

Study to monitor the business and regulatory environment affecting the collaborative economy in the EU

Draft Final Report







[Written by Lucas Porsch, Lison Rabuel, Ricardas Juskevicius (VVA), Kristina Karanikolova (TNO), Mika Naumanen (VTT)]
[December 2017]



EUROPEAN COMMISSION

Produced by Directorate-General for the Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) Unit E3 — Digitalisation of the single market Contact: Neil Kay

E-mail: neil.kay@ec.europa.eu

European Commission B-1049 Brussels

Europe Direct is a service to help you find answers to your questions about the European Union.

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Find out which disclaimer you need:

 $\label{lem:http://ec.europa.eu/dgs/communication/services/visual_identity/pdf/guidelines-studies-publications-by-external-organisations_en.pdf$

This report was produced in the frame of a service contract with Directorate-General for the Internal Market, Industry, Entrepreneurship and SMEs (DG GROW).

The content of this report represents the views of the contractor and is its sole responsibility; it can in no way be taken to reflect the views of the European Commission or other body of the European Union.

The European Commission do not guarantee the accuracy of the data included in this report, nor do they accept responsibility for any use made by third parties thereof.

More information on the European Union is available on the Internet (http://europa.eu).

More information on the European Union is available on the Internet (http://europa.eu).

Luxembourg: Publications Office of the European Union, 2016

Print	ISBN 978-92-79-45908-5	ISSN 1831-2802	doi:10.2838/397707	DS-AU-15-001-EN-C
PDF	ISBN 978-92-79-45907-8	ISSN 2443-5228	doi:10.2838/941824	DS-AU-15-001-EN-N

© European Union, 2016

Reproduction is authorised provided the source is acknowledged.

Printed in

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

PRINTED ON TOTALLY CHLORINE-FREE BLEACHED PAPER (TCF)

PRINTED ON RECYCLED PAPER

PRINTED ON PROCESS CHLORINE-FREE RECYCLED PAPER (PCF)

Contents

1	INTRODUCTION6							
	1.1	Objective of the study and this deliverable6						
	1.2	Scope of	f the study	7				
	1.3	Structur	e of the report	9				
2	MAIN COLL		RES OF THE BUSINESS ENVIRONMENT AFFECTING VE ECONOMY AT EU LEVEL					
	2.1		ation of the aspects of the business environment that are refor platform business models					
	2.2	Vertical	themes	12				
		2.2.1	Transport	13				
		2.2.2	Accommodation	24				
		2.2.3	Finance	32				
	2.3	Horizont	al themes	39				
		2.3.1	Public administration	39				
		2.3.2	Business support	45				
		2.3.3	Alignment	49				
3	METH	ODOLOG'	Υ	52				
	3.1	Data col	lection	52				
	3.2	Indicato	r design and calculation	62				
=:		_						
FIG	jure	S						
Figui	Figure 1: Themes, business environment features, indicators and data collection questions 11							
Tables								
Table	Table 1: Features, indicators, questions and their assessment for the transport theme 22							

1 Introduction

This chapter recalls the objectives of this study and of the present report, as well as the scope and the main definitions adopted.

1.1 Objective of the study and this deliverable

The **overall objective of this study** is to assess the business environment surrounding the collaborative economy in three sectors (accommodation, transport and finance) in all EU Member States. In this study, business environment refers to all regulations closely affecting collaborative enterprises and actions undertaken by Member States' authorities to facilitate the development of the collaborative economy.

The study's overall objective is sub-divided into five specific objectives, namely:

- (i) Identify the aspects of the business environment at Member State and sector level which are the most important for facilitating or hindering the development of the collaborative economy.
- (ii) Describe in a comparative overview how those aspects of the business environment, regulatory or other, are handled in each Member State.
- (iii)Develop a set of indicators to measure key features of the business environment affecting the collaborative economy in each Member State.
- (iv)Develop a composite indicator that will be used to benchmark the business environment in individual Member States.
- (v) Suggest changes to the business environment that would promote further growth of the collaborative economy.

The **specific objective of this Final Report** (Deliverable 3) is to provide a picture of the business environment affecting the collaborative economy at Member State and EU level, and to compare the business environment across Member States. It will also put forward suggestions for how the business environment can be enhanced to encourage further development.

This Final Report draws upon the work undertaken through the three Tasks of this study, i.e.:

- The identification and description of the main business environment features affecting the development of the collaborative economy, and the design of an associated set of indicators (Task 1 – Deliverable 1);
- The description and calculation of the indicators to measure the business environment at Member State level (Task 2 – Deliverable 2);
- The assessment of the business environment in Member States, including proposals for further development (Task 3).

In line with the methodology of this study, this Final Report (Deliverable 3) will contribute to a better understanding of the business environment affecting the collaborative economy in the EU. Furthermore, it will point out the methodological strengths and weaknesses of repeating such an exercise in the future.

1.2 Scope of the study

The **scope of this study** concerns collaborative economy transactions in the accommodation, transport and finance sectors in all 28 EU Member States, assessed according to six vertical and horizontal themes. The **business environment scope** is defined by the regulations imposed upon collaborative platforms and peer-to-peer (P2P) transactions by Member States' authorities. The features identified here only measure the influence national authorities have on P2P transactions. Market or platform-specific influence on P2P transactions is beyond this study's scope, for reasons described in more detail in chapter **Error! Reference source not found.**

P2P transactions, as used in this study, refer to transactions concluded between non-professionals. For the finance sector, this study looks at P2B and P2P transactions, meaning transactions where peer providers invest in companies (P2B, or peer-to-business) or other peers (P2P). The distinction between a peer and a professional provider is set upon the provider's entry on the market (e.g. the need to obtain a professional authorisation or license) or depends on certain thresholds. Thresholds vary by sector, for instance:

- The amount of revenue gained;
- The number of days of activity on the market;
- The maximum amount invested via platforms;
- The frequency of one's activity.

This study does not provide a comprehensive assessment of when peers are considered as acting in their private or professional capacity. However, the regulatory data collection exercise undertaken in Task 1 has assessed certain thresholds in Member States that make this distinction (see Chapter **Error! Reference source not found.**). At EU level, a European Commission (2017) study on consumer issues in P2P markets provides a cross-analysis of the various thresholds, as of March 2016, in EU Member States (see Task 5 report of the aforementioned study)¹.

Mixed online platforms, where both professional and non-professional service providers operate, are included in the scope of this study if they follow a collaborative economy logic. This includes platforms that start off with an exclusive P2P focus, but whose peer base professionalises as the platform grows. Examples of such platforms include, for instance, Airbnb or Uber. The notion of "professional peer provider" in this study is not solely defined by a regulatory requirement for licensing or authorisation, but also involves the peer provider's registration as a business for tax reasons.

The **collaborative economy scope** adopted in this study is closely aligned with the European Commission's 2016 Communication on a European Agenda for the Collaborative economy²:

¹ European Commission (2017). Exploratory study on consumer issues in peer-to-peer markets. Available at: http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=77704

² European Commission (2016). A European Agenda for the collaborative economy. COM(2016) 356 final. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:0356:FIN

Textbox 1: Collaborative economy definition

What is the collaborative economy?

The term "collaborative economy" refers to business models where activities are facilitated by collaborative platforms that create an open marketplace for the **temporary usage of goods or services** often provided by private individuals. The collaborative economy involves **three categories of actors**:

- (i) service providers who share assets, resources, time and/or skills these can be private individuals offering services on an occasional basis ("peers") or service providers acting in their professional capacity ("professional service providers");
- (ii) users of these shared goods or services;
- (iii) intermediaries that connect via an online platform providers with users and that facilitate transactions between them ("collaborative platforms").

Collaborative economy transactions generally **do not involve a change of ownership** and can be carried out **for profit or not-for-profit** (and may involve some transfer of ownership of intellectual property).

Source: A European Agenda for the collaborative economy, COM (2016) 356 final.

While collaborative economy services can be provided by professional providers, the scope of this study is limited to **peer provision of services**.

The **sectorial scope** of this deliverable and study concerns three collaborative economy areas, namely accommodation, transport and collaborative finance. The definitions of the sectors, in line with this study's inception report, are as follows:

- i. The **transport sector** comprises ride sharing, car sharing and ride hailing models. Transport platforms connect riders with short or long-distance travel options. Examples of platforms include BlaBlaCar (ride sharing), SnappCar (car sharing) and Uber (ride hailing).
- ii. The **accommodation sector** is composed of short-term rental (e.g. Airbnb or Wimdu) and short-term swapping platforms (e.g. LoveHomeSwap, HomeAway). Providers can grant access to a portion of their primary residence (e.g. a sofa, a spare room), their whole primary residence, or a secondary residence (e.g. a holiday home).
- iii. The **finance sector** is defined as individuals and businesses who invest, lend and borrow directly between each other, such as P2P lending (e.g. Prosper, Zopa) or equity investment (e.g. Conda.eu, Anaxago, Wiseed or SeedMatch.de).

The study categorises business environment features according to **six "vertical" and "horizontal" themes**. The three vertical themes are dedicated to each of the three sectors (transport, accommodation, finance). The three horizontal themes cover cross-cutting features affecting all three sectors and are defined as follows:

iv. **Public administration** relates to the capacity and efficiency of the public administration at national and regional level to support the development of the collaborative economy. It includes the simplification of procedures and

- an enhanced dialogue through various communication channels, including through online contact points or specific structures.
- v. **Business support** involves public support services for collaborative economy start-ups. Such support can be of financial nature, as well as technical and/or business advice. In the United Kingdom, for instance, the government funds a competition between collaborative economy businesses rewarding trust and innovation.³
- vi. **Alignment** includes regulations on alignment of regional policies (at local and regional level) with national policies. For instance, the revision of the Finnish Transport Code aims at bringing transport market regulations together under one single act.⁴

1.3 Structure of the report

This Final Report is the combined result of Tasks 1, 2 and 3. The EU-level desk research and data collection carried out in Task 1 fed into the indicator methodology and calculation developed in Task 2. This report draws upon the results of the indicators for each Member State to present the business environment at EU and Member State level, compare it across Member States, and provide some recommendations for further development.

This report is structured as follows:

- Chapter 2 presents the main features of the business environment affecting the development of the collaborative economy;
- Chapter 3 outlines the methodology to design and calculate the indicators, as well as to collect the data feeding these indicators;
- Chapter 4 presents the results of the data collection, and describes the business environment affecting the collaborative economy in the 28 Member States:
- Chapter 5 draws upon the findings of the previous chapters to suggest recommendations for the future development of the collaborative economy in the EU.

³ Innovate UK.(2016) Available at: https://www.gov.uk/government/publications/funding-competition-digital-innovation-in-the-sharing-economy/funding-competition-digital-innovation-in-the-sharing-economy

⁴ Finnish Ministry of Transport and Communications (2016). "Transport Code enables better transport services and flexible business operations". Press release. Available at: http://valtioneuvosto.fi/en/artikkeli/-/asset_publisher/liikennekaari-mahdollistaa-paremmat-liikennepalvelut-ja-helpottaa-yritysten-toimintaa

2 Main features of the business environment affecting the collaborative economy at EU level

This chapter provides an overview of the main business environment features that affect the development of the collaborative economy in the 28 EU Member States. This overview was the basis for the development of the indicators presented in chapter 4.

2.1 Identification of the aspects of the business environment that are most relevant for platform business models

The **business environment** includes all external factors that affect businesses in a certain market. Such factors include, among others, regulation, market conditions, social and cultural trends, technology, existing human capital, etc. In this study, the business environment includes all regulations closely affecting collaborative enterprises, as well as other actions undertaken by Member States' authorities to facilitate the development of the collaborative economy.

Together, the features of the business environment push the development of an industry in certain, sometimes divergent, directions. The nature and impact of the business environment differs depending on the industry covered and, within it, the specific **business models** considered. In general, what distinguishes collaborative economy businesses from traditional business models is the way they provide services. As put by Demary and Engels (2016), traditional service providers adopt a "pipe-like" business model, employing staff within an enterprise to supply a product or service directly to a segment of the market.

By contrast, the collaborative economy is characterised by the use of **P2P online platforms** to match providers with consumers. Development is based on **indirect network effects** (users benefit from an increasing number of users on the other side of the platform) and **economies of scale**, which allows platforms to realise substantial efficiency gains.⁵ **Trust** is a crucial element that facilitates the matching between supply and demand. One characteristic of collaborative platforms is therefore the use of trust-building tools, which includes reviews and ratings, verification of identity mechanisms, etc.⁶

Within the different collaborative economy sectors, the impact of the legislation can vary significantly. For instance, in the collaborative transport industry, there are fewer regulations on ride sharing and car sharing than ride hailing/VTC (Voiture de Transport avec Chauffeur) services in the Member States. The degree of openness varies greatly across countries, with some markets fully liberalised with very few restrictions, and others with significant market barriers for new entrants and a regulatory division aimed at protecting the taxi industry.⁷

⁵ Demary V., Engels B. (2016). Collaborative Business Models and Efficiency. Potential Efficiency Gains in the European Union, p. 5.

⁶ European Commission (2017). Exploratory study on consumer issues in peer-to-peer markets. Available at: http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=77704

⁷ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 22.

On the basis of the economic significance, growth potential, and impact of the collaborative economy, a number of collaborative economy business models to be scrutinised has been selected within the transport, accommodation and finance themes (see sub-chapters 2.2.1 to 2.2.3).

