Sharing Cities Sweden

Governing Sharing Cities

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Sharing Cities Sweden

A NATIONAL PROGRAM FOR THE SHARING ECONOMY IN CITIES

Sharing Cities Sweden is a national program for the sharing economy in cities. The program aims to put Sweden on the map as a country that actively and critically works with the sharing economy in cities. The objectives of the program are to develop world-leading test-beds for the sharing economy in Stockholm, Gothenburg, Malmö and Umeå, and to develop a national node in order to significantly improve national and international cooperation and promote an exchange of experience on sharing cities.

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Executive Summary

Background

One of the ways in which cities around the globe are seeking to address excessive consumption of natural resources is by exploring new ways of consuming products and services. Of these ways, one is represented by the 'sharing economy' (SE) – "a consumption-production mode in a city, in which value is generated through transactions between peer actors (both organisations and individuals) offering temporary access to idling or under-utilised rivalry physical assets" (Mont, Voytenko Palgan, & Zvolska, forthcoming, p. 5). The sharing service providers that form a major part of the SE, cited in this report as urban sharing organisations (USOs) (Zvolska, Lehner, Voytenko Palgan, Mont, & Plepys, 2018), not only promise to generate new types of economic activity and development, but justify their existence also with potential contributions to environmental and social sustainability in cities (McLaren & Agyeman, 2015).

However, while the SE grows around the globe (PwC, 2014), its impacts to urban sustainability and consumption patterns are still largely unknown (Frenken & Schor, 2017). In fact, the rapid development of the SE – and primarily its vanguards Airbnb and Uber – has in the latest decades become increasingly contested due to its exacerbation of many socio-economic challenges in cities (Frenken & Schor, 2017). Consequently, many local governments are today responding in varying ways to the emergence of these organisations in attempts to protect the interests of their citizens. What appears to be lacking, however, are holistic analyses on the multitude of ways this governance is being or can be executed. More specifically, not only is there a gap in knowledge on how the SE can be governed locally so that it can contribute to advancing urban sustainability, but also on how the local government roles in the SE can be conceptualised theoretically. These gaps provided the impetus for this study.

Research Questions

Focusing on the municipalities of Malmö and Gothenburg as case studies, the following questions were set to guide the inquiry of this study:

1. *How do the municipalities of Malmö and Gothenburg govern their local urban sharing organisations?*
2. *What is the role (if any) of the sharing economy in relation to the sustainability agendas of the municipalities of Malmö and Gothenburg?*
3. *What are the ways (if any) to advance the theory on local governance roles in the sharing economy?*

Findings

Both Malmö and Gothenburg municipality were found to recognise the SE in their municipality-wide steering documents. Importantly, the mentions of the SE in these steering documents were made in relation to a wider discussion on the sustainability work and agenda of these municipalities. However, the municipalities were also found to lack official strategies for governing the SE. Analysed using a conceptual framework by Zvolska et al. (2018), the following findings were made in relation to specific governance roles.

Enabler. Both municipalities were found to actively employ the role of 'enabler' towards their local USOs. Most prominent sub-roles of the role of enabler was that of 'partner', while the least prominent was noted to be the role of 'matchmaker'.

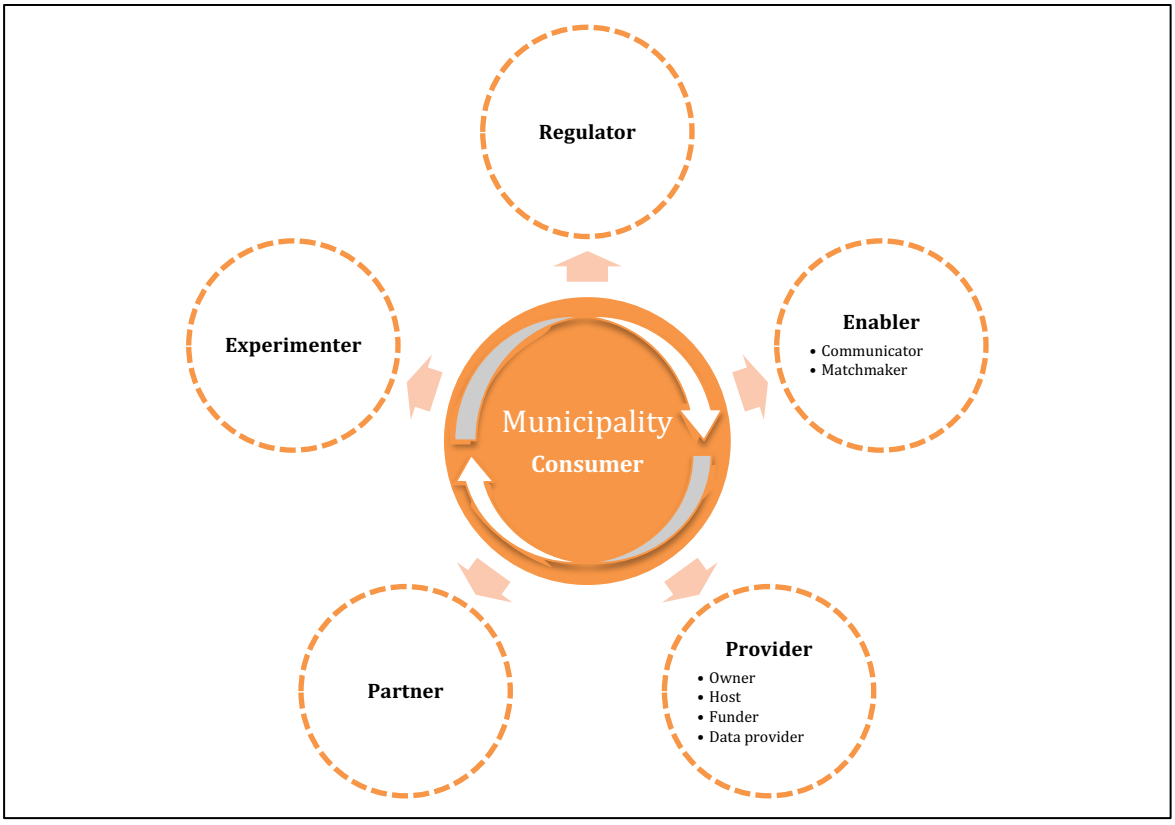
Provider. The second-most prominent role for both municipalities was discovered to be that of 'provider'. Of the sub-roles of the role of provider, the role of 'host' was noted to be more actively employed than the role of 'investor'.

Consumer. Although both municipalities have a policy on sustainable public procurement, the role of 'consumer' in the context of the SE was found to be minor. In Gothenburg, the municipality governs as a consumer to a small extent, whereas in Malmö this role was not found to be employed by the municipality at all.

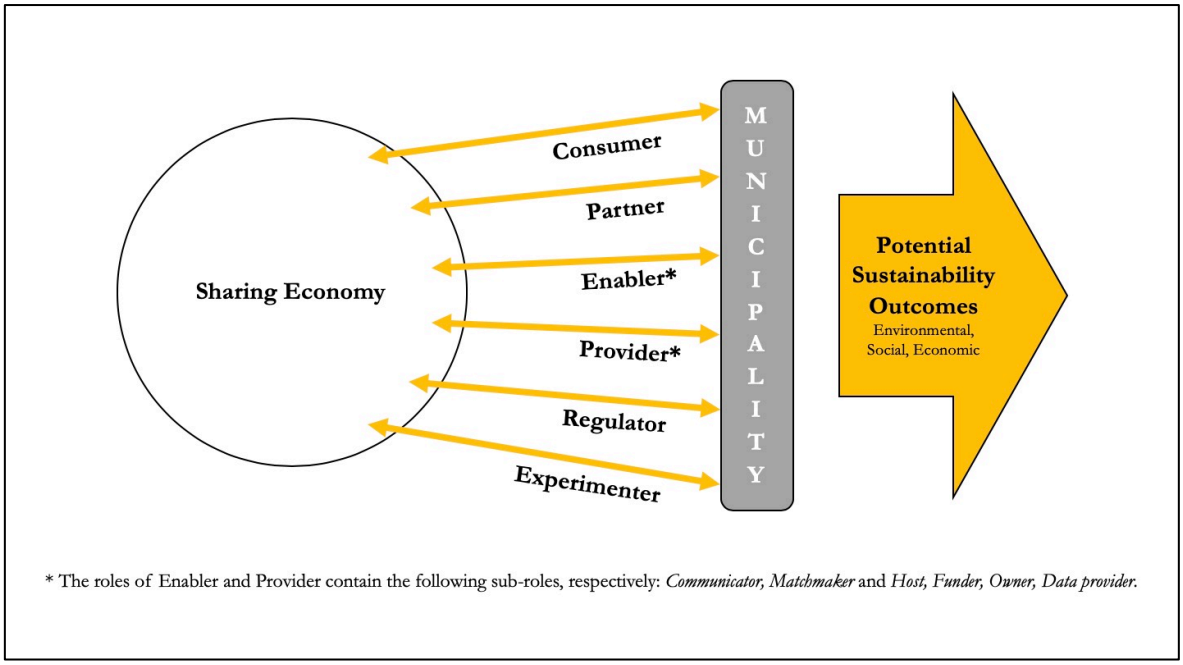
Regulator. The role of regulator was found to be non-existent in both case municipalities. This was mostly due to the municipalities not having deemed it relevant to place controls on their local USOs' operations. Moreover, it appears that municipalities' responsibilities in regulating the SE in the context of the multi-level governance system of Sweden remains unclear to the case municipalities.

Other municipal governance activities. Aside from these governance roles, it was found that both municipalities also engage with their local SE as direct providers of full sharing services and as 'experimenters'. Experimentation takes place primarily through the Sharing Cities Sweden-related activities. In addition, Gothenburg municipality pursues generating more sharing activity in the city by providing open data to its local businesses and the civil society through a digital platform.

It was found that the municipality can assume one or a combination of six separate roles to govern the SE: *regulator*, *enabler*, *consumer*, *provider*, *partner* or *experimenter*, with the roles of 'enabler' and 'provider' including further sub-roles that signify of differing forms of engagement and involvement in the SE.



It was also found that the municipalities perceive the SE as a tool for achieving the overarching sustainability agendas of the municipal governments. Against this finding, this report recommends that the municipalities make use of the different governance roles in engaging with their local SEs and generating desirable sustainability outcomes.



Conclusions and Recommendations

Overall, Gothenburg municipality was found to be more active in its governance of the local SE. This may be, among other reasons, due to the vibrancy of the city's USO landscape, providing the municipal organisation with more opportunities to engage with sharing activity in the city. All of the aforementioned governance roles were employed mainly with the purpose of supporting the cities' local USOs. Only some intentional inhibiting of sharing was noticed to take place in Gothenburg. However, significant indirect inhibiting of particularly private, for-profit USOs was noted to take place in both municipalities, which is arguably brought about by a lack of official SE-strategies. Furthermore, both case municipalities seem to be framing the role of the SE as a tool for improving the overall environmental, social and economic sustainability of the cities.

In order to improve the coherence of municipal governance of the SE and support the alignment of this work with the overarching sustainability agendas, both municipalities are recommended to:

- Strive for an extensive and comprehensive evaluation of the impacts of the SE across the cities to determine which USOs ought to be supported, in order to facilitate the achievement of the socio-economic and environmental goals by the municipalities;
- In order to enable policy development, define the term 'sharing economy' and determine what to include and what to exclude in the SE definition, preferably in consultation with local sharing actors, academic partners, other cities and nation-level officials;
- Develop a long-term strategy that sets a vision of the SE and SE-related goals and objectives for the municipality;
- Complement the long-term strategy with short-term action plans which outline in more detail how the municipality will work with the SE in practice;
- In time, support the emergence of new USOs and the development of the existing ones that are deemed favourable for sustainable urban development and enhance the normalisation of sharing as a practice through a variety of methods, such as;
    - Facilitating the creation of partnerships between the municipality and private USOs;

- Monitoring the development of the SE locally, nationally and internationally and proactively revising regulations or raising issues regarding them on the national level, if necessary;
- Enhancing the role of digital sharing opportunities in the cities through, for example, promoting open data initiatives and supporting digital sharing innovation processes amongst aspiring entrepreneurs;
- Enhancing municipal communication activities around the SE, by informing the citizens of the potential sustainability benefits of sharing and, conversely, of the negative impacts of overconsumption;
- Supporting the establishment of mediator organisations and delegating some of the governance roles to them;
- Employing the role of consumer more actively by procuring more of sustainable sharing services and thus leading by example in the SE, and;
- Embracing a more experimental approach to governing sharing by, for example, experimenting with tax incentives for sharing service providers and temporary rules and norms for sharing service providers such as car pools.

To contribute to theory building in the area of local governance of the SE, suggestions have also been provided for revising and advancing the theoretical framework by Zvolska et al. (2018). These include:

- Separating the role of 'partner' from the main role of 'enabler';
- Developing the main role of 'provider' further by adding the sub-roles of *owner* and *data provider* under it and by renaming the role of 'investor' as *funder*, and;
- Adding the role of *experimenter* as a new role.

This report also provides the following recommendations for future research:

- Enhance efforts in impact assessment of the SE;
- Explore the drivers and barriers for local governments to employ the role of consumer in the context of the SE;
- Perform more of holistic analyses of local governance of the SE and the relationship between the SE and cities' sustainability agendas to bridge the identified knowledge gaps;
- Employ the revised conceptual framework in the contexts of other cities to verify or challenge its conceptualisation of the governance roles, and;
- Employ the revised conceptual framework in the contexts of other sustainability concepts and challenges, such as the circular economy, in order to test its applicability to assessing the governance of urban sustainability more broadly.

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Abbreviations

CEG – Collaborative Economy Gothenburg

ICT – information and communications technology

SCG – Sharing City Gothenburg

SCM – Sharing City Malmö

SCS – Sharing Cities Sweden

SE – sharing economy

MIA – Malmö Innovationsarena

ULL – urban living lab

USO – urban sharing organisation

1 Introduction

Many of today's global sustainability problems, such as climate change and biodiversity loss, originate from humankind's excessive consumption of natural resources, where more resources are extracted for the production of goods and services than is naturally regenerated by the Earth and more waste and pollution is produced than the natural ecosystems can absorb and sustain (European Environment Agency, 2012). These consumption levels are partly attributable to our largely linear economies, which manufacture new goods to be purchased, used and finally discarded by economic agents. Aside from the earlier mentioned sustainability impacts, these processes can be very inefficient; for example, many still usable goods enter the end-of-life phase of their lifecycle prematurely (Ellen MacArthur Foundation, n.d.). To add to the scale of the problems, societies have over time constructed the ideal of private ownership, according to which individually-owned assets are perceived as more desirable than commonly-owned and/or -used ones (Belk, 2007). This desire to privately own is causing situations where households accumulate material possessions that end up being significantly under-utilised throughout their useful lives. For example, a private car in Europe stands still on average over 90% of its useful life (Ellen MacArthur Foundation, 2015), and a power drill is typically used only for 12-15 minutes during its lifetime (Botsman, 2010).

Thus, a situation is borne where not only more natural resources enter the manufacturing lines than is necessary to satisfy the needs of societies, but also a significant share of existing assets is used wastefully and unproductively. To tackle such inefficiencies of the linear economy, efforts are being taken to transform our production and consumption systems into such where the materials and value vested in goods are maintained in the economy for as long as possible. This concept of the 'circular economy' includes using goods and services at (ideally) their maximum capacity (Ellen MacArthur Foundation, n.d.), which necessitates their sharing, exchanging, swapping, renting and gifting[1] (Voytenko Palgan, Zvolska, & Mont, 2017). Some of these practices are very old; for instance, sharing has been said to have existed for hundreds of thousands of years (Belk, 2017; Price, 1975). Today, however, all of them are increasingly being used as bases for new types of service models that capitalise on the rapidly developing information and communications technologies (ICT) to construct platforms on websites and/or smartphone applications. These platforms enable sharing of resources in a whole new way, and are run by what Zvolska et al. (2018) call urban sharing organisations (USOs)[2]. According to the authors, USOs are the main facilitators of organised sharing in cities and form part of the larger umbrella term *sharing economy* (SE). The term currently lacks a generally-accepted definition and the debate on what the SE includes and what it does not include is on-going. However, in this report the SE is understood as "a consumption-production mode in a city, in which value is generated through transactions between peer actors (both organisations and individuals) offering temporary access to idling or under-utilised rivalry physical assets" (Mont et al., forthcoming, p. 5).

Zvolska et al. (2018) state that USOs have various motivations for operating their sharing services. Nevertheless, most of the largest USOs in the world are commercial ones which seek to make a profit. These include for example the peer-to-peer accommodation rental platform Airbnb and the peer-to-peer ride provision platform Uber, which are commonly cited in academic literature that discusses the SE (Martin, 2016). What is more, the consumption of

[1] For the sake of simplicity, these different practices are commonly denoted as 'sharing' henceforth in this report.

[2] According to Zvolska et al., (2018), USOs are either communal or commercial "that that employ ICT to reduce transaction costs and make sharing of resources among peers easily accessible" (p. 2). In this report, the term 'USO' is used to describe all types of initiatives and organisations that facilitate sharing, renting, exchanging, swapping and gifting of resources.

these services is growing rapidly around the world; for example, it has been estimated that the global reveneues in the five largest sectors of the SE (including accommodation and transport) will reach $335 billion by 2025, up from approximately $15 billion in 2014 (PwC, 2014). Most of this consumption takes place in urban centres, which is mainly due to their high densities of people and shareable resources (Zvolska et al., 2018).

However, USOs and their services may also have various sustainability promises, such as possessing the potential for improving social cohesion and environmental sustainability of societies (Zvolska et al., 2018). These potentials have made the SE enter public discussions on the sustainability of cities (McLaren & Agyeman, 2015). It has been pointed out that cities' contributions to global sustainability problems are significant; by 2005, they consumed approximately 75 per cent of the world's energy and material flows (Swilling, Robinson, Marvin, & Hodson, 2013). Therefore, it has been argued that cities and their local governments ought to play a significant role in tackling global sustainability problems (Bulkeley & Kern, 2006). Against this background, then, it appears imperative for local governments to find ways to engage with the SE, so that its sustainability potential is harnessed to the pursuit of more sustainable consumption in cities.

1.1 Problem Definition

An analysis of the extant literature on the topic of local governance of the SE shows that there is clearly a need for further research. For example, there is an imbalance in terms of the geographic areas that previous studies have focused on. Thus far, research has concentrated on investigating local governments' engagements with the SE in large metropolitan cities, such as Seoul, Milan (Bernardi, 2018), Berlin, London (Zvolska et al., 2018), Amsterdam (van den Eijnden, 2017) and San Fransisco (Długosz, 2014). Meanwhile, various geographic regions remain where little to no investigations have been made, such as the Northern European region. It is important to investigate cities' governance of the SE in diverse contexts, for different countries have different multi-level governance systems, which implies that cities in these countries also possess differing possibilities to govern and shape their local SE. Learning from experiences from a variety of contexts provides the academic community and practitioners with an enhanced knowledge base on the subject. In addition, while it has been noted that the ways in which cities have chosen to intervene in their local SEs vary (Rinne, 2014), most of previous studies have analysed single governance approaches in the SE at a time.

What is more, these studies mainly investigate cities' regulatory responses to the most well-known USOs, Airbnb and Uber (Brail, 2017; Guttentag, 2015; Jonas, 2015; Miller, 2016). To date, the study by Zvolska et al. (2018) is the only one that has assessed local governance of the SE more holistically. Based on previous work by Bulkeley & Kern (2006) and Kern & Alber (2009) in particular, Zvolska et al. (2018) have developed a framework that can be used to analyse the roles of cities in governing the SE and provide them with policy suggestions for developing their engagement approaches to the SE. As a practical application, the authors employ the framework to the cities of Berlin and London. Since that study remains the only one to assess various kinds of governance approaches of cities in the SE at once to date, more holistic research on the topic is evidently needed.

However, governance of the SE has been complicated by the unknown sustainability impacts of sharing services. In theory, by reducing consumption-related environmental impacts, improving social cohesion and promoting new forms of entrepreneurship (McLaren & Agyeman, 2015), development and growth of the SE has the potential to support cities with achieving their environmental and socio-economic goals and objectives (Zvolska et al., 2018). Yet, examples from around the world have shown that not all dimensions of the SE are sustainable and that restrictions may need to be placed on some platforms and operators

(Voytenko Palgan et al., 2017). For example, by turning vast numbers of residential apartments into full-time short-term holiday rentals in Paris, the online-based peer-to-peer accommodation platform Airbnb has contributed to the city's housing price hikes and thus the phenomenon of driving lower-income citizens out of the city centre (Schofield, 2014). In other words, it seems important to not only understand all the different mechanisms that are available to local governments for governing the SE, but also to explore how the local governments relate the SE to their overarching sustainability agendas.

