initiatives. These areas concern the collaborative economy specifically, or broader areas with an impact on the sharing economy:

- Regulations: the regulation of providers and platforms in the collaborative economy and incumbent services with which they compete is an important driver of the development of the collaborative economy. Market access requirements and reporting or inspection requirements can keep services from spreading or fostering them.
- Support for entrepreneurs and/or start-ups (financial, e.g. grants, or non-financial, e.g. training activities, provision of information and guidance);
- Education and training (e.g. for digital skills);
- Ease of the dealing with the administration (e.g. submit taxes);
- Presence of initiatives on the circular economy and/or the collaborative economy (e.g. roadmap, policy paper, guidance, etc.)

### 4.2.5 Typologies of UCCE

The first two dimensions (characteristics and usage) determine the impacts of collaborative economy initiatives and are therefore used to define the typologies of UCCE initiatives. Some of the impacts will be also determined by the third dimension “territorial characteristics”. Therefore our analysis needs to work out the differences in impact caused by the different territorial characteristics. The typologies will therefore have subgroups, such as “bike sharing in dense urban environments” and “bike sharing in rural environments”.

The fourth dimension (policy options) is also not used to develop typologies. We want to work out the impacts of different policies on different typologies and for that an inclusion of policy options in the typologies would not be advisable.

Using these different dimensions and the hypotheses on the impact chain, a typology of about 10-15 different types of UCCE initiatives will be developed. The typologies may differ in policies affecting them, in the cultural and territorial dimensions, or in the impacts caused.

A first list is presented below:
<table>
<thead>
<tr>
<th>Typology</th>
<th>Sector</th>
<th>Underlying asset</th>
<th>Transaction relationship</th>
<th>Transaction mode</th>
<th>Replacement activity</th>
<th>Hiring of workers involved</th>
<th>Dominant market player</th>
<th>Size of the activity</th>
<th>Organiser local/outs ide the territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikesharing</td>
<td>Transport</td>
<td>Bike</td>
<td>B2C</td>
<td>Renting</td>
<td>Rental bike</td>
<td>For maintenance of asset and coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Car sharing</td>
<td>Transport</td>
<td>Car</td>
<td>P2P or B2C</td>
<td>Renting</td>
<td>Rental cars</td>
<td>Only for coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Ride sharing</td>
<td>Transport</td>
<td>Car</td>
<td>P2P</td>
<td>Sharing</td>
<td>Public transport</td>
<td>For service and coordination</td>
<td>Yes (Blablacar)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Rides-on-demand</td>
<td>Transport</td>
<td>Car</td>
<td>B2C (rarely P2P)</td>
<td>Renting</td>
<td>Taxi</td>
<td>For service and coordination</td>
<td>Yes (Uber)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Short-term rental</td>
<td>Accommodation</td>
<td>Space</td>
<td>P2P (rarely B2C)</td>
<td>Renting</td>
<td>Hotel</td>
<td>For service and coordination</td>
<td>Yes (Airbnb)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Co-living</td>
<td>Accommodation</td>
<td>Space</td>
<td>P2P</td>
<td>Sharing</td>
<td>No</td>
<td>Only for coordination</td>
<td>Yes (Couchsurfing)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Home exchange</td>
<td>Accommodation</td>
<td>Space</td>
<td>P2P</td>
<td>Swapping</td>
<td>Hotel</td>
<td>Only for coordination</td>
<td>Yes (HomeExchange)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Renting goods</td>
<td>Goods</td>
<td>Goods</td>
<td>P2P</td>
<td>Renting</td>
<td>Rental companies</td>
<td>Only for coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Reselling goods</td>
<td>Goods</td>
<td>Goods</td>
<td>P2P</td>
<td>Selling</td>
<td>Retailers</td>
<td>Only for coordination</td>
<td>Yes (eBay)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Swapping goods</td>
<td>Goods</td>
<td>Goods</td>
<td>P2P</td>
<td>Swapping</td>
<td>No</td>
<td>Only for coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Local</td>
</tr>
<tr>
<td>Community gardens</td>
<td>Food and waste</td>
<td>Space</td>
<td>P2P</td>
<td>Sharing</td>
<td>Agriculture</td>
<td>For service and coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Local</td>
</tr>
<tr>
<td>Food sharing/meal sharing</td>
<td>Food and waste</td>
<td>Food</td>
<td>P2P</td>
<td>Sharing</td>
<td>Restaurants</td>
<td>For service and coordination</td>
<td>Yes (Foodora)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
<tr>
<td>Energy cooperatives</td>
<td>Energy/utilities</td>
<td>Energy</td>
<td>P2P</td>
<td>Sharing</td>
<td>Energy providers</td>
<td>For maintenance of asset and coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Local</td>
</tr>
<tr>
<td>Coworking space</td>
<td>Service/Freelance</td>
<td>Space</td>
<td>P2P (rarely B2C)</td>
<td>Renting</td>
<td>Office rental</td>
<td>For service and coordination</td>
<td>No</td>
<td>Data to be collected</td>
<td>Local</td>
</tr>
<tr>
<td>Freelancer platform</td>
<td>Service/Freelance</td>
<td>B2C</td>
<td>Selling</td>
<td>Services</td>
<td>High</td>
<td>For service and coordination</td>
<td>Yes (Taskrabbit)</td>
<td>Data to be collected</td>
<td>Outside</td>
</tr>
</tbody>
</table>

### 4.2.6 Impacts of UCCE initiatives

Measuring impacts of the UCCE initiatives is challenging as the indicators are expected to vary depending on the type of initiative considered, as well as the data available in the territory.