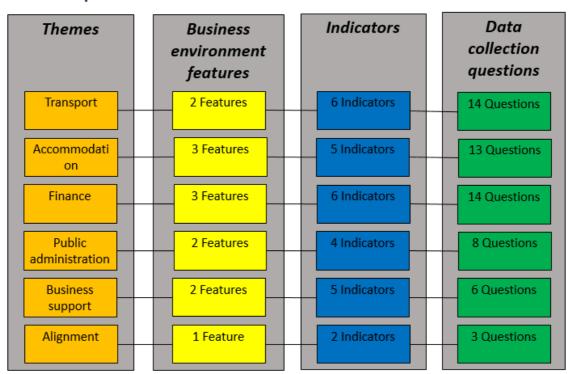
As mentioned in sub-chapter 1.2, the overview of the business environment features that affect the development of the collaborative economy were structured into six **themes**, three of them vertical (transport, accommodation, finance) and three of them horizontal (public administration, business support and alignment).

The progression from the themes to the indicators has been done as follows:

- For each theme, the most important **Business environment features** affecting each theme have been identified by desk research, and validated by interviews with EU-level experts who have ranked the features that were most important.
- For each of the identified business environment features, one or several
 Indicators
 were identified to measure the performance of Member States
 under this feature.
- Finally, for each indicator, one or several data collection questions were developed to make the measurement of that indicator operationable and transparent. These data collection questions allowed country researchers to gather data on the indicators.

Error! Reference source not found. below illustrates the relationships between themes, business environment features, indicators and data collection questions.

Figure 1: Themes, business environment features, indicators and data collection questions



The division between vertical and horizontal themes is justified as some business environment features may not have the same impacts in every collaborative economy sector affected, whereas others are relevant for all sectors. For instance, licensing requirements cover different aspects in transport (e.g. type of car), accommodation (e.g. whether the rental is a primary or secondary residence) or finance (e.g. professional experience of platform owners).

This chapter describes the features and indicators for each theme, including an explanation of their importance for the business and regulatory environment. It also defines the questions that have been associated to each indicator and gives indications on how results should be interpreted.

2.2 Vertical themes

The first three themes describe business environment features that are specifically relevant for the three sectors covered in the study, transport, accommodation and finance. For each of the themes three general features have been identified as being relevant. The main common features are **Regulatory clarity** and **Market access requirements**. Another feature identified as relevant for the accommodation and finance themes is **Enforcement**.

Regulatory clarity refers to the extent to which the national, regional or local legislative framework explicitly indicates what type of transactions can take place within its legal constraints. This feature was overwhelmingly ranked by experts interviewed for this study as among the most important aspects affecting platform development (see Annex 3). Its importance lies in the fact that it is often not clear which type of legislation applies to the collaborative economy. As a result, collaborative platforms are often bound to the same regulations that are imposed on their conventional market peers. Different approaches are taken by each Member State, or even by each local or regional authority, in deciding which transactions can take place. Smorto (2015) highlights that local or regional authorities can either use the rules applicable to traditional sectors to regulate collaborative sectors, or deem them unfit and create new ones.8 The 2016 Communication on a European Agenda for the Collaborative economy points out that national legislations often do not take into account the specificities of collaborative business models, which creates regulatory uncertainty for platforms and providers.9

Market access requirements are conditions imposed by the regulatory environment for peer providers or collaborative platforms to operate on the market. The European Commission (2016) identifies this feature as one of the key questions raised by the introduction of collaborative economy services in local markets. Smorto (2015) observes that in order to promote innovation, and due to some self-governing mechanisms adopted by P2P platforms¹⁰, local authorities tend to impose

⁸ Smorto, G. (2015). "The sharing economy as a means to urban communing." Conference paper, 1st IASC Thematic Conference on Urban Commons, November 6-7th, 2015, Bologna, Italy. Available at: https://wiki.p2pfoundation.net/Sharing_Economy_as_a_Means_To_Urban_Commoning

⁹ European Commission (2016). A European agenda for the collaborative economy, COM (2016) 356 final, p. 2. ¹⁰ Self-regulatory approaches involve collaborative economy platforms as well as non-governmental stakeholders. Cohen, M., Sundararajan, A. (2015). "Self-Regulation and Innovation in the Peer-to-Peer Sharing

lighter regulatory constraints on collaborative economy than on traditional operators. However, as the author as well as the European Commission (2016) point out, for the sake of consumer protection considerations, market failures and a level-playing field demanded by traditional sectors, some authorities keep the same standards for collaborative and traditional economic operators. Germany and Spain are examples where authorities are adopting such approaches. ¹¹ On the other hand, Finck and Ranchordas (2016)¹² point out to several instances of protests from traditional economic operators, particularly in transport and accommodation, against the unfair competition brought by collaborative models (e.g. hotels in Berlin and Barcelona protest against short-term rental platforms, taxi drivers in Paris or London against Uber).

Enforcement is considered as the flexibility of national and local authorities in ensuring that local market rules are duly followed by collaborative economy operators. As mentioned above, some authorities adopt innovation-based approaches, and therefore are more lenient towards collaborative platforms, while others adopt a stricter approach, in line with that taken for conventional economic operators. Such measures can considerably restrict the collaborative economy activities. For instance, in Berlin, the number of Airbnb listings has dropped by 40 percent in a month after the new law fining illegal short-term rentals with up to EUR 100,000 has been announced.¹³ On the other hand, Frenken and Schor (2016) highlight that market access requirements such as caps on earnings or time allowed for collaborative economy services cannot work without proper enforcement procedures.¹⁴ As the following sub-chapters describe, enforcement approaches differ substantially between EU Member States, leading to more or less restrictive business environments for collaborative platforms to operate in.

2.2.1 Transport

The transport theme, in this study, is defined as the P2P transactions involving the shared use of cars. Other transport modes (bikes, trailers) are not included, and neither are transport-related facilities that can be shared (e.g. parking spaces). In collaborative transport, peers share access to a car either at the same time, or in sequence. The car might have a driver, this being the peer provider, or no driver.

2.2.1.1 Business models

The transport theme includes three business models – ride sharing, car sharing and ride hailing (see Textbox 2). Most regulatory attention is concentrated on these business models, while market-wise they comprise the overwhelming majority of collaborative transport platforms. Apart from being the most popular collaborative transport business models in Europe, very few other P2P business models exist

Economy". The University of Chicago Law Review Dialogue, 82, pp. 116-133. Available at: http://adapt.it/adapt-indice-a-z/wp-content/uploads/2015/06/Sundararajan_Cohen_Dialogue.pdf

11 Interviews with Lucia Hernandez (30/05/2017), Vera Demary (01/06/2017) and Rosa Guirado (21/06/2017).

12 Finck, M., Ranchordas, S. (2016). "Sharing and the city". Vanderbilt Journal of Transnational Law, 49.

Available at: https://www.vanderbilt.edu/jotl/wp-content/uploads/sites/78/8.-Ranchordas-Finck_Paginated.pdf

13 City Lab (18 April 2016). "Berlin is banning most vacation apartment rentals". Available at: https://www.citylab.com/equity/2016/04/airbnb-rentals-berlin-vacation-apartment-law/480381/

14 Frenken, K., Schor, J. (2016). Putting the sharing economy into perspective. ISU Working Paper 16.04. Innovation Studies Utrecht (ISU) Working Papers. Utrecht University. Available at: http://www.geo.uu.nl/isu/pdf/isu1604.pdf

alongside them, mostly involving other modes of transport (e.g. bikes, camper cars or boats), assets (e.g. parking spaces) or services other than passenger transport (e.g. food or furniture transport).

Textbox 2: Definitions of P2P transport business models

Definitions of P2P transport business models

Ride sharing involves cost-sharing transactions, where individuals can carpool to a certain destination, or part of the journey after finding one another on an online platform. In this model, the final destination is set by the owner of the car. For peers, transactions are usually not-for-profit, although some platforms allow providers to make a profit. Popular P2P ride sharing platforms include BlaBlaCar, Karzoo, EasyCarClub, GoCarShare, Haxi or Covivo.

Car sharing involves for-profit transactions, where individuals in a private capacity can rent each other' cars by subscribing to an online platform service connecting the peers. Popular P2P car sharing platforms include SnappCar, AutoLevi, OuiCar or MyWheels.

Ride hailing involves for-profit transactions, where individuals acting in their personal or professional capacity offer to drive consumers to their destination. Popular ride hailing platforms include Uber, Taxify, Hailo or TaxiBeat.

The three business models were selected because of their economic significance, as well as due to their regulatory specificities.

In general, the collaborative economy transport sector has an important economic size. The European Commission (2017)¹⁵ finds that collaborative transport is the third largest in terms of volume of transactions and peer base after accommodation and odd jobs. The transport sector, taken as ride sharing and ride hailing, accounts for EUR 1 billion in peer expenditure and EUR 794 million in peer revenue every year. Moreover, 9.28% of all EU collaborative economy users are collaborative transport consumers, while 8.31% are providers. A PwC study (2015)¹⁶ finds that transactions in the transport sector are worth EUR 5.1 billion, which ranks it third after the accommodation and finance sectors. The same study outlines that the transport sector brings the highest revenue to collaborative platforms (EUR 1.65 billion). However, it should be noted that these estimates are not entirely comparable as the study includes platforms which do not fall under the collaborative economy definition (e.g. B2C platforms like DriveNow or Car4you) and the European Commission study (2017) does not.

In addition to their significant economic size, the three business models selected in the transport theme are believed to have a high growth potential.

The Boston Consulting Group (2016) estimates that **car sharing** will grow from 5.9 million users and 88,000 cars worldwide in 2015 to 35 million users (+493%) and

¹⁵ The study assessed the collaborative economy, or "P2P market" as composed of (re)sale of goods, accommodation, transport, rental of goods and odd jobs.

¹⁶ PwC (2016). "Assessing the size and presence of the collaborative economy in Europe". Assessment prepared for DG GROW. Available at:

http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native

228,000 cars (+159%) in 2021.¹⁷ The study predicts that 14 million users will be active in Europe in 2021. Moreover, Roland Berger (2014) predicts that the global value of the car sharing sector will reach between EUR 3.7 and EUR 5.6 billion by 2020, with a yearly projected market growth of 30% between 2013 and 2020. 18

At city-level, Frost and Sullivan (2014) estimate that round-trip car sharing membership in London will increase by 92% to 264,000 between 2015 and 2020.¹⁹ And while Boston Consulting Group (2016) states that car sharing will only be economically viable in cities with over 500,000 inhabitants, data from Germany shows that the service is popular even in areas with under 50,000 inhabitants.²⁰

Ride sharing, is estimated to be the largest collaborative transport business model in terms of expenditure and revenue.²¹ The number of ride sharing platform users is expected to amount to 60.4 million by 2021, while user penetration in the ride sharing sector is expected to reach 10.8% in 2021.²² In 2017, revenue in the ride sharing market segment amounts to USD 5,949 million (EUR 5,302 million²³) in Europe. The sector is expected to show an annual growth rate (CAGR 2017-2021) of 15.8%, resulting in a market volume of USD 10,714 million (EUR 9,550 million²⁴) in 2021.

Finally, ride hailing, a sector covered in Europe mainly by Uber, saw a 500% increase in the number of rides hailed in Europe between 2015 and 2017. According to the Statista Market Sharing Forecast, Uber is the main ride hailing platform in most of the countries it operates in. 25 Nevertheless, there are several European competitors, such as Taxify, Hailo or TaxiBeat, along with international competitors like Lyft, Easy, Didi and others. The business model is often considered part of the global taxi market, worth USD 108 billion (EUR 97 billion), of which ride hailing accounts for a third, or USD 36 billion (EUR 32 billion²⁶). P2P transport services such as Uber could substitute the use of private vehicle: a study commissioned by

¹⁷ Boston Consulting Group (2016). "What's ahead for the car sharing?" BCG. Available at: https://www.bcgperspectives.com/content/articles/automotive-whats-ahead-car-sharing-new-mobility-itsimpact-vehicle-sales/?chapter=7

¹⁸ Berger, R. (2014). "SHARED MOBILITY: How new businesses are rewriting the rules of the private transportation game." Think Act. Available at:

https://www.rolandberger.com/publications/publication_pdf/roland_berger_tab_shared_mobility_1.pdf ¹⁹ Frost and Sullivan (2014). Car-sharing in London – Vision 2020, London.

²⁰ Bundesverband CarSharing (2012). "CarSharing ist auch in kleineren Städten und Gemeinden erfolgreich möglich". BCS. Available at:

https://carsharing.de/themen/carsharing-im-landlichen-raum/carsharing-ist-auch-kleineren-stadten-

gemeinden-erfolgreich
²¹ A European Commission study on consumer issues in P2P platform markets finds that the transport sector, taken as ride sharing and ride hailing, account for EUR 1 billion in peer expenditure and EUR 794 million in peer revenue every year. the study finds that ride-sharing accounts for 90% of both expenditure and revenues, while ride hailing only accounts for 10%. Source: European Commission (2017). Exploratory study of consumer issues in online peer-to-peer platform markets.

²² Statista Market Sharing Forecast (2017), "Ride sharing 2017", Available at: https://www.statista.com/outlook/368/100/ride-sharing/worldwide#

 $^{^{23}}$ Converted at the European Central Bank exchange rate EUR 1 = USD 1.1219 on June 1st, 2017.

²⁴ Converted at the European Central Bank exchange rate EUR 1 = USD 1.1219 on June 1st, 2017.

²⁵ Statista Market Sharing Forecast (2017). "eTravel: Mobility Services". Available at: https://www.statista.com/download/outlook/whiterpaper/Mobility_Services_Outlook_0117.pdf ²⁶ Goldman Sachs data.

Uber finds that the total number of active cars in Stockholm would be reduced by 18,000 (5% of the total) if P2P transport services were launched.²⁷

Despite important resistance from the traditional industry and regulators (i.e. some or all of Uber's services have been banned or curtailed in Germany, France, Italy, Belgium, the Netherlands and Spain²⁸), P2P ride hailing is expanding. In March 2017, Uber announced that it would increase its headquarters staff in Amsterdam from 400 to 1,000. In terms of the company's financial standing, Reuters reported in April 2017 that "Uber's revenues were USD 2.9 billion but losses were USD 991 million" in the final quarter of 2016²⁹.