1.2 Questions addressed in the report

Reflecting the above, the main questions that have been set to guide this report and the tasks that are necessary to perform to answer those questions are presented in Table 1-1 below.

Table 1-1. Questions and tasks

1. How do the municipalities of Malmö and Gothenburg govern their local urban sharing organisations?
Task 1: Explore how the municipalities' work on sharing has been organised.
Task 2: Explore how the municipalities support and inhibit USOs through different governance roles.
Task 3: Explore how prominent the different governance roles are for the municipalities.
2. What is the role (if any) of the sharing economy in relation to the sustainability agendas of the municipalities of Malmö and Gothenburg?
Task 4: Explore the overarching sustainability agendas of the municipalities for mentions (if any) of the SE.
Task 5: Analyse the role (if any) of the SE in these sustainability agendas.
3. What are the ways (if any) to advance the theory on local governance roles in the sharing economy?
Task 6: Apply the framework of Zvolska et al. (2018) to Malmö and Gothenburg municipalities' contexts.
Task 7: Discuss the findings of this report in the context of the framework.
Task 8: Propose ways to revise and advance the framework.

1.3 Scope and Limitations

As noted, this report will focus on the municipalities of Malmö and Gothenburg. Limiting the scope of this report to two municipalities was influenced by the large amount of data that was deemed necessary to be gathered for constructing a comprehensive view of the different ways in which municipalities govern their local USOs. Forming such a view involves collecting primary data not only from the municipalities, but also from USOs and experts of the subject area, as well as significant amounts of secondary data on the subject from various sources. Furthermore, given the limited time that was endowed for the completion of this report by the study programme, it was determined that conducting research on more than two municipalities would not be realistic. This naturally has implications to the generalisability of the results of this study. The level of the generalisability of the results and the external validity of this report will be discussed further in Section 2.4.

In addition, it must be emphasised that the purpose of this report is *not* to determine what form of sharing is sustainable and what is not; rather, the report aims to assess how the municipalities govern the USOs and look at how the municipalities relate the SE to the rest of their sustainability agendas.

Finally, it is pointed out that a circumstantial limitation that the author of this report faced was the inconvenient timing of the research project. The completion of this report project took place in the middle of a summer holiday season in Sweden (approximately from mid-June until mid-August), which conflicted with the desired timing of the primary data collection phase. The author desired to conduct the primary data collection after the completion of the literature

analysis due to the fact that the literature analysis could inform the primary data collection process. However, due to the holiday season the author commenced the primary data collection prior to the full completion of the literature review in order to be able to collect the planned amount of data in time. This may have influenced the content and quality of the data collected in the early stages of the primary data collection phase. Neverthelss, the author tried to mitigate this problem by assessing the quality of the earlier collected data immediately after its collection, so that potential improvements could be made as early on in the process as possible.

2 Methodology

This section presents an overview of the methodology of this report. Section 2.1 explains the overall research design, including the report's conceptual framework. Subsequently, sections 2.2 and 2.3 describe the data collection and analysis processes. Finally, section 2.4 discusses considerations related to the limitations of the overall research design.

2.1 Research Design

2.1.1 Comparative Case Study

In order to answer its questions addressed in this report, the author adopted a deductive approach by applying and testing the conceptual framework on governance roles in the SE by Zvolska et al. (2018) to the context of two municipalities, Malmö and Gothenburg. More specifically, *a comparative case study* was conducted on the municipalities. This entailed an in-depth investigation of the governance approaches Malmö and Gothenburg municipalities employ towards their local USOs. Given that little corresponding research has been conducted to date, the case studies performed in this report were exploratory. In executing the study, the author followed a *hierarchic comparative approach* (Verschuren, Doorewaard, & Mellion, 2010). This meant first collecting data on the municipalities independently of each other and presenting the findings on them in a prescribed order (in section 4, the findings from Malmö case study are first discussed, followed by a discussion of the findings from Gothenburg case study). Then, the data on the cases was analysed in a comparative manner, where the similarities and differences in governance approaches of the municipalities were pointed out and potential reasons for them were discussed (Verschuren et al., 2010).

There were three key reasons to choose specifically Malmö and Gothenburg municipalities as case studies in this inquiry. Firstly, both municipalities are located in the previously little investigated Northern European region. One notable contribution to filling this gap, however, has been provided by Hult & Bradley (2017) who have examined Malmö municipality's infrastructural provision to its local USOs. However, in comparison to this report, the scope of the said study is limited, as it only focused on how the municipality can support its local USOs by providing them with physical infrastructure. Secondly, Swedish municipalities offered an intriguing ground to investigating local governance of the SE due to their relatively high degree of autonomy and various roles and responsibilities related to, for example, taxation, public service provision and housing and infrastructure development (Sveriges Kommuner och Landsting, n.d.-b). This suggested that Malmö and Gothenburg municipalities have the potential of shaping their local SE in various ways. Thirdly and finally, both municipalities are part of the recently-launched research programme *Sharing Cities Sweden* (SCS) which is funded by strategic governmental funding. This implied that the municipalities have adopted a structured approach to developing the SE in their cities, making them relevant as case studies (Sharing Cities Sweden, n.d.).

The strategic selection (Verschuren et al., 2010) of Malmö and Gothenburg as case studies of the four municipalities participating in the SCS programme (Malmö, Gothenburg, Stockholm and Umeå) was further influenced by the results of an initial screening of the participating municipalities. This screening involved gathering available web-based information and a review of grey literature addressing the SE in these cities, in order to construct a general understanding of how they approach the SE and interact with its stakeholders, as well as what kind of USOs are operational in the cities currently. This screening indicated that in terms of the number of operational USOs and the municipality's level of engagement in the SE, the two most active municipalities are those of Malmö and Gothenburg.

2.1.2 Conceptual Framework

Before discussing the methods for data collection and analysis, it is important to introduce the framework of Zvolska et al. (2018), which was adopted as the conceptual framework for this report and guided its data collection and analysis. This was mainly due to the uniqueness of the framework in the field of local governance of the SE.

Zvolska et al.'s (2018) framework on local governance roles is based on four distinct governance mechanisms that have been described by Bulkeley & Kern (2006) and Kern & Alber (2009) in the context of urban climate governance. These governance mechanisms are: *governing by authority* (i.e. governing that builds on regulation, control and formal planning, involving also use of sanctions to ensure implementation), *governing by provision* (i.e. governing that is based on delivery of public services, including education and health care, as well as provision of infrastructure and financial resources), *governing through enabling* (i.e. governing by, for example, facilitating partnerships and collaborations between private actors and establishing partnerships between municipal organisations and private actors, and public education and awareness raising; also referred to as 'network governance' by Khan (2013)) and *self-governing* (i.e. the municipality's governance of its own activities, such as procurement, and leading by example). From these governance mechanisms, Zvolska et al. (2018) have determined similarly four main governance roles that a local government can assume to govern USOs. These roles are *regulator* (governing by authority), *provider* (governing by provision), *enabler* (governing through enabling) and *consumer* (self-governing). In addition, the role of provider is split in two sub-roles (*host* and *investor*) and the role of enabler is split in three sub-roles (*communicator*, *matchmaker* and *partner*). Figure 2-1 illustrates these roles

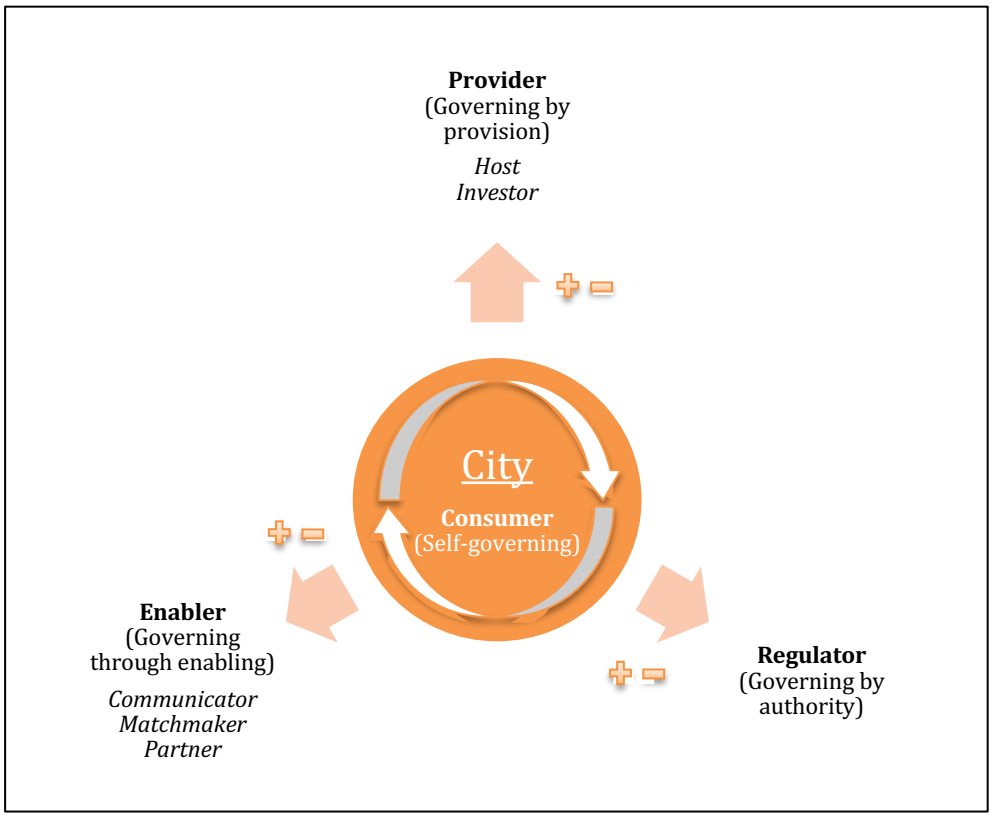

Figure 2-1. Local governance roles in the sharing economy

Source: Illustration by author (after Zvolska et al., 2018)

In the role of *regulator*, the municipality can govern USOs by employing legislative and regulative measures and imposing taxes, policies and bans that influence the establishment and running of USOs. Meanwhile, as a *provider*, the municipality can provide USOs with either facilitating infrastructure (i.e. act as a *host*) or financial support (i.e. act as an *investor*). As an *enabler*, the municipality can engage with USOs in various ways: for example, by arranging competitions or establishing certification schemes to promote best practices in sharing or by simply raising awareness about them (i.e. act as a *communicator*), by facilitating collaboration amongst USOs (i.e. act as a *matchmaker*), or by setting up partnerships with the USOs (i.e. being a *partner* to them). Finally, as a *consumer*, the municipality can support the USOs by procuring their services. According to Zvolska et al. (2018), these roles are not mutually exclusive; for example, a municipality can govern the SE, or even a single USO, as an enabler and provider. Additionally, the authors posit that the municipalities can either support (denoted by '+' symbol in Figure 2-1) or inhibit (denoted by '–' symbol in Figure 2-1) their local USOs to differing degrees in these roles. For example, a municipality directly can provide funding to certain types of USOs and ban others, or it can communicate or promote certain USOs' activities while giving a lower priority to other USOs.

2.2 Data Collection

The data collection phase of this report consisted of two parts: primary and secondary data collection. Primary data was collected through semi-structured interviews and, to a lesser extent, study visits. Secondary data was gathered through desk research in order to construct a literature review and analysis and search for supporting data on the governance of USOs by the municipalities of Malmö and Gothenburg. The data types and the collection processes behind them are elaborated next.

2.2.1 Primary Data

The three following informant groups were identified as the most relevant ones to interview:

1. Municipal civil servants working with SE-related issues;
2. Local USOs of private and public nature, and;
3. Experts with a perspective and knowledge on the SE and the municipality's role in it in the Swedish, European and/or global context.

All of the interviews with the municipal representatives were selected through *purposive sampling* (Emmel, 2013). The interviews with expert informants were selected through a mix of purposive (three out of five interviews) and *snowball sampling* (Emmel, 2013) (two out of five interviews), as two expert interviews were organised by an interviewee making a connection to another interviewee on behalf of the author. Finally, all of the interviews with the USOs were selected through purposive sampling, which was enabled by the existing contacts of the supervisor of the author of this report to relevant organisations.

Subsequently, the basic interview guides were developed. Four different basic interview guides were devised: one for relevant actors in municipal organisations, one for private USOs, one for public USOs and one for experts on the SE (for full interview guides, see Appendices I-IV). Due to the differences in nature between a public USO and a private USO, separate interview guides were deemed necessary to devise for these informant types. Prior to each interview, the relevant basic interview guide was further adjusted to suit the unique characteristics and position of the interviewee. The number of questions varied according to the basic interview guide, from 10 to 20. The questions themselves were a mix of open-ended and closed ones..

Then, the data collection process was initiated. Data collection was first conducted in Gothenburg, where four in-person interviews were conducted and four study visits to USOs were made (for a list of the study visits, see Appendix V). It is important to note that these study visits were organised as part of the activities of a conference by the SCS programme, which the author participated for research purposes. Furthermore, not all data that was collected from USOs was gathered through study visits; from some of the USOs, data was collected through interviewing. During the study visits, the concepts of the services of the USOs were explained to the author by an employee of the USOs, and data was collected by making direct observations and posing questions to the employee. After performing data collection in Gothenburg, the author moved to collecting data in Malmö. In Malmö, 11 interviews were conducted in person, four interviews over Skype and one over the phone (for a full list of the interviewees, see Appendix VI).

Overall, the author of this report conducted 20 interviews with 19 interviewees and four USO study visits. One civil servant from Malmö municipality was interviewed twice (one main interview and one follow-up interview). Altogether, this amounts to 24 (20+4) acts of data collection. Table 2-1 presents the distribution of the acts of data collection by informant type and the informant's location of operation.

Table 2-1. Distribution of acts of data collection

	Gothenburg	**Malmö**	**Both cities**	**Other**
Municipal representative	1	3*		
USO representative	5	6	2	
Expert		1		4
Other	1**	1***		

* In Malmö, two interviews were conducted with the same civil servant.

** This interviewee is the representative of both CEG and Studiefrämjandet, which are discussed in section 4.

*** This interviewee works for IVL Swedish Environmental Research Institute, which is discussed in section 4.

As is shown by Table 2-1 above, the acts of data collection that relate to Malmö is higher by amount of four compared to the acts of data collection that relate to Gothenburg. However, the difference is not as large in practice as it may seem; firstly, in Malmö the work on sharing is shared by two civil servants, whereas in Gothenburg all this work is coordinated by a single civil servant who thus "corresponds" to the two civil servants of Malmö municipality; secondly, as is noted above, two interviews with a same civil servant from Malmö municipality were conducted, which can together be regarded as "one long interview"; and finally, one of the experts happened to be based in Malmö by chance and may in practice be classified with the other expert interviews under "Other". Thus, when these aspects are taken into consideration, the number of interviews conducted in each municipality is approximately the same, with only one more interview having been conducted in Malmö in comparison to Gothenburg. Therefore, the data collected from each of the case municipalities is considered to have an approximately equal weighing in the overall data amount.

The reason for conducting only one to three interviews with municipal representatives per case municipality stems from the simple fact that these were the only informants from each municipality who could provide a sufficient overview of the municipalities' work on sharing.

Consequently, this enabled conducting more interviews with USOs. For the sample of USOs, the author sought to collect a representation of a diverse range of products that the USOs' services are based on, including clothes, sports equipment, mobility services, toys and instruments. Finally, to provide a level of objectiveness to the collected data, it was decided that a handful of interviews with external experts were to be conducted as well.

2.2.2 Secondary Data

Secondary data collected to support the literature review in this report consists mainly of academic (e.g. journal articles and conference papers) and grey literature (e.g. municipal reports, policy documents, announcements, websites, presentations and other relevant written documents, as well as audio-visual sources). In this data collection, the conceptual framework served to inform the use of keywords and thus, all collected secondary data discusses local governance of the SE from the angles outlined by the framework. Examples of keywords that were used in the searches are presented in Table 2-2.

The academic and grey literature was searched using the search engines *LUBsearch* (digital library of Lund University), *Google Scholar* and *Google*, with the two formerly mentioned being the preferred ones in the search for academic studies and the latter being used mainly for searching information related to the governance of USOs by Malmö and Gothenburg municipalities.

Table 2-2. Search engines and keywords used in the report

Search engine	Keywords
LUBsearch Google Scholar	municipal, local, governance, government, urban, sharing economy, platform economy, role, Malmö, Gothenburg, procurement, regulat*, infrastructure, financ*, fund*, enabl*, sustainable, sustainability.
Google[1]	municipal, local, governance, government, sharing economy, platform economy, role, Malmö, Gothenburg, Sege Park, Masthuggskajen.

[1] In case of the Google searches, when looking for information on the sharing governance of Malmö and Gothenburg municipalities, translations of the key terms were used at times (for example, as opposed to 'sharing economy', the word 'delningsekonomi' was opted for, or instead of 'Gothenburg', 'Göteborg' was used).

2.3 Data Analysis

In order to analyse the collected primary and secondary data, the data was first transcribed and then *coded* (Stake, 2010). Here, the municipal governance roles presented in the conceptual framework served as the main codes for seeking answers to question 1. In other words, all transcripts, academic and grey articles and other information, such as municipal documents, were labelled using the terms *regulator*, *provider*, *enabler* and *consumer*. Any data that could not be labelled with these codes but were nevertheless deemed significant for the purposes of the study were given their own codes. After this, the data was organised according to the codes and *a thematic analysis* was performed in order to identify similarities and differences in the coded data. This process was performed separately for the primary and secondary data. For seeking answers to question 2, the Swedish translations of words *environment*, *social*, *economic*, *sustainability*, *sustainable*, *sharing economy* and *collaborative economy* were used as codes to analyse the collected secondary data regarding the role of the SE in the sustainability agendas of the case municipalities. After this, a thematic analysis was performed to detect patterns in the coded data.

In case of the *Literature Review and Analysis*-section, thematic analysis helped in pointing out the data gaps that this report intends to contribute to filling. For the *Findings*- and *Discussion*-sections of this report, thematic analysis helped in detecting similarities and differences in the governance

approaches of the municipalities, which could then be analysed for drawing policy implications and potential development suggestions for current theory on local governance roles in the SE.

It is emphasised that a small number of academic articles were selected for a more in-depth analysis for the literature review. These articles were by Zvolska et al. (2018), Bulkeley & Kern (2006) and Kern & Alber (2009). This was done because they form the basis of the theory that this report aims to build on, and thus it was important to understand these articles' strengths and weaknesses that the data collection process could be informed by.

2.4 Research Method Limitation Considerations

As stated, the purpose of this report is to investigate how the municipalities of Malmö and Gothenburg govern their SEs, particularly focusing on how the governance approaches of the municipalities are related to advancing urban sustainability in the cities. To this end, the author has investigated various governance mechanisms employed by the municipalities. While the main source of data has been interviews with various stakeholders, a triangulation of methods (Thomas, 2016; Verschuren et al., 2010) has been employed in order to enhance the construct validity of this research (Yin, 2014). As noted in Section 2.2.2, the data sources included primary data from interviews and study visits and secondary data from previously conducted interviews, municipal reports and documents and audio-visual sources.

The type and nature of the collected data for this study (mainly direct observations of events and accounts regarding how the municipalities of Malmö and Gothenburg govern their local USOs) imply that the threat posed to the internal validity of the study is somewhat low (Yin, 2014). Nevertheless, the process of analysing the primary data has entailed some instances where inferences of the accounts of the interviewees have been necessary to make. In such situations, the author has attempted to consider all possible explanations to reduce the threat to the report's internal validity (Yin, 2014).

Furthermore, the fact that this report follows a case study approach implies that there are also some limitations to the generalisability of the results and thus the external validity of this study (Yin, 2014). The generalisability of the results of this study is affected by for instance the fact that municipalities in different countries possess different sets of responsibilities and degrees of autonomy, which implies that the abilities of municipalities to intervene and shape their local SE varies as well. Thus, depending on the characteristics of the local multi-governance systems, the extents to which municipalities can gain learnings and the research community can generalise from the results of this study vary. These limitations to the generalisability of the results have been addressed by choosing two cases over a single case and by using theoretical replication logic in selecting the cases, which expects somewhat contrasting results of the two cases for predictable reasons (Yin, 2014).

Finally, it is argued that the research of this report is highly replicable. This has been contributed to by, for example, providing an accurate and transparent description of the different study phases in the *Methodology*-section. Furthermore, most of the informants are considered to be very approachable due to the public nature of municipal organisations and the small scale of the USOs that operate in the municipalities.