We therefore propose to develop a set of core indicators that can be comparable across all territories, and complete them with the territory-specific indicators available. As mentioned above, we will pay attention to draw linkages with the Urban Agenda on the circular economy and the SDGs.
An example of indicators for one typology (bikesharing) can be seen below:

**Table 2: Example of indicators for bikesharing**

<table>
<thead>
<tr>
<th>Impact area</th>
<th>Impact</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>CO2 reduction</td>
<td>Proportion of service km that replace car or public transport km</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average emissions (CO2 and particles) per car km or per public transport km</td>
</tr>
<tr>
<td>Economic</td>
<td>Price reduction</td>
<td>Average price per km bikesharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average price per car km or public transport km</td>
</tr>
<tr>
<td></td>
<td>Revenues/Wages creation</td>
<td>Savings generated due to price reductions</td>
</tr>
<tr>
<td></td>
<td>Job creation</td>
<td>Number of workers involved in maintaining the platform and the assets (bikes)</td>
</tr>
<tr>
<td></td>
<td>Platform revenue</td>
<td>Platform turnover</td>
</tr>
<tr>
<td>Social</td>
<td>Decrease of social inequalities</td>
<td>Price of a trip to the city centre</td>
</tr>
<tr>
<td></td>
<td>Increased skills</td>
<td>Bike repair skills</td>
</tr>
<tr>
<td></td>
<td>Saved parking space</td>
<td>Less need for parking space in the city</td>
</tr>
<tr>
<td>Political / Governance (if any)</td>
<td>Increased participation to local life</td>
<td>Increased mobility of poor people</td>
</tr>
</tbody>
</table>
5 Revised workplan and project implementation

This section presents a revised version of the workplan. It has been elaborated according to the ToR, taking into account the actual date of signature of the contract (January 2019).

The workplan was adjusted following the discussions exchanged during the Kick-off meeting, as follows:

- Sub-activity 3.1: the selection of initiatives for case studies starts already in Month 1 and will be finalised in Month 2;
- Sub-activity 3.2: SWOT analysis of UCCE typologies will start in Month 3 and should be finalised in Month 7;
- Sub-activity 3.3: drafting of the case studies will start in Month 4 and should be finalised in Month 8;
- Workshops organised by shareNL in each stakeholder territory will be held between Month 6 and 7 and in Month 9.

Figure 6: Updated workplan

Dates for the deliverables:

- Deliverable 1: Inception Delivery: 8 February 2019
- Deliverable 2: Interim Delivery: 8 May 2019
- Deliverable 3: Draft Final Delivery: 8 October 2019
- Deliverable 4: Final Delivery: 8 January 2020

Dates for the meetings:

- 1st Steering Committee meeting: 8 January 2019 (Brussels)
- 2nd Steering Committee meeting: 5 March 2019 (Brussels)
- 3rd Steering Committee meeting: 3 June 2019 (Prato)
- 4th Steering Committee meeting: 11 to 15 November 2019 (Location to be confirmed)
### Annex 1: List of criteria for the typologies

<table>
<thead>
<tr>
<th>Area</th>
<th>Criteria</th>
<th>Sub-criteria</th>
<th>Indicators for the criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business or organisation models</strong></td>
<td>Market/sector</td>
<td>Transport, accommodation, goods, food and waste, energy/utilities, services/freelance</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Transaction mode</td>
<td>Sharing, renting, lending, exchanging/swapping</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Replacement activity</td>
<td>Type of activity replaced</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Hiring of workers involved</td>
<td>Only for coordination For service and coordination For maintenance of asset and coordination</td>
<td>X</td>
</tr>
<tr>
<td><strong>Usage</strong></td>
<td>Size of the activity</td>
<td>High/Low</td>
<td>To be determined</td>
</tr>
<tr>
<td></td>
<td>Dominant market player or niche player</td>
<td>Presence of a dominant market player in the market (Yes/No)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Local organiser/outside the territory</td>
<td>Local/outside</td>
<td>X</td>
</tr>
<tr>
<td><strong>Territorial characteristics</strong></td>
<td>Digital front runner or follower</td>
<td>Front runner/follower</td>
<td>Internet access, broadband access, Internet use, digital skills</td>
</tr>
<tr>
<td></td>
<td>Labour market situation</td>
<td>Unemployment high/low</td>
<td>Unemployment rate</td>
</tr>
<tr>
<td></td>
<td>Competition for space</td>
<td>Intense/less intense</td>
<td>Population density</td>
</tr>
<tr>
<td></td>
<td>Market size of incumbent markets</td>
<td>Taxi, hotel and tourism, retail, agriculture</td>
<td>Turnover of the different sectors</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
<td>Social progress high/low Level of trust high/low Collectivism high/low</td>
<td>Social progress and perception of inequalities Trust in the political and legal system Quality and accountability of government services Tolerance and inclusion Distance to power Individualism vs. collectivism</td>
</tr>
<tr>
<td><strong>Policy framework</strong></td>
<td>Regulations</td>
<td>Presence of regulations impeding the development of the collaborative economy</td>
<td>Market access requirements UCCE</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship</td>
<td>Presence of support for entrepreneurs/start-ups</td>
<td>Grants, training, information and guidance</td>
</tr>
<tr>
<td></td>
<td>Education and training</td>
<td>Yes/No</td>
<td>Initiatives in education, digital skills</td>
</tr>
<tr>
<td></td>
<td>Simplicity of administration</td>
<td>Yes/No</td>
<td>Specific system to submit taxes, information and guidance</td>
</tr>
<tr>
<td></td>
<td>Initiatives on the circular economy and/or collaborative economy</td>
<td>Yes/No</td>
<td>Roadmap, policy paper, guidance</td>
</tr>
</tbody>
</table>
Annex 2: Summary of each territory’s objectives and needs

5.1 The Hague

5.1.1 Territorial characteristics

The Hague, South Holland’s second largest city and the Netherlands’ third largest city, counts a population of 525,000 inhabitants (2017). Since 1899, when The Hague held the world first Peace conference, the city is widely known for being the international hub for peace and justice. As a matter of fact, it hosts the International Court of Justice, the International Criminal Court, and several others intergovernmental and non-governmental organisations. The Hague is also helping the Netherlands become the “secure gateway of Europe” by promoting the world’s leading security cluster, The Hague Security Delta (HSD). As a consequence, many are the tech international firms that have established their headquarters in The Hague. Given the presence of non-profits, government agencies and private companies, the Dutch city is said to be a vibrant and ever-expanding innovation centre. The Hague is also one of the members of the Urban Agenda Partnership for the Circular Economy. On top of that, The Hague aims to become climate-neutral in 2040, which is 10 years ahead of the national goal of the Netherlands. This ambition is developed throughout a plan to further reduce CO2 emissions, expand sustainable district heating, and to make the city more climate-proof.

The city is divided into eight official districts, which are subsequently divided into neighbourhoods. Within the city’s boundaries can be found both the most prosperous as well the poorest neighbourhoods of the Netherlands, respectively in the western and south-eastern district. The Hague has a particular interest in the potential of UCCE initiatives for solving social and economic problems in the city’s most deprived areas.