Finally, looking at ride sharing and ride hailing business models, Roland Berger (2014) estimates revenues to reach between EUR 3.5 and 5.2 billion by 2020, at a yearly projected market growth rate of 35% per year between 2013 and 2020.30

Car sharing, ride sharing, and ride hailing are innovative business models that do not fit traditional, well-regulated economic activities. Therefore, national-level regulation for these collaborative economy activities can promote or inhibit their growth. Platforms such as BlaBlaCar and Uber, as well as several studies (see above) on the P2P transport theme indicate that regulatory uncertainty is among the most pressing business environment feature for the development of collaborative platforms. 31,32,33,34,35,36,37

This study does not include two other major business models of the collaborative transport theme: bike sharing and parking space sharing. Roland Berger (2014) estimates that car sharing and ride sharing (which includes ride hailing) will develop between 1.2 and 1.75 times faster than bike sharing or parking space sharing by

²⁷ Stefansdotter, A., Danielsson, C., Nielsen, C., Sunesen, E. (2015), "Economic benefits of peer-to-peer transport services", Copenhagen Economics Stockholm. Available at:

https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/0/320/1441009386/econom ics-benefits-of-peer-to-peer-transport-services.pdf

²⁸ "European court takes up the question: what is Uber?" Financial Times. Available at: https://www.ft.com/content/f2774c9a-b566-11e6-ba85-95d1533d9a62

²⁹ Skydsgaard, N (2017). "Uber eyes EU expansion despite Denmark setback, looming EU court ruling". Reuters. http://www.reuters.com/article/us-uber-tech-europe-idUSKBN17K22V

³⁰ Berger, R. (2014). "SHARED MOBILITY: How new businesses are rewriting the rules of the private transportation game." Think Act. Available at:

https://www.rolandberger.com/publications/publication_pdf/roland_berger_tab_shared_mobility_1.pdf ³¹ Finck, M., Ranchordas, S. (2016). "Sharing and the city". Vanderbilt Journal of Transnational Law, 49. Available at: https://www.vanderbilt.edu/jotl/wp-content/uploads/sites/78/8.-Ranchordas-Finck_Paginated.pdf ³² Codagnone, C. and Martens, B. (2016). "Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues". Institute for Prospective Technological Studies, Digital Economy Working Paper 2016/01. JRC100369. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2783662

³³ Goudin, P. (2016). The Cost of Non-Europe in the Sharing Economy: Economic, Social and Legal Challenges and Opportunities. PE 558.777.

34 European Parliament (2015). Tourism and the sharing economy: challenges and opportunities for the EU.

IP/B/TRAN/FWC/2010-006/Lot5/C1/SC3, PE 563.411.

³⁵ Smorto, G. (2015). "The sharing economy as a means to urban communing." Conference paper, 1st IASC Thematic Conference on Urban Commons, November 6-7th, 2015, Bologna, Italy. Available at: https://wiki.p2pfoundation.net/Sharing_Economy_as_a_Means_To_Urban_Commoning

³⁶ PwC (2016). "Assessing the size and presence of the collaborative economy in Europe". Assessment prepared for DG GROW. Available at:

http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native ³⁷ Cologne Institute for Economic Research (2016). Collaborative Business Models and Efficiency. Potential Efficiency Gains in the European Union. Impulse Paper No. 07.

2020, although the revenue forecast for bike sharing is very similar to car/ride sharing models.³⁸

2.2.1.2 Main features and their indicators

A European Commission study on passenger transport by taxi, hire car with driver and ridesharing in the EU $(2016)^{39}$ as well as interview input from BlaBlaCar and Uber have highlighted the following major business environment features affecting collaborative transport business models: Regulatory clarity and Market access requirements.

Regulatory clarity in the context of collaborative transport refers to how clear and how specific national/local rules are about the ways in which platforms and providers can operate in the sector by engaging in or facilitating P2P transactions. Of the three actors involved in P2P transactions, namely providers, consumers and intermediary platforms, regulation overwhelmingly affects providers and platforms.

Regulatory clarity in the collaborative transport sector was perceived by five EU stakeholders as perhaps the most important factor affecting the sector's development. 40 In addition, Roland Berger (2014) finds that shared mobility needs a secure political and legal framework, and considers that existing rules and regulations need to be liberalised, albeit not at the expense of citizens' safety and (data) protection.41

Within this feature, the presence of **Bespoke legislation** regulating the sector has been acknowledged as the most important element affecting the development of collaborative transport. Bespoke legislation refers to the existence of regulatory acts that permit collaborative platforms or peer providers to operate, as well as describe what the regulatory authority means by P2P transactions in the collaborative transport sector. Bespoke legislation is particularly important for collaborative economy actors to understand which business models are allowed to operate in certain Member States. For instance, the P2P service of Uber (i.e. UberPop) has been banned in several Member States. 42 Similarly, the ride sharing platform BlaBlaCar has encountered judicial issues in Spain.⁴³ In most Member States, there is no bespoke legislation governing P2P transport, in particular car sharing and

³⁸ Berger, R. (2014). "SHARED MOBILITY: How new businesses are rewriting the rules of the private transportation game." Think Act. Available at:

https://www.rolandberger.com/publications/publication_pdf/roland_berger_tab_shared_mobility_1.pdf ³⁹ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report.

⁴⁰ Interviews with Koen Frenken (13/06/2017), Vera Demary (01/06/2017), BlaBlacar (06/06/2017), Rosa

Guirado (21/06/2017) and Martijn Arets (13/06/2017).

41 Berger, R. (2014). "SHARED MOBILITY: How new businesses are rewriting the rules of the private transportation game." Think Act. Available at:

 $[\]underline{\text{https://www.rolandberger.com/publications/publication_pdf/roland_berger_tab_shared_mobility_1.pdf}$ ⁴² Belgium, Bulgaria, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden. Source: European Commission (2017). Exploratory study of consumer issues in online peer-to-peer platform markets. Task 4 Uber - Case study report. Available at: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item id=77704 ⁴³ El Pais (17 October 2017). "BlaBlaCar afronta en Madrid su primera sanción en Europa." Available at: https://elpais.com/ccaa/2016/10/17/madrid/1476701871 454042.html?rel=mas

ride sharing services. Ride hailing business models are more often regulated by a distinct set of laws, or covered by the taxi legislation.⁴⁴

Market access requirements govern the entrance conditions on the transport market for collaborative transport platforms and peer providers. Such requirements strongly depend upon the type of business model employed. Several authors, among which Finck and Ranchordas (2016)⁴⁵, Smorto (2015)⁴⁶, Martin (2016)⁴⁷ or Chase (2016)⁴⁸ point out a distinction between "pure" sharing and more commercially-oriented sharing that generates profit. The authors suggest that regulation should consider this aspect when imposing market access requirements.

Market access requirements were perceived by experts interviewed in this study as crucial for ensuring fair competition and reliable services. BlaBlaCar, for instance, was sued in Spain by bus transportation companies⁴⁹, and later fined by Spanish authorities for not adhering to market access requirements applicable to the traditional transport operators. 50 Moreover, there are reports that peer providers were fined EUR 4,000 for using the platform in Spain.⁵¹ The platform stated in an interview that regulation should clearly specify under what conditions peer providers can operate. 52 Other interviewees also blamed the lack of clear market access rules for making it difficult for platforms and providers to operate.⁵³

Within the market access requirement feature, the following indicators have been identified as important:

Business-model specific market access requirements. Conditions such as the need for taxi and VTC drivers to obtain a license to operate, or the number of vehicles allowed to operate. In some countries, especially for ride hailing business models there are quantitative restrictions in the number of licenses issued, which are direct barriers to entering the market.⁵⁴ Qualitative requirements, such as exams or proof of financial ability, have been identified as indirect barriers. 55

⁴⁴ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 52.

⁴⁵ Finck, M., Ranchordas, S. (2016). "Sharing and the city". Vanderbilt Journal of Transnational Law, 49. Available at: https://www.vanderbilt.edu/jotl/wp-content/uploads/sites/78/8.-Ranchordas-Finck_Paginated.pdf ⁴⁶ Smorto, G. (2015). "The sharing economy as a means to urban communing." Conference paper, 1st IASC Thematic Conference on Urban Commons, November 6-7th, 2015, Bologna, Italy. Available at: https://wiki.p2pfoundation.net/Sharing_Economy_as_a_Means_To_Urban_Commoning

⁴⁷ Martin, C. J. (2016). "The Sharing Economy: A Pathway to Sustainability or a Nightmare Form of Neoliberal Capitalism". Ecological Economics (121), pp. 149-159. Available at:

http://www.sciencedirect.com/science/article/pii/S0921800915004711

48 Chase, R. (2016). Peers Inc: How People and Platforms Are Inventing the Collaborative Economy and

Reinventing Capitalism.

49 Novoa, J. (2015). "Bus companies to sue Blablacar in Spain, want regulators to ban the car sharing company (Updated)". NovoBrief. Available at: https://novobrief.com/blablacar-spain-regulation/

50 El Pais (17 October 2017). "BlaBlaCar afronta en Madrid su primera sanción en Europa." Available at:

https://elpais.com/ccaa/2016/10/17/madrid/1476701871_454042.html?rel=mas

⁵¹ Martinez, J. (2016). "Primera sanción de la Comunidad de Madrid a BlaBlacar: seis claves del varapalo". El Español. Available at: http://www.elespanol.com/economia/empresas/20161017/163734321_0.html ⁵² Interview with BlaBlaCar (06/06/2017).

⁵³ Interview with Martijn Arets (13/06/2017).

⁵⁴ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 30.

⁵⁵ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 30.

- Peer and professional provider distinction. As the European Commission (2016) points out, clear distinctions between peer and professional activity are essential to encourage engagement of peer providers. 56 Distinctions are often made on the basis of income, duration and frequency thresholds. Such distinctions are important for market access because they decide whether occasional collaborative economy users must bear the same level of regulatory burden as professional drivers.
- Price restrictions. Although most Member States only impose price restrictions on taxis, some also do so for VTCs. As the European Commission study (2016) outlines, fare regulations are justified as they provide more certainty to passengers about the price they will be charged.⁵⁷ However, by restricting free competition, price regulations may deter peer providers from providing transport services through collaborative platforms.
- **Dispatch centre affiliation.** Some countries condition the provision of P2P transport services with dispatch centre affiliation, which puts additional burden to peer providers and directly restricts their entry and operation in the market, and prevents them from changing from one platform to another.58
- General licensing requirements. For instance, P2P providers might be required to carry additional insurance⁵⁹, or to pass professional certifications or exams⁶⁰, which makes it more difficult for peer providers to operate.

2.2.1.3 Questions linked to each indicator and their scoring

The following questions were developed to measure the identified indicators for the business environment features in the transport theme.

Bespoke legislation. The following questions have been assigned to measure this indicator:

- 1. Is there a definition of P2P car sharing in national law?
- 2. Is there a definition of P2P ride sharing in national law?
- 3. Does the applicable legislation allow non-professional drivers to provide private transport (VTC) services via platforms for remuneration?

A score of 1 has been allocated if there are definitions of P2P car sharing and/or P2P ride sharing in national law, as it confers clarity to platforms and providers as regards the types of P2P transactions allowed. A score of 1 has been allocated if the legislation allows non-professional drivers to provide VTC services via platforms for remuneration, as it directly eliminates potential uncertainty about entering the market.

58 Interview with Uber (19/07/2017).

⁵⁶ European Commission (2016). A European Agenda for the collaborative economy. COM(2016) 356 final, p. 5. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:0356:FIN

Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 9.

⁵⁹ Transport for London (2016). "TfL sets out plans to modernise and enhance London's private hire industry". Press release. Available at: https://tfl.gov.uk/info-for/media/press-releases/2016/january/tfl-sets-out-plans-tomodernise-and-enhance-london-s-private-hire-indust

⁶⁰ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 30.

Business-model specific market access requirements. The following questions have been assigned to measure this indicator:

4. Is P2P car sharing permitted without obtaining a professional license/authorisation?

A score of 1 has been allocated if the answer is "Yes", as the absence of license/authorisation directly facilitates market access for peer providers.

5. Is P2P ride sharing permitted without an authorisation or professional license if remuneration for the activity corresponds only to the running costs of operating the vehicle?

A score of 1 has been allocated if the answer is "Yes", as the absence of license/authorisation directly facilitates access to market for peer providers. Furthermore, the exemption of licensing requirements based on the non-for-profit nature of the activity suggests a clear distinction between peer and professionals.

- 6. Is the number of taxi licenses restricted?
- 7. Is the number of VTC licenses restricted?

A score of 1 has been allocated if the number of licenses is not quantitively restricted, as it indicates the ease of access to the transport market.

<u>Peer and professional provider distinction.</u> The following questions have been assigned to measure this indicator:

8. Are peer providers (taxi/VTC drivers) offering ride sharing services on an occasional basis exempt from authorisation or professional licenses applicable to taxi or VTC services?

A score of 1 has been allocated if the answer is "Yes", as it removes additional regulatory burden for peer providers entering the market. Furthermore, the exemption of licensing requirements based on the frequency of the activity suggests a clear distinction between peer and professionals.

9. Is there a threshold to distinguish between peer and professional peer activity?

A score of 1 has been allocated if the answer is "Yes", as it brings clarity to peer providers as regards their rights and responsibilities. Moreover, it often implies less regulatory burden for peer providers and therefore directly encourages their entry in the market.

Price restrictions. The following questions have been assigned to measure this indicator:

- 10. Are the fares for taxis unrestricted?
- 11. Are the fares for VTC services unrestricted?

A score of 1 has been allocated if the fares are not restricted, as it ensures free competition.