3 Literature Review and Analysis

This section presents a review and analysis of extant academic and grey literature on the topic of local governance of the SE. Section 3.1 reviews and analyses the main bodies of prior research on local governance approaches and responses to the SE. The findings of the literature review are structured according to the four main local governance roles as specified by Zvolska et al. (2018): *regulator*, *enabler*, *provider* and *consumer*. However, it also analyses alternative governance approaches that have been discussed in relation to the subject. Subsequently, in section 3.2 the theory on governance of the SE by Zvolska et al. (2018), as well as the research that their theory builds on, is reviewed and analysed. Finally, some concluding remarks are presented in section 3.3.

3.1 Local Governance of the Sharing Economy

It has been noted that not only is the trust of new generations in the traditional institutions such as large corporations and political parties eroding and shifting towards platform-based businesses such as Uber and Airbnb, but also the needs of the population are changing (Bond, 2014). The applications of such concepts as big data, cloud computing and algorithms that accompany the SE seek to cater to those changes, but at the same time they are expected to transform today's societies and economies. However, the magnitude and extent of that transformation will depend on societies' economic, social and political choices, of which some are made on the local level (Kenney & Zysman, 2016). Nevertheless, since the societal impacts of the SE are not yet well understood, local governments are still exploring ways to engage with their local USOs. The previous investigations into the subject are reviewed and analysed next.

3.1.1 Local Government as Regulator

A review of extant literature on local governance of the SE quickly makes it evident that a significant majority of the academic research and grey literature in the area is focused on the *regulatory* responses of cities towards USOs, especially the largest ones. Importantly, one common conclusion that can be detected from these studies is that USOs challenge the current regulatory frameworks of cities. As Dyal-Chand (2015) illustratively puts it, in United States of America (USA) the SE has gone to show that "what many Americans may have thought of as the way of doing business now appears to be just one way of doing business" (p. 245-246). These new business models create a two-fold challenge to local authorities: on the one hand, some of the existing regulations may need to be revised, while on the other altogether new laws, bylaws, regulations and standards need to be designed to suit the nature of the services of emerging platform-type organisations (Finck & Ranchordás, 2016; Skjelvik, Erlandsen, & Haavardsholm, 2017; WEF, 2017). In fact, it has been suggested that in the future, communities are likely to need their own "sharing lawyers" to handle the legal conundrums that the SE creates (Kassan & Orsi, 2012). Furthermore, Kenney & Zysman (2016) note that regulating the SE is a task that local governments must take up urgently, as the quickening pace of digitalisation will only make regulating USOs more difficult in the future.

A significant share of the previous research on local regulation of the SE has focused on providing revision recommendations to the authorities. While these recommendations differ in their level of detail and scope, they are united by their focus on the context of USA. For example, Jonas (2015) provides recommendations to the government of New York City for updating its regulations on the taxi cab industry and short-term accommodation sector due to the rise of Uber and Airbnb and the like. Meanwhile, Major (2016) suggests how US municipalities can improve their room-sharing regulations. Almirall et al. (2016), on the other hand, have raised the importance of implementing data protection laws as cities pursue constructing open data platforms. Additionally, principles for new sharing regulation in USA have been proposed on the sector-level by Wegmann & Jiao (2017) and on the economy-level by Miller (2016).

Finck & Ranchordás (2016) suggest governing through collaboration as an approach to dealing with the regulatory challenges the SE entails. The authors argue that the processes of 'negotiated rulemaking' or 'negotiated co-regulation' ought to be used in regulating the SE to some extent, so that regulatory responsibility is shared between private and public actors. The motivation here is that collaborative processes such as negotiated co-regulation can lead to improved accountability, transparency and motivations to comply with regulations. As an example of such collaboration between a city and USO, the authors mention the City of Amsterdam and Airbnb coming into an agreement on cooperative collection of taxes, as well as establishing a *sui generis* public-private partnership, where Airbnb signed a memorandum of understanding. However, while arguing for collaborative governance, the authors point out that private actors should not be given the responsibility of protecting public interest – this ought to lie with the public sector.

Similarly, Bond (2014) and Cannon & Summers (2014) have argued that local governments should establish collaborative agreements with USOs as a way of dealing with the regulatory pressures and ensuring cooperative relationships between local governments and the USOs from the beginning. In addition, self-regulatory organisations have been proposed, which would allow USOs a partner-status in regulation (M. Cohen & Sundararajan, 2015). On the other hand, Brail (2017) has raised concerns about the incumbent industries' competitiveness against sharing platforms and has thus voiced that a balance between the incumbents and new entrants must be found, perhaps by de-regulating existing industries.

Overall, what unites the aforementioned studies is that their authors have all focused on what and how the regulation of the SE *ought to be*. Thus, the review of literature indicates that little has been done to analyse what *is currently being done* by cities to regulate the SE. At the same time, the number of examples of regulatory retaliations of cities against sharing platforms is increasing and particularly the larger, commercial sharing platforms, such as Airbnb and Uber, have been facing legal battles in various cities around the world. For example, Uber operations has had its operations banned in many American cities (Cannon & Summers, 2014), and in Amsterdam and Barcelona, the local authorities have restricted the operations of Airbnb in order to protect the interests of the general public (O'Sullivan, 2018; Rodriguez, 2018). Some cities have taken a different approach: in Toronto, the city's traffic department has removed some of the regulation that also applied to the traditional taxi industry and provided a license to Uber to operate in the city, thus striking a balance between the incumbents and Uber (Vincent, 2017). One reason to the lack of assessments and analyses of cities' already-occurred regulatory reactions towards USOs today may be that the SE is very much a contemporary phenomenon; thus, most of these actions have also taken place somewhat recently.

3.1.2 Local Government as Enabler

Some academic studies and grey literature have looked at the ways in which municipalities can *enable* different forms of sharing. Scholars of the field of urban governance perceive that the municipality's traditional role of direct service provider and regulator is transforming towards that of facilitator or enabler of different urban activities (Zvolska et al., 2018). Zvolska et al. (2018) argue that the role of enabler can be exhibited in varying degrees through the roles of *partner*, *communicator* and *matchmaker*, as mentioned in section 2.1.2. A review of extant literature shows that some of the activities that these roles entail have been discussed by previous studies as well.

For example, the enabling of the SE by local governments has been discussed in the context of innovation, for innovation is often a central element in the creation of ICT-enabled sharing. In the role of matchmaker, local governments can bring innovators together and facilitate collaboration among them. For example, it has been argued that enabling collaboration should form the basis of a municipality's policy and ought to involve active listening and identification

of innovation partners (Almirall et al., 2016). Furthermore, it has been recommended that municipalities allocated resources to constructing organs that can oversee and manage innovation ecosystems in the city (Cohen, Almirall, & Chesbrough, 2016).

Cooper & Timmer (2015) on the other hand have suggested municipalities to map out their local USOs and promote them and connect sharing actors with relevant resources. In addition, WEF (2017) have proposed cities to enable collaboration between private citizens and thus foster social innovation, host innovation programmes, "hackathons" and similar, as well as raise awareness on the potential social, environmental and economic impacts of sharing.

The role of city as *partner* in the SE has also been discussed to some extent. In their report titled "Collaboration in Cities: From Sharing to 'Sharing Economy"', WEF (2017) lays out different roles for a local government to assume in the SE. One of these is the role of 'collaborator', which means that a local government can partner with actors that support or design sharing platforms such as academia, public agencies, private businesses or citizens, in order to achieve economic, social or environmental benefits. As an example of a partner, the report mentions *Sharing Cities Alliance*, an organisation based in Amsterdam, the Netherlands, which facilitates international collaboration between cities on the development of the SE and platform economy. However, apart from the study by Zvolska et al. (2018), no other paper was found to discuss the role of local government as a partner in the SE. What is more, during the review of previous literature no analyses on the role of *communicator* were detected (with the exception of the study by Zvolska et al. (2018), again).

3.1.3 Local Government as Provider

Some of the research on local governance of the SE has examined the role of *provider*. Here, focus has been more on cities' provision of *infrastructural support* to USOs than on cities' provision of *financial support*.

In fact, some have argued that provision of sharing infrastructure is municipalities' most important tasks in their pursuit of more sustainable cities (Agyeman, McLaren, & Schaefer-Borrego, 2013). Perhaps the most comprehensive case study on the municipality's role as provider in the SE has been performed by Hult & Bradley (2017), who have examined the municipality of Malmö's provision of sharing infrastructure. Positing that it is an emerging role for municipalities to plan for and construct infrastructure that enables sustainable consumption for citizens, the authors see that local authorities can also establish facilities for citizens to move beyond consumerism and become producers or "makers" that allows them to partake in the SE in their cities. This they can do by sharing spaces, tools or skills with their peers. Thus, by setting up "stable frames and basic infrastructure" as the authors call it (Hult & Bradley, 2017, p. 612), municipalities do not simply react to the citizens emerging needs, but allow them to provide solutions to urban problems themselves. The authors also argue that Malmö municipality has proactively promoted 'collaborative consumption' – an umbrella term coined by Botsman & Rogers (2011) which includes the SE as one its dimensions – and point out that it is recognised as a key strategy in the municipality's "Action Plan for the environmental programme 2015-2018" (p. 602). In this document, the municipality also states that various sharing services need to be developed and scaled up. In their study, Hult & Bradley (2017) examine two organisations as examples of the sharing infrastructure in the city: STPLN (a citizen-led makerspace) and Garaget (a municipality-led 'urban living room' that provides a multitude of services, including book and tool lending). It must be pointed out, however, that this study does not take into consideration the possibility of Malmö municipality providing its citizens and businesses with *intangible* resources, such as open data, in spite of the fact that the digital aspect is central feature to the modern sharing movement. Thus, in order to provide a comprehensive view of how the

municipality acts as a provider in the local SE, it is necessary to assess the city's endeavours on the digital front as well.

Indeed, many authors have pointed out the significance of open data in the creation of more sharing in cities. By providing open data through platforms and portals, it is argued, local governments can engage the private citizens and businesses better in the collaborative and sharing movements, because these enable them to develop applications and services themselves that cater the needs of urban populations (Almirall et al., 2016; B. Cohen et al., 2016; Cooper & Timmer, 2015). In many cities, constructing such a platform or portal is already underway; for example, the city of Barcelona has engaged in open data efforts in order to, among other reasons, induce new kinds of economic activity in the city by the citizens (Capdevila & Zarlenga, 2015). However, this task is not without challenges: to achieve transparency and shared flows of data, municipalities need to demand companies, particularly larger ones, to disclose their data to the municipalities. This then requires developing new types of business models and legal frameworks in order to compensate the companies for such transactions (Almirall et al., 2016). On the other hand, as Cohen et al. (2016) note, very few companies have in fact succeeded in developing successful applications or related services from shared, open data.

Interestingly, the only example of a discussion on local government as an investor in the SE that was detected from the literature review was noted in the study by Zvolska et al. (2018), wherer the investor roles of the cities of Berlin and London were analysed.

3.1.4 Local Government as Consumer

The least attention in the extant literature has been given to how local governments can act as *consumers* in the SE; in other words, how they can incorporate sharing services into their operations. In fact, the only study looking into this governance role is by Zvolska et al. (2018). In the study, the authors investigate how Berlin and London act as consumers in their local SEs. However, the authors find little evidence of such activity exhibited by the cities. In case of Berlin, the work of a Berliner Stadtreinigung (a quasi-public institution) is mentioned, as it supported some Berlin-based offline USOs in 2014 and a project by an apartment block association and an organisation named *Pumpi Pumpe* that faciliatated resource sharing among neighbours through stickers, among other things. In case of London, the role of consumer was limited as well, as it was found that only some city councils were procuring mobility services from car-sharing clubs.

3.1.5 Other Types of Local Governance of the SE

Looking beyond the classification of governance roles by Zvolska et al. (2018), some discussion has also been held around an alternative governance approach towards the SE; that is, *governing through experimentation*. However, this research is more superficial rather than systematic and in-depth and focuses predominantely on what 'should' be done in local governance of the SE, as opposed to evaluating of what 'has' been done. This is perhaps again due to the fact that the SE is a rather new phenomenon in cityscapes around the world.

Overall, it appears that governing through experimentation as it proposed in previous research overlaps with the governance approaches outlined by Zvolska et al. (2018) to some extent. Embodied by the idea of "city-as-a-laboratory", Finck & Ranchordás (2016) have suggested applying an experimental governance approach to the regulation of USOs. The authors propose that experimental regulation could take the form of temporary policies or rules, after which assessments could be made on whether they need to be discarded, altered or made them permanent. According to the authors, this kind of approach has been employed by at least the city of Portland in the US, where the city allowed Uber and Lyft to operate on experimental

terms, leading eventually to permanent rules on ride-sharing. The city of Amsterdam is also pointed as an often-referenced example of the implementation of experimental regulation towards the SE. Furthermore, Almirall et al. (2016) have proposed adopting an experimental approach to the governance of data in the city. Pointing out that today, data is often accumulated in silos in the city, the authors argue that cities should experiment with infrastructures and new technologies such as blockchain that could help in making data available across them. However, other ways in which local governments can experiment, such as trialling with temporary infrastructure or experimental services (Kronsell & Mukhtar-Landgren, 2018), seem to have been overlooked by researchers thus far.

3.2 Theory on Local Governance Roles in the SE

As noted earlier, this sub-section is devoted to reviewing and analysing the theoretical framework on the local governance roles in the SE. Before this, however, the research that has inspired this framework is briefly examined.

This research has been performed by Bulkeley & Kern (2006) and Kern & Alber (2009), who analysed the role of the local government in climate change governance in the UK and Germany and in multi-level systems in OECD countries, respectively. Bulkeley & Kern (2006) identify four distinct modes of governing in their analysis of British and German local governments' climate protection work: *self-governing*, *governing by authority*, *governing by provision* and *governing through enabling*, of which they determine governing through enabling and self-governing as the modes that were increasingly being used. Overall, the authors find that there is a transition from direct service provision towards enabling in different areas of public policy, for example education, housing and transportation. Meanwhile, analysing the governance modes employed by OECD countries in climate mitigation and adaptation, Kern & Alber (2009) find that in many countries, municipalities are reluctant to govern in traditional authoritative ways and mostly employ self-governance and enabling. However, the authors posit that all four modes of governing are necessary in urban climate governance.

As noted, these governance approaches have influenced the development of Zvolska et al.'s (2018) framework on the governance roles of local governments in the SE. Although the sustainability issues differ between the studies, the authors found the identified governance approaches useful to analysing local governance of the SE as well. In their study, as noted earlier, Zvolska et al. (2018) distinguish four distinct roles for a local government to adopt in the local SE: city as *regulator*, city as *enabler*, city as *provider* and city as *consumer* (for explanations of these roles, see section 2.1.2). Applying the framework to the cities of Berlin and London, the authors find that both cities govern as regulators in their SEs in a manner that the local governments have traditionally been seen doing; that is, from the top-down. In addition, the authors observe that both cities' roles as providers in the SE is somewhat limited, though both cities act relatively more as hosts than investors by providing spaces and premises to some USOs and, for instance, parking spaces to car pool companies. The authors also find that the cities' roles as enablers is small, with only a small number of projects having been devoted to promoting sharing in London, and the enablement of USOs taking place at the district level in Berlin. Finally, noting that there was only one example of either of the cities governing as a consumer, the authors argue that it is here where a great improvement opportunity lies for the cities to make use of the SE in advancing their sustainability agendas.

The article and the theoretical framework by Zvolska et al. (2018) has several merits. Through its analysis of the sharing governance of the cities of Berlin and London, it is among the first articles to analyse local governance of sharing in a holistic manner and thus provides the first contribution to the identified knowledge gap. In doing so, the authors assess the coherence of the cities' approaches to governing USOs, which allows them to provide the cities with policy

recommendations for addressing the fragmented nature of their current governance. For this exercise, the framework proves a useful tool. Furthermore, the framework itself distinguishes four clear governance roles for the local governments to assume. In addition, with the framework the authors are able to critically analyse the cities' efforts in relating sharing to the rest of their sustainability work.

However, some shortcomings can also be detected in the article. These relate particularly to the conceptual framework's description and classification of some of the municipal roles in the SE, as well as to the application of the framework to assessing the cities' governance modes in practice. For one, the framework does not account for the traditional role of the city as a direct provider of services, which is described as part of governing by provision by Bulkeley & Kern (2006). Such an intervention in the SE may be deemed necessary when insufficient interest towards a certain service has been shown by private citizens and businesses (WEF, 2017). Arguably, a sharing service that established and entirely run by a municipality ought to be classified under the role of 'provider', adding another dimension next to the roles of host and investor. Furthermore, it must also be pointed out that the role of provider also lacks the provision of intangible resources, such as open data. On the other hand, the classification of the role of 'partner' as a sub-role to the role of 'enabler' is not without its problems either, as is evidenced by the discussion in this literature review. Since some practitioners (WEF, 2017) have conceptualised this role to entail features of governing by provision (e.g. provision of funding to sharing service providers), it may be possible that contestations to this conceptualisation of the role are discovered through this research as well. Furthermore, Zvolska et al.'s (2018) framework disregards the governance mechanism of 'governing through experimentation'. Therefore, it is clear that more research on the local governance of the SE is needed to either verify or discredit the above critique.

3.3 Concluding Remarks

In all, this review and analysis of extant literature has indicated that the most investigated area of local governance of sharing is regulation of the SE, while the governance of USOs through enabling, provision of resources and procurement (public consumption of sharing services) has been given less focus. Above all, it has shown that there is a clear knowledge gap in terms of holistic analyses of the governance of sharing by local authorities. Furthermore, it has illustrated that analyses of the relationship between local governance of sharing and the sustainability work and agenda of local governments are lacking. One exception to these has been provided by the study of Zvolska et al. (2018) with their study of the governance of sharing in the contexts of Berlin and London. However, this review has also pointed out that there are potential shortcomings in the authors' theoretical framework on governance roles of local governments in the SE, particularly in relation to the role of provider. Thus, more research in the subject area is arguably needed.

4 Findings

This section presents the findings of this study that relate to the governance approaches employed by the municipalities of Malmö and Gothenburg in their local SEs. The first two sub-sections, 4.1 and 4.2, discuss the broad lines of Malmö's and Gothenburg's municipal organisations' work on the SE, in order to provide context for the discussion on the roles the municipalities have currently assumed in their SEs. Subsequently, the sub-sections 4.3-4.6 describe the examples of the manifestations of the different governance roles that were detected from the collected data, organised according to the theoretical framework by Zvolska et al. (2018). For the purposes of clarity, in these sections the findings related to Malmö municipality are presented first and the findings related to Gothenburg municipality second. The final sub-section, 4.7, describes the municipal activities related to the SE that are not addressed by the framework by Zvolska et al. (2018) at present.

4.1 Malmö

From the interviews, it emerged that Malmö municipality's strategic work related to the SE is largely coordinated by two municipal civil servants, both of which were interviewed for this study. These civil servants are employed by the Department of Environment of the municipality. In an interview, one of these civil servants pointed out that the municipality's work on the SE is influenced by an overarching Environmental Programme for the years 2009-2020 which states that during this time, the city shall (among other things) place focus on more efficient utilisation of resources and enablement of sustainable lifestyles and consumption (Malmö Stad, 2009). While the programme lacks an explicit mention of the SE, the term is brought up in the municipality's Action Plan for 2015-2018 for the Environmental Programme. This plan states that collective and shared resource consumption are among the measures with which the municipality can achieve a smarter and more sustainable resource consumption in the city (Malmö Stad, 2015). This includes, for instance, the municipality leading by example through sharing of office furniture amongst the municipal organisations. The plan also states that the municipality shall provide the citizens with opportunities for shared resource use through the development and scaling up of, for example, car, bicycle and tool pools, clothing libraries, repair shops and other forums for swapping, exchanging, borrowing and reusing. Furthermore, according to the plan the municipality shall test and evaluate sharing services and sets a target for doing this for at least three services by the year 2016. The Action Plan names the Environmental Committee of the municipality as the responsible body for coordinating this work, while the responsibility for the implementation of the plan is shared amongst various committees, including the Environment, Leisure and Technical Committees.

The two civil servants leading the municipality's work on the SE explained that the majority of municipality's efforts related to sharing takes place within two projects. One of them is a larger project called *Malmö Innovationsarena* (MIA), which includes a theme on sharing and the SE. In MIA, one of the civil servants explained, it is investigated whether sharing solutions can bring about lower living costs for citizens and create new business opportunities. Work of MIA is concentrated on four geographic areas of the city: Kirseberg/Östervärn, Lindängen, Amiralstaden and Rosengård (Nord, n.d.). In the three latter mentioned areas, work on the SE is approached differently to the earlier mentioned area of Kirseberg/Östervärn (the work that is taking place here will be elaborated shortly). In the latter mentioned areas, the approach to working with sharing is to see how sharing can contribute to fulfilling the needs of the citizens of the area within the frames of the areas' existing infrastructure and business and citizen activities.