5.1.2 Presence and usage of UCCE initiatives in the territory

Although the Netherlands’s economy still relies on “linear” processes, there is an interest in the potential of the circular and sharing economy in both creating jobs as well as promoting sustainable development. The discussion on the opportunities provided by the fast-growing development of digital platforms is much present in the public debate. The sharing economy is often seen as an opportunity to leverage the sustainability of cities and to improve social capital. The sharing economy is contributing to a broader debate on a “participatory society”, “do democracy”, or “hackable cities”. The Dutch government is supportive of several initiatives in this regard, with the aim of fostering innovation and efficiency in urban development.

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16 Loosduinen, Segbroek, Scheveningen and Haagse Hout.

17 Escamp, Centrum, Laak.

18 The Hackable city is a research project that explores the potential for new modes of collaborative citymaking, in a network society. It can be often perceived as a model for a collaborative citymaking.
initiatives in this field such as Democratie in Action and Kracht in NL. Furthermore, at the national level, there are several platforms mapping existing collaborative economy initiatives, for instance, Deeleconomie in Nederland\textsuperscript{20}, Maex\textsuperscript{21} or the Sharing City platform.\textsuperscript{22} For instance, Deeleconomie in Nederland has counted around 218 platforms at the national level\textsuperscript{23}.

The Hague is already today home to several collaborative economy platforms, especially in the field of food, mobility, goods and money.\textsuperscript{24} The number of UCCE is in a constant growth and the overview provider on the Maex estimates the current city’s number of UCCE initiatives around 242.\textsuperscript{25}

In 2016 the city was awarded with the Autodeel Award – a prize that confirmed the effective steps forward taken by the municipality in the field of car sharing. Finally, in 2017, The Hague joined the Sharing Cities Alliance. Furthermore, the Hague has won prizes for innovative ways of financing sustainability initiatives. The city grants subsidies to develop relevant ideas, project and plans, which has an important impact in leveraging UCCE initiatives and setting trust among parties (e.g. The Energy Coop and The Clothing Bank are initiatives that were granted with municipal funding).

5.1.3 Policies and regulatory framework affecting UCCE initiatives

At the national level, The Netherlands is developing a wide programme in order to implement circular and collaborative economy initiatives. The main objective of the Dutch government is to reduce the use of primary raw materials by 50% before 2030 (The Ministry of Infrastructure and the Environment, and the Ministry of Economic Affairs, 2016). Within this framework, the municipality of The Hague is witnessing a significant increase in positive experiences related to the sharing economy. In terms of challenges, the collaborative economy raises questions about current legislation and regulations. As the divide between producer and consumer is becoming blurry, national legislators are becoming aware of the need for new rules. This is why the government has recently taken responsibility for setting actions in motion on this particular matter (The Ministry of Infrastructure and the Environment, and the Ministry of Economic Affairs 2016). Finally, The Dutch Ministry of Economic Affairs has established a

\textsuperscript{20} http://www.deeleconomieinnederland.nl/
\textsuperscript{21} https://maex.nl/
\textsuperscript{22} http://www.sharingcity.nl/sharing-city-platform/#over-sharing-city
\textsuperscript{23} Deeleconomie in Nederland, Spreadsheet mapping available platforms, available at : https://docs.google.com/spreadsheets/d/1IgaTSb1-sTU4DEHKTNGUb8PN-5yQ4u6rTbGhN2ZP8_M/edit?gid=0.
\textsuperscript{24} Sharing City Platform, Den Haag, Available at: http://www.sharingcity.nl/den-haag/.
\textsuperscript{25} https://maex.nl/denhaag/#/initiatives
programme giving the sharing economy the possibility to “go for or go against the grain of current regulations and challenge traditional industries”.26

5.1.4 Main obstacle to the development of UCCE initiatives

- Risk aversion, especially when it involves public money.
- Market structure, with strong economic operators from the “traditional economy”. It is therefore difficult for a grassroots project to grow and professionalise.
- Skills. People needs a certain level of digital skills and literacy in order to use these initiatives.
- Lack of access to the initiatives.
- Lack of information and lack of experience on how to manage initiatives. DeCooperatiseExpert.nl is an agency that has been set to help setting up a cooperative.
- Adoption of a strategy that builds on the identity of the city, and on the potential of existing local initiatives
- Legislation. A fast-growing landscape of the UCCE initiatives raises an issue of social security and taxes, that need to be adapted to this new economic model. Also, the division between producers and consumers become blurry and implies the adoption of new rules.
- Keeping a current market, competitive for existing operators (e.g. taxi drivers or hotels).

5.1.5 Priorities and expectations regarding UCCE

The Hague is interested in the potential of UCCE to solve social and economic problems in the city’s most deprived areas. Furthermore, one of the city’s priorities which could be achieved via the development of UCCE initiatives is energy transition. Already some initiative in this field have been developed in The Hague e.g. Energy Coop.

5.1.6 Main stakeholders in the UCCE arena

- Energy Coop;
- The Clothing Bank;
- Other cooperatives (e.g. Breadfund, consumer cooperatives to buy wholesale goods);
- Mealsharing platforms.

5.1.7 Main data sources available for mapping UCCE initiatives

- Blog mapping currently identified initiatives in The Hague: https://haagscirculair.wordpress.com/
- Platform mapping sharing economy knowledge and experiences: http://www.sharingcity.nl/den-haag/
- Platform mapping UCCE initiatives per city in the Netherlands, which makes interesting linkages between the initiatives and the relevant SDGs: https://maex.nl/denhaag/#/home
- Platform mapping UCCE initiatives and conducting research and consultancy activities: http://www.deeleconomieinnederland.nl/
- Platform mapping local participatory initiatives: http://krachtinnl.nl/

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26 HubAmsterdam, Harmen van Sprang: “The Sharing Economy is all about the products and services that lead to a happy, sustainable and connected life”, available at: https://amsterdam.impacthub.net/2016/10/18/the-sharing-economy-interview-harmen-van-sprang/.
5.1.8 Identification of territories with similar challenges and needs

The stakeholders also expressed a particular interest to learn from the city of Ghent, where the municipality provides a strong support for the collaborative economy and explores new ways of governance. The Hague is following its example with the Manual for Public Spaces where the design of public spaces is made participatory.