Dispatch centre affiliation. The following questions have been assigned to measure this indicator:

- 12. Are taxis explicitly required to be affiliated to a dispatch centre to provide transportation services?
- 13. Are VTC service providers explicitly required to be affiliated to a dispatch centre?

A score of 1 has been allocated if the answer is "No", as it is an additional requirement for transport providers which restricts their possibility to change platforms.

General licensing requirements. The following question has been assigned to measure this indicator:

14. Is there a requirement for providers to get a professional license/authorisation that involves more than holding a driving license and not to have a criminal conviction?

A score of 1 has been given if the answer is "No", as it indicates that peer providers have lower market access requirements than professionals.

Table 1: Features, indicators, questions and their assessment for the transport theme

Feature	Indicator	CODE	Data collection question	Assessment of results
Regulatory clarity	Bespoke legislation	T1	1. Is there a definition of P2P car sharing in national law?	"Yes" = 1 "No" = 0
			2. Is there a definition of P2P ride sharing in national law?	"Yes" = 1 "No" = 0
			3. Does the applicable legislation allow non-professional	"Yes" = 1
			drivers to provide private transport (VTC) services via platforms for remuneration?	"No" = 0
Market access requirements	Business model- specific market	professional license/authorisation?Is P2P ride sharing permitted without an authorisation	5.	"Yes" = 1 "No" = 0
	access requirements		corresponds only to the running costs of operating the	"Yes" = 1 "No" = 0
			6. Is the number of taxi licenses restricted?7. Is the number of VTC licenses restricted?	"Yes" = 0 "No" = 1
	Peer and professional provider distinction	Т3	8. Are peer providers (taxi/VTC drivers) offering ride sharing services on an occasional basis exempt from authorisation or professional licenses applicable to taxi or VTC services?	"Yes" = 1 "No" = 0
			9. Is there a threshold to distinguish between peer and professional peer activity?	"Yes" = 1 "No" = 0
	Price restrictions	T4	10. Are the fares for taxis unrestricted?11. Are the fares for VTC services unrestricted?	"Yes" = 1 "No" = 0
	Dispatch centre affiliation	Т5	12. Are taxis explicitly required to be affiliated to a dispatch centre to provide transportation services?13. Are VTC service providers explicitly required to be affiliated to a dispatch centre?	"Yes" = 0 "No" = 1

Study to monitor the business and regulatory environment affecting the collaborative economy in the EU – Final report

General market	T6	14. Is there a requirement for providers to get a professional	"Yes" = 0
access		license/authorisation that involves more than holding a	"No" = 1
requirements		driving license and not to have a criminal conviction?	

2.2.2 Accommodation

The accommodation theme, in this study, is considered as the activities involving the for-profit P2P short-term rental of rooms or entire residences by means of an online platform facilitating the transaction. It also includes home swapping activities, which implies an indirect monetary gain.

2.2.2.1 Business models

The accommodation theme includes two business models – short-term rental and home swapping activities (see Textbox 3).

Textbox 3: Definitions of P2P accommodation business models

Definitions of P2P accommodation business models

Short-term rental models include transactions where personal providers rent out their spare rooms or entire properties to other people looking for affordable accommodation. These transactions are "for profit" in the sense that they are based on a monetary exchange for the rental. They include the rental of rooms or entire residences between peers for a short period of time. Platforms match peers according to supply and demand, i.e. platforms list a range of available rooms or properties which peer consumers can choose from, and a list of people who are looking for a room. Examples of popular short-term rental platforms include AirBnB, Wimdu, 9Flats or HomeAway.

Home swapping involves cost-sharing transactions where peers can swap their properties, thereby sharing costs as they do not pay for accommodation. The transaction is non-fee based as the exchange is in-kind (a house swap). Platforms match peers according to the supply, i.e. list of peers offering their properties for a short-term swap, which other peers can choose from. The exchange of property can happen concomitantly, or at different time intervals. Examples include Trampolinn, GuestToGuest and HomeExchange.

The two business models were selected because of their economic significance and growth potential.

The collaborative accommodation sector is the largest collaborative economy market in Europe, in terms of both the volume of transactions and its peer base. The European Commission (2017)⁶¹ finds that this sector generates EUR 6.6 billion in peer expenditure and EUR 4.1 billion in peer revenues each year. The same study indicates that the sector accounts for 8.23% of all collaborative economy consumers in the EU, and for 5.39% of all peer providers. Another study, conducted by ING (2016) on a sample of 15,000 EU respondents, finds that holiday accommodation was by far the most shared, desired or borrowed good in P2P markets. Finally, PwC (2016) estimates that the accommodation sector accounts for more transaction value than the transport, collaborative finance and on-demand services combined, with a total of EUR 15.1 billion. In terms of platform revenues,

⁶¹ European Commission (2017). Exploratory study of consumer issues in online peer-to-peer platform markets.
⁶² ING (2016). "Airbnb heeft flink opwaarts effect op Amsterdamse huizenprijzen". Available at:
https://www.ing.nl/nieuws/nieuws en persberichten/2016/04/airbnb heeft flink opwaarts effect op amsterd
amse huizenprijzen.html

although it is second to the transport sector, it is estimated to bring in EUR 1.15 billion each year. 63

It is important to note that, while the short-term rental sector is being increasingly regulated by national policy makers, there are no regulations specific to short-term swapping activities. Nevertheless, interviews with experts report a high potential for growth in comparison to the short-term rental market, which makes it likely to be subject to further regulation in the future. 64

2.2.2.2 Main features and their indicators

Input from an ongoing European Commission study on the collaborative accommodation sector⁶⁵ has highlighted the major business environment features affecting collaborative accommodation business models: **Regulatory clarity**, **Market access requirements**, and **Enforcement**.

Regulatory clarity in the context of this theme includes the extent to which national/local rules are specific about what type of P2P transactions can take place, and how they can be intermediated.

Within this feature, the presence of **Bespoke legislation** regulating the sector has been identified as the most important feature affecting the development of collaborative accommodation. Bespoke legislation, as in the case of the transport theme, has among the largest impact on the development of the collaborative accommodation sector, according to several interviewees. This indicator affects both the emergence of collaborative platforms, but perhaps more importantly the willingness of peer providers to rent out their homes. The lack of a clear definition or of a regulatory framework for P2P transactions notably provides uncertainty for peers. For instance, in May 2016 Berlin authorities have started imposing fines of up to EUR 100,000 on providers that do not obtain a permit. The Independent (2016) reports that, due to this, the city recorded a 40% drop in the number of Airbnb listings the following month. For

Market access requirements in the P2P accommodation theme exist at national, regional, or local (municipal) level, and can be applicable to providers (peers and professionals) and collaborative platforms. The literature in this field generally calls for market access requirements for P2P short-term rental transactions, because of their impact on the traditional accommodation sector, on long-term rents or on the

⁶³ PwC (2016). "Assessing the size and presence of the collaborative economy in Europe". Assessment prepared for DG GROW. Available at:

http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native ⁶⁴ Interviews with HomeExchange (07/04/2017) and GuestToGuest (18/04/2017) in the frame of a European Commission study on the assessment of the regulatory aspects affecting the collaborative economy in the tourism accommodation sector in the 28 Member States (not published yet).

⁶⁵ VVA, Spark Legal Network (ongoing). Study on the assessment of the regulatory aspects affecting the collaborative economy in the tourism accommodation sector.

 $^{^{66}}$ Interviews with Martijn Arets (13/06/2017), Lucia Hernandez (30/05/2017), Vera Demary (01/06/2017), and Koen Frenken (13/06/2017)

⁶⁷ Payton, M. (2016). "Berlin stops AirBnB renting apartments to tourists to protect affordable housing". The Independent. Available at: http://www.independent.co.uk/news/world/europe/airbnb-rentals-berlin-germany-tourist-ban-fines-restricting-to-protect-affordable-housing-a7008891.html

cost of living.^{68,69,70,71,72,73} However, market access conditions can have an adverse effect on the harmonious development of the collaborative economy in this theme. Within this feature, the following indicators are important:

• **Registration, authorisations, notifications**⁷⁴ for peer providers or collaborative platforms (including landlord approval) govern the market entry of collaborative economy operators. Such requirements can limit the number of market participants either directly (by imposing conditions that providers or users are not able or ready to meet) and indirectly (by adding administrative burden that makes users or buyers not enter the market).

The following types of registration and authorisation requirements can have a significant impact on the development of the collaborative economy:

- a) <u>Public authority authorisation, registration or notification</u>. The need to get an authorisation from, register with, or notify a public authority prior to undertaking collaborative economy activities. From an economic point of view, depending on the burden of the registration process and the strictness of the conditions, a registration can decrease the number of platforms or peer providers significantly.
- b) <u>Landlord approval for subletting</u>. Whether an approval of the landlord is needed for temporary subletting. Regulations that only allow subletting with an approval of the landlord can be a serious obstacle for the development of the collaborative economy especially as cities

⁶⁸ Samaan, R. (2015). "AirBnB, rising rent, and the housing crisis in Los Angeles". Available at: https://www.ftc.gov/system/files/documents/public comments/2015/05/01166-96023.pdf

⁶⁹ Schmücker, D. (2016) "Assessing the impact of "shared accommodation" for city tourism". 14th Global Forum on Tourism Statistics, Venice, Italy, 23-25 November 2016. Available at:

 $http://tsf2016 venice.enit.it/images/articles/Papers_Forum/6.2_Assessing \% 20 the \% 20 impact \% 20 of \% 20 shared \% 20 accommodation \% 20 for \% 20 city \% 20 tourism.pdf$

⁷⁰ ING (2016). "Airbnb heeft flink opwaarts effect op Amsterdamse huizenprijzen". Available at: https://www.ing.nl/nieuws/nieuws_en_persberichten/2016/04/airbnb_heeft_flink_opwaarts_effect_op_amsterd

https://www.ing.nl/nieuws/nieuws_en_persberichten/2016/04/airbnb_heert_flink_opwaarts_effect_op_amsterd amse_huizenprijzen.html

⁷¹ Zervas, G., Proserpio, D., Byers, J. (2016). "The rise of the sharing economy: estimating the impact of AirBnB on the hotel industry". Available at: http://people.bu.edu/zg/publications/airbnb.pdf

 $^{^{72}}$ Kagermeier, A., Koller, J., Stors, N. (2016). "Airbnb als Share Economy-Herausforderung für Berlin und die Reaktionen der Hotelbranche". Available at:

https://www.researchgate.net/publication/281844630_Airbnb_als_Share_Economy-

Herausforderung_fur_Berlin_und_die_Reaktionen_der_Hotelbranche

⁷³ Rafferty, J. (2010). "To Address Its Housing Shortage, Paris Cracks Down on Pied-à-Terre Rentals". New York Times. Available at: http://www.nytimes.com/2010/07/07/business/global/07rent.html

⁷⁴ Registration, authorisation and notification can be defined as follows:

Registration: Procedure under which a provider or a platform needs to declare its activity to public authorities, in order to appear on a register. It usually involves submitting an administrative form, possibly along some supporting documents. The activity can start immediately after confirmation of entry onto register, and does not depend on the authority's prior approval.

Authorisation: Procedure under which a provider or a platform is required to take steps in order to obtain from a competent authority a decision concerning the entitlement to carry out an activity. It usually involves submitting an administrative form, possibly along some supporting documents. The activity can start only after the authority's review and prior approval of the documents. This can take the form of licenses, approvals, concessions, authorisation forms.

Notification: Procedure under which a provider or a platform is required to declare its activity to public authorities. It usually involves submitting an administrative form, possibly along with supporting documents. The activity can start immediately after confirmation of receipt of notification, and does not depend on the authority's prior approval.

tend to have a higher proportion of tenant households and younger households are both more often tenants and more inclined to become a peer provider of accommodation.

- Restrictions on the type of good or service provided have a large influence on the spread of P2P accommodation transactions. After reviewing national regimes governing such restrictions, the following emerged as the most relevant:
 - a) Renting out primary or secondary residences. This type of regulation can have a significant impact on peer providers and the development of the collaborative economy as more mobile households (students or other young people) are an important potential for peer providers and very often change their living circumstances quickly (due, for example, to break-ups or temporary work relations).
 - b) Renting out rooms or parts of a residence, obligations to be present in the building while renting out or other conditions. Any condition has the potential to limit the number of peer providers.
- **Peer and professional provider distinction** was also flagged as important by EU-level stakeholders. This distinction refers to the existence of different standards between P2P and B2C (Business-to-Consumer) transactions in the short-term rental market. It may also refer to the existence of a bespoke regulatory regime for P2P transactions.

Exemptions for peer providers from regulations affecting professionals could be an important driver for the development of the collaborative economy as any regulatory burden is on average more burdensome for peer providers who have less time to understand and comply with the regulations and less revenues to compensate for the regulatory costs. All of the experts interviewed expressed that this issue is relevant.

As a third feature, **enforcement measures** play an important role in the development of the P2P short-term rental and swapping markets. In this sector, these often take the form of inspections (e.g. in Paris⁷⁵ or Barcelona⁷⁶) or fines (in German cities like Berlin, peer providers without a permit could be fined to pay up to EUR 100,000⁷⁷). The extent to which fines can be considered as encouraging or hindering the development of the collaborative economy is debatable. On the one hand, it brings further clarity to the applicable legislation, which is assumed to be beneficial to platforms and providers. It also deters economic operators from commercial activity, and in this sense further encourages peer providers to engage in the collaborative economy. On the other hand, it can hinder peer providers' activity if the distinction between peers and professionals is not clearly drawn. Therefore, the enforcement measure feature only covers **Inspections**, and does not take fines into account.