Another key branch of Malmö municipality's work on sharing is focused on the efforts related to the SCS programme. The municipality pursues these efforts under the name of *Sharing City*

Malmö (SCM). The aim of the SCM project, similarly to the entire SCS programme, is to establish a test-bed to design, test and evaluate sharing solutions. The project partners who amount to more than 20 altogether (of which the majority are commercial developers) (Pelin, 2018) have, however, currently designated three areas as test-bed sites. While work on two of the test-bed sites is set to commence sometime in 2019, one that is currently being developed is located in an area of the city named "Sege Park". This is located in the Kirseberg/Östervärn area of the city, and thus overlaps somewhat with the work of the MIA project in the area. In fact, the civil servants in charge of the two main sharing-related projects of Malmö municipality are collaborating actively with each other. The Sege Park test-bed, as stated by a civil servant in a leading position in the SCM project, is regarded as the 'sharing flagship' of Malmö municipality. Here, so-called *sharing hubs* will be built. The sharing hubs are physical premises that will be placed in different locations in the area and feature various sharing solutions, ranging from shared products to mobility services, under the same roof. Thus, in contrast to the MIA project which works to develop sharing using existing infrastructure, in the SCM project the approach is to design sharing into the infrastructure that is built from scratch. The decision to develop sharing opportunities in Sege Park dates to a time before the SCS programme's launch. According to a civil servant leading the SCM project, the intent to implement sharing opportunities was first noted down in the area's overarching sustainability strategy in 2015. However, how the SE was to be developed is not specified in the strategy, which is what the SCM project is currently working on.

However, in interviews with the two leading civil servants it was noted that outside these two projects, the municipality does not have an official, overarching strategy for working with the SE or the local USOs.

4.2 Gothenburg

In Gothenburg, the SE gained some of its first institutional traction when it was included in the official city budget for 2015. In this budget, it was stated that the municipality shall pursue an economy that is based circular principles, sharing and trust (Göteborgs Stad, 2014a). Since then, the annual city budgets have always featured a similar statement about the SE. However, according to a civil servant leading the municipality's work on the SE, the budgets have not specified how exactly this aim ought to be pursued, which is why civil servants have been left with open hands for coming up with their own proposals. In addition, the municipality has a climate programme, which includes an emissions reduction target of 75% per person from consumption-related activities (Göteborgs Stad, 2014b). This emissions reduction target also drives the municipality's work on the SE, according to the leading civil servant.

Most of Gothenburg municipality's work that relates to sharing is performed by the unit of Sustainable Consumption under the municipal body of *Consumer and Citizen Services Administration*. This is also where the civil servant who leads the municipality's work on the SE and in relation to the Sharing City Gothenburg (SCG) project is employed (the SCG project will be elaborated on later in this section). However, this unit does not perform all SE-related work of the municipality; according to the leading civil servant, the work of the unit is concentrated on the non-profit USOs that emerge from the civil society. Meanwhile, the interaction with the city's commercial USOs is undertaken by *Business Region Göteborg*.

Similarly to Malmö municipality, Gothenburg municipality does not have an official sharing strategy or approach to working with its local USOs. Instead, the civil servant leading the municipality's work in the area notes that interactions with USOs are assessed on a case-by-case basis. However, the unit of Sustainable Consumption of the municipality of Gothenburg has laid out five unofficial strategies for engaging with the local SE. These strategies are:

1. Support, encourage and develop citizen-led initiatives and companies that deliver products and services for sharing;
2. Launch own sharing services, such as bicycle pools and different kinds of lending services;
3. Identify which public assets are affected by the sharing economy and look into opening the municipality's own assets to sharing;
4. Review rules and laws that inhibit or prevent citizens from sharing and raise these at the national level, and;
5. Encourage a sharing culture and create public awareness.

In addition, Gothenburg municipality has launched its project to pursue the goals and objectives of the SCS programme, called *Sharing City Gothenburg* ('Sharing City Göteborg', SCG). The project involves 15 project partners, including NGOs, a university, a social innovation incubator, commercial developers and private USOs, among other stakeholder types (Göteborgs Stad, n.d.-c). However, in contrast to the SCM project in Malmö which has three geographically designated test-bed areas, in the SCG project the whole city of Gothenburg is perceived as a test-bed, according to the civil servant leading the SCG project. Thus, not all SCG partners collaborate on developing the SE in the same locations. As an example, the leading civil servant mentioned *Klädoteket*; a USO that specialises in renting clothes. The USO has partnered with the project to develop its clothing rental service online, which it runs alongside its physical store. In other words, in comparison to the SCM project, the SCG project appears more versatile in its focus and approach.

This section concludes the overviews of the sharing-related work of the case municipalities. Next, the municipalities' governance of the USOs are described in the context of the conceptual framework.

4.3 Municipality as Enabler

This section examines how the case municipalities work to enable the SE and the operations of USOs through the roles of *partner*, *communicator* and *matchmaker*.

4.3.1 Municipality as Partner

One of the examples of a USO-municipality partnership which was detected in both case municipalities is one that is between a bicycle sharing system operator and the municipality. Both municipalities have had bicycle sharing systems established in their cities; *Malmö by Bike* in Malmö, and *Styr & Ställ* in Gothenburg. Both systems have similar organisational structures; the bicycle systems themselves have been supplied and are operated by private companies as commissioned by the municipal organisations, and the municipalities participate in their design aspects, such as placing of new bicycle stations[3]. Both systems have had a great reception and are now being expanded to include more bicycles and stations.

It is noteworthy to note here, however, that according to the civil servants working with the bicycle sharing systems in the case municipalities, in neither of the municipalities the system is considered as a sharing service, nor are they branded or marketed as such. One reason to this is that the bicycles of these services have not been thought of as replacements to personal bicycles which many citizens in these cities already possess; rather, the systems themselves have been

[3] Although these services have technically been procured by the municipalities, they are not classified under the role of 'consumer' due to the fact that they have been procured for to be primarily used by the citizens, and not by the municipalities themselves. In other words, they are not services that are incorporated in the municipalities' own operations as, for instance, a car pool service for the municipal employees is.

considered as mobility services that are sustainable altenatives to private cars for moving around in the city. However, in Malmö it was noted that with its coming expansion, the Malmö by Bike services is set to reach also such areas in the city where not all citizens possess a personal bicycle. Hence, it could be argued that in Malmö, the bicycle sharing system's nature shifts towards that of a sharing service.

Apart from this example, Malmö municipality does not appear to be a partner to many private USOs outside the SCM test-bed site. A very notable exception to this, however, was detected in the case of STPLN; an NGO that runs a multi-functional space and acts as a USO by providing a makerspace and a co-working space for creative and innovative individuals and groups. The organisation also facilitates the development of its visitors' and collaborators' projects and initiatives. According to an employee in a managerial position at STPLN, Malmö municipality cooperates with the organisation in various ways:

> We have so many co-operations of different kinds [with the municipality]; for example, they are trying to organise things for kids to do – kids who can't afford to go on a vacation or are stuck in the city – and we always chip in and do things in the summer, also in the suburbs. We ran a co-project with Malmö Stad in Lindängen a couple of years ago called Returen, which includes collection of garbage but also upcycling of garbage. [...] We also work with them in events all the time. **[Interviewee 10]**

It ought to be pointed out, however, that STPLN is a somewhat special type of USO in Malmö's sharing landscape. According to the employee of STPLN, the organisation was established from an initiative by the municipality; it requested a few key individuals to form an NGO and then gave it a mission to set up an organisation that it is today. This explains the municipality's keen interest in STPLN's operations.

As noted, Malmö municipality's role as a partner to the USOs is more pronounced in the SCM project. As one of the project partners, the municipality's role is to coordinate and facilitate work to ensure that cooperation among the partners runs effortlessly. Some examples of how this role is exhibited in practice emerged in two interviews with a civil servant in a leading position in the SCM project. For example, in an earlier stage of the project, the civil servants working on the project were faced with a situation where they were not able to place any sharing-related sustainability demands on the project's developer partners due to the political climate preventing it. Therefore, to ensure that the sharing solutions that are to be implemented in the area were to achieve a sufficient level of ambition from the perspective of the SCM project, the municipality facilitated the establishment of collaboration between the developers and architecture companies that were selected as winners of an innovation competition focusing on sharing and smart, climate-friendly living in the Sege Park area.

Another exhibit of Malmö municipality's role as a partner in the SCM project emerged when the leading civil servant elaborated on the process of selecting the actual sharing solutions for the SCM test-bed site. This process has begun with the developers first expressing their wishes to the municipality regarding the functions – both sharing- and non-sharing-related – that they wish to see being implemented in the area. Now, in the coming phase of the project, these functions will be used as a framework for a mapping process that shall search on an international scale for sharing solutions which could perform and fulfil these functions. To facilitate the discovery of these solutions, the municipality has formed a partnership with IVL Swedish Environmental Research Institute ('Svenska Miljöinstitutet'), who shall conduct part of the research. Finally, once the preliminary sharing solutions have been selected, the municipality will conduct citizen engagement with, for example, the residents of the areas neighbouring the Sege Park test-bed site and aspiring entrepreneurs, who may be invited to run the services in the area. This will provide the project partners with the citizens' input on the proposed sharing

solutions and functions, which will then facilitate the confirmation of the final set of solutions for the area by the project partners.

In Gothenburg, one of the municipality's key partnerships is not with a USO as such, but with a sharing-focused mediator NGO called *Collaborative Economy Gothenburg* (CEG, 'Kollaborativ Ekonomi Göteborg'). This partnership was formed when the civil servant, who leads the municipality's work on sharing, attended a sharing-related event that was set up by the founders of what was then to become CEG. Upon their meeting, the actors realised that they were unanimous in their desires to promote the SE in Gothenburg. Therefore, the following year they established an *idea-based civil-public partnership* ('idéburet offentligt partnerskap') – a version of public-private partnerships that can be formed between civil society actors and the public sector to pursue a common objective in Sweden (Göteborgs Stad, n.d.-b). The partnership can be established when the initiative (which needs to originate from the civil society) is not intruding nor competing with the existing commercial sector. It establishes the signatory parties as equal partners in the initiative.

The partnership between CEG and Gothenburg municipality has allowed the municipality to provide some funding to CEG to enable the NGO to realise their idea of an interactive map that shows all USOs in the city of Gothenburg and the neighbouring areas. This map is called the *Smart Map* ('Smarta Kartan') (the Smart Map will be further elaborated on in Section 4.3.2). According to the NGO's representative, CEG not only facilitates collaboration amongst the local USOs, but also bridges the gap between the USOs and the municipality where necessary, which has played a key role in building up to future collaborations between the municipality and USOs of Gothenburg. In addition, CEG also acts as a collective voice of a large share of the city's USOs and, when necessary, pursues influencing SE-related policy-making of the municipality.

Similarly to Malmö municipality, as part of its SCS-related efforts, Gothenburg municipality acts as a coordinating and facilitating partner in the SCG project. However, as noted in section 4.2, this role is not constrained to a certain geographic area as is the case with Malmö municipality in the SCM project, but through the SCG project the municipality acts as a partner to various USOs around the city. This is why many of the partnerships between a private USO and the municipality that can be detected from the collected data have, in fact, been established through the SCG project. For example, the municipality collaborates with Klädoteket and *Grow Gothenburg*; an association that has developed a platform that matches those with unexploited arable land with those who are willing to cultivate on that land.

To ensure the effectiveness of its coordinating work in the SCG project, the municipality has recently hired an additional employee to its team to work alongside the civil servant that leads the municipality's work in SCG and on sharing overall. What is noteworthy here is that this person joins the municipal staff from CEG and *Studiefrämjandet* (a study association which operates in all Swedish municipalities and is a partner in the SCG project) and is therefore well-connected with the city's USOs. As a process leader, this person's role is to ensure that the work of the SCG project partners contributes to the municipality's objectives.

However, the SCG project has also raised some important, but unresolved questions related to the SCS programme and the municipality's role as a partner in the SE in general. The majority of the city's USOs are grassroots-level organisations that operate locally, and there are only few commercial USOs that are active in the city and that have relations with the municipality. However, with the launch of the SCG project, the municipality has been contacted also by commercial USOs, who have expressed their willingness to participate in the project. For example, the municipality was once approached by a Swedish for-profit digital task and skills

sharing platform for such a purpose, but the municipality felt that the USO's business model and nature do not match its ideals about the SCG project and that the USO related more to a concept called 'on-demand economy' than it did to the SE.

4.3.2 Municipality as Communicator

At first, it must be pointed out that both of the case municipalities have included a mention about the SE and its importance to contributing to a more resource efficient society in one or several of the steering documents of the municipality. In Gothenburg, the SE has been mentioned in the annual city budgets since 2015, and in Malmö it was included in the Action Plan for 2015-2018 for the Environmental Programme 2009-2020 (see section 4.1 and 4.2). These can be viewed as examples of the case municipalities governing the SE as communicators, for they are raising awareness of the role of sharing in the development of the cities amongst the general public.

Aside from this, some additional examples of governing as communicator can be detected from the collected data. In Malmö, the data indicates that experiences regarding the municipality's role as communicator vary. Amongst the USOs that benefit of the municipality's supportive communication activities is STPLN. In an interview, the following was mentioned by a person in a managerial position in the NGO:

> They send us so many study/technical visits, when they show off Malmö and what they do. So at least once a week we have one. Last year, I think we had more than a hundred study visits and quite a few of them are via the city, because they want to show off that this is what the city is doing as well. **[Interviewee 10]**

Thus, the organisation is receiving significant awareness raising through the study visit bookings by the municipality. In addition, the municipality promotes on the municipality's websites those USOs that it runs or partners with, such as STPLN, Garaget, Fritidsbanken and Malmö by Bike. It does this by, for example, mentioning them in posts, dedicating a separate page for them on the website and/or featuring them on the municipality's events-website titled *Kul i Malmö* ('Cool in Malmö') (Malmö Stad, n.d.-a, n.d.-c, n.d.-b, n.d.-e, n.d.-f). Garaget and Fritidsbanken are discussed in more detail in Section 4.7.1.

However, it became apparent that private USOs do not receive such support from the municipality. From the interviewed USO, employees in leading roles at Swop Shop (a second-hand clothing store with a special service of clothing exchange) and Tool Pool (a free-of-charge tool lending service established alongside a traditional commercial hardware store) in fact expressed their hopes for the municipality to support the city's private initiatives more with communication activities. The employee of Swop Shop did mention, however, that the municipality has raised awareness of the USO amongst the research community by booking some study visits into the shop. In addition, Malmö municipality has developed a map called "GO! Malmö" which includes "green initiatives" in the city (Malmö Citysamverkan AB, 2015). This map features Swop Shop and Tool Pool. Nevertheless, this map was a one-time effort and is hence not an interactive, continuously-developed tool like Smart Map in Gothenburg. Furthermore, the employees from Swop Shop and Tool Pool both stated that awareness raising of sharing amongst the general public is needed in Malmö, in order to generate higher userships for the existing USOs and for achieving multiplication of sharing models in the city. Here, according to the USOs, the municipality can and ought to be a key player in.

What is more, it appears that there is no high awareness of the SCM project either, despite being regarded as the flagship project for advancing the SE in Malmö by the municipality. This became apparent when several USOs located outside the Sege Park area, as well as an expert with

experience in working with Malmö-based USOs mentioned that they know only little, or are not aware at all, of the municipality's intentions to develop sharing opportunities in that area. Although not representative of the general public, the fact that the stakeholders that are more acquainted with the attributes of the local SE are not aware of the municipality's activities in the SCM test-bed is arguably indicative of lacking communication efforts in relation to the project.

While Gothenburg municipality performs similar activities to communicate on sharing as Malmö municipality does (it promotes some USOs on municipal websites), it also benefits of the partnership with CEG which produced the Smart Map. In fact, according to the civil servant leading Gothenburg municipality's work on sharing, the municipality considers the Smart Map as its predominant tool for communicating about the SE and the USOs in the city. Having such a platform in a city is arguably important; a survey into citizen attitudes toward sharing performed by the municipality in 2017 showed that the majority of citizens are open toward sharing more but are unsure as to how or where to do more of it (Göteborgs Stad, 2015). Furthermore, a representative of CEG points another benefit of the organisation's communication activities:

> While sharing initiatives just do their thing which they believe is very important, CEG has the role of focusing the city's and public's attention to the sharing movement and say "hey, do you see what's going on?" **[Interviewee 2]**

Thus, by raising awareness of the USOs amongst the general public, CEG removes pressure from the USOs to perform such activities entirely by themselves and allows them to better focus on running their operations.

Not all USOs are included on the Smart Map though, as the municipality and CEG have set the following criteria for the USOs to fulfil to be included in it (Smarta Kartan, n.d.):

- Their services need to be open to all citizens, unless they are limited to a particular neighbourhood or residential block;
- The items or services offered by the USOs are free of charge or do not generate a profit to the USOs;
- The USOs can be classified as, or they entail, local communities;
- The USOs facilitate the urban commons and promote access, as opposed to ownership;
- The USOs are focused on sharing, exchanging, renting, giving and borrowing, as opposed to buying or selling, and;
- In case the USO is an international company, it needs to have a cooperative structure.
- In addition, it is preferable, but not compulsory, for the USOs to promote exchange between private individuals.

However, despite receiving some international attention recently by winning a Eurocities award, the municipality is struggling with increasing awareness of the Smart Map amongst the citizens. Owing to the SCS programme, the municipality is now able to fund the development of the 2.0 version of the Smart Map. The changes include making the map open source, which allows other cities in the programme and elsewhere to implement the infrastructure and populate it with information from their local contexts. Thus, through the SCS programme, the municipality of Gothenburg is working to not only enable further sharing in its own area of jurisdiction, but also facilitate uptake of innovations elsewhere in and outside Sweden.

Furthermore, following some citizen activity on the matter, a petition urging Gothenburg to become a 'Sharing City' – an internationally used term of a city with an advanced SE and sharing

culture but that lacks an official recognised certification – was brought to the Consumer and Citizen Services Administration for handling. The petition was agreed to by the Administration, and it its response, the Administration recognises the opportunity for Gothenburg to become the first 'Sharing City' in Sweden and strengthen the city's brand as 'a sustainable city that is open to the world' (Göteborgs Stad, 2017b). However, the civil servant leading the work in the area noted that there is some confusion within the municipal organisation as to whether the municipality is now considered to be a 'Sharing City'. Thus, the promotional and communicational benefits of the 'Sharing City' brand are yet to be capitalised on effectively.

Aside from these efforts, the municipality also performs some awareness raising of the SE in Gothenburg in the form of public lectures. Additionally, based on the responses acquired from the local USOs, awareness of the SCG project appears to be somewhat higher than in the case of the SCM project. The project has been established social media accounts that are used to further promote the project, while the SCM project in Malmö lacks these. Again, however, it must be emphasised that this sample is not representative of the general public's awareness of the project. Nevertheless, it indicates that promotion of SCG is being performed by the project partners.

However, it was also pointed out by an employee of Fritidsbanken Frölunda Torg – a sports and leisure equipment lending service – that while Gothenburg municipality communicates about the SE, it also enables construction of new shopping malls in the city and thus promotes the traditional modes of consumption simultaneously:

> I mean, it's... Gothenburg is really good in some parts but it's also like promoting, say like, building new shopping malls, and so, they do both things now. **[Study visit D]**

4.3.3 Municipality as Matchmaker

In Malmö, only limited evidence of the municipality acting as a matchmaker was found. This includes activities that are part of the MIA project; the municipality has arranged a small number of public events where the role of SE in citizens' everyday lives were discussed by panels of USOs and experts of the subject (Institutet för hållbar stadsutveckling, 2017; Malmö Stad, 2017). In this way, the municipality can be seen as having brought USOs together and thus having acted as a matchmaker to them.

In the SCM project, through the citizen engagement process that is part of the project partners' search for most appropriate sharing solutions for the test-bed site, the municipality shall bring together sharing entrepreneurs to discuss the initial results of the sharing solution mapping process in the autumn of 2018 (more details regarding the sharing entrepreneurs' role in the SCM project will be provided in Section 4.4.1). In addition, albeit not an example of the municipality bringing together USOs as such, the process where Malmö municipality has brought together the developer project partners and provided conditions for creating collaboration between them can be regarded as a matchmaking activity by the municipality. This is because it is precisely the developers who bear the primary responsibility of designing and implementing sharing solutions in the Sege Park test-bed site. In this process, the municipality emphasises the importance of building trust between the municipality, the developers and property owners, as well as amongst the developers themselves. It has previously been realised at Malmö municipality that a high trust between partners creates improved preconditions for closer collaboration in development projects and ensures that all partners work towards the same goals. In case of Sege Park, this process has resulted in the developers coming together to ponder and design sharing solutions together. As part of the trust building process, the municipal officials who work on the project have placed their project offices on-site, having learned from previous projects that providing a "neutral" location for discussions and

negotiations allows the stakeholders to interact more freely with each other. The municipality has also organised some trust-building activities at their on-site offices:

> [...] We play ping pong together and cook together and have individual talks, to build relations instead of flexing our guns – there's no point in that when there are actors that want to achieve the same goals as we do. **[Interviewee 6]**

Meanwhile in Gothenburg, it appears that the role of matchmaker is primarily played by CEG (see section 4.3.1) and Studiefrämjandet, as opposed to the municipality. The municipality does, however, collaborate with both organisations, as mentioned earlier. Studiefrämjandet, for example, has run a workshop, through which it brought together different kinds of USOs, as was explained by an employee of Klädoteket:

> Then, Studiefrämjandet started a transition workshop, because they wanted to combine different organisations under the same roof and try to develop a co-working space for different fields. This [included] Klädoteket, a hackerspace and a bike kitchen, so it was a lot of different organisations coming together under the same roof. **[Study visit A]**

4.4 Municipality as Provider

This section looks at the ways in which the case municipalities provide either infrastructural (i.e. act as hosts) or financial support (i.e. act as investors) to the USOs.