5.2 Maribor

5.2.1 Territorial characteristics

Maribor is the second largest city in Slovenia with almost 120,000 inhabitants. It is the economic and cultural centre of Northeast Slovenia and has a history of economic ups and downs. A downturn came after the declaration of independence in 1991. Due to the loss of the Yugoslavian market, the industry’s collapse has never fully recovered. Since the 2000s, Maribor’s economy has turned towards tourism, sports and arts, becoming the European capital of culture in 2012. However, the 2008 crisis delivered another blow to the city. Therefore, high unemployment rates have historically characterised Maribor’s economy. Since 2015, when Maribor introduced its first waste management policy, the city has actively attempted to implement strategies within the emerging framework of the circular economy. It is also the first Slovenian municipality with an approved circular economy strategy.²⁷ Not without a reason, Slovenia is one of the Member States of the Urban Agenda Partnership on Circular Economy. In addition, given its experience and achievements in the field of social entrepreneurship, Maribor was chosen as the European Capital of Social Economy in 2018.²⁸

5.2.2 Presence and usage of UCCE initiatives in the territory

Collaborative economy is slowly growing in Slovenia with several sharing platforms (e.g. prevozi.org, a carpooling platform). The city of Maribor financed the establishment of the Common urban eco garden, for instance.

The government is more and more active in the field of the collaborative economy. For instance, in December 2015 and September 2016, the Minister of Public Administration travelled to the United States with the aim to establish a development cooperation with some tech companies (Uber, Celtra, Tesla, LinkedIn, Google, Facebook) and to discover new digital economy business models.²⁹

5.2.3 Policies and regulatory framework affecting UCCE initiatives

The governance in Slovenia is divided between the national and municipal level, without any regional dimension. At the national level, a Roadmap towards the Circular Economy was developed, while Maribor established a Strategy for the Transition to Circular Economy at local level. The scope of the local strategy refers only to the circular economy with no reference to the sharing economy. The strategy creates “an innovative model as a system for managing all the resources available in the Municipality of Maribor and the wider urban area”. This model is based mainly on the publicly owned enterprises, which already provide services to the residents, and as such are seen as “connecting link” in the transition from linear to the circular economy. Among the key areas of the strategy are waste management, secondary raw materials, innovations and investment. The Strategy has identified seven pillars:

1. Waste (municipal waste and services);
2. Construction (construction and industrial waste and soil);
3. Energy (surplus energy, renewable resources);
4. Mobility (urban transport and joint service);
5. Water (recycled water and alternative resources);
6. Land (Regeneration and planning);

In addition, several pieces of legislation in the field of sustainability and waste treatment might be also relevant as they include the circular economy as a key element. At the national level, the government of Slovenia adopted: Smart Specialisation Strategy from 2015, the Waste management program, and the Waste prevention program of Republic of Slovenia. At the local level, the city of Maribor adopted: The Waste management strategy from 2015 and the Sustainable Urban Strategy of the Municipality of Maribor from 2016. As a whole, these documents design a smart, green and circular development model for the city of Maribor.

However, starting a collaborative service for profit – no matter how small in scope – is subject to more or less the same market access requirements as of traditional services. Additionally, working with foreign platforms is considered an export activity, thus it is subject to VAT regardless of the volume of the turnover. Therefore, as they are bounded to several regulatory requirements, peer-to-peer activities are usually less attractive (European Commission, 2018).

5.2.4 Main obstacle to the development of UCCE initiatives

- Intricacy of the legal system, which do not allow initiatives to scale up (e.g. renting out of rooms by private owner’s through Airbnb);
- Lack of inclusive framework for the collaborative economy, which would take into account the stakeholders needs;

31 Ibid.
32 Ibid.
• Municipal budget is tight (support for the UCCE should be found in already existing options, e.g. make available municipality premises/buildings/lands);
• Security of funding, managing financing of projects and attracting private investors;
• Regarding the Strategy for the Transition to Circular Economy, keeping deadlines, stable costs and developing a communication strategy.

5.2.5 Priorities and expectations regarding UCCE
Maribor would like to better apprehend the different business models of the collaborative economy. The stakeholders are also interested in measuring social impacts of the UCCE, as social benefits could leverage investment in the area of the UCCE.

5.2.6 Main stakeholders in the UCCE arena
• Re-circulation of the food waste: https://robin-food.com/
• Car-pooling platform: https://prevoz.org/
• Car-sharing platform: https://avant2go.com/cities/maribor
• Coworking space: http://tkalka.si/
• + Resilient, a sociolab project
• Common urban ECO garden: http://www.smartcitymaribor.si/en/Projects/Smart_Living_and_Urban_Planning/Common_urban_ECO_garden/
• CELCYCL: Discarded potentials of biomass (potential of biomass for development of advanced materials and bio-based products): http://celkrog.si/?lang=en. Contact person: Klemen Risto Bizjak (project manager)
• Co-working space: http://tkalka.si/
• Initiative of introducing circular economy system to Alpine Space to achieve low-carbon targets: https://www.greencycle.si/
• Create responsible (creating sustainable and stable jobs): https://create-responsible.eu/en/about-the-project/

5.2.7 Main data sources available for mapping UCCE initiatives
• Circular Change: http://www.circularchange.com/
• Website of the Association Social Economy Slovenia: http://socialnaekonomija.si/.
• Website of Wcycle Institute, involved in the drafting the Strategy for the Transition to Circular Economy: https://wcycle.com/

5.2.8 Identification of territories with similar challenges and needs
Maribor aspires to become a circular hub and to cooperate with other municipalities nearby. The city has indicated its willingness to learn from the example of Barcelona as both stakeholders participate in the Mediterranean Project. Furthermore, Barcelona adopted a contractual approach to the cooperation with big platforms such as Airbnb or Booking, which seems to be interesting for the municipality of Maribor. The city expressed also an interest for the initiatives undertaken in the city of Genova.
5.3 Prato

5.3.1 Territorial characteristics

With a population of 193,432 (2018), Prato is the second biggest city in Tuscany (Italy). Prato is widely known for its textile industry, which played a key role in the city’s economic growth. After the process of industrialisation, Prato became a world leader in the textile and fashion sectors, and, starting from the 1970s, the city witnessed an economic boom – boosted by the strong Chinese immigration started in the 1990s as well. Although being historically attached to the manufacturing industry, nowadays Prato’s economy is developing along the provision of services and hosts what has been labelled as a little Silicon Valley. As a matter of fact, the ICT sector is leading the city’s economic recovery. Furthermore, Prato is one of the first Italian cities to take steps in improving road traffic and air quality by adopting Urban Plan for Sustainable Mobility.33 Recently, the municipality of Prato has become an active member of the EU Circular Economy Partnership.