⁷⁵ https://www.thelocal.fr/20160113/paris-cracks-down-on-illegal-airbnb-flats

 $^{^{76}}$ https://www.theguardian.com/technology/2017/jun/02/airbnb-faces-crackdown-on-illegal-apartment-rentals-in-barcelona

⁷⁷ http://www.independent.co.uk/news/world/europe/airbnb-rentals-berlin-germany-tourist-ban-fines-restricting-to-protect-affordable-housing-a7008891.html

2.2.2.3 Questions linked to each indicator and their scoring

This chapter presents the questions used to measure the indicators and the way the questions are scored.

Bespoke legislation. The following questions have been assigned to measure this indicator:

- 1. Is there a specific regulation for accommodation services in the collaborative economy?
- 2. Is there a clear definition of the type of P2P transactions allowed?

A score of 1 has been allocated if the answer is "Yes", as it confers clarity to platforms and peer providers and facilitates the collaborative economy activity.

Registration, authorisations, notifications. The following questions have been assigned to measure this indicator:

- 3. Are peer providers required to register, obtain an authorisation from, or notify a regulatory authority prior to letting their property?
- 4. Are peer providers required to obtain approval from their landlord prior to sub-letting their property?
- 5. Are peer providers required to obtain approval from their building association or other residents in their building prior to sub-letting their property?

A score of 1 has been allocated if the answer is "No", as it facilitates the entry to the market for peer providers.

- 6. Are peer providers permitted to let their primary residence?
- 7. Are peer providers permitted to let their secondary residence?
- 8. Is there a restriction on the proportion of the property permitted to be rented out?
- 9. Are peer providers prevented from renting out their whole property?
- 10. Are peer providers obliged to be present in the property they are renting out?

A score of 1 has been allocated if the answer is "Yes", as it indicates that peer providers have more freedom to offer their assets on the market.

Peer and professional provider distinction. The following questions have been assigned to measure this indicator:

11. Are individuals offering services on an occasional basis exempt from regulations (e.g. health and safety requirements)?

A score of 1 has been allocated if individuals offering services on an occasional basis are exempt from certain regulations, as it indicates that peer providers should comply with fewer regulations than hotels.

12. Is there a threshold to distinguish between peer and professional peer activity?

A score of 1 has been allocated if there is a threshold distinguishing between peer and professional activity, as it brings clarity to peer providers as regards their rights and responsibilities, and facilitates their entry in the market.

Inspections. The following question has been assigned to this indicator:

13. Are peer providers subject to inspections from public authorities to ensure compliance with the law?

A score of 1 has been given if the answer is "No" as it facilitates peer providers' entry to market and operations. It should be noted, as mentioned above, that this indicator only assesses the factors encouraging the activity of platforms and peer providers, but does not measure consumer protection concerns.

The following table outlines the main features, the indicators representing the features (including their codes), the questions measuring the indicators, and the assessment of the questions in the accommodation theme.

Table 2: Features, indicators, questions and their assessment for the accommodation theme

Feature	Indicator	CODE	Data collection question	Assessment of results
Regulatory clarity	Bespoke legislation	A1	 Is there a specific regulation for accommodation services in the collaborative economy? Is there a clear definition of the type of P2P transactions allowed? 	"Yes" = 1 "No" = 0
Market access requirements	Registrations, authorisations, notifications	A2	3. Are peer providers required to register, obtain an authorisation from, or notify a regulatory authority prior to letting their property?	"Yes" = 0 "No" = 1
			4. Are peer providers required to obtain approval from their landlord prior to sub-letting their property?	"Yes" = 0 "No" = 1
		5.	5. Are peer providers required to obtain approval from their building association or other residents in their building prior to sub-letting their property?	"Yes" = 0 "No" = 1
	Restrictions on type of good or		6. Are peer providers permitted to let their primary residence?	"Yes" = 1 "No" = 0
	service provision		7. Are peer providers permitted to let their secondary residence?	"Yes" = 1 "No" = 0
			8. Is there a restriction on the proportion of the property permitted to be rented out?9. Are peer providers prevented from renting out their whole property?	"Yes" = 0 "No" = 1
		10	10. Are peer providers obliged to be present in the property they are renting out?	"Yes" = 0 "No" = 1
	Peer and professional provider distinction	professional	11. Are individuals offering services on an occasional basis exempt from regulations (e.g. health and safety requirements)?	"Yes" = 1 "No" = 0
			12. Is there a threshold to distinguish between peer and professional peer activity?	"Yes" = 1 "No" = 0

Study to monitor the business and regulatory environment affecting the collaborative economy in the EU – Final report

Enforcement	Inspections	A5	13. Are peer providers subject to inspections from public	"Yes" = 0
measures			authorities to ensure compliance with the law?	"No" = 1

2.2.3 Finance

The finance theme, in this study, is considered as the P2P transactions in which people give each other loans, or invest in each other's' projects (either demand-driven like crowdfunding or supply-driven like having a list of projects to invest in). Peers act in their private capacity, and their actions are governed by the platform. In P2P finance, peers can also invest in businesses, therefore a P2B relation is possible.

2.2.3.1 Business models

The finance theme includes two business models – **equity funding** and **debt funding** (see Textbox 4).

Textbox 4: Definitions of P2P finance business models

Definitions of P2P finance business models

Equity funding allows individuals to invest in a business in return for shares in the company. It is therefore characterized by a peer to business relation (P2B). This type of funding is traditionally used to launch start-ups or to provide funds for a new business venture for an established company. Money is lent in return for the ownership of a small part of the business. Examples include Crowdfunder or Fundable.

Debt funding allows individuals to borrow and lend money without the use of an official financial institution as an intermediary. The money is lent through an online platform. The advantages of this type of funding is that lenders can earn higher returns compared to savings and investment products offered by banks, while borrowers can borrow money at lower interest rates. Examples of platforms facilitating P2P transaction include Kiva, Prosper and Zopa. LendingClub is a good example of a crowdfunding debt lending platform.

The collaborative finance sector has been developing rapidly in Europe. The European Commission estimates that EUR 4.2 billion were raised through crowdfunding platforms in 2015, of which EUR 4.1 billion entailed a financial return. PwC (2016) estimates transactions in the collaborative finance sector to be worth EUR 5.2 billion, which ranks it second after the accommodation sector. According to the same study, the collaborative finance sector brings EUR 250 million revenue to platforms. The sector is expanding, with a rise of 23.3% in the number of collaborative platforms between 2013 and 2014. The European Commission staff working document (2016) also notes a potential for internationalisation of the sector, with more platforms operating across borders, which is confirmed by a Crowdfunding Hub report (2016)⁷⁹.

 $^{^{78}}$ PwC (2016). "Assessing the size and presence of the collaborative economy in Europe". Assessment prepared for DG GROW. Available at:

This study does not include reward-based funding platforms that link donations to rewards, although this model is the most widespread (i.e. Kickstarter or KissKissBankBank). This choice has been made to follow the scope of the Commission's previous work on the sector that only included business models that entailed a financial return.⁸⁰ A European Commission staff working document (2016) shows that equity and debt funding represent the highest amount of money raised through collaborative finance, respectively EUR 422 million and EUR 3.3 billion, as opposed to less than EUR 100 million for reward-based crowdfunding. Moreover, interviews with collaborative finance experts have suggested that the regulatory framework for reward-based crowdfunding was much less developed than the other two, and did not impose significant constraints on collaborative economy platforms and providers.⁸¹

2.2.3.2 Main features and their indicators

Interview input from a European Crowdfunding Network stakeholder⁸², as well as from reports by CrowdfundingHub (2016)⁸³ and the European Commission (2016)⁸⁴ has highlighted the following major business environment features affecting both collaborative finance business models: **Regulatory clarity**, **Market access requirements** and **Enforcement**.

Regulatory clarity is essential for the development of both P2P lending and equity investment. While there are sufficient national regulations affecting some business models (equity investment), there is much less for others (reward-based crowdfunding). According to the CrowdfundingHub (2016), in some Member States P2P consumer lending is fully unregulated, raising issues concerning consumer protection and irresponsible borrowing⁸⁶.

Within this feature, the presence of **Bespoke legislation** is an important indicator for promoting the growth of the crowdfunding sector as well as to protect investors, according to the European Commission (2016)⁸⁷. Bespoke legislation measures the extent to which national/local rules are specific about what type of P2P transactions can take place, and how they can be intermediated. Such legislation is very important to reassure market players and therefore contribute to the sector's development. The presence of bespoke legislation is perceived as positive as it confers clarity to platforms and peer providers and facilitates the collaborative economy activity.

Market access requirements such as registrations and authorisations, personal and professional provider distinction, the presence of a prospectus, investment

⁸⁰ European Commission Staff Working Document (2016). Crowdfunding in the EU Capital Markets Union. SWD(2016) 154 final.

⁸¹ Interview with the European Crowdfunding Network (25/05/2017).

⁸² Interview with the European Crowdfunding Network (25/05/2017).

⁸³ Crowdfunding Hub. Current State of Crowdfunding in Europe. 2016.

⁸⁴ European Commission (2016). Crowdfunding in the EU Capital Markets Union. Commission Staff Working Document. SWD(2016) 154 final.

⁸⁵ Interview with the European Crowdfunding Network (25/05/2017).

⁸⁶ Crowdfunding Hub. Current State of Crowdfunding in Europe. 2016.

⁸⁷ European Commission (2016). Crowdfunding in the EU Capital Markets Union. Commission Staff Working Document SWD(2016) 154 final.

limits, and information requirements have been identified as relevant. Within this feature, the following indicators are important:

- **Registrations and authorisations**. The need for registering or getting an authorisation from public authorities governs the entry of collaborative economy operators. Obtaining licenses may require time and incur costs, which may deter platforms from entering the market. Lowest values for time and costs are therefore perceived as positive.
- **Peer and professional provider distinction**. It defines the extent to which occasional collaborative economy users must bear the same level of regulatory burden as professional providers. In this case, it indicates easier access to market for collaborative economy platforms than finance institutions. A clear distinction is therefore perceived as positive.
- Prospectus requirement. Prospectus is a legal document companies are required to publish when they issue securities to attract investments. It contains information on the company issuing the securities and the securities themselves, as well as the general terms of the offer. This additional administrative burden, though positive in the extent to which it enhances transparency over the transaction and thus minimises transaction risks, might deter platforms from being active, and is therefore perceived as negative.
- **Information requirements**. Platforms are obliged to provide specific information about the service they provide. Although it indicates further consumer protection requirements, it is also burdensome for peer providers, and is therefore perceived as negative.

As in the accommodation theme, **Enforcement measures** are also taken into account.

• Within this feature, *Inspections* are an important indicator. As stated by a finance platform, inspections are important since a major problem in the equity investment industry is the fact that many platforms do not do proper due diligence on the projects they advertise for funding⁸⁸. Other platforms, as evidenced by Frenken and Schor (2016), may resort to novel approaches such as alternative currencies or block-chain technology, and thus become less transparent. Inspections hinder peer providers' entry to market and operations, and are therefore perceived as negative.

2.2.3.3 Questions linked to each indicator and their scoring

This chapter presents the questions used to measure the indicators and the way the questions are scored.

Bespoke legislation. The following questions have been assigned to measure this indicator:

- 1. Is there a bespoke regime regulating P2P equity investment?
- 2. Is P2P equity investment prohibited?

⁸⁸ Interview with Conda (12/07/2017).

- 3. Is there a bespoke regime regulating P2P lending?
- 4. Is P2P lending prohibited?

A score of 1 has been allocated if there is a bespoke regime regulating P2P equity investment or P2P lending, as it confers clarity to platforms and peer providers and facilitates the collaborative economy activity. A score of 1 has been allocated if P2P equity investment and P2P lending are not prohibited, as it restricts the collaborative economy activity.

Registrations and authorisations. The following questions have been assigned to measure this indicator:

- 5. Please indicate the maximum number of calendar days during which an authority needs to decide on issuing a license for P2P equity investment platforms.
- 6. Please indicate the maximum number of calendar days during which an authority needs to decide on issuing a license for P2P lending platforms.

A score corresponding to the number of days has been allocated in cases where the relevant legislation or authority specifies the maximum number of calendar days for the decision to issue the licence. When there is a licence, but no limit for its issuing exists, the score is 365 days.

- 7. What are the direct costs to obtain all necessary authorisations/licenses for P2P equity investment platforms?
- 8. What are the direct costs to obtain all necessary authorisations/licenses for P2P lending platforms?

Lowest values are positive, as they indicate a lower administrative burden for peer providers. The following scores have been assigned when:

- The licence is free: 0;
- The license is not free, and there is bespoke legislation: 1-5,500;
- There is no licence, but there is bespoke legislation specifying this: 0;
- There is no license due to absence of bespoke legislation, and there is no fee identified for applicable licence: 5,500;
- The information is not available: N/A.

Personal and professional provider distinction. The following questions have been assigned to measure this indicator:

- 9. Are P2P equity investment platforms exempt from any of the requirements applicable to investment firms for obtaining an authorisation/license?
- 10. Are P2P lending platforms exempt from any of the requirements applicable to banks for obtaining an authorisation/license?
- 11. Is there a threshold to distinguish between peer and professional peer activity?

A score of 1 has been allocated if collaborative finance platforms are exempt from any of the requirements applicable to traditional financial institutions, as it indicates easier market access for platforms. A score of 1 has been allocated if there is a threshold, as this brings clarity to peer providers as regards their rights and responsibilities, and facilitates their entry in the market.

Prospectus requirements. The following question has been assigned to measure this indicator:

12. Is there an amount over which peer providers are required to publish a prospectus?

A score of 1 has been given if the answer is "No", as it indicates less burden for providers.

Information requirements. The following question has been assigned to measure this indicator:

13. Are peer providers required to provide information to public authorities before engaging in collaborative finance?

A score of 1 is allocated if the answer is "No", as it indicates less burden for providers. It should be noted that this indicator only assesses the factors encouraging the activity of platforms and peer providers, but does not measure consumer protection concerns.