4.4.1 Municipality as Host

Based on the collected data, Malmö municipality's role as a host is not particularly pronounced. However, the account by a representative of Sunfleet – a commercial car pool operator that runs its service in both of the case municipalities – provided an interesting contrast to this trend in the data. Explaining the extents to which the municipalities of Malmö and Gothenburg are providing parking spaces for the cars of the company's car pools, the representative noted the following:

> Malmö [municipality] is a leader in this. Gothenburg is lagging in this area – even in the case of new developments and using the P-norm. They haven't gotten around it – they have all the statistics, but they aren't there yet [...]. **[Interviewee 5]**

Thus, in this respect Malmö municipality acts more actively as a host than Gothenburg municipality. Another example of Malmö municipality acting as host is the municipality providing premises to the earlier mentioned NGO, STPLN.

In the SCM project, Malmö municipality intends to act as a host to USOs as well. This is to take place during a coming stage of the project, as part of the engagement process involving the aforementioned sharing entrepreneurs. In an interview with the civil servant who is in a leading position in the SCM project, it emerged that there is a consensus among a large number of the developer partners of the project on the fact that the sharing solutions in Sege Park ought to be run by independent entrepreneurs:

> And that's really interesting from the aspect that if we want to use like third-party entrepreneurs running the sharing solutions... [...] It's really important from the developers' point of view to make sure that [the sharing services] actually can stand on their own legs when [the area] is up and running when people actually move in, because they want to promise services to them. **[Interviewee 6]**

In other words, it is the commercial developers' view that to achieve a successful set of sharing solutions in the area, the solutions ought to be established and operated by independent

entrepreneurs. Later in the interview it was also stated by the civil servant that in the view of the developers, entrepreneurs who have made investments in developing the sharing solutions also have a high drive for running the services. Therefore, the likelihood for the services to sustain into the future is higher than in the case where the solutions were developed in another way and, for instance, local NGOs or the residents of the area were recruited to run them. Thus, in order to facilitate the process of developing the sharing services and business models for them, Malmö municipality intends to provide participating entrepreneurs with free spaces to test out their ideas. In return, the municipality envisages charging the entrepreneurs rent based on their turnovers. However, the practicalities of this arrangement are yet to be decided on.

In addition to the earlier mentioned Sunfleet, there are several USOs that Gothenburg municipality hosts by providing the USOs with premises to run their operations in. These organisations and initiatives include Leksaksbiblioteket (a toy library) and temporary sharing-themed events such as clothing swap days, and tool and instrument lending services, electric car pool and rooms for exchanging goods that are run in public housing properties (Lund, 2017). Of the USOs that were studied for this report, Fritidsbanken Frölunda Torg – one of three Fritidsbankens that currently operate in the city – mentioned having received support in the form of furniture from a district administration of the municipality. This district administration partners with a non-profit association, which is responsible for running the day-to-day operations of the service. Additionally, it is worth pointing out that the previously mentioned Studiefrämjandet which collaborates with the municipality in the SCG project also acts as a host to Gothenburg's USOs. USOs that operate in the association's premises at present include two bicycle kitchens and a repair café.

4.4.2 Municipality as Investor

The collected data indicates that the governance role of investor is not very prominent for Malmö municipality. In fact, the only evidence of the municipality providing direct funding to a private USO was observed in the case of STPLN. In return for the funding it provides to the NGO, the municipality receives a voice in the STPLN's decision-making processes, as well as statistics on the organisation's development. It is important to note, however, that according to an employee in a leading position in the organisation, part of the funding that STPLN receives from the municipality is used to applying for additional funding from elsewhere, including the European Union and Sweden's Innovation Agency (*Vinnova*). This it does to increase its independence from the municipality:

> We do, however, find it a little awkward at times that we are a non-profit NGO that is supported a lot by the municipality, because we feel that as an NGO, we should challenge the municipality and be independent. **[Interviewee 10]**

Thus, the organisation does not want to be or be seen as too reliant on the municipality either.

In contrast, the data shows that Gothenburg municipality governs more actively as an investor. Most examples of this governance relate to the SCG project. From the collected data, it emerged that Grow Gothenburg, Klädoteket and Leksaksbiblioteket have received or will receive funding from the municipality via the SCG project. Additionally, as was noted in section 4.3.1, Gothenburg municipality has also funded CEG.

4.5 Municipality as Regulator

The collected data points to the fact that the role of regulator is not currently employed by either of the case municipalities. The leading civil servants from both of the case municipalities stated that they have thus far not faced such problems with USOs as cities elsewhere in the world have and have therefore not found a need to regulate them. However, their accounts also indicate

that there are some uncertainties within the municipalities as to what their abilities to regulate the SE are in the first place. In Malmö, it was pointed out by a civil servant that the municipality may possess authority in some areas of the economy that the USOs disrupt:

> I mean, it depends. [...] For instance, in Gothenburg, they have something called "solidarity fridges", that could be like something that could be regulated, because [...] I have colleagues working with food security. **[Interviewee 7]**

Later, discussing the case of Airbnb, the civil servant noted:

> [...] You are aware of this of course, but Amsterdam for instance has a regulation with Airbnb [...]. Maybe, in Malmö, if there was a problem, we could apply that [...]. **[Interviewee 7]**

Yet another view on the matter was provided by the civil servant leading Gothenburg municipality's work on sharing in an interview:

> And so for me, the Sharing City is much about exploring the opportunities of the SE in regard to sustainable consumption, as opposed to many other cities who've had to deal with problems with Airbnb and Uber. If there are problems here, though, they're dealt with on the national level. **[Interviewee 1]**

In a follow-up email exchange, the civil servant expanded on this perception by noting that the municipality has some provisions in its local regulations concerning its public space use that it could employ to regulate USOs if necessary (Göteborgs Stad, 2018).

Nevertheless, both municipalities maintain an open stance towards the entrance of new USOs into the cities. Both municipalities noted that they could not prevent these USOs from launching their services in the city in any case, even if they wanted to. One USO type that could potentially cause problems and that was discussed by both municipalities was private bicycle sharing companies. Both municipalities expressed the hope that the entering USOs would approach the municipalities to inform them of their plans to launch their operations in the cities beforehand, so that the municipalities could prepare accordingly and avoid any unwanted implications. While Gothenburg has experienced an entrance of a private bicycle sharing company into the city without prior notification, Malmö has not – a civil servant from Malmö municipality stated that these companies have informed the municipality of their launch plans beforehand. However, the interviewed civil servants at Gothenburg municipality also stated having noticed that USOs are becoming more cooperative and have increased their efforts in establishing a relationship with the municipality. What is more, a civil servant leading Gothenburg municipality's work on sharing stated that the municipality remains observant to ensure the regulatory framework is not hindering the USOs operations either:

> Of course, if we see rules and laws that are hindering sharing in the city, we can raise it on the national level. **[Interviewee 1]**

4.6 Municipality as Consumer

All in all, the case municipalities were found to govern the USOs as consumers only to a small extent. Both municipalities were found to have policies in place for sustainable procurement (Göteborgs Stad, n.d.-a; Malmö Stad, n.d.-d). However, for example the civil servant leading Malmö municipality's work on sharing stated that for the moment the tool is mostly used for procuring products that entail a certain degree of circularity, and not for procuring sharing services. In Gothenburg, the municipality has purchased a toy exchange service from *Retoy* – a social enterprise focused on toy swapping (Lund, 2017). In addition, a representative of the car pool-operating Sunfleet mentioned that some smaller municipalities in the municipal association

of Gothenburg have used the cars of the USO's car pool. These examples were, however, the only ones discovered during the data collection.

4.7 Other Municipal Activities

This section describes the types of governance approaches towards the USOs that the case municipalities of Malmö and Gothenburg are employing but which are not recognised by the theoretical framework by Zvolska et al. (2018).

4.7.1 Provision of Sharing Services

One central mode in which both of the case municipalities engage in their local SEs is direct provision of sharing services by the municipalities themselves. Here, it is important to point out that the municipality may not be the sole party operating the service, but the essential factor is that the service has originated from the municipality's initiative. In addition, this role may involve higher resource investments as the services need to be established and updeld by the municipality. Furthermore, in their communications around these services, the municipalities promote these services as municipality-run and thus claim ownership of them, despite that not being the case for all the services. These features set the following services apart from the ones that have been discussed in the earlier sub-sections.

An example of a service that was noticed to exist in both of the municipalities is a digital platform that allows municipal departments and organisations to give goods such as furniture to each other and thus avoid unnecessary procurement and discarding of municipal property. In Malmö, this platform is called *Malvin* (Mynewsdesk, n.d.), and in Gothenburg *Tage*. In Gothenburg, Tage has yielded the municipality approx. 6-7 million SEK in savings and reduced emissions with about 60 tons of CO2 (Lund, 2017).

In addition, the Department of Culture of Malmö municipality runs a multi-functional organisation named *Garaget*, which is officially classified as one of the city's public libraries. However, the organisation also runs a USO; a gadget lending service that includes tools, board games and instruments. A civil servant working at Garaget stated that overall their gadget lending service – offered free of charge – has proven very successful, particularly in the case of tools. However, not all sharing services have been equally popular: a clothing library trial that was conducted in collaboration with a local USO specialised in clothing rental was discontinued due to lack of use by visitors and the USO closing down at its main location. Nevertheless, for the time being, Garaget is committed to continuing and developing its sharing service, and is, for example, exploring its replication in other public libraries in the city.

Malmö municipality's Department of Leisure also manages the single Fritidsbanken that operates in the city Malmö. The municipality has, however, recruited a local sports association to take care of the day-to-day operations of the service. The municipality is currently observing a steady rise in the statistics related to borrowing activity and is thus far pleased with the service's development, with visitors coming not only from the neighbouring areas, but also from afar. A civil servant from Malmö municipality working with the development of the Fritidsbanken stated that the municipality is intending to establish more of similar initiatives in other areas of the city in the future as well, but such intentions are yet to be formalised by the municipality.

There are also various sharing initiatives in Gothenburg that the municipality is responsible for, including the earlier mentioned municipality-led electric car pools to residents of publicly-owned buildings and *Fixoteket*-titled makerspaces. In addition, the municipality has run a trial project called *Delamera*, where public libraries offered different kinds of goods, such as tools, board games, sewing machines and cookware to borrow. However, according to the civil servant

leading the municipality's work on sharing, the project was deemed unsuccessful and has been closed down for the time being so that its concept can be re-assessed. Gothenburg municipality has also begun a process to map out all its empty premises and spaces in the hope of finding new uses for them. It is also investigating how to organise the opening up of these spaces in a centralised manner. The municipality's current efforts to use publicly-owned urban spaces and premises more efficiently also include a municipality-owned property management company *Higab*, which is looking into more efficient ways of using the temporarily available office spaces that it manages.

4.7.2 Facilitating the Availability of Open Data

Another municipal activity that emerged in some interviews but that is not discussed by current theory on local governance of the SE is the construction and operation of open data platforms, which can be used for inducing the creation of more USOs in the city by businesses and the civil society. According to previous research, these are common activities in various cities around the globe (Almirall et al., 2016).

Gothenburg municipality has since 2009 been working to open up its data for its citizens to use. A civil servant in a leading position in the municipality's work on sharing notes that the municipality possesses significant amounts of data on various aspects of urban life, such as how the citizens of Gothenburg travel in the city on a day-to-day basis. As the civil servant noted:

> Our idea is that we shouldn't be the one who develops all the apps when citizens are better at doing that. So we try to facilitate by making as much data open as possible. **[Interviewee 1]**

Malmö municipality, on the other hand, is yet to initiate efforts in this area of municipal sharing work. A civil servant in a leading position in the municipality's work on sharing stated that some discussions had been had regarding establishing one alongside the potential development of Malmö's own Smart Map but plans to realise such ideas remain to be set. The civil servant did, however, express some reservations regarding the provision of open data for inducing the development of, for example, apps and consequently more sharing themselves:

> Of course, if people could just fill in themselves, it's very good. But if people then start filling up things that isn't really sharing economy, then it's a problem. **[Interviewee 7]**

4.7.3 Experimenting

Furthermore, since a key purpose of the SCS programme is to design, test and evaluate various kinds of sharing solutions in test-beds to see, which solutions are worth replicating in other parts of the cities, it could be argued that the partnering municipalities are *governing the SE through experimentation* through the SCM and SCG projects (Bulkeley & Broto, 2012). This is another governance approach that is not recognised by the conceptual framework of Zvolska et al. (2018).

The experimental nature of the programme is not limited to testing which sharing solutions are successful and which are not. A civil servant from Malmö municipality in a leading role in the SCM project elaborated on the the ideas that had emerged during the project:

> The question we ask ourselves in that process is "what is the connection between these sharing hubs and the actual residential buildings?". So how do we actually use sharing as a tool to create affordable living. Could we reduce the space of apartments, for example, and lift that functionality out into the sharing hubs? That is the main topic I would say. **[Interviewee 6]**

Furthermore, the project partners point out that this type of a project has not been performed elsewhere in the world:

> We believe it's pretty unique globally to have that like as a strategical process between the City and the developers to actually create affordability structurally and building sharing in that sense from the beginning. **[Interviewee 6]**

In other words, with the approach of integrating sharing into the housing design, the project partners also intend to achieve one of the aims set for the Sege Park area, which is to create affordable housing in the area. However, since no similar experiments have been performed before, the results of this trial are also uncertain; the leading figure of the SCM project stated that the outcome in housing prices could also be the opposite of the intended. The experimental approach of the SCS programme also extends to running the sharing services; for instance, the civil servant coordinating the work in the SCG project mentioned that one of the project's aims is to come up with solutions that would enable sharing services such as bike kitchens to afford to place themselves in very central locations where costs of running a service are generally high.

5 Discussion

This section presents a discussion of the findings of this report. The discussion is structured so that it provides answers to the presented questions. The first sub-section (5.1) is further split into three sub-sections, 5.1.1-5.1.3, of which 5.1.1 seeks to answer question 1 and 5.1.2 seeks to answer question 2. This is done by analysing the governance of the SE by the municipalities of Malmö and Gothenburg and looking at how the SE is related to the overarching sustainability agendas of the municipalities. Section 5.1.3 shall present some recommendations based on the findings for questions 1 and 2. The second sub-section (5.2) is devoted to providing an answer to question 3, by first analysing the findings in relation to the theoretical framework by Zvolska et al. (2018) and then presenting the author's suggestions for the revision and advancement of the framework. The final sub-section (5.3) presents some concluding remarks for this section.

5.1 Governance of the SE by Malmö and Gothenburg

Before analysing the governance approaches of the case municipalities, it must be emphasised that both municipalities lack an official strategy for the SE that would outline approaches, activities or responsibilities towards the local USOs for the municipal organisations. Therefore, all interactions between the municipalities and USOs are evaluated on a case-by-case basis by the municipalities, whenever situations requiring municipal intervention emerge. This has resulted in the fact that the different governance roles and their prominence for the respective municipality are in effect a sum of separate governance activities, rather than a result of systematic policy regarding governance of the SE.

5.1.1 Comparison of Governance Approaches

This section seeks to answer question 1: "How do the municipalities of Malmö and Gothenburg govern their local urban sharing organisations?". This involves comparing the governance approaches between the two municipalities in terms of their prominence to the municipalities and analysing the extent to which they are supportive or inhibitive towards the USOs.

Municipalities as Enablers

Overall, based on the collected data it appears that the governance role which both municipalities employ most actively in in their local SEs is that of *enabler*. However, there are differences in the ways in which the case municipalities exhibit the different sub-roles. As *partners* to the USOs, the governance roles are similar between the case municipalities in that both municipalities have various partnerships and collaborations with local sharing actors. However, it seems that each partnership between a sharing-related organisation and one of the case municipalities has a unique kind of nature, extent and purpose. For example, while some partnerships involve various kinds of direct municipal support to USOs (such as the one between Malmö municipality and STPLN), some have been established with a mediator organisation to support local USOs indirectly (such as the one between Gothenburg municipality and CEG). These examples are illustrative of the versatile forms the municipal governance role of partner can take. Furthermore, the types of USOs that are partnered with vary by the municipality as well. Outside the SCM project, the municipality of Malmö only partners with USOs that it has commissioned or initiated itself, and within the project, the municipality uses its partnership with commercial developers to bring about privately-run sharing solutions into the test-bed area. The municipality of Gothenburg, on the other hand, has established partnerships with private USOs as well. However, as was noted in section 4.3.1, the municipality has made use of the SCG project in achieving this. Outside the SCG project, the municipality does not have many USO partners in addition to the company that operates the Styr & Ställ bicycle sharing system.

Nevertheless, it is notable that in both of the case municipalities there are clearly more examples of partnerships between the municipal organisation and a non-profit or public USOs than of partnerships between the municipality and private and for-profit USOs. In other words, this would suggest that through this governance role, the municipalities are indirectly inhibiting private USOs. What is more, there have also been discussions on creating criteria for municipal collaborations in the SCS programme. This issue was brought to the agenda of the programme by Gothenburg municipality after it was approached by a commercial skills sharing platform regarding a possible collaboration on the SCG project, which the municipality then had to turn down due to disagreeing with the USO's aims and drivers. This incident showcased that Gothenburg municipality is willing to set governance structures for directly inhibiting certain forms of sharing, at least in the context of the SCS programme.

Overall, the issue of which USOs to partner, collaborate and cooperate with seems to be a hot topic of discussion within the case municipalities. This has been contributed to by various problems that the municipalities have faced along the way as they have interacted with their local USOs. One of the possible reasons to the apparent low level of collaboration between the case municipalities and private USOs emerged from the interview with the civil servant leading Gothenburg municipality's work on sharing. This civil servant suggested that there is a lack of trust between the actors:

> But it takes time to work with these [initiatives] – they are very grassroots initiatives – to build trust over time and how can we cooperate. [...] But there aren't so many... Many are hesitating to knock on the door of the city government [...]. **[Interviewee 1]**

The civil servant also mentioned having noticed that grassroots-level initiatives (especially those that are run by younger generations) regard cooperation with the municipality as a negative thing; these initiatives prefer to be independent and do not want to be associated with the officials or other larger institutions. This would be why they are unwilling to contact the municipal government for support. These initiatives, the civil servant stated, also wish to avoid establishing official organisational structures around their sharing initiatives. Meanwhile, in order to establish a direct collaboration between the municipality and a USO, the municipality requires a sharing initiative to be supported by a formal organisational structure, such as that of an NGO's. These issues significantly complicate governance as a partner for the municipality.

Another potential contributor to the low level of collaboration between the municipalities and USOs, it was suggested, is the size of the municipal organisation in the case municipalities. For example, the civil servant who leads Gothenburg municipality's work on sharing noted that the municipality employs approximately 50,000 people who are organised in numerous committees, departments and units. Those USOs that would like to receive municipal support may for this reason find it difficult to determine which department and unit in the municipality to contact. Such had been the experience also for the Malmö-based Swop Shop when it tried to reach out to Malmö municipality for support, according to an employee of the USO.

In addition, according to the civil servants who lead the municipalities' work on sharing, partnership creation is also complicated by the definitional conundrum that surrounds the term 'sharing economy'. For one, the civil servant leading Gothenburg municipality's work on sharing noted that pinning down one definition for the term is not straightforward for a municipality, because it may imply excluding some companies from collaborations with the municipality:

> It's very difficult. We've been talking about [coming up with a definition]. [...] We as a city cannot exclude companies, so we have to be very careful with that. If we cooperate with one, we must be careful in how we can say 'no' to another one. We have to treat them equally. **[Interviewee 1]**

In other words, coming up with a definition for the SE is complicated by the municipality needing to remain objective. For example, since there is no set definition for the SE, the municipalities may be contacted for cooperation by various types of organisations who claim to be part of the SE, but who in the municipalities' view are not part of it. This is illustrated by the incident involving the skills sharing platform mentioned in section 4.3.1. Nevertheless, the definitional issue related to the SE has come up during the course of the SCS programme as well; for example the civil servant leading Gothenburg municipality's work on sharing stated the intention of raising the need for developing criteria for cooperations in the programme, but recognised that setting such criteria may not prove simple, for different municipalities might have different understandings of even the most central terms, such as 'sharing economy' and 'on-demand economy'. Thus, the abovementioned problems that relate to USO-municipality partnerships together highlight the need for improving the coherence of the governance of the SE as partners for the municipalities.