5.3.2 Presence and usage of UCCE initiatives in the territory

Prato develops projects within the framework of the Smart city Project: smart economy, smart environment and smart mobility which are falling under the UCCE scope. Within the smart economy, Prato identified six projects and three initiatives which cover innovative process relying on technologies and supporting economic activities, for instance the sharing economy.34 With regard to the smart environment section, it covers a wide range of projects ranging from reduction of the CO2 emissions, optimisation of the energy use, rationalisation of consumption, waste reduction, management of drainage system and water management (recovery and reuse of the wastewater) as well as promotion and management of urban green spaces, and finally the requalification of abandoned areas (remediation in the public construction sector).35 Prato identified 37 projects (ongoing or completed) as well as 20 new initiatives, which are still in the design phase.36 Especially, the stakeholder emphasised the importance of the urban, social, economic and cultural regeneration strategies in the city (e.g. project Ri-generation POP). For instance, initiatives of re-use, revitalisation and refurbishment of abandoned public proprieties improved Prato’s life quality by establishing new gathering places for social, cultural and economic activities. Two projects have been already developed with special areas of Porto, affected by some critical aspects of the contemporary city: Marcolotto Zero (area with a high number of disused industrial buildings and an important lack of public spaces) and Via del Serraglio (a city centre area characterised by the closure of neighbouring businesses).37 Finally, intelligent mobility is equally a fast developing sector in

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34 City of Prato, Smart Economy, available at: http://www.cittadiprato.it/EN/Sezioni/212/Smart-economy/.
36 Ibid.
Prato. The city identified 10 projects, where four are led by the local government and reminding six by companies. On top of that, five initiatives are in the design phase.

5.3.3 Policies and regulatory framework affecting UCCE initiatives
As of 2018, there is no legislative framework which regulates collaborative economy activities in Italy. Although the Italian government initiated a legislative proposal to regulate the sharing economy, a formal law has not been promulgated yet (European Commission 2018). Hence, most of the regulation takes place at the local level. For instance, in January 2018, Prato and two other main Italian municipalities have joined a “memorandum of understanding”, together with the Ministry of Environment, called “Città per la circolarità” (Adnkronos, January 18th 2018). The main objective of the memorandum is to spur local authorities testing and implementing innovative solutions connected to the circular and collaborative economy such as: the re-use, repair, and recycling of existing materials and products; the regeneration of urban public and private spaces. Public property vacancy and underuse are currently being considered opportunities for circular and collaborative economy initiatives. Unused buildings can become spaces in which to activate innovative social practices, establish hubs of economic innovation, start-up houses, economy of culture and creativity; this is an opportunity for the collaborative economy. Furthermore, Prato’s industries have established well-known practices in the field of second-hand clothing reuse and water waste.

At the local level, Prato has adopted the Integrated Urban Plan Strategy (PIU’ PRATO), which aims to redevelop a city district called “Marcotto 0”. Among others, the Plan establishes objectives for businesses laboratories projects, smart city projects, textile sector and sustainability.39

5.3.4 Main obstacle to the development of UCCE initiatives
For the time being, Prato has not yet identified any clear obstacles to the development of UCCE initiatives.

5.3.5 Priorities and expectations regarding UCCE
A clear priority of the UCCE initiatives in Prato lies with urban, social, economic and cultural regeneration of the city (Ri-generation POP). Prato expects that a further emergence of new urban polarities, by triggering the environmental and socio-economic transformation of some vulnerable areas, will improve the city’s sustainability and cohesion of the urban development. The city of Prato also sees a potential of UCCE initiative for recovery and reuse of wastewater.
5.3.6 Main stakeholders in the UCCE arena
Given that initiatives of urban regeneration are often launched by local authorities, the relevant stakeholders to be interviewed are:

- Comune di Prato
- Tuscany Region

5.3.7 Main data sources available for mapping UCCE initiatives
- University Centre for Research in Prato, specialised in the field of local development, social economy, inclusive development, M&E and impact evaluation, and sustainable food commodities: http://www.arcolab.org/en/.
- Website of the City of Prato, providing description of smart city initiatives and R1-generation POP: http://www.cittadiprato.it.

5.3.8 Identification of territories with similar challenges and needs
The city of Prato has not yet identified any territory with similar challenges and needs. This will take place at later stage if relevant.

5.4 Porto

5.4.1 Territorial characteristics
Porto is Portugal’s second biggest city and counts 214,349 inhabitants (2016). The historic centre of Porto has been classified as a World Heritage Site by UNESCO. Additionally, Porto is a gateway to further World Heritage Sites in both Portugal and Spain. However, Porto is also a forward-looking city. Its tourism industry is continuously developing; the airport has been recently modernised and expanded, and a new cruise liner terminal has been developed in the nearby seaport. Porto is now the third most visited tourist destination in Portugal and won the award for Best European Destination in 2012. The city is also becoming an important hub for innovation, mainly due to the presence of six universities, several higher education institutes and a series of R&D centres. Specific industry clusters have been formed in the IT and creative sector, biotechnology and health, and mechanical engineering.

5.4.2 Presence and usage of UCCE initiatives in the territory
In the field of sustainably undertaking of the collaborative economy at the national level, cooperative Antonio Sergio para a Economica Social published results of the study indicating significant socio-economic impacts of these organisations in 2013 (2.8% of Gross Value Added, 5.2% of total income and 6% of paid employment). It has been noted that in the city of Porto the growing number of entrepreneurs, pays more attention “to values such as share and collaboration.” This new tendency was born in the post-economic crisis context, where

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the new economic activities came to reinforce to old economic practices and boosted public spaces (e.g. emergency of urban markets). The emergence of entrepreneurship is mirrored in increasing awareness of the co-working space, especially in the city centre of Porto (e.g. rehabilitation). For instance, as of January 2017, Porto identified 10 co-working spaces (e.g. Porto I/O, Typographia-Cowork, Uptown Guest Office, the OPO'Lab), concentrated in 3 parishes of the city, and 6 of them were located in the central area. On top of that, Porto identifies among the most successful sectors of the circular economy accommodation and mobility.