Inspections. The following question has been assigned to measure this indicator:

14. Are there enforcement measures taken by public authorities to ensure compliance with regulations? (Please specify.)

A score of 1 has been allocated if the answer is "No" as it indicates that there is less regulatory pressure for P2P providers. Note that this indicator does not measure the benefits of regulatory compliance for the broader society.

Table 3: Features, indicators, questions and their assessment for the finance theme

Feature	Indicators	CODE	Data collection question	Assessment of results
Regulatory clarity	Bespoke legislation	F1	 Is there a bespoke regime regulating P2P equity investment? 	"Yes" = 1 "No" = 0
			2. Is P2P equity investment prohibited?	"Yes" = 0 "No" = 1
			3. Is there a bespoke regime regulating P2P lending?	"Yes" = 1 "No" = 0
			4. Is P2P lending prohibited?	"Yes" = 0 "No" = 1
Market access requirements	Registrations and authorisations	F2	 Please indicate the maximum number of calendar days during which an authority needs to decide on issuing a license for P2P equity investment platforms. 	Lowest values are positive, maximum value is 365
			 Please indicate the maximum number of calendar days during which an authority needs to decide on issuing a license for P2P lending platforms. 	Lowest values are positive, maximum value is 365
			7. What are the direct costs to obtain all necessary authorisations/licenses for P2P equity investment platforms?	Lowest values are positive, maximum value is 5,500
			8. What are the direct costs to obtain all necessary authorisations/licenses for P2P lending platforms?	Lowest values are positive, maximum value is 5,500
	Peer and professional provider distinction	F3	9. Are P2P equity investment platforms exempt from any of the requirements applicable to investment firms for obtaining an authorisation/license?	"Yes" = 1 "No" = 0
		10	10. Are P2P lending platforms exempt from any of the requirements applicable to banks for obtaining an authorisation/license?	"Yes" = 1 "No" = 0
			11. Is there a threshold to distinguish between peer and	"Yes" = 1

			professional peer activity?	"No" = 0
	Prospectus	F4	12. Is there an amount over which peer providers are required	"Yes" = 0
	requirement		to publish a prospectus?	"No" = 1
	Information	F5	13. Are peer providers required to provide information to public	"Yes" = 0
	requirements		authorities before engaging in collaborative finance?	"No" = 1
Enforcement	Inspections	F6	14. Are there enforcement measures taken by public authorities	"Yes" = 0
measures			to ensure compliance with regulations? (Please specify.)	"No" = 1

2.3 Horizontal themes

2.3.1 Public administration

Public administration refers to the measures taken by public authorities at national, regional and local level to support the development of the collaborative economy from an administrative point of view. This horizontal theme aims to reduce the administrative burden imposed on peer providers and collaborative platforms through accessing the market.

2.3.1.1 Main features and their indicators

The research undertaken for this report identified two important features that would alleviate administrative burden for collaborative economy stakeholders, namely **Guidance** and **Oversight**. These comprise the provision of guiding documents regarding applicable legislation, user/platform rights and obligations, or on P2P transactions as a whole. In addition, they can help measure the extent to which a national/regional authority is actively engaged in supporting or better regulating one or several collaborative economy sectors. This can be done, for instance, via platform-authority cooperation agreements, notably on tax collection. Other initiatives can involve the establishment of certain (inter)departmental units or bodies responsible for the active promotion of the collaborative economy, as explained further in this sub-chapter.

Guidance refers to any public document or publication on official websites issued by public authorities with respect to the collaborative economy. Guidance can target platforms through information on taxation, licenses, insurance, or applicable legislation to help them set up. It can also target peer providers, and tackle applicable legislation, rights and obligations, or give tips and information about participation to platforms. In this respect, the presence of a publicly supported body dealing with queries from peers on the use of P2P services is an additional way to provide guidance to peer providers.

Guidance has been underlined by EU stakeholders as an important factor to foster the development of the collaborative economy. Uncertainty is a deterrent to the collaborative economy activity and, in this regard, the provision of clear and reliable information is beneficial. This feature is divided into indicators between guidance to platforms and guidance to peer providers, and includes broader guidance on the applicability of national employment rules to collaborative economy services:

• **Guidance on setting up collaborative platforms** has been considered by five EU stakeholders as affecting the development of the collaborative economy. ⁸⁹ One interviewee notably mentioned that public authorities, notably at national level, had a key role in guiding platforms through finding sustainable business models in the long-term. ⁹⁰ It has therefore been selected as an indicator.

⁸⁹ Interviews with the European Crowdfunding Network (25/05/2017), BlaBlaCar (06/06/2017), Martijn Arets (13/06/2017), Vera Demary (01/06/2017) and Rosa Guidaro (21/06/2017).
⁹⁰ Interview with Martijn Arets (13/06/2017).

- **Guidance to peer providers** has also been emphasised as an important element to take into account by all EU stakeholders, and therefore selected as an indicator. It improves clarity and transparency of information as regards rules and procedures. Guidance has a direct effect on peer providers' willingness to engage in the collaborative economy, as lack of information has been identified as an important deterrent for peer providers. Guidance is therefore perceived as positive.
- Cooperation between public authorities and platforms designates partnerships between public authorities and collaborative platforms to facilitate platforms' compliance with the law, e.g. for tax collection purposes. This element has been emphasised by the Commission Staff Working Document of the European Agenda for the collaborative economy⁹¹, and desk research has found several examples of this practice, such as the collaboration between the accommodation platform Airbnb and public authorities to collect tourist tax on their behalf. The purpose of this cooperation is to lower the administrative burden and to secure tax income.
- The provision of Guidance on employment and tax rules has been identified as an important element bringing further clarity to platforms and providers as regards their collaborative activity. Depending on national legislation, providers might be classified either as operating in their private capacity, as self-employed or as sole traders, with differing market access implications, including tax treatment⁹². In some cases, peer providers undertake legal efforts to recognise their status as employees (e.g. against Instacart⁹³, Uber⁹⁴). As the Commission staff working document of the European agenda for the collaborative economy (2016)⁹⁵ pinpoints, there is no single approach on how to qualify employment status across Member States in the collaborative economy. This diversity of regimes at national level and across borders can bring confusion to platforms and providers about their rights and obligations, which deters their collaborative activity, as one EU expert in transport emphasised. 96 Also, as highlighted by De Groen and Maselli (2016), the collaborative economy has significant impacts on labour markets, notably in terms of remuneration and working conditions.⁹⁷ The paper highlights that information about remuneration, working conditions, and requirements for peer providers' participation, are crucial policy implications to be tackled by governments. In addition, three interviewees highlighted that one barrier for platforms and providers is the lack of understanding of what is legal and what is not. 98

⁹¹ European Commission (2016). A European Agenda for the collaborative economy. COM (2016) 356 final, p. 42.

<sup>42.

92</sup> UK Government (2015). "Working for yourself". Available at: https://www.gov.uk/working-for-yourself/what-counts-as-self-employed

93 Steinmetz, K. (2015). "Lawsuit claims Instacart 'personal shoppers' should be classified as employees".

⁹³ Steinmetz, K. (2015). "Lawsuit claims Instacart 'personal shoppers' should be classified as employees". Fortune. Available at: http://fortune.com/2015/03/18/lawsuit-claims-instacart-personal-shoppers-should-be-classified-as-employees/

⁹⁴ Shontell, A.(2015). "California Labor Commission rules an Uber driver is an employee, which could clobber the \$50 billion company". Business Insider UK. Available at: http://uk.businessinsider.com/california-labor-commission-rules-uber-drivers-are-employees-2015-6?r=US

⁹⁵ European Commission Staff Working Document (2016). Crowdfunding in the EU Capital Markets Union. SWD(2016) 154 final.

⁹⁶ Interview with BlaBlaCar (06/06/2017).

⁹⁷ De Groen P., Maselli I.(2016). "The Impact of the Collaborative Economy on the Labour Market". CEPS Special Report No. 138. Available at: https://www.ceps.eu/system/files/SR138CollaborativeEconomy_0.pdf

98 Interviews with BlaBlaCar (06/06/2017), Vera Demary (01/06/2017) and Koen Frenken (13/06/2017).

Oversight refers to the role of public authorities guiding and overseeing the development of the collaborative economy. This is done through initiatives aimed at understanding the impact of the collaborative economy and scrutinising its development.

The indicator of *Policy-making* refers to the level of proactivity of public authorities in overseeing and promoting the collaborative economy in a sustainable way. One expert interviewed for this study highlighted that a good indicator on a Member State's openness towards this sector is their efforts to regulate or understand it, ⁹⁹ for instance by setting up collaborative economy working groups in government ministries ¹⁰⁰, or by attempting to produce statistics on the collaborative economy. 101

2.3.1.2 Questions linked to each indicator and their scoring

This chapter presents the questions used to measure the indicators and the way the questions are scored.

Guidance on setting up a collaborative platform. The following question has been assigned to measure this indicator:

- 1. Has the government (or any other official authority) issued guidance on setting up a collaborative platform with respect to:
 - a. Taxation;
 - b. Necessary licenses;
 - c. Insurance requirements;
 - d. Applicable legislation;
 - e. Other (please specify)?

A score of 1 has been allocated if there is guidance with respect to any of the issues listed (taxation, necessary licenses, insurance requirements, applicable legislation, or any other type of quidance), as it shows the willingness of regulators to clarify the position of platforms and ease the regulatory burden.

Guidance to peer providers. The following questions have been assigned to measure this indicator:

2. Has the government (or any other official authority) issued a public document or a publication on an official website with respect to:

¹⁰⁰ In Catalonia, the "Interdepartmental Commission on the collaborative economy" brings together civil

⁹⁹ Interview with Koen Frenken (13/06/2017).

servants from different ministries to consider the impact of the collaborative economy and issue proposals for its development. Source: Generalitat de Cataluyna (2017). "Participa en la economía colaborativa". Available at: http://web.gencat.cat/es/actualitat/detall/Participa-Gencat-leconomia-collaborativa

101 The UK's Office for National Statistics' initiative to assess the feasibility of measuring the sharing economy in

the UK. The study attempts to estimate the value of the collaborative economy, and its impact on the labour market. The final goal is to provide policy makers with reliable data to improve future regulation of the collaborative economy market. Source: Office for National Statistics (2016). "The feasibility of measuring the sharing economy: progress update." Available at:

https://www.ons.gov.uk/economy/economicoutputandproductivity/output/articles/thefeasibilityofmeasuringthes haringeconomy/progressupdate

- a. Legislation applicable to peer providers on P2P platforms;
- b. Rights and obligations of P2P providers;
- c. Tips for participating on P2P platforms;
- d. General information or campaigns on what P2P services are;
- e. Other (please specify)?

A score of 1 has been allocated if there is a public document or a publication on an official public website clarifying any of the topics mentioned (what P2P economy is, what P2P providers' rights and obligations are, or any other information clarifying the status of peer providers).

3. Is there a publicly-supported body dealing with queries from peers on the regulatory aspects of use/offering of P2P services?

A score of 1 has been allocated if there is indeed such a body as this increases the points of access to support for P2P providers.

Cooperation between public authorities and platforms. The following question has been assigned to measure this indicator:

4. Has the government (or local authority) entered into a partnership with any collaborative platform (e.g. for tax collection purposes)?

A score of 1 has been allocated if the answer is "Yes" as this indicates that the public authority is open to P2P providers and is collaborating with them, in the process also reducing their compliance burden.

Guidance on employment and tax rules. The following questions have been assigned to measure this indicator:

- 5. Has the government provided guidance on the applicability of national tax rules with respect to services provided on P2P platforms?
- 6. Has the government provided guidance on the applicability of national employment rules with respect to services provided on P2P platforms?

A score of 1 has been allocated when the answer is "Yes" as it indicates a willingness to alleviate peer provider and platform burden.

Policy making. The following two questions have been assigned to measure this indicator:

- 7. Is there a dedicated public body for dealing with legislation related to P2P services?
- 8. Are there, or have there been any initiatives from public authorities to examine the development and impact of the collaborative economy (e.g. government commission, stakeholder consultation, study)?

A score of 1 has been given if such bodies exist, as it shows a willingness from the public authorities to monitor the development of the collaborative market.

The following table outlines the main features, the indicators representing the features (including their codes), the questions measuring the indicators, and the assessment of the questions in the public administration theme.

Table 4: Features, indicators, questions and their assessment for the public administration theme

Feature	Indicator	CODE	Data collection question	Assessment of results
Guidance	Guidance on setting up P2P platforms	PA1	1. Has the government (or any other official authority) issued guidance on setting up a collaborative platform with respect to: a. Taxation; b. Necessary licenses; c. Insurance requirements; d. Applicable legislation; e. Other (please specify)?	"Yes" = 1 "No" = 0
	Guidance to peer providers	PA2	 2. Has the government (or any other official authority) issued a public document or a publication on an official website with respect to: a. Legislation applicable to peer providers on P2P platforms; b. Rights and obligations of P2P providers; c. Tips for participating on P2P platforms; d. General information or campaigns on what P2P services are; e. Other (please specify)? 	"Yes" = 1 "No" = 0
			 Is there a publicly-supported body dealing with queries from peers on the regulatory aspects of use/offering of P2P services? 	"Yes" = 1 "No" = 0
			 Has the government (or local authority) entered into a partnership with any collaborative platform (e.g. for tax collection purposes)? 	"Yes" = 1 "No" = 0
	Guidance on employment and tax rules	PA3	Has the government provided guidance on the applicability of national employment rules with respect to services provided on P2P platforms?	"Yes" = 1 "No" = 0
			Has the government provided guidance on the applicability of national tax rules with respect to services provided on P2P platforms?	"Yes" = 1 "No" = 0
Oversight	Policy making	PA4	Is there a dedicated public body for dealing with legislation related to P2P services?	"Yes" = 1 "No" = 0
			8. Are there, or have there been any initiatives from public authorities to examine the development and impact of the collaborative economy (e.g. government commission, stakeholder consultation, study)?	"Yes" = 1 "No" = 0

2.3.2 Business support

Business support measures are public support services aimed at increasing the community's interest in the collaborative economy, and at incentivising them to participate. Public authorities can reduce administrative burden (as seen in the public administration theme), but also facilitate access to market by supporting platforms develop through financial or non-financial support, or by promoting collaborative practices among peers through infrastructure, activities or accreditation schemes.