However, not all municipal organisations face the same problem with collaborations. The Malmö-based Garaget, which is technically a public library of Malmö municipality but in practice more than that (as it for instance runs a USO in its premises) is, in fact, contacted by too many actors from the civil society for collaborations in relation to the organisation's capacity to realise them:

> Because we kind of ended up in a way where we can be quite relaxed about not having too many projects of our own, because I have to say "no" to more collaborations that I could say "yes" to, because there are so many people like wanting to work with us. So that's like a "luxury problem" [...]. **[Interviewee 9]**

One of the reasons to this, the civil servant in charge of collaborations between the organisation and civil actors suggested, is the organisation's brand. Garaget has a reputation of being easily approachable and, despite being part of Malmö municipality, it is not commonly associated with the municipal organisation. According to the civil servant, Garaget is also known for its decision-making speed which is faster than is normally expected from a municipal organisation. The civil servant further noted that the organisation operates with a very exploratory approach and that the organisation's employees are equipped with a "doer-attitude", which means that Garaget often operates in the "grey zones" of what a municipal organisation can and cannot do. These ways of working also led to the establishment of the gadget lending service. In addition, Garaget has collaborated with Klädoteket (a local USO corresponding to that operating in Gothenburg) on a clothing lending service. This service was eventually discontinued due to the USO closing down at its main point of operation, but at Garaget the service and collaboration was deemed successful. In short, the experiences and approach of Garaget illustrate the conditions that are needed for easier establishment of collaboration between private USOs and a municipal organisation.

Both municipalities also govern their local SEs as *communicators* somewhat actively, and this governance seems to be both supporting and inhibiting towards the USOs. In terms of the efforts related to the SCS programme, the municipalities seem to be providing their projects with differing levels of visibility, as in Gothenburg the SCG project appears to be more well-known and has more communication channels (the social media accounts) than the SCM project in Malmö. Outside the SCS-related efforts, communicational support seems to be provided to municipality-owned, -coordinated or -commissioned USOs in both municipalities. Additionally, a wide range of non-profit USOs are supported by being included in the Smart Map in Gothenburg.

However, while these USOs are receiving direct support, the USOs that are excluded from these communicational activities can be regarded as being indirectly inhibited by the municipalities.

This is primarily the case for private, for-profit USOs. For instance, CEG and Gothenburg municipality do not allow for-profit USOs to be included on the Smart Map, which clearly puts those USOs in a disadvantageous position from a visibility perspective, compared to the USOs that are included in the Map. Other examples of such inhibiting are provided by the experiences of the Malmö-based private USOs Swop Shop and Tool Pool. In the interviews with the USOs, employees of the initiatives stated that the USOs have desires to expand their operations but mentioned that the initiatives are not being provided with enough communicational support, if any at all, to achieve their ambitions. This communicational support, they elaborated, could take the form of communicating about the benefits of sharing over buying, for example:

> Well, if there's any kind of [support] that I can get [from the municipality] for inspiring people everyday on how not to overconsume then yeah, that would be great as well. **[Interviewee 12]**

Furthermore, as was noted by an employee of Fritidsbanken Frölunda Torg, sharing as a practice and consumption mode in general is being hindered by the support that is constantly being provided to initiatives with business models that support traditional consumption and private ownership. Hence, it is arguable that in doing so, the municipality is to some extent undermining the viability of sharing as an alternative consumption mode to buying and owning. Therefore, there seem to be opportunities for improving the clarity in the way the case municipalities govern the SE as communicators as well.

The collected data suggests that the role of *matchmaker* is not very prominent for either of the case municipalities, although some efforts have been taken to bring USOs together and facilitate the creation of collaborations and synergies in both of the case municipalities. Here, it must be emphasised again that in comparison to Malmö municipality, Gothenburg municipality benefits of the existence of two non-profit organisations that are supportive of this work. The other one of these is CEG: not only does CEG act as a communicator for a large number of the city's USOs and represent them as the collective voice of the USOs in sharing-related decision-making, the NGO also performs the role of matchmaker to some extent. The other of these organisations is the study association Studiefrämjandet, which also acts as a matchmaker to certain degree.

When the municipalities do govern the USOs as a matchmaker, the governance appears to be supportive, rather than inhibiting. However, it is noteworthy that not all USOs get to be part of the matchmaking activities: for example, not all of Malmö's USOs have been or will be invited to the events hosted by the MIA or the SCM project, and not all types of USOs (i.e. mainly the for-profit ones) are cooperated with by CEG and Studiefrämjandet. Thus, it can be argued that some level of inhibiting of some types of USOs does take place through this governance role as well.

Municipalities as Providers

The second-most active main role that the case municipalities seem to be governing in is that of *provider*. However, there are again differences in how this role and its sub-roles are exhibited by the municipalities. Overall, the role of host appears to be more prominent to both of the municipalities than the role of investor.

Based on the collected data, Gothenburg municipality governs its USOs more actively as a host than Malmö municipality does. One contributing factor to this appears to be that Gothenburg municipality has undertaken more efforts in more sectors of the SE than Malmö municipality has. Furthermore, this role seems to be employed more towards the USOs that are of non-profit type again, whereas for-profit USOs seem to be receiving less of supportive hosting. In fact, the only example of a for-profit USO that is hosted by a municipality detected from the data is

Sunfleet; this USO is hosted by both of the case municipalities. It must be remembered, however, that through the SCM project Malmö municipality intends to act as a host to the sharing entrepreneurs that shall potentially run the sharing solutions of the Sege Park test-bed on a commercial basis. Nevertheless, the role of host for the large part appears to be supportive towards non-profit USOs and indirectly inhibiting towards for-profit USOs. In case of Gothenburg, what is noteworthy is that experiences from this municipality showcase that it need not necessarily be the municipality that acts as a host to the local USOs; other organisations from, for example, the civil society can perform the role as well. In Gothenburg, this role has been played by Studiefrämjandet.

As noted, the role of *investor* is less prominent in both of the case municipalities than the role of host. Moreover, it appears to be more actively employed in Gothenburg than in Malmö, for the only private USO that Malmö municipality is supporting financially appears to be STPLN. Interestingly, Gothenburg municipality seems to have created a more active role as an investor primarily through the SCG project, which it uses to fund private USOs as well. Outside the project, however, governing as an investor does not appear straightforward, for it entails various issues that can either determine whether a USO is supported by being provided funding or whether it is inhibited by not being granted financial support. For instance, a civil servant from Gothenburg municipality noted that the municipality cannot fund initiatives that are run by individual citizens; there must be an organisation operating the initiative before funding provision to the USO can be considered.

Funding of USOs has risen on the agenda at the municipality on other occasions as well. In an interview with the civil servant leading Gothenburg municipality's work on sharing, it was noted that only few independent for-profit USOs operated in the city overall, while the majority of the USOs are of non-profit nature. The author noticed this to be the case in Malmö as well. Reasons to the small numbers of private, for-profit USOs in the cities were pondered by some of the interviewees. For example, it was highlighted by the civil servant leading the work on sharing at Gothenburg municipality that several of the city's past and present private USOs have found it difficult to sustain their operations. As an example, Klädoteket was mentioned; the USO has in the past received funding from the regional government for developing a sustainable business model for its concept, but it is nevertheless struggling to sustain itself today. Consequently, the municipality has contemplated over assisting USOs financially. However, this has not proven a straightforward issue either, as the leading civil servant pondered:

> Then how can we as a local government support them, fund them, should we, is it legal, in that we do not exclude other companies? **[Interviewee 1]**

In other words, providing funding to USOs involves a risk of ending up discriminating different organisation types. However, it was pointed out by the civil servant that in addition to the municipality, USOs can apply for funding for culturally- or environmentally-driven sharing projects from the regional government as well, as Klädoteket has done.

Nevertheless, the civil servant from Gothenburg municipality also pointed out that it is not only large investments in the USO that ensure the success of sharing services. As an example, a local company called *Airdine* was mentioned. The civil servant stated that despite the millions of Swedish Krona that were invested in the business, the company was eventually forced to close down due to too low levels of usage by the citizens (Wallenberg, 2017). Of the private USOs interviewed in Malmö, Swop Shop reported of having struggled with developing a sustainable business model and with attracting sufficient numbers of customers as well.

In addition, as was noted in Section 4.7, other types of resource provision aside from financial and infrastructural were detected in the case municipalities. Both of the case municipalities govern their local SE actively by directly providing entire sharing services themselves. Gothenburg municipality, however, possesses more activities in the area of spaces and premises sharing than Malmö municipality, and may thus be considered somewhat more active in this means of governing as well. In addition, Gothenburg municipality was found to govern the SE by providing an open data platform with the purpose of facilitating the creation of more USOs by the businesses and the civil society. Malmö municipality's efforts in this area, on the other hand, were discovered to be lacking for the time being. All of the aforementioned activities are being conducted with the purpose of supporting the development of the local SE.

Municipalities as Consumers

According to the collected data, the role of *consumer* is currently only being employed by the municipality of Gothenburg of the investigated case municipalities. However, even in Gothenburg this governance role is exhibited to a small extent. Consequently, it is arguable that in the role of consumer, the case municipalities do not govern their USOs in a particularly supporting or inhibiting manner. Nevertheless, both municipalities have policies for sustainable procurement in place; hence, procurement of sharing services may take place in a larger extent in the future. Therefore, this role clearly presents the municipalities with opportunities to govern their SEs more actively.

Municipalities as Regulators

Based on the findings, it is argued that role of *regulator* is not currently employed in the governance of the SE by the municipalities of Malmö and Gothenburg and is thus the least evident role for the case municipalities. Furthermore, the uncertainties at the case municipalities regarding the possible extent of this role illustrates of the fact that regulating the SE has not been an issue that the municipalities have had to allocate resources to investigating thus far. However, as the number of USOs is likely to grow and their types may become more diverse, the role of regulator is expected to become more timely to the municipalities of Malmö and Gothenburg in the future.

Municipalities as Experimenters

Finally, outside the theoretical framework by Zvolska et al. (2018), it was found that both of the case municipalities govern their SEs by experimenting through the SCM and SCG projects. While in Malmö this experimental approach was found to be concentrated on the Sege Park test-bed area, in Gothenburg the scope was detected to be larger and not confined to a specific geographic area. In the projects, both municipalities seem to have assumed a facilitating and coordinating role which is exhibited, for instance, through the matchmaking activities the municipalities perform to ensure a smooth functioning of collaboration between the project partners. In other words, the municipalities seem to be experimenting with the governance roles that Zvolska et al. (2018) define, but in new contexts and under new types of conditions, in order to bring about more of potentially sustainable sharing in the cities.

Summary and Comparison to Previous Findings

All in all, the data suggests that Gothenburg municipality is governing its USOs and thus local SE more actively than Malmö is. There are likely to be several reasons to why this is the case, but for instance it was found that the city of Gothenburg has, in relative terms, a more vibrant landscape of USOs than Malmö does. This strong base of USOs has for example resulted in the creation of an interest organisation (CEG) and a petition to the municipality for the city of Gothenburg to become an official 'Sharing City'. This activity has provided Gothenburg municipality with more opportunities to engage with its local USOs compared to Malmö

municipality. Nevertheless, in terms of the governance roles, the municipalities seem to be employing the same roles in similar, but relative magnitudes. In other words, both municipalities govern most prominently as enablers and least prominently as consumers.

When comparing these findings to the findings made by Zvolska et al. (2018) in their pioneering study on the governance of USOs by the cities of Berlin and London, some similarities but also some significant differences can be found. In both studies, the local governments have been found to govern inactively as consumers. Furthermore, all local governments have been identified to govern as investors to a limited extent. However, while the role of regulator was found to be one of the most prominent governance roles in the cities of Berlin and London (Zvolska et al., 2018), in the case of Malmö and Gothenburg this role has not been assumed by either of the municipalities. Moreover, while the role of enabler was found to be somewhat limited in London and Berlin, in Malmö and Gothenburg this is the most prominent role the municipalities have assumed in their SEs. Nevertheless, similarly to the findings of Zvolska et al. (2018), in this study several of the USO- and expert-informants hoped for the municipalities (particularly that of Malmö) to allocate more resources to enabling sharing opportunities and USOs. Finally, a key difference between the studies findings is that the local governments of Malmö and Gothenburg were found to govern the SE as experimenters in addition to the roles defined by Zvolska et al. (2018), whereas the local governments of Berlin and London were not examined from this aspect.

As was expected, countries' multi-level governance systems influence the ways in which their municipalities can and do intervene in the local SEs. In Sweden, the municipalities have been allocated a relatively large share of the delivery of public services, which may be why Malmö and Gothenburg municipalities assume a somewhat significant role in the direct provision of sharing services themselves as well. On the other hand, as pointed out in section 4.5, Swedish municipalities do not possess similar regulatory powers as their fellow cities do elsewhere in the world. Therefore, the prominence of the role of regulator is likely to be smaller than it is elsewhere in the future as well.

5.1.2 Role of the SE in Relation to the Sustainability Agendas

This section seeks to answer question 2: "What is the role (if any) of the sharing economy in relation to the sustainability agendas of the municipalities of Malmö and Gothenburg?". In order to analyse the relationship between the SE and the overarching sustainability agendas of the municipalities, the match between the municipalities' explicit and implicit desires of the sustainability outcomes of increased sharing and the actual role that the SE seems to be playing in the municipalities' sustainability work today needs to be discussed.

Desired Outcomes of the SE

As noted earlier, for the time being both municipalities lack an official sharing strategy that would outline the municipalities' ambitions, goals and objectives for the SE. Therefore, to form an understanding of the purpose the case municipalities have given to their work on advancing the SE, the motivations and drivers of different municipal actors for working on sharing need to be reviewed.

In Gothenburg, the municipality's Sustainable Consumption unit seems to assume most of the responsibility when comes to interacting with local USOs and other SE-related actors. Similarly, in Malmö the work on sharing has mainly been assumed by the Department of Environment. These facts would suggest that the primary purpose for developing the SE for the municipalities is to advance the environmental sustainability of the cities. However, as was mentioned in sections 4.1 and 4.2, both municipalities have included a mention of the SE in one (Malmö) or several (Gothenburg) official documents. In both municipalities, these mentions are presented

in relation to a discussion on the municipalities' efforts to improve the environmental sustainability of the cities, but in Gothenburg the municipality's official budgets also note that the aim is to promote a SE that increases trust in the society. Furthermore, in Malmö the leading civil servant notes that with sharing the municipality hopes to generate new employment opportunities. In addition, Gothenburg municipality states on the website of the SCG project that the project intends to explore whether sharing can bring about new entrepreneurship activity.

The municipalities can arguably convey a message about what they wish to achieve with increased sharing through the motivations of the municipality-run USOs as well. For example, according to a civil servant of the municipality of Malmö who is in a leading position at Garaget, by running a gadget lending service the organisation aims to contribute to a more environmentally sustainable and socially just society, by providing access to goods that citizens might not be able to purchase themselves and, hopefully, removing their need to purchase such goods for themselves. On the other hand, the civil servant from the municipality's Department of Leisure who works with the Fritidsbanken of the city stated that the primary driver for it to run such a service is to provide all the citizens with equal opportunities to try out different kinds of sports, regardless of their backgrounds. The second-most important motivation for Malmö municipality to run a Fritidsbanken is to encourage more of sustainable consumption amongst the citizens. By acquiring the store's borrowable sports equipment have been only through donations from the citizens and sports associations (as do all other Fritidsbankens), the service promotes higher utilisation of existing resources in the society. Therefore, social drivers have a relatively high importance amongst the municipality-led USOs in Malmö.

Thus, based on these observations, it would appear that for both municipalities the purpose for advancing the SE is three-fold: to improve the environmental, social and economic sustainability of the cities. However, it is also apparent that the municipalities and their employees are inconsistent in their perceptions about the main purpose of advancing the SE, which may have implications on the effectiveness of the municipality's work on sharing on a general level.

Role of the SE in Practice

As noted, both case municipalities perceive the SE as a means to achieving a more environmentally and socially sustainable society that also presents opportunities for economic development. However, there are various features in the municipalities' work on the SE which can be analysed to determine, whether the SE is being employed effectively as a tool for pursuing sustainable urban development by the municipalities.

For one, the level of *normalisation* of sharing in the cities – meaning the extent to which the SE and sharing as a practice have become part of the routines and practices of the municipalities and the everyday lives of their citizens – can be examined. Overall, there are several signs of the fact that sharing and the SE is yet to be normalised in the municipalities. As has been stated several times previously, both municipalities have included a mention of sharing in one or more steering documents, which indicate of the municipalities' intentions to make sharing a more normalised practice in the cities. However, whereas the municipality of Gothenburg has included the SE in several of its city budgets, the municipality of Malmö has only included it in one of its Action Plans for the Environmental Programme. Thus, it could be argued that there has been a longer line of attempts to make sharing normalised in the municipality of Gothenburg than there has been in the municipality of Malmö. In addition, Gothenburg seems to host a more vibrant grassroots SE, which has resulted for instance in a citizen-led initiative proposing Gothenburg to seek to become a 'Sharing City' and the creation of an organisation that promotes the local USOs' interests to the municipality (CEG). These developments are yet to

take place in Malmö, which conveys of a lower cognitive legitimacy of the SE in the city of Malmö compared to Gothenburg.

Indeed, more signs of a lack of normalisation of sharing can be detected in Malmö municipality than in Gothenburg municipality. For instance, the civil servant in a leading position at Garaget points out that given the limitedness of the organisation's budget, Garaget needs to constantly evaluate and prioritise the use of its funding. This also affects the future of the gadget lending service; according to the civil servant, the future of the service is dependent on whether such a service remains demanded by Garaget's visitors and the extent of damage or theft of property the service faces. This is arguably an indication of the fact that the level of normalisation of sharing within the municipal organisation is not very strong. How can sharing become a normalised consumption mode, if the public authorities are willing to discontinue such services should the demand for them fall? If the municipality is not promoting sharing and trying to give it a prominent status in the citizens' lives, how can sharing become a credible alternative consumption mode in the city? Furthermore, the promotion of sharing cannot be left as the responsibility of the private sector, since it is more vulnerable to changes in demand. Therefore, if municipality truly wishes for the proportion of sharing of the city's overall consumption to increase or even to remain in its current level, it must keep on improving the desirability of sharing and opportunities for practicing it.

What is more, as was pointed out by an employee in a leading position at STPLN, while Malmö municipality's projects seem diverse and plentiful, they lack continuity; even the projects that seem to be functionable and well-received might not be renewed or prolonged, as these initiatives are only provided funding for a set amount of time. Such an approach can hamper the normalisation of sharing in the city, and to avoid that from happening, the municipality needs to guarantee a necessary length of continuity for the USOs and sharing projects that it supports and develops. This is naturally true for the SE-related activities of Gothenburg municipality as well.

On the other hand, it was noticed that the municipality-led USOs in both case municipalities lack objectives, targets and official visions for the future, and that the impacts of their operations have not yet been evaluated. This also communicates of incomplete normalisation of sharing within the municipal organisations. However, it must be pointed out that some of these USOs, such as Fritidsbanken Malmö, have been established only recently, which implies that the initiatives are still in their trial phases.

Furthermore, based on the responses of the leading civil servants, there appears to be a lack of prominent and extensive political support to the civil servants' work on the SE in both case municipalities. It is therefore arguable that there is room for improving the normalisation of sharing through higher support from the political sphere as well.

Thus, from the perspective of the level of normalisation of sharing, it can be argued that the SE is not being employed effectively as a tool for pursuing the municipalities' overarching sustainability agendas. However, the extent to which the municipalities evaluate the impacts of sharing can also be viewed as an indication of how well the SE is being employed as a tool for achieving sustainable urban development. Through the SCS programme, the municipalities shall evaluate the performance and impact of the sharing solutions that are included in the SCM and SCG projects together with their project partners. In an interview with the civil servant in a leading position in the SCM project, it emerged that Malmö municipality has organised the evaluation of the future sharing solutions of the Sege Park test-bed site with IVL. In Gothenburg, the evaluation tasks of the SCG project will be undertaken by the University of Gothenburg, according to the civil servant in a leading position in the project. Today, however,

most of these evaluation efforts are yet to be performed. Furthermore, outside these projects little to no evaluation work related to the SE or the activities of USOs has been performed. Therefore, the SCS programme provides the municipalities with an opportunity to approach the development of the SE in a more systematic and analytical manner than they have been able before, and it is expected that these municipalities' role in the evaluation of the impacts of sharing will rise in the future as learnings of the programme are employed across the cities.