5.4.3 Policies and regulatory framework affecting UCCE initiatives
All of the major international collaborative platforms are present in Portugal – and growing. The current legislation is not particularly bonding. In fact, besides the Local Accommodation Act in 2014 (which regulates the collaborative accommodation sector), there is no particular legislation applying to the other sectors. However, although the Portuguese economy is growing at outstanding rates, its potential is not mirrored in the numbers of initiatives belonging to the collaborative economy. That being said, the city of Porto has shown significant improvements along the Smart City Index. On, March 2015, the city of Porto asserted its position in this process by being selected as one of the five “beacon cities” that would work in close cooperation with GrowSmarter (a project from the EU Commission). In 2016, the Portuguese Smart Index has presented Porto as the Portuguese city with the best results in the main intelligence vectors. And in 2017, the municipality of Porto participated for the first time in the Smart Cities Innovation Summit Asia. Finally, the city is developing a Strategy on the circular economy which maps possible initiatives to be implemented by 2030.

5.4.4 Main obstacle to the development of UCCE initiatives
For the time being, Porto has not yet identified any clear obstacles to the development of UCCE initiatives.

5.4.5 Priorities and expectations regarding UCCE
Porto has a good understanding of big platforms (Airbnb and Uber) but is lacking at the same time knowledge on smaller initiatives as well as the number of their users. The stakeholders of the city of Porto are interested in the identification of areas in which the municipality could play a supportive role.

5.4.6 Main stakeholders in the UCCE arena
- Co-working space OPO'Lab is a multidisciplinary centre and the first FabLab in Portugal: http://www.opolab.com/#front.

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42 Ibid.
• Wo-working space Porto I/O: http://porto.io/.
• Co-working space Typographia-Cowork, designed for or entrepreneurs, freelancers and companies: https://typographia-cowork.com/en/.
• Portuguese Association for Consumer Protection: Portuguese Association for Consumer Protection: Portuguese Association for Consumer Protection
• Portuguese National Innovation Agency, which is assumed as the Innovation Hub. Among others, it aims at enhancing a collaborative innovation as well as fostering a social environment which favours technological entrepreneurship: https://ani.pt/en/

5.4.7 Main data sources available for mapping UCCE initiatives
• ScaleUpPorto Portal is a catalysator for the creation of an innovation ecosystem and a network of individuals and organisation. The website maps existing initiatives in the city of Porto: https://scaleupporto.pt/
• Start-up Porto Accelerator, a program empowering entrepreneurs for a quick process of growth and for an effective communication and promotional strategy: https://startupportoaccelerator.com/.

5.4.8 Identification of territories with similar challenges and needs
Given the importance of the tourism sector, the city of Barcelona could be interesting to scrutinise for the city of Porto.

5.5 Oslo

5.5.1 Territorial characteristics
Oslo is the capital and the biggest city of Norway, and accounts 673,469 of inhabitants. The population of the city is in a constant increase and presents the fastest-growing major city in Europe. Oslo is a global city, which has been ranked as first when it comes the quality of life among European cities and as the second most expensive city in the world. Oslo, established an overall target to reduce its CO2 emissions by 50% by 2030 and to become carbon neutral in 2050. The city aims to achieve this ambitious target mainly through an integrated waste management system, which was launched for the first time in 2006. Oslo has an ambition to be internationally leading in waste prevention, re-use and recycling and was appointed in 2019 as a European Green Capital. Oslo encourages the concept of city

45 City Population, Oslo, avialabet at: https://www.citypopulation.de/php/norway-admin.php?adm2id=0301.
47 Ibid.
49 Ibid.
where both residents and entrepreneurs “do not think in terms of waste, but in terms of resources with permanent and social value.”

5.5.2 Presence and usage of UCCE initiatives in the territory
As of 2017, there were about 30 digital platforms involving some form of hiring labour. The collaborative economy is perceived as a way for citizens to better access goods and services which are not necessarily at their hand. The main collaborative economy initiatives in the city of Oslo are the following: car sharing, sharing libraries as well as various cooperatives. Especially, the sharing libraries concept aims at promoting a social development by providing knowledge to people within their local communities. Finally, the collaborative economy could play a special role in the field of waste reduction in the city.

5.5.3 Policies and regulatory framework affecting UCCE initiatives
At national level, the White Paper on the collaborative economy was developed in Norway. However, according to the stakeholders, its scope is limited to the negative impacts of the collaborative economy. At local level, Oslo does not have any dedicated legislation on the collaborative economy. Nevertheless, the city is currently developing a Strategy on sustainable and circular consumption, which aims to reduce overall consumption trends (e.g. reduction of carbon consumption and other resources). The strategy aims to replace the previous Waste Management Strategy adopted in 2006. With the upcoming local elections (September 2019), the collaborative economy may be brought further in the political debate.

5.5.4 Main obstacle to the development of UCCE initiatives
- Reaching out citizens to participate effectively in the UCCE initiatives.
- Need of constant dialogues with local stakeholders (e.g. households, farmers) in order to reach good quality requirements.

5.5.5 Priorities and expectations regarding UCCE
The city of Oslo expects to understand how to promote the collaborative economy. The stakeholders emphasised the need of information about the role of the cities from a bottom-up perspective rather than top-down.

5.5.6 Main stakeholders in the UCCE arena
- Agency of Waste Management of the city of Oslo
- Agency of Urban Environment
- Obso, a housing cooperative of 200 members that has initiated a lot of UCCE initiative in the city of Oslo and beyond: www.obos.no

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5.5.7 Main data sources available for mapping UCCE initiatives

- Obos.no – a housing cooperative of 200 members that has initiated a lot of UCCE initiative in the city of Oslo and beyond: obos.no

5.5.8 Identification of territories with similar challenges and needs

Oslo has not yet identified any territory with similar challenges and needs. This will take place at later stage if relevant.