2.3.2.1 Main features and their indicators

The business support measures identified in this report through desk research and expert interviews can be divided into the provision of (financial or non-financial) **Support services**, and the **Facilitation of collaborative services**.

Support services designate the measures public authorities take to help collaborative platforms and entrepreneurs settle and grow. Support services can be financial (e.g. grant schemes or public funds), or educational (e.g. training activities, or technical and business advice). Most experts interviewed for this study emphasise the relevance of such measures to encourage the development of the collaborative economy, and highlight they are not widespread enough in Member States. ¹⁰²

Within this feature, the following indicators are important:

- **Financial support**. Public authorities can support collaborative economy businesses by providing grant schemes, as well as other public funding programmes. Such initiatives are often implemented at national level. They can target collaborative economy actors specifically, or a broader target group (i.e. SMEs, start-ups, innovative businesses). In the latter case, it is important to assess whether collaborative economy actors are eligible to receive funding, and the conditions under which they can apply. 103
- Non-financial support. Public authorities can also provide material help to collaborative economy platforms or providers, e.g. training activities, technical or business advice. Such support can be provided at national or local level (e.g. by cities or chambers of commerce). EU stakeholders consider this measure secondary compared to financial services to encourage the collaborative economy, but still three stakeholders believe it has a significant effect fostering collaborative economy activities.¹⁰⁴

Facilitation of collaborative services refer to the indirect measures public authorities take to encourage the development of the collaborative economy within the public administration or among citizens. Initiatives range from the promotion of collaborative economy services within public administration (i.e. through public procurement, or by encouraging the use of collaborative platforms in the public sector) to the setting up of accreditation schemes for collaborative platforms or to preferential tax treatment granted to peer providers. The experts interviewed have estimated that such measures were a good indicator of public authorities' openness towards collaborative economy business models. 105

¹⁰⁴ Interviews with Lucia Hernandez (09/06/2017), European Crowdfunding Network (21/05/2017) and Martijn Arets (13/06/017).

¹⁰² Interviews with Rosa Guidaro (21/06/2017), European Crowdfunding Network (25/05/2017), Lucia Hernandez (30/05/2017) and Martin Arets (13/06/2017)

^(30/05/2017) and Martijn Arets (13/06/2017). 103 Interview with Martijn Arets (13/06/2017).

 $^{^{105}}$ Interviews with Rosa Guidaro (21/06/2017), European Crowdfunding Network (25/05/2017) and Vera Demary (01/06/2017).

Within this feature, the following indicators are important:

- **Promotion of P2P services within public administration.** Public administration can back collaborative platforms through public procurement. For instance, the United Kingdom government recommended updating its procurement framework to include collaborative platforms as alternatives for traditional transport and accommodation services. Public authorities can also get involved in running a platform, or encourage the use of collaborative platforms by public servants. For instance, in France and the United Kingdom, public authorities can use crowdfunding platforms to finance public projects. In these cases, collaborative platforms complement the public service offer. Such involvement has an immediate positive effect on the development of the collaborative economy as it directly supports platforms' activities and encourages citizens to engage in these new kinds of business models.
- **Accreditation schemes.** Public or publicly-supported recognition of the quality of collaborative economy services. Accreditation schemes can include, for instance, quality labels. As acknowledged by the literature^{107, 108, 109} and the European Commission (2017)¹¹⁰, trust is crucial in the development of the collaborative economy. According to the experts interviewed, public authorities can play a role facilitating this trust and spreading good practices among the industry.¹¹¹
- **Preferential tax treatment**. Refers to tax allowances or specific tax rules exempting peer providers from fiscal contributions up to a certain amount received from their collaborative economy activity. The European Commission's Communication on a European Agenda for the Collaborative economy (2016) acknowledges that issues can emerge in relation to tax compliance and tax enforcement. The document also notes that only a few Member States have adapted their tax framework to collaborative economy activities. As emphasised by de Groen and Maselli (2016), specific tax rules (especially exemptions) are deemed very useful as they create financial incentives for small providers to engage in the collaborative economy. 113

2.3.2.2 Questions linked to each indicator and their scoring

This chapter presents the questions used to measure the indicators and the way the questions are scored.

Financial support. The following questions have been assigned to this indicator:

- 1. Are there dedicated, publicly-funded grant schemes for collaborative platforms?
- 2. Are there other kinds of direct or indirect public financial support to which collaborative platforms can apply?

¹⁰⁶ UK Government (2015). "Independent review of the sharing economy. Government Response". Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414111/bis-15-172-government-response-to-the-independent-review-of-the-sharing-economy.pdf

response-to-the-independent-review-of-the-sharing-economy.pdf

107 Brescia, R. (2016). Regulating the Sharing Economy: New and Old Insights into an Oversight Regime for the Peer-to-Peer Economy. Nebraska Law Review, Vol. 95, No. 1, p. 87 (2016). Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2728900

¹⁰⁸ Slee, T. (2013). Some obvious things about internet reputation systems. Available at: http://tomslee.net/2013/09/some-obviousthings-about-internet-reputation-systems.htm

¹⁰⁹ Lobel, O. (2016). The Law of the Platform. Univ. of San Diego, Legal Studies Research Paper Series, Mar. 2016, available at http://ssrn.com/abstract = 2742380.

¹¹⁰ European Commission (2017). Exploratory study of consumer issues in online peer-to-peer platform markets.

¹¹¹ Interviews with Rosa Guidaro (21/06/2017) and European Crowdfunding Network (25/05/2017).

European Commission (2016). A European agenda for the collaborative economy, COM (2016) 356 final, p. 12. 113 De Groen P., Maselli I. (2016). "The Impact of the Collaborative Economy on the Labour Market". CEPS Special Report No. 138, p. 23.

A score of 1 has been allocated if the answer is "Yes" as it indicates that national government is supportive of collaborative platforms.

Non-financial support. The following question has been assigned to this indicator:

3. Does the government provide support services (e.g. training activities, technical and business advice) for collaborative economy platforms or peer providers?

A score of 1 has been assigned if the government provides any of the listed support services.

Promotion of P2P services within public administration. The following question has been assigned to this indicator:

4. Are public servants allowed to use collaborative services in a professional capacity?

A score of 1 has been allocated if public servants can use collaborative economy services while in a professional capacity.

Accreditation schemes. The following question has been assigned to this indicator:

5. Does the government provide an accreditation scheme for the promotion of the collaborative platforms or actively support industry initiatives for self-regulatory standards (e.g. quality label)?

A score of 1 has been allocated if an accreditation scheme for collaborative platforms is provided.

Preferential tax treatment. The following question has been assigned to this indicator:

6. Has the government introduced any tax allowance or specific tax rules for peers in the collaborative economy? (please specify)

A score of 1 has been allocated if the answer is "Yes" as this indicates that collaborative providers can make use of specific tax rules.

The following table outlines the main features, the indicators representing the features (including their codes), the questions measuring the indicators, and the assessment of the questions in the business support theme.

Table 5: Features, indicators, questions and their assessment for the business support theme

Feature	Indicator	CODE		Data collection question	Assessment of results
Support services	Financial support	BS1	1.	Are there dedicated, publicly-funded grant schemes for collaborative platforms?	"Yes" = 1 "No" = 0
			2.	Are there other kinds of direct or indirect public financial support to which collaborative platforms can apply?	"Yes" = 1 "No" = 0
	Non-financial support	BS2	3.	Does the government provide support services (e.g. training activities, technical and business advice) for collaborative economy platforms or peer providers?	"Yes" = 1 "No" = 0
Facilitation of collaborative services	Promotion of P2P services within public administration	BS3	4.	Are public servants allowed to use collaborative services in a professional capacity?	"Yes" = 1 "No" = 0
	Accreditation schemes	BS4	5.	Does the government provide an accreditation scheme for the promotion of the collaborative platforms or actively support industry initiatives for self-regulatory standards (e.g. quality label)?	"Yes" = 1 "No" = 0
	Preferential tax treatment	BS5	6.	Has the government introduced any tax allowance or specific tax rules for peers in the collaborative economy? (please specify)	"Yes" = 1 "No" = 0

2.3.3 Alignment

Alignment refers to the extent to which regulation affecting collaborative economy providers and platforms is harmonised across a Member State.

2.3.3.1 Main features and its indicators

The **Degree of regulatory alignment** is the only feature linked to the alignment theme. Such a feature is particularly relevant for platforms operating in more than one Member State. For instance, the car sharing platform BlaBlaCar highlighted the difficulties and the considerable market research costs it must cover in order to expand to a new market. Lack of alignment can also affect peer providers, as they must comply with different sets of rules depending on where they provide their service.

Regulatory alignment at Member State-level is not a given. In the transport and accommodation themes especially, regulatory powers can be devolved to local or regional authorities, as explained below. This is less so the case in collaborative finance, as evidenced by an expert interviewed for this study.¹¹⁵

Within this feature, the following indicators are important:

- **Degree of regulatory alignment Transport**. Refers to the extent to which transport regulations are harmonised at national level. A European Commission study on collaborative transport (2016) emphasises that the transport market can be highly fragmented within a Member State, for instance because taxi licenses are only valid for the territory of the issuing municipalities. ¹¹⁶
- **Degree of regulatory alignment Accommodation**. Refers to the extent to which accommodation regulations are harmonised at national level. Within the accommodation theme, the devolution of housing and tourism matters to local authorities increases policy fragmentation at national level. 117

2.3.3.2 Questions linked to each feature and their scoring

This chapter presents the questions used to measure the indicators and the way the questions are scored.

Degree of regulatory alignment – Transport. The following question has been assigned to measure this indicator:

1. Do the same rules on authorisation apply for peer transport services everywhere within a Member State?

A score of 1 has been allocated if the answer is "Yes", as it indicates that the regulatory environment in the transport theme is aligned within a Member State.

Degree of regulatory alignment – Accommodation. The following questions have been assigned to measure this indicator:

2. Do some regions or cities in the country apply specific regulations for P2P accommodation service providers?

¹¹⁵ Interview with European Crowdfunding Network (25/05/2017).

¹¹⁴ Interview with BlaBlaCar (06/06/2017).

¹¹⁶ Grimaldi Studio Legale (2016). Study on passenger transport by taxi, hire car with driver and ridesharing in the EU. Final report, p. 8.

¹¹⁷ VVA, Spark Legal Network (ongoing). Study on the assessment of the regulatory aspects affecting the collaborative economy in the tourism accommodation sector.

3. Do some regions or cities apply the national regulations on accommodation service providers differently and cause different regulatory burdens?

A score of 1 has been allocated if the answer is "No", as it indicates that the regulatory environment in the accommodation theme is aligned within a Member State, and that regulatory burden associated with policy fragmentation is avoided.

The following table outlines the main features, the indicators representing the features (including their codes), the questions measuring the indicators, and the assessment of the questions in the alignment theme.

Table 6: Features, indicators, questions and their assessment for the alignment theme

Feature	Indicator	CODE	Data collection question	Assessment of results
Degree of regulatory alignment	Degree of regulatory alignment - Transport	AL1	 Do the same rules on authorisation apply for peer transport services everywhere within a Member State? 	"Yes" = 1 "No" = 0
	Degree of regulatory alignment - Accommodation	AL2	 Do some regions or cities in the country apply specific regulations for P2P accommodation service providers? Do some regions or cities apply the national regulations on accommodation service providers differently and cause different regulatory burdens? 	"Yes" = 0 "No" = 1

3 Methodology

This chapter outlines the methodology to design and calculate the indicators, as well as to collect the data feeding these indicators.

3.1 Data collection

3.1.1.1 Design

Data collection research questions have been elaborated in parallel with the identification of the key features of the business environment. Research questions have been linked to a feature to facilitate the development of indicators in a streamlined process. Data collection efforts served to validate and complement the initial list of indicators submitted in the inception report and revised in Deliverable 1.

Different inputs have been used to elaborate data collection research questions:

- EU-level literature review and interviews with EU-level experts and collaborative platforms;
- Suggestions from the European Commission, resulting in inputs from different expert Directorate Generals.

The final list of data collection research questions has been compiled in a "data collection fiche" in Excel format. 28 data collection fiches have been distributed to the country researchers to fill-in. Data collection fiches were divided into eight different sheets, as follows:

- A first "Scope" sheet aimed at providing essential information to country researchers. It comprised definitions of the collaborative economy, the six vertical and horizontal themes within the scope of the study, important concepts, and a brief explanation of what was expected from each country researcher;
- Six "Questions" sheets corresponding to each vertical and horizontal theme, outlining the list of questions with blank cells to fill-in with answers;
- An "Interview" sheet where country researchers indicated the status of their interviews with experts and collaborative platforms. 118

Within the "Questions" sheets, country researchers could see the different questions, their associated feature, indicator and business model, and a brief description of the main terms used (Table 7). Country researchers had to fill-in:

- Short answer: pre-defined answers with Yes, No, Mostly, Partially;
- Reasoning and references: explain the reasoning behind the short answer with input from laws, reports and interviews;
- Sources: the exact source(s) referenced following the Harvard Referencing Guide¹¹⁹;
- Data Collection Fiche: Country researchers had to look through national or citylevel regulations imposing the restrictions asked for in the questions.