At the same time, the municipalities ought not to overlook the evaluation opportunities that are currently present outside the SCS activities. This applies to Malmö municipality especially, whose SCM and MIA project efforts are confined to specific geographic areas. When asked whether impact evaluation of their service has been done in the past, is currently being done or will be done in the future, most of the USOs in the case municipalities responded negatively. While most USOs expressed interest in conducting evaluations, some USOs stated that they do not possess the necessary resources to conduct such but would need external support for it. This presents a potential role for the municipalities to play. Furthermore, interviews with the cities' USOs indicated that many USOs are either willing to share or are already sharing their data with the municipality. For instance, STPLN and two USOs from the mobility sector of the SE, Skjutsgruppen and Sunfleet, mentioned that they have either made their APIs open source or are actively sharing their data with the municipalities of Malmö and Gothenburg. By doing so, the USOs facilitate the municipalities' endeavours to measure and evaluate the sustainability impacts of sharing in the city.

5.1.3 Recommendations to the Municipalities

During the progress of this study, it was pointed out by numerous interviewees that in order to significantly increase the proportion of sharing of a city's overall consumption, a significant behaviour change is needed, which for its part requires time and overcoming of some notable barriers. For example, several interviewees mentioned convenience-related aspects (e.g. sharing is perceived to take more time and effort than buying), as well as emotional attachment to material possessions, such as cars or clothes, as major hindrances to change. Furthermore, some interviewees stated that different socio-economic backgrounds cause people to relate to sharing differently; some are more open to it and value ownership less, while others value ownership so much that they are resistant to sharing. It was also suggested that some may perceive sharing to carry a stigmatising label, which can make sharing seem an 'embarrassing' practice. Thus, achieving normalisation of sharing amongst citizens necessitates changes to their mindsets and lifestyles. However, as is shown by the financial struggles of many USOs, at the same time USOs themselves may not be able to sustain their operations until these changes have been achieved. Therefore, it is necessary for the municipality to intervene and support this transition, from ownership to access, in a multitude of roles. Based on the above analysis, the following recommendations are made to the case municipalities.

Evaluate the Impacts of the SE Extensively and Comprehensively

As has been pointed out in this report, too little is still known about the actual sustainability impacts of the SE and the services of USOs. While the test-bed approach of the SCS programme which includes testing and evaluation of the impacts of sharing solutions offers a good start to this process, the municipalities are encouraged to extend these efforts across the cities, wherever the USOs are located. In this report, it has been shown that the local USOs outside the test-bed areas are willing to be subject to such evaluations. However, since many of the USOs are already struggling to remain operational as it is and have thus little resources to allocate to such efforts themselves, support from the municipality is likely to be necessary. Herein lies a potential role that the municipalities could play; for example, should they possess the capacity, they could support the USOs in the impact evaluation themselves, or match the USOs together with such

actors that possess the resources and capabilities to conduct the necessary evaluations. Through these evaluations, the municipalities can determine which types of USOs ought to be supported and which types of providers need to be inhibited, so that the resulting sharing has the potential of contributing to the attainment of the overarching socio-economic and environmental goals of the municipalities.

Define the SE and Develop a Sharing Strategy

As has been stated in this report, the current approach of Malmö and Gothenburg municipalities of assessing all USO-interactions on a case-by-case basis is arguably inefficient, as it excludes various USOs with potential outside the municipalities' efforts to develop the SE in the cities. This is particularly the case in Malmö, where the efforts to develop the local SE appear to take place in the silos of SCM and MIA projects.

Therefore, to facilitate a multifaceted governance of the SE, the case municipalities are recommended to develop *an official strategy for the governing of the SE*. However, in order to accomplish this, the municipalities must first *define the SE*; what types of sharing services and actors do the municipalities understand to be included in and excluded from the SE. As was noted by the civil servant who leads Malmö municipality's work on sharing, defining the SE is a prerequisite for designing and implementing an effective policy on the SE:

> I mean, now there hasn't really been anyone who has been working on a policy or strategy for the city, but this is also why it's very difficult. I mean, what should we make a policy about? **[Interviewee 7]**

If these two tasks are executed carefully, it is arguable that the municipalities do not risk committing discrimination of different operators. This is because by setting clear boundaries to the SE, the municipalities can more easily determine which activity needs to be governed by the municipal body that carries the most responsibility on the work on sharing, and which activity ought to be handled by another municipal body. For instance, this could be executed so that the Department of Environment manages the most work related to the SE and USO-interaction, and the 'Department of Business and Commerce' or similar interacts with those service providers that do not match with the definition's criteria. This way, no actor will be left unaccounted for by the municipality. Ideally, developing a definition for the SE should be performed in consultation with local sharing actors, the academia, other cities and national-level officials, to avoid possible confusion and conflicts in the policy implementation stage. Furthermore, with a careful framing of the term, the municipality can better govern the SE in a manner that helps it in achieving its sustainability goals, objectives and targets.

After definitions for the SE have been set, the municipalities can proceed to developing long-term strategy for the development of the SE in the cities. These strategies ought to include a long-term vision and possible sharing-related goals and objectives. To accompany these strategies, the municipalities are also recommended to develop short-term action plans that outline more clearly how the municipality's work on sharing will exactly be carried out; for example, which areas of the SE are prioritised for further support and what kind of targets need to be met at what time, so that the long-term goals and objectives are eventually reached.

Support the Expansion of a Sustainable SE

After more evaluations have been performed and definitions, strategies and action plans on the SE have been set, the municipalities are encouraged to employ a variety of methods to support the development of a SE that it sees is in the interest of the citizens and is in line with the broader sustainability goals and objectives of the municipality. Some recommendations for expanding the SE in the cities of Malmö and Gothenburg are provided next. Again, it is

emphasised that all of the following tasks ought to be pursued within the boundaries of the set definition and with the overarching municipal sustainability goals and objectives in mind.

1) **Facilitate the establishment of more collaborations with private USOs**

Based on the collected data, it can be noted that there are desires for creating more partnerships between the case municipalities and private USOs; for-profit and non-profit alike. However, as has been pointed out, these USOs are often hesitant to contact the municipality, which can be due to their perception of the municipality as a rigid or constraining partner or due to not knowing who or which department to contact in the municipal organisation. Thus, in order to build trust and facilitate communication amongst the stakeholders, more neutral meeting grounds are needed to facilitate this. As has also been noted, the need for such has already been realised within both of the municipalities, but arenas for achieving this seem to be few nevertheless.

Therefore, to build more collaborative relationships and networks with private actors and thus generate more private USO activity, the case municipalities are recommended to allocate resources in establishing more organisations with a similar concept to that of Malmö municipality's Garaget. Despite being municipality-led or -owned, these organisations would be a low threshold point-of-contact and exploratory in trialling collaborations with USOs. They need not involve the municipality providing financial assistance to the USOs; often, USOs may simply be in of need a platform to reach better the critical mass for their operations. Furthermore, organisations of this kind need not be established as part of a public library (it is noteworthy that Garaget's USO alongide the book lending service has raised some questioning amongst Malmö municipality's librarians), but instead they can be founded as stand-alone organisations. These organisations could also act as showrooms and spaces for citizens to try out the sharing services. To a certain extent, this is already pursued in the Sege Park test-bed of the SCM project in the form of 'sharing hubs', but in the current plans for the hubs, support services for the sharing entrepreneurs are lacking. Furthermore, these hubs are intended for residents of a specific area, whereas a need for such sharing hubs arguably exists elsewhere as well, since USOs may wish to (or even need to) reach masses larger than Sege Park's resident population in order to sustain their services.

While such collaborative spaces are a tool for encouraging more contacts from the private to the public sector, for an even higher effect it is also recommended that the municipalities themselves reach out to the private sector more in pursuit of more USO-municipality partnerships. This is already done by Gothenburg municipality to some extent; for instance, the creation of the civil-public partnership with CEG was the result of the actors meeting "on the field". This is thus another way of finding a neutral ground for meeting with the USOs.

2) **Perform the role of regulator proactively**

As was noted in section 5.1.1, this governance role may become more prominent in the future should the number and types of USOs grow. That is also when the municipalities may seek to add clarity to the issue of regulating USOs. For the moment, both municipalities are in a position where they can observe the regulatory and legislative responses of cities in other countries towards sharing platforms, and thus act on potential regulatory issues related to the SE proactively. Therefore, the municipalities are recommended to devote resources to looking into potential legal implications of different forms of already occurring sharing as well as of the various types of municipal support that can be offered to USOs.

3) **Facilitate the development of digital sharing infrastructure in the city**

In the Introduction of this report, it was noted that ICT is a central element that distinguishes the SE from the sharing that has taken place before the digitised era. During the data collection process, it was noted that there are good opportunities for citizens to share at the physical locations of the USOs in the municipalities, particularly in Gothenburg. However, it was also observed that there are only a few digital apps and platforms that facilitate sharing across the cities. While the current situation in the cities benefits those that reside nearby these locations, it is less convenient for those that live further away. In an interview, an expert from an independent foundation that runs an international network of cities to share knowledge and best practice on engaging with the SE emphasised the importance of the digital sphere of the sharing economy and its balance with the cities' physical sharing infrastructure. Digital platforms are often decentralised and enable sharing not only within smaller local communities, but also amongst strangers across larger geographic areas. Therefore, digital sharing opportunities can provide a solution to enhancing the convenience of sharing, by bringing the services closer to their users via ICT devices. This way, it can also contribute to enhancing the normalisation of sharing. This is important also because one of the key purposes of the SCS programme is to incorporate ICT in the process of designing, testing and evaluating of sharing solutions. Furthermore, a key activity for inducing more ICT-enabled sharing is to develop an open data platform, which particularly Malmö municipality is encouraged to place efforts into.

4) Communicate more extensively around sharing

Additionally, the case municipalities are encouraged to communicate more extensively and diversely around sharing. For one, it is encouraged that the SCM project partners step up the project's communicative efforts, for little appears to be known about the project in Malmö. This can enhance the cognitive legitimacy of sharing in the eyes of the citizens and show that the municipality of Malmö is perceiving sharing as a tool for creating more sustainable, but also more affordable lifestyles for the citizens. The civil servants are also encouraged to inform and push the local politicians more about the potential benefits of systematic development of the SE, in order to create more traction for sharing policies in the cities. Finally, the municipalities are urged to raise awareness of the sustainability problems related to overconsumption, as well as of the potential benefits of sharing, exchanging, renting and borrowing, in order to drive more demand to USOs.

5) Delegate governance roles to other stakeholders where necessary

Experiences from Gothenburg show that municipalities need not always be direct partners to the USOs themselves, but through partnerships with mediator organisations municipalities may delegate some of its activities and thus governance of the USOs to external organisations. For example, CEG performs the roles of matchmaker and communicator and Studiefrämjandet acts as a host to the local USOs. This can be helpful, for as it was pointed out by a representative of CEG, at times it may be difficult for the municipality to communicate about issues around lifestyles and consumption, because it needs to remain polically objective in its activities. Such roles, the representative argues, can be better performed by independent organisations from the civil society. Therefore, Malmö municipality, which is currently lacking such organisations, is particularly encouraged to support the formation of such.

6) Experiment more in and with the SE

Overall, the municipalities of Malmö and Gothenburg are encouraged to embrace a more experimental approach to governing the SE. This experimentation can be exhibited through the other governance roles, such as that of consumer. Governing more experimentally as a consumer was especially emphasised by an expert with experience on the governance of sharing

and social innovation. According to the expert, the intent of the SCS programme to explore the opportunities and challenges of the SE through test-beds is commendable as it also represents a form of experimentation, but the ossified practices and processes of running a municipal organisation and delivering services also need to be challenged. In other words, incorporating sharing in municipalities' own operations – how they can procure sharing services – ought to be given more attention. Other ways of experimenting may include, for example, trialling with tax incentives for sharing service providers (Ahmed, 2016) or testing temporary rules and norms for sharing service providers such as car pools (Finck & Ranchordás, 2016); in other words, experiment with the role of regulator. Of the case municipalities' current efforts, Garaget can be raised as an exhibit of the successes of experimenting as a municipal organisation.

5.2 Theory on Local Governance Roles in the SE

This section seeks to answer question 3: "What are the ways (if any) to advance the theory on local governance roles in the sharing economy?" This is done by first, analysing the current theoretical framework against the findings of this study (section 5.2.1) and then, by proposing suggestions to revise the framework (section 5.2.2).

5.2.1 Analysis of Current Theory

This study has assumed a deductive approach by adopting and applying the theoretical framework of Zvolska et al. (2018) to analysing the governance of the USOs by the municipalities of Malmö and Gothenburg. This study verifies and confirms the validity of the roles a local government can assume in the SE as they are outlined by the current framework, although not all of them are timely nor prominent for the municipalities examined in this study. However, this study also contests the conceptualisation of some of the roles of the framework.

First, the fact that the role of 'partner' is included in the role of enabler in the current conceptualisation of local government roles is concluded to be problematic. This is because a partnership between a USO and a local government does not at all times entail governing through enabling. Furthermore, a single partnership between a local government and a USO can feature traits of a number of governance roles simultaneously. For instance, as part of its partnership with Fritidsbanken Frölunda Torg, a district administration of Gothenburg municipality has provided furniture to the USO. Thus, this partnership clearly entails governing by provision. Other illustrative examples are the bicycle sharing systems in the cities. Here, the municipalities act as partners in the provision of this service but, since private companies have been commissioned to deliver the services (as opposed to the companies being enabled to deliver them by the municipalities), these arrangements cannot be regarded as enabling of USOs by the municipalities. Furthermore, partnering or collaborating usually represents a two-way dynamic between a USO and a local government or an interest group (e.g. CEG) and a local government, whereas governing through enabling in general implies the use of less resource-intensive support by the local government to enhance the development of USOs. Thus, it would appear that role of partner is tied to multiple governance mechanisms than just governing through enabling.

Second, as was noted in section 3.2 and is now verified by this study, the conceptualisation of the role of 'provider' is not without its shortcomings either. The current conceptualisation fails to account for the direct provision of 'full' sharing services by the local government. Illustrative examples of this in the case municipalities are the digital platforms Malvin and Tage that are used for sharing and exchanging ownership of material resources within and between municipal organisations. In addition, by only discussing the provision of tangible resources, the role of provider does not consider the possibility of the local government providing businesses, citizens and USOs with intangible resources, such as open data. As has been noted earlier, open data

provision has been regarded as an important local government activity in facilitating the establishment of more of USOs (Almirall et al., 2016; B. Cohen et al., 2016; Cooper & Timmer, 2015).

Finally, being based on the four governance mechanisms of self-governing, governing through authority, governing by provision and governing through enabling, the framework does not recognise experimenting as a governance mechanism (Bulkeley & Castán Broto, 2013; Kronsell & Mukhtar-Landgren, 2018). Using urban living labs (ULLs) as an example, Voytenko, McCormick, Evans, & Schliwa (2016) describe experimental governance as the development and testing of "new technologies, products, services and ways of living to produce innovative solutions to the challenges of climate change, resilience and urban sustainability" by urban stakeholders (p. 46). Arguably, the same method of is employed by the diverse range of project partners in the case of SCS programme as they design and test sharing solutions in the test-beds. On the other hand, as Kronsell & Mukhtar-Landgren (2018) point out, it can also refer to experimenting in different governance roles, such as communicator, enabler or partner. As has been shown in this report, governing through experimentation is a viable mechanism for local governments to engage in and shape the local SE.

5.2.2 Suggestions for Theory Revision

Based on the above critique, the following revisions are proposed for advancing the theory on local governance of the SE.

Due to the overlaps with other governance roles, in the updated framework the role of 'partner' is separated to become its separate main role. In this role, a local government can employ more than one governance mechanism towards a USO, such as governing through enabling and governing by provision. Similar conclusions about the role of partner being a separate governance role have also been reached elsewhere. For example, investigating governance in the context of ULLs, Kronsell & Mukhtar-Landgren (2018) posit that in the role of partner, a municipality does not govern through authority as in the traditional sense, but rather participates in a partnership where the terms are more or less equal and thus moves towards "a network-centred definition of governance" (p. 993). In addition, in their white paper WEF (2017) proposes the role of 'collaborator', in which a city can *partner* with actors (including public agencies, businesses and academia) who develop or support the development of sharing platforms for the purposes of economic, social or environmental development. Thus, in the role of partner a local government forms a partnership with equal terms directly with a USO or with a USO-supporting organisation (such as CEG), where it can, for instance, support the partner organisation with administrative or financial assistance to facilitate the organisation's operations.

Additionally, through the activity of direct provision of sharing services to the citizens, the governance role of *owner* (i.e. the local government governing the USO as its 'owner') emerged as a new role from the research for this study. Both of the case municipalities have initiated some USOs in their cities, and while they do not necessarily own all of these USOs themselves, it is likely that in those cases a municipal department holds significant decision-making power that influences the direction of the USOs' development. Since the role of owner involves the act of providing a sharing service to the citizens and is thus linked to governing by provision, it is conceptualised as a sub-role of the role of provider.

In addition, the theoretical framework is revised by including a new sub-role of *data provider* under the role of provider, where the local government provides intangible resources to the businesses and civil society in the form of data through an open platform. In this study, provision of open data emerged as an initiative that Gothenburg municipality reported having engaged in in order to facilitate the development of new digital services by businesses and

citizens themselves. At the same time, Malmö municipality expressed interest in doing so as well.

Furthermore, due to the emergence of the new sub-role of 'owner' which can be exhibited by, for example, the local government using its influence as a major shareholder to steer the development of a USO, the role of 'investor' is renamed in the updated framework to avoid confusion and overlapping between the two sub-roles. Thus, the new name suggested for this role is *funder*, which denotes the local government providing financial support to USOs in the form of, for instance, grants.

Finally, building on the theory of experimental governance, the revised framework also features the new role of *experimenter*. As has been noted in this report, this role can be exhibited by through the development and testing of new technologies, services and ways of living much like in the SCS programme, or alternatively through the exploration of the other governance roles, such as consumer or regulator. In other words, although the role of experimenter is illustrated as its own, individual role in the revised framework, it is emphasised that it can be employed through the other governance roles as well (e.g. an experimental consumer, or an experimental regulator).

Figure 5-1 illustrates the revised theoretical framework. It is emphasised that the governance roles are not mutually exclusive, meaning that the municipality can assume more than one role while engaging with a single USO. For example, a municipality can simultaneously assume the role of funder and thus act as a provider to a USO, while also raising awareness of the USO's operations and thus perform the role of enabler.

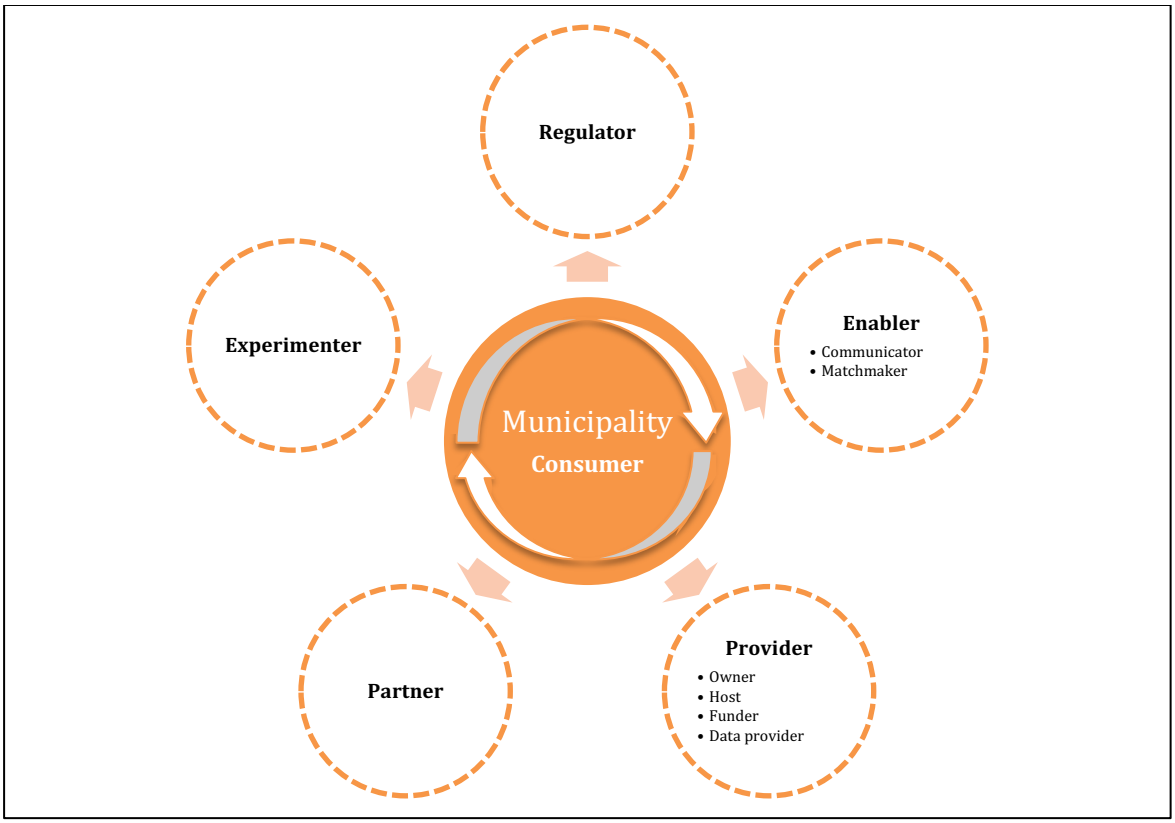

Figure 5-1. Revised roles of municipal government in the sharing economy

Source: Illustration by author (after Zvolska et al., 2018)

In order to facilitate the case municipalities' governance of the SE as a tool for reaching their overarching sustainability goals, it will next be shown how the case municipalities may employ this framework in practice. As per to the findings of this stuy, it is also argued the conceptualisation of the governance of the SE by Malmö and Gothenburg municipalities must emphasise the role of the SE in the local governments' overarching sustainability agendas. As has been stated numerous times in this report, both of the case municipalities perceive the SE as a tool for achieving other, more overarching sustainability goals, objectives and targets. For example, by having the potential of reducing excessive consumption of natural resources, the SE can lower the overall emissions of the city. In case of the municipalities of Malmö and Gothenburg, the SE is seen as an instrument for achieving a more sustainable environmental, social and economic development in the cities. In other words, the SE is perceived as a means to an end, rather than as an end itself.