5.6 Flanders

5.6.1 Territorial characteristics

The Flanders region is the Dutch-speaking northern portion of Belgium. Despite not being the largest part of Belgium, it is the most populated (7,978,873 inhabitants). In the 20th century, Flanders’ economy modernised rapidly, and today Flanders is the wealthiest region of Belgium (provides 58% of the national GDP), and in general one of the wealthiest regions in Europe. Given its outstanding economic performance, Flanders’ labour market is characterised by an employment rate above the Belgian average (+1.7% in 2014) and an unemployment rate significantly below the EU28 average (-4% in 2014). Being located in the heart of Europe, Flanders is a unique hub provided with companies that offer efficient supply and distribution links with other major European regions. Not surprisingly, Flanders’ economy is driven by its export (which represents 83.1% of Belgium’s total export).

5.6.2 Presence and usage of UCCE initiatives in the territory

The most widespread collaborative economy initiatives in Flanders are: car sharing, food waste, community-supported agriculture in cities, co-housing initiatives or initiatives to reduce the cost of housing (cooperatives), coworking spaces, and energy cooperatives (e.g. EnerGhent). In particular, car sharing is growing fast in the past four-five years. This can be the result of some cities’ policies to reduce cars, increase, parking lots, e.g. in Ghent. On the other hand, some cities have a more car-friendly policy and there the importance of car sharing is less prevalent. In addition, in Flanders exists subsidies for pilot projects on innovative initiatives that relate to the collaborative economy (bike sharing, shared libraries, clothing etc).

Regarding the governance of sharing economy, Ghent is an interesting example where the local authority really supports the sharing economy initiatives (Commons Ghent). As of spring 2017, a mapping identified around 500 of commons-oriented initiatives. Commons Ghent is conducting, on its own, a mapping activity of the UCCE initiatives and existing good practices in this area. Other Flemish cities are also leading in UCCE initiatives. The Vlaanderen Circular website identified several initiatives, for instance, in Brussels (41 cases), in Antwerp (29 cases), in Bruges (12 cases), in Leuven (10 cases), or in Hasselt (8 cases). Especially, regarding the circular economy initiatives, the city of Antwerp is very much up-front with, for

instance, the development of the Sustainable Port of Antwerp\textsuperscript{53} and a series of experimental initiatives developed under the umbrella of Circular South project.\textsuperscript{54}

5.6.3 Policies and regulatory framework affecting UCCE initiatives

The collaborative economy has had an impact on Belgium’s employment, social system and tax regimes. Thus, the Belgian government started to regulate the collaborative economy sector. The first legal instrument is a law introduced in 2016, regulating the taxation of services in cases where transactions are processed through collaborative economy platforms (European Commission, 2018). At local level, the Flemish government sees Circular Economy as an important transition priority of the government. Especially the OVAM plays an important role as a facilitator of UCCE initiatives. At the moment, there is no real strategy to foster the collaborative economy in the region. However, some cities (e.g. Ghent) provide strong support for the collaborative economy by adopting a comprehensive framework such as Commons Transition Plan for the City of Ghent. The plan determines a which kind of public policies could support the commons-based initiatives.\textsuperscript{55}

5.6.4 Main obstacle to the development of UCCE initiatives

In Flanders some general and sector-specific obstacles were identified:

- General obstacles to the UCCE initiatives
  - Fragmentation of initiatives;
  - Regulatory and administrative obstacles (e.g. mutualised cohousing);
  - FabLabs and coworking spaces lack of real production’s activities;
  - Some commons-project are set in post-migration communities and limited to ethnic and religious memberships;
  - Civil society organizations often perceive the projects as mainly directed towards vulnerable categories and not as general productive resources;
  - There is no connection between university and the commons project, neither a propensity to open source and design projects;

- Car sharing:
  - Tax cuts for company cars;
  - Distance between potential consumers (geographical aspect);

- Energy/co-housing:
  - Culture of individualism where each family wants to build its own house;

- Food waste:
  - Food safety regulation;
  - Logistics when it comes to transportation of food wastes.

5.6.5 Priorities and expectations regarding UCCE

Flanders perceive collaborative economy as a way to participate in the circular economy and is especially interested in the impact of sharing for saving resources and limiting CO2 emissions.


5.6.6 Main stakeholders in the UCCE arena

- Autodeelen, a care pooling website: https://www.autodelen.net/
- Netwerk bewust verbruiken, a community based website, sharing information and knowledge on sustainable life https://www.bewustverbruiken.be/
- OVAM : https://www.ovam.be/

5.6.7 Main data sources available for mapping UCCE initiatives

- Autodeelen.net: website gathering all information on car sharing in Flanders
- Website of Commons Ghents providing a list of UCCE initiatives : http://maps.commons.gent/
- Map of circular economy case studies in Flanders :c

5.6.8 Identification of territories with similar challenges and needs

The Flanders region has not yet identified any territory with similar challenges and needs. This will take place at later stage if relevant.

5.7 Greece

5.7.1 Territorial characteristics

Greece, with a population of approximately 11 million (2016), is a southern European country situated at the crossroads of Europe, Asia and Africa. Its economy, which witnessed a real miracle in the post-war years, played a major role in the European debt crisis and led the country into a sharp downturn. After six years of economic decline, the national’s economy started rising again in 2014. Despite that, the unemployment rate is still high and above the EU-28 average: in the first four months of 2018, it equalled 20.3%. Greece has recently started developing a sector of social enterprises, cooperatives and similar organisations in order to tackle some of the country’s most significant social challenges using another economic and entrepreneurial model commonly known as “Social and Solidarity Economy”.

5.7.2 Presence and usage of UCCE initiatives in the territory

The sharing economy is perceived as a mean to increase economic and social opportunities. For instance, during the economic recession in 2008, an important number of private houses were shared through the popular platforms to cover the expenses issue of the high property
taxation. In 2014, a “Sharing Economy Greece” conference took place, which focused among others on the topic “What is the sharing economy and why should you care?”. Among the most relevant rental-commercial platforms and Social Cooperatives, can be found respectively Airbnb and Stay in Athens as well as Common Lab Markerspace. Regarding the reduction of poverty, a public initiative Time Banks should be put forward. The latter UCCE initiative falls under the social economy framework and is funded by the Partnership Agreement for the Development Framework 2014-2020 for tackling poverty by skills swapping banks. In addition, some carpooling’s models are financed by the Ministry of Environment, Energy and Climate Change, for instance, Hopin and CarPooling. Finally, most recently the Government is interested in the development of energy communities’ projects.