In addition, country researchers had to conduct:

 Three interviews with policy/academic experts, mostly to validate the existent findings, or to complement them with the context in which the laws were created or operate in;

¹¹⁸ Peer-provider input was gathered in survey format.

¹¹⁹ https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/library/public/harvard.pdf

- Three interviews with platform representatives (one per vertical theme). These interviews helped to provide examples to the regulations/restrictions described, and may also serve to validate some of the findings;
- Surveys with three peer providers (ideally one per vertical theme). Peers would also provide examples or validate some of the existing findings.

Finally, the interview input column indicated which interview question linked to which associated research question.

Table 7: Data collection fiche columns

Main question	Sub-feature	Feature	Business model	Description	Level	Short answer	Reasoning and references	Sources	Interview input sources
1. Is there a definition of P2P car sharing in	Bespoke	Regulator	Car sharing	Find out	National	Yes	Article L.1231-14 of the Transport Code defines carsharing as "the	Article L.1231-14 of the Transport Code.	E-TRAN-1 / PP-TRAN-1 / PL-TRAN-1
2. Is there a definition of P2P ride sharing in	Bespoke	Regulator	Ride sharing	Find out	National	Yes	Law 2015/992 introduces a definition of ridesharing	LOI n° 2015-992 du 17 août 2015 relative à	E-TRAN-2 / PP-TRAN-2 / PL-TRAN-2
3. Does the applicable legislation allow non-	B	0		Do laws allow	Paris	No	To be allowed to operate, ride hailing operators must be register	Service public.fr, Exploitant ou conducteu	E-TRAN-3
professional drivers to provide private	Bespoke legislation	v clarity	Ride hailing	drivers who are not businesses	Lyon	No	To be allowed to operate, ride hailing operators must be register	Service public.fr, Exploitant ou conducteu	ur de voiture avec chauffeur (VTC). Available at: https://www.service-public.fr/pro
transport (VTC) services via platforms for	- regionation	,,		to provide	Lille	No	To be allowed to operate, ride hailing operators must be register	Service public.fr, Exploitant ou conducteu	ur de voiture avec chauffeur (VTC). Available at: https://www.service-public.fr/pro
4. Is P2P car sharing permitted without	Model-specific	Market			Paris	Yes	There is no need for any professional license/authorisation. This	Ministère de la Transition écologique et s	E-TRAN-4 / PP-TRAN-3
obtaining a professional	market access	access	Car sharing	carry out P2P sharina	Lyon	Yes	There is no need for any professional license/authorisation. This	i Ministère de la Transition écologique et s	olidaire, Autopartage en France. Available at: https://www.ecologique-solidaire.
license/authorisation?	requirements	nts		without any	Lille	Yes	There is no need for any professional license/authorisation. This	Ministère de la Transition écologique et s	olidaire, Autopartage en France. Available at: https://www.ecologique-solidaire.
5. Is the requirement for a professional car	Model-specific	Market		If you do need a		No	There is no need for any professional license/authorisation. This	Ministère de la Transition écologique et s	E-TRAN-4-a / PP-TRAN-3-a
sharing license dependent on the level of	market access	access	Car sharing	license/authori sation, does it	Lyon	No	There is no need for any professional license/authorisation. This	i Ministère de la Transition écologique et s	olidaire, Autopartage en France. Available at: https://www.ecologique-solidaire.
income/profit from the activity?	requirements	nts		depend on your	Lille	No	There is no need for any professional license/authorisation. This	Ministère de la Transition écologique et s	olidaire, Autopartage en France. Available at: https://www.ecologique-solidaire.
6. Is P2P ride sharing permitted without an	Model-specific	Market		This asks if you	Paris	Yes	Decision 11-21.908 of the French Court of Cassation has declared	Cour de Cassation, civile, Chambre comm	E-TRAN-5 / PP-TRAN-4
authorisation or professional license if	market access	requireme	Ride sharing	need a license only when you	Lyon	Yes	Decision 11-21.908 of the French Court of Cassation has declared	r Cour de Cassation, civile, Chambre comm	erciale, 12 March 2013, Decision 11-21.908. Available at: https://www.legifrance.g
remuneration for the activity corresponds	requirements	nts		make a profit	Lille	Yes	Decision 11-21,908 of the French Court of Cassation has declared	Cour de Cassation, civile, Chambre comm	erciale, 12 March 2013, Decision 11-21,908, Available at: https://www.legifrance.g

A **research guide** (available in Annex 5) has been elaborated to provide further guidance to the country researchers. Country researchers have also relied on various documents provided by the European Commission and the core team to facilitate their work, as well as different lists of experts and collaborative platforms to interview.

Interviews with experts, collaborative platforms and peer providers have been scheduled and conducted as follows:

- Country researchers have sent interview requests using a template email, drafted by the core team explaining the project, and an accreditation letter provided by the European Commission. When needed, reminder emails and phone-calls have been sent to stakeholders to schedule missing interviews.
- In case of acceptance, country researchers have sent the questionnaire to allow interviewees to prepare their answers beforehand. The core team had prepared distinct questionnaires for experts, collaborative platforms and peer providers, and the different themes within scope. As questionnaires strictly followed the research questions, they are not provided in annex of this report;
- Once the interview conducted, country researchers drafted minutes and integrated the answers into the data collection fiche.

Additional peer providers' input has been gathered through an **online survey** elaborated on SurveyGizmo. The goal was to maximise the chances to reach individual stakeholders who might be less aware of the European Commission's work, and less available to answer to a formal interview. The survey has been designed by the core team in an easy-to-read language and disseminated using social network groups. Answers were anonymous.

In terms of geographical scope, country researchers had to cover the regulatory environment at national and city-level, with the capital taken as most representative city. In some Member States, researchers had to cover **additional cities**:

- · Germany: Berlin, Hamburg and Munich;
- France: Paris, Lyon and Lille;
- UK: London, Manchester and Liverpool;
- Romania: Bucharest and Cluj;
- Netherlands: Amsterdam and Rotterdam.

In Belgium, data collection has covered the regions of Flanders and Wallonia, as well as Brussels city.

3.1.1.2 Process

Country researchers have been selected for their expertise in the topic and language skills. External experts have been contracted for the Member States that could not be covered by the consortium. Before starting data collection, the core team conducted separate pre-emptive Skype chats with country researchers (internally and externally).

Data collection ran during **six and a half weeks** between 19 July and 1 September 2017.

The core team advised country researchers to respect the following process:

- First go through the documentation provided by the European Commission and the core team, describing Member State regulations in the transport, accommodation, and finance theme¹²⁰;
- In the meantime, contact relevant stakeholders to request interviews. The idea
 was to conduct interviews after having looked through the relevant legislation, so
 interviews could focus on gathering missing information and clarify ambiguous
 elements.

Interim results have been requested after three weeks to monitor progress. Clarification emails have been sent at several stages of data collection to ensure the good understanding of the work to be done and adjust coordination between country researchers. Interim results have been sent to core team members responsible for Task 2 to allow them to start at an early stage, and to point out potential issues to correct for the remaining of data collection.

Final results have been submitted on 1 September 2017. The core team has compiled and reviewed all results. The quality assurance was undertaken to ensure that all cells are filled in, the methodology is aligned, the references are correctly and harmoniously written, and the reasoning makes sense. When needed, country researchers have been asked to update their data collection fiche.

3.1.1.3 Results

In the data collection phase, 129 interviews have been carried out. Of those 129 interviews 65 have been carried out with academic and policy experts, 54 with platforms' representatives and 10 with peer providers.

Of the 54 platforms involved in the study, 30 operate in the finance theme, 20 in the transport theme and 4 in the accommodation theme.

The reason for the low responses in the accommodation theme was due to its concentration (lower number of platforms) and to the timing of the data collection. Summer season is a peak period for these platforms, which made them less available to provide information.

The table below summarises the number of interviews by country.

Table 8: Total number of interviews by country

Country Nr Country Nr Country **AT** 2 FΙ 5 MT 4 BE 3 FR 8 NL 1 BG 6 HR 4 PL 11 7 CY HU 2 PT 1 CZ 5 ΙE 3 RO 3 DE 6 IT 7 SE 8 DK 6 LT 2 SI 4 5 SK EE LU 6 4 EL 3 LV 4 UK 2 ES 7

¹²⁰ Accommodation documents were provided at a later stage due to the necessity to obtain agreement from the European Commission. Country researchers were advised to focus on other sectors in the meantime, and to start scheduling interviews.

Grand Total 129

Data collection was carried out mainly in August, as a result many stakeholders were not available or reachable due to the holiday period.

Overall the data collection was very successful. Table 9 and Table 10 present the fill rates for each of the Member States for each of the 62 questions. Here, ✓ indicates that the question was answered and NA that no information was available. When the indicator value is an average of several data points, it is required that more than half of those points are present for the value to be calculated. A missing indicator value is marked with a grey colour in the indicator result presentation.

The majority of the six themes reached a 100% fill rate. Notable outliers are the accommodation and finance themes for Belgium, with 69% and 71% fill rates respectively, and the finance theme for Croatia, with a fill rate of 82%. In the case of Belgium, the accommodation questions for which answers are missing could not be verified through desk research and interviews. While specific regulation for accommodation services in the collaborative economy exist in the region of Flanders and Brussels, it does not clearly cover the questions in order to verify them and provide definitive answers. Consequently, NA was chosen as the most appropriate response. This strategy was applied to all questions that could not be clearly verified. Doing so prevented introduction of biased valuation both in a positive and negative direction.

The case of the finance theme for Croatia illustrates another general reason for missing values – lack of regulation of P2P economy and the uncertainty over the applicability of traditional regulation. Croatia currently does not have a bespoke legislation regulating P2P finance. However, operators could be subject to requirements applicable to more traditional finance providers. Because this could not be clarified through desk research and expert interviews, NA values were chosen as the most appropriate responses.

In general, however, as the tables below show, the problem of missing values was low. The fill rate in general is very high and allows for methodologically sound analysis.

Table 9 : Total fill rate for the data collection per question, for Member States Austria to Hungary¹²¹

	per MS	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU
ACC	per questio	100 %	69%	100 %	100 %	92%	100 %								
	n	,,		,,	,,		,,	,,	,,	,,	,,	,,	,,	,,	,,,
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3	96%	✓	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q4	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q5	93%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q6	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q7	96%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q8	96%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q9	96%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q10	93%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

 121 Please note that the question marked with an asterix were excluded from the final analysis. See sub-chapter 3.2.1.1 for further details.

Q11	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q12	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU
TRA N	per questio n	100 %													
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	√													
Q3	100%	√													
Q4	100%	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓	✓ ✓	✓	✓ ✓						
Q5*	100% 100%	✓	✓	√	✓	✓	√	✓	✓	√	√	√	✓	✓	✓
Q6 Q7	100%	·	·	· /	· /	· /	· /	·	· /	·	· /	·	· /	·	·
Q8	100%	✓	✓	✓	✓	✓	✓	· ·	✓	✓	✓	✓	✓	✓	✓
Q9	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q10	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q11	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q12	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q14	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q15	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU
FIN	per questio n	100 %	71%	100 %	88%	88%	100 %	82%	100 %						
Q1	100%	✓	√	√	√	√	√	√	✓	✓	√	✓	✓	√	√
Q2	100%	√													
Q3	100%	✓ ✓	✓	√ NA	✓ ✓										
Q4 Q5	96% 96%	√	↓	NA NA	√										
Q6	96%	✓	✓	✓	✓	✓	✓	· ✓	✓	✓	✓	✓	✓	NA ✓	✓
Q7	93%	✓	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓	NA	✓
Q8	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q9	89%	✓	NA	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q10*	93%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q11*	96%	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q12	96%	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	96%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q14	100%	✓	✓	✓	✓	√	√	√	√	✓	✓	✓	✓	√	✓
Q15*	93%	/	NA	V	V	V	V	✓	V	V	V	V	V	V	V
Q16	100%	√													
Q17	96% per MS	√ AT	NA BE	✓ BG	CY	√ CZ	√ DE	√ DK	√ EE	✓	ES	√ FI	✓FR	√ HR	₩
PUB-	per MS	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AD	questio n	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	√													
Q3	100%	√													
Q4	96%	√													
Q5	100%	√	✓ ✓	✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓	✓	✓ ✓
Q6 Q7	100% 96%	✓ ✓	∨	√	√	∨	√	∨	∨	∨	√	√	∨	∨	√
Q/	90%														

Q8	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU
BS- SUP	per questio n	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q4	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q5	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q6				/	,	,				,		,	,		
	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	₩
ALIG															
	per MS per questio	AT 100	BE 100	BG 100	CY 100	CZ 100	DE 100	DK 100	EE 100	EL 100	ES 100	FI 100	FR 100	HR 100	HU 100
ALIG	per MS per questio n	100 %	BE 100 %	100 %	100 %	100 %	DE 100 %	DK 100 %	100 %	100 %	100 %	100 %	FR 100 %	HR 100 %	HU 100 %

Table 10^{122} : Total fill rate for the data collection per question, for Member States Ireland to the United Kingdom

	per MS	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
ACC	per question	100%	85%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q4	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q5	93%	✓	NA	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q6	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q7	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q8	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q9	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q10	93%	✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q11	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q12	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
TRAN	per	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Q1	question 100%	√													
Q2	100%		✓	✓	✓	1	1	1	√	1	✓	✓	1	✓	✓
	1000/	1	✓ ✓	√	√	√	√	√	√	V	✓ ✓	✓ ✓	✓	✓	√
	100%	✓ ✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3	100%	✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓	✓	✓ ✓	✓ ✓	✓	✓	✓ ✓
Q3 Q4	100% 100%	✓	✓	✓ ✓ ✓	✓	✓	✓	✓ ✓ ✓	✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓	✓ ✓ ✓	✓ ✓ ✓
Q3 Q4 <i>Q5*</i>	100% 100% 100%	✓ ✓ ✓	✓