Therefore, based on this perception of the SE as a tool, it is reasoned that the SE must also be conceptualised as a separate phenomenon and thus, a tool-like entity in the cityscape. The municipalities can engage in the SE when deemed necessary, in order to shape it and direct it towards bringing about their desired sustainability outcomes. This it can do by adopting one or several means for doing this; the governance roles. This is depicted by Figure 5-2 below.

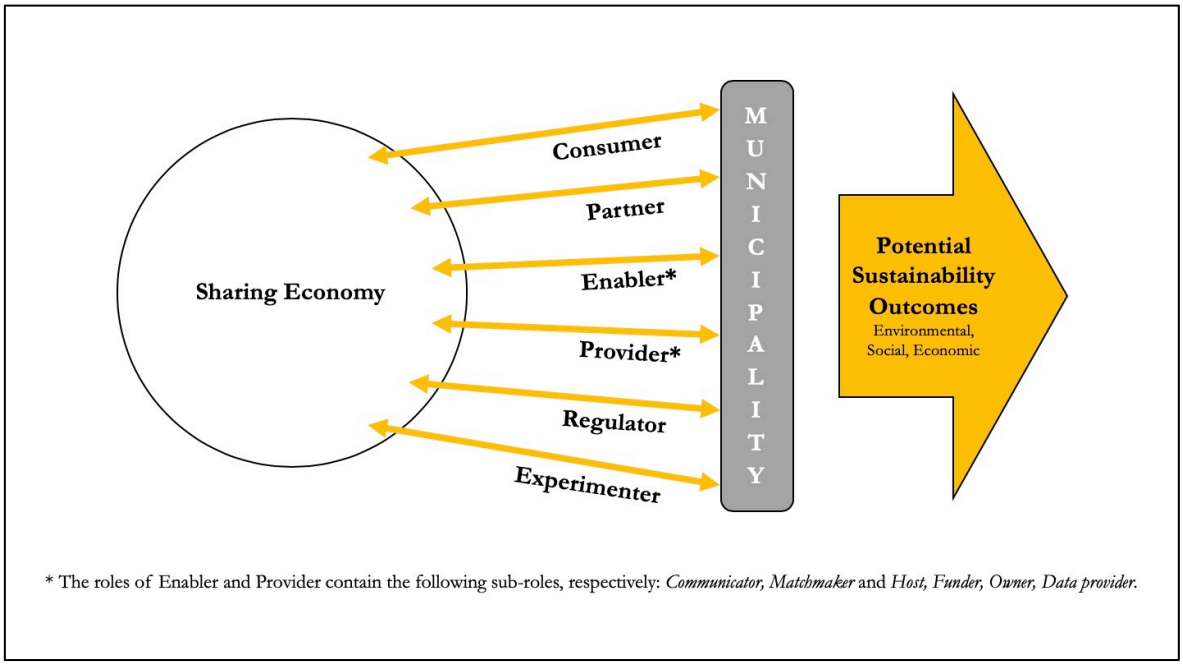

Figure 5-2. Local governance roles in the sharing economy

Source: Illustration by author

By conceptualising the governance roles with arrows, it is denoted that the municipalities can *enter* the SE in a role or roles of their choosing. In addition, the arrows also work to indicate of the direction of *action* and *transfers of material and immaterial resources*, *benefits and costs*. Notably, these arrows are two-headed in the case of each role. This is because there are *flows* in both directions for each role. For example, in the role of partner a municipality may transfer financial and infrastructural support to the USO and in return, gain access to an asset that is created as a result of the partnership, such as Smart Map. In the role of consumer, on the other hand, the municipality gains access to a sharing service by a USO in exchange for a financial transaction, or payment, to the USO.

As has been evidenced by the findings of this study, in the process of governing the SE a local government needs to make decisions that entail forming some sort of an understanding of what types of USOs and sharing is desirable from its point of view. This may be the case for instance when a local government assesses whether a certain type of sharing or USO can contribute to the attainment of its overarching sustainability goals. In other words, a local government will be faced with situations where it needs a *definition* of the SE. This is exemplified by the case where Gothenburg municipality decided to forego a partnership with a skills sharing platform as part of the SCG project, because it saw that the platform did not match with the municipality's understanding of the SE. Cases such as these highlight the importance of defining the SE for achieving effective governance of the SE. By setting boundaries to the SE, the local government knows which providers it considers to represent the "right" type of sharing from its point of view and can allocate its governance resources accordingly. Meanwhile, the providers that are left outside the definition of the SE, the local government can engage with through other means or dedicated organs of governance, such as the Department of Business and Commerce or similar. This way, the local government can also avoid accusations of exclusionary or discriminatory activities, because it can in any case still engage with those organisations and initiatives and support their development.

When it comes to the supporting and inhibiting of sharing that Zvolska et al. (2018) discuss, this study has shown that in most cases a course of action towards a USO from the local government, which the arrows represent, entails some form of support to the USO. However, as is argued by Zvolska et al. (2018) and has also been evidenced in this report, forms of indirect or subtle inhibiting may also take place within the SE by a local government. This happens for instance when certain USOs are promoted in the local government's communications, leaving some USOs de-prioritised. However, in the practical application of the framework to the case where the SE is perceived as a tool for achieving sustainable urban development, it is argued that such forms of indirect inhibiting are exhibits of inefficient governance of the SE. This is based on the following reasoning. If the municipality truly perceives the SE as a tool for achieving higher sustainability goals and objectives, it approaches the SE in a focused and coherent manner, which then entails an official sharing strategy where it is clearly outlined which forms of sharing and types of USOs it understands to be included in the SE and which not. Arguably then, in order to be efficient in the achievement of its goals and objectives, the local government governs all of the USOs in a direct and, more importantly, supportive manner in the role that is seen most appropriate for the type of USO in question. In other words, in an ideal situation, an effective governance of the SE entails that there is no inhibiting of USOs, but only supporting. Neverthelss, instances may rise where the local government needs to use its regulatory authority, for example when a type of USO that was previously assessed as sustainable subsequently turns out as unsustainable. In these cases, by restricting or banning the operations of a certain USO or type of USO because it is exhibiting traits of negative sustainability impacts, the local government directly inhibits the sharing activity in question. Consequently, this implies that the definition of the SE must also be quite sophisticated and closely linked to the municipality's sustainability agenda.

5.3 Concluding Remarks

Overall, the examination of the governance of the SE by the municipalities of Malmö and Gothenburg and the advancement of the theory on local governance on the SE that have been presented in the analysis of this report have added new considerations into the discussion about how local governments can shape and engage with the SE. Through its analysis, this study has shown that when local governments begin to address the SE as a phenomenon with positive sustainability potentials and, consequently, a tool for achieving more overarching sustainability goals and objectives, governance in the context of the SE becomes a question of 'governing the SE', as opposed to 'governing <u>in</u> the SE'. While rhetoric of this nature may have been used in

previous studies as well, the placement of the local government in relation to the SE has not been discussed in as much detail as it has in this report. Moreover, it is shown that through such a lense, the SE is perceived as a means to a larger end, such as reducing climate impacts. However, for to be used as such and thus meaningfully contribute to achieving local governments' sustainability goals, the SE needs to be approached systematically and analytically.

6 Conclusions and Areas for Further Research

This study posed three research questions for guiding the investigation on the topic of local governance roles in the SE in the context of two Swedish municipalities, Malmö and Gothenburg. Answers to these questions are summarised below. In addition, recommendations for engaging with the SE to harness its sustainability potential and avoid its potentially negative outcomes are proposed to municipalities. Finally, areas for future research are highlighted.

1. How do the municipalities of Malmö and Gothenburg govern their local urban sharing organisations?

Neither of the case municipalities have an official, overarching sharing strategy nor policies for engaging with the local SE. While both municipalities have mentioned sharing of resources and the SE in one or several of their official steering documents, no goals, objectives or targets have been set for the SE, and no official responsibility allocations regarding the work on sharing within the municipalities have been performed. Most of sharing-related municipal work is, however, conducted by the Department of Environment of the municipality of Malmö and the unit of Sustainable Consumption of the municipality of Gothenburg.

Both case municipalities act mostly as enablers and providers in the SE, and least actively as consumers and regulators. Overall, it appears that Gothenburg municipality is more active in its governance of the SE. Outside the governance roles set out in the conceptual framework of this report, both municipalities have also taken a visible role in initiating many sharing services themselves and governing as experimenters in the SE. In addition, Gothenburg municipality is governing its SE as a provider of open data. Most of the governance is conducted with the aim of supporting the local USOs, but on the other hand private, and mainly for-profit, USOs are being indirectly inhibited by both municipalities.

In all, it is concluded that there is room for enhancing the prominence of some governance roles by the municipalities, particularly the role of consumer. It is also noted that although the role of regulator cannot be seen to be employed by either of the municipalities today, it is likely to become more timely in the future as the number of operational USOs continues to grow and types of practiced sharing will become more diverse in the cities. Furthermore, it is pointed out that to enhance the coherence and effectiveness of the governance of the SE, the municipalities need to obtain a more structured approach to engaging with the local USOs.

2. What is the role (if any) of the sharing economy in relation to the sustainability agendas of the municipalities of Malmö and Gothenburg?

Both of the case municipalities appear to be framing the role of the SE as a tool for advancing the environmental, social and economic sustainability of the cities. However, this role has not been formalised by official sharing strategies or policies, nor has sharing as a practice and the application of the SE been extensively normalised yet in the everyday routines in the municipalities. In addition, the fact that various USOs in both of the case municipalities struggle to sustain implies that the USOs are overall attracting too little interest from the general public and that the critical mass is yet to achieved. Thus, it is concluded that to achieve a meaningful impact on the resource efficiency, social cohesion and economic development of the cities through sharing and thus significantly contribute to the attainment of the goals, objectives and targets of the municipalities' sustainability agendas, more of sharing activity needs to be generated in both of the case municipalities. However, this necessitates that the municipalities first determine which USOs have the potential of contributing positively to the attainment of these goals. The SCS programme provides the municipalities with an opportunity to approach the SE more systematically and analytically than they have been able before, but arguably work on sharing requires such structure all across the cities.

3. What are the ways (if any) to advance the theory on local governance roles in the sharing economy?

This report has also contributed to theory building by revising and advancing the theoretical framework on municipal governance roles in the SE. This has been done by:

- Separating the role of 'partner' from the main role of 'enabler';
- Developing the main role of 'provider' further by adding the sub-roles of *owner* and *data provider* under it and by renaming the role of 'investor' as *funder*, and;
- Adding the role of *experimenter* as a new role.

Recommendations to the Municipalities

Based on the conclusions, the author of this report recommends the municipalities of Malmö and Gothenburg to:

- Strive for an extensive and comprehensive evaluation of the impacts of the SE across the cities to determine which USOs ought to be supported, in order to facilitate the achievement of the socio-economic and environmental goals by the municipalities;
- In order to enable policy development, define the term 'sharing economy' and determine what to include and what to exclude in the SE definition, preferably in consultation with local sharing actors, academic partners, other cities and nation-level officials;
- Develop a long-term strategy that sets a vision of the SE and SE-related goals and objectives for the municipality;
- Complement the long-term strategy with short-term action plans which outline in more detail how the municipality will work with the SE in practice;
- In time, support the emergence of new USOs and the development of the existing ones that are deemed favourable for sustainable urban development and enhance the normalisation of sharing as a practice through a variety of methods, such as;
    - Facilitating the creation of partnerships between the municipality and private USOs;
    - Monitoring the development of the SE locally, nationally and internationally and proactively revising regulations or raising issues regarding them on the national level, if necessary;
    - Enhancing the role of digital sharing opportunities in the cities through, for example, promoting open data initiatives and supporting digital sharing innovation processes amongst aspiring entrepreneurs;
    - Enhancing municipal communication activities around the SE, by informing the citizens of the potential sustainability benefits of sharing and, conversely, of the negative impacts of overconsumption;
    - Supporting the establishment of mediator organisations and delegating some of the governance roles to them;
    - Employing the role of consumer more actively by procuring more of sustainable sharing services and thus leading by example in the SE, and;
    - Embracing a more experimental approach to governing sharing by, for example, experimenting with tax incentives for sharing service providers and temporary rules and norms for sharing service providers such as car pools.

Areas for Further Research

Based on the findings of this study, some further research needs have been identified.

For one, more research needs to be conducted on understanding the impacts of the consumption of sharing services, in order to inform future policy-making around the SE.

The drivers and barriers for local governments to procure sharing services at a higher level also need to be better understood for developing the prominence of the role of consumer in the governance of the SE.

In addition, more of holistic analyses of local governance of sharing in cities and the relation of sharing to cities' sustainability agendas need to be performed in order to bridge the identified knowledge gap.

Finally, the advanced theoretical framework on local governance of the SE ought to be employed in contexts of other cities and/or sustainability problems and concepts, such as the circular economy, in order to verify or challenge its conceptualisation of the local governance roles in the pursuit of sustainable urban development.

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Appendix I. Municipality Interview Guide

Purpose of the interview	To understand: • the municipality's drivers/motivations to engage with the SE • the degree of formalisation that the municipality's work regarding the SE has • the municipality's current role and activities towards the SE and its local USOs • the municipality's plans for future activities that it is going to perform w.r.t. the SE

Interviewee(s)	
Contact details	
Organisation	
Interviewer(s)	
Duration	
Time and location	
Other notes and observations	

Work on sharing in the municipality
1. How has work on the SE been organised in your municipality?
2. How does your municipality understand/define the SE – what it includes and what it does not include?
3. Could you elaborate on your municipality's drivers/motivations to engage with the SE?
4. Could you describe the role that sharing initiatives has been given in your municipality in general?
5. Could you describe the municipality's strategy for working with local sharing organisations?
SE in the municipality
6. In your opinion, what are the main drivers/barriers for people to share in your municipality?
7. How does your municipality keep track on what is going on in your local SE?
8. What kind of opportunities and threats do you see that sharing and the SE present your city with in general?

Role of the municipality in the SE
9. Overall, how would you characterise the role of your municipality in your SE?
10. Does your municipality itself provide sharing services to its citizens and if yes, what kind of services are they?
11. Does the city itself procure any sharing services?
12. Does your municipality collaborate with some sharing initiatives?
13. Are there any activities that the municipality does to enable cooperation and networking between sharing actors in order to facilitate more sharing initiatives to emerge and more sharing of resources in general to take place?
14. Does your municipality work to communicate on the importance of sharing resources in the city somehow?
15. How would you describe the level of communication between your municipality and your local sharing initiatives?
16. Has your municipality itself placed financial or infrastructural investments in the SE to support the growth of sharing?
17. Has your municipality found a need to regulate your local sharing organisations?
18. What does the municipality do to evaluate the impacts of the SE to make sure it contributes to the municipality's objectives and targets?
19. How has participation in the SCS programme influenced your municipality's work on the SE?
20. What is the municipality's role in the development of the test-bed areas as part of the SCS programme?

Appendix II. Private USO Interview Guide

Purpose of the interview	To understand: • what the USO does and what its purpose is • the mission and vision of the USO • the relationship between the USO and the municipality • the nature and level of support from the municipality to the USO in the past, present and future • the potential challenges/barriers to development the USO is facing and the USO's general outlook • the USOs view on the municipality as a location to establish a USO in general • the USO's view on the role of the municipality in the SE • the USO's involvement in the development of the local SE and the municipality's SCS efforts

Interviewee(s)	
Contact details	
Organisation	
Interviewer(s)	
Duration	
Time and location	
Other notes and observations	

USO itself
1. Could you briefly explain what your organisation does?
2. What were the drivers/motivation behind the establishment of your organisation?
3. How many employees/volunteers/participants do you have?
4. Could you describe your organisation's mission and vision?
5. Do you have any goals or objectives for your operations and if yes, could you describe them?
6. Could you describe the typical user of your service?
7. What do you do to reach these users?
8. How do you promote your service?
USO and the municipality

9. Please describe the current relationship between your organisation and the municipality.
10. Could you describe the ways in which the municipality influences your operations today (e.g. through taxes, regulations, policies, or by supporting financially or infrastructurally, helping in networking etc.)?
11. How does your organisation perceive the role of the municipality in the SE today?
12. How apt would you say this city's environment and conditions are for establishing a USO and developing a SE in general?
13. Do you have any collaborations with other organisations in place?
14. To what extent (and how) would your organisation be willing to support/cooperate with/collaborate with the municipality in its efforts to develop your local SE and enable more sharing to take place?
15. Has your organisation been involved in the SCS initiative of your municipality or the municipality's efforts to develop the SE in general?
Final questions
16. What kind of opportunities and threats does your organisation see that the SE presents your city with in general?
17. Please describe the outlook for your organisation.

Appendix III. Public USO Interview Guide

Purpose of the interview	To understand: • how the service works, what its purpose is and its significance for the municipality • its mission and vision • the typical user and the user base of the service • the experiences of the service so far and its general outlook • how the service is evaluated

Interviewee(s)	
Contact details	
Organisation	
Interviewer(s)	
Duration	
Time and location	
Other notes and observations	

Service itself
1. Could you elaborate briefly on how the service works and the idea that was behind the service's establishment?
2. What was the driver for the municipality itself to run this service?
3. Which departments are involved in running this service and what capacity are they operating it with?
4. Could you describe the objectives and/or targets that have been set for the service?
5. Could you describe the typical user of your service?
6. How would you rate the accessibility of your service is in general to different groups people across different areas in the city?
7. How do you evaluate the performance of your service?
8. Could you describe the progress of your service since your establishment?
9. What is the significance of this service to the municipality?
Outlook of the service

10. How apt would you say this city's environment and conditions are for establishing sharing services and developing a SE in general?
11. What kind of opportunities and threats do you see that sharing and the SE present your city with in general?
12. Please describe the outlook for your service.

Appendix IV. Expert Interview Guide

Purpose of the interview	To get the interviewee's perspective on: • the status of the SE in Sweden against the SE in global cities • the drivers and barriers for (Swedish) municipalities to engage with their local USOs • the governance approaches of (Swedish) municipalities in the SE in general

Interviewee(s)	
Contact details	
Organisation	
Interviewer(s)	
Duration	
Time and location	
Other notes and observations	

1. How would you describe the status of the SE in Sweden in comparison to the SE in cities globally?
2. What is the role of sharing and the SE in Swedish municipalities today?
3. Is there any common "Swedish understanding/view/definition" of the SE?
4. In your opinion, what are the drivers for (Swedish) municipalities to engage with the SE?
5. In your opinion, what are the barriers for (Swedish) municipalities to engage with the SE?
6. How do (Swedish) municipalities in general approach the SE?
7. In your opinion, how should the municipalities govern their USOs?
8. What distinguishes the forerunner cities from the laggard cities in terms of their SE work?
9. What is your take on how (Swedish) municipalities incorporate the SE in their sustainability work? How do (Swedish) municipalities address the sustainability potential of the SE/USOs?
10. What is the opportunity that the SCS programme presents the Swedish cities with when you think about cities' work on the SE globally?

Sharing
Cities
Sweden

A NATIONAL PROGRAM
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ECONOMY IN CITIES