5.7.3 Policies and regulatory framework affecting UCCE initiatives
The development of this sector is backed up by the national government, which made its improvement a first priority. During the economic recession, the very first legislative framework on the social economy was introduced bringing a new legal form into existence: Social Cooperative Enterprises. This law was superseded in 2016 with further legislation aiming at broadening the scope of Social and Solidarity Economy initiatives (Adam 2017). However, the market participants of initiatives are not yet regulated and protected as in the traditional branches of economy. It is estimated that due to sharing economy activities, there has been a loss of EUR 300 million and 15,000 jobs. Therefore, the emergence of a new legislative framework for the collaborative economy is under consideration in the country. In parallel, Greece is also developing the Strategy for the Transition of Greece into Circular Economy.

5.7.4 Main obstacle to the development of UCCE initiatives
- Bureaucratic barriers and a slow bureaucratic system;
- Lack of awareness about the sector’s work;
- Poor commissioning and procurement from the public sector, and lack of appropriate finance.

5.7.5 Priorities and expectations regarding UCCE
Due to the economic crisis, jobs and growth are the priority objectives of all policy measures in Greece. Therefore, the country is particularly interested in financial and/or economic benefits as well as related employment issues generated by the collaborative economy. Finally, Greece wants to understand how to improve regulations and policy measures to foster the collaborative economy and its positive impacts.
5.7.6 Main stakeholders in the UCCE arena

- StayInAthens: accommodation for exchange students in Athens with rents: www.stayinathens.com;
- Mermix: innovative service that connects farmers who own idle farming equipments with renters: https://www.mermix.gr/en
- Time Bank of Municipality of Larissa: http://xronos.anthropomania.gr/
- The Fourni Korseon Municipality, which launched first Energy Independent Community: https://www.fourni.com/
- Carpooling stakeholders: http://www.hopinside.com/en,
- Co-Hab Athens, an applied research project to elaborate collective ownership models for reclaiming quality of habitat and housing: https://cohabathens.com/

5.7.7 Main data sources available for mapping UCCE initiatives

- Katsoni, Vickly, An investigation into the sharing economy phenomenon in the Greek tourism industry in the accommodation sector, available at: https://www.researchgate.net/publication/324480586_An_investigation_into_the_sharing_economy_phenomenon_in_the_Greek_tourism_industry_in_the_accommodation_sector.

5.7.8 Identification of territories with similar challenges and needs

Greece has not yet identified any territory with similar challenges and needs. This will take place at later stage if relevant.
Annex 3: Literature review outline and literature grid

This Annex presents the main headings of the literature review on the circular and collaborative economy. All sources will be stored in an Excel spreadsheet (grid) in order to facilitate access and classification into the different topics of interest.

Outline

1. Methodological approach to the literature review
2. Existing definitions and typologies of circular and collaborative economy initiatives
   2.1. Differences and commonalities in definitions and approaches to the circular and collaborative economy
   2.2. Different typologies
3. Influence and relationships with territories, policies and usage patterns
   3.1. Territorial characteristics and cultural aspects
   3.2. Influence of regulations
   3.3. Different usage patterns
4. Measuring the impacts of the circular and collaborative economy
   4.1. Environmental impact
   4.2. Economic impact
   4.3. Social impact
   4.4. Political/governance impact
5. Annexes
   5.1. List of sources
   5.2. Overview of existing data sources
   5.3. Overview of existing stakeholders and experts
<table>
<thead>
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<th>Ref No.</th>
<th>Author</th>
<th>Organisation</th>
<th>Year</th>
<th>Title</th>
<th>Link</th>
<th>Geographical scope</th>
<th>Collaborative/circular economy /both</th>
<th>Definitions and typologies</th>
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Annex 4: List of sources for the literature review

This Annex presents the list of sources that will be screened in the literature review. We have already reviewed existing definitions and approaches to the circular and collaborative economy. The rest of the literature review will be done in the rest of the inception phase.

On the collaborative economy:


Ballus-Armet, Ingrid; Shaheen, Susan A; Clonts, Kelly; Weinzimmer, David. (2014). Peer-to-Peer Carsharing Exploring Public Perception and Market Characteristics in the San Francisco Bay Area, California. Available at: https://doi.org/10.3141/2416-04


Belk. (2014). You are what you can access: Sharing and collaborative consumption online. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0148296313003366


Chen and Kockelman. (2016) CARSHARING’S LIFE-CYCLE IMPACTS ON ENERGY USE AND GREENHOUSE 2 GAS EMISSIONS. Available at: https://www.caee.utexas.edu/prof/kockelman/public_html/TRB15carsharingLCA.pdf

Cheng M. (2016). Sharing economy: A review and agenda for future research. Available at: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84975045771&doi=10.1016%2Fj.ijhm.2016.06.003&partnerID=40&md5=96a34b0d67f89e219cd6837a78403ec1


Fang et al. (2016). Effect of sharing economy on tourism industry employment. Available at: https://ideas.repec.org/a/eee/anture/v57y2016icp264-267.html

Frenken and Schor (2017). Putting the sharing economy into perspective. Available at: https://www.sciencedirect.com/science/article/pii/S2210422417300114


Richardson, Lizzie. (2015). Performing the sharing economy. Available at: https://doi.org/10.1016/j.geoforum.2015.11.004


The Barcelona City Council (2016). Impacte del lloguer vacacional en el mercat de lloguer residencial de Barcelona. Available at: https://ajuntament.barcelona.cat/turisme/sites/default/files/160921_informe_impacte_lloguer_vacacional.pdf

The Office for National Statistics (2017). The feasibility of measuring the sharing economy. Available at:


**On the circular economy:**


Walter R Stahel (2016), Circular Economy, Macmillian Publisher Limited. Available at: https://www.researchgate.net/publication/298909366_Circular_economy

Yong Geng, Joseph Sarkis & Raimund Bleischwitz. (2019). How to globalize the circular economy. Available at: https://www.nature.com/articles/d41586-019-00017-0?error=cookies_not_supported&code=f42a805c-5ff0-49e3-84e0-f868e703f755

EU sources:


European Commission (2018) Study to monitor the business and regulatory environment affecting the collaborative economy in the EU. Available at:


**On the Sustainable Development Goals:**


### Annex 5: List of databases and data sources

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<tr>
<th>Name</th>
<th>Scope</th>
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</tbody>
</table>
Annex 6: Kick-off meeting minutes

Sent as a separate document.
ESPON 2020 – More information

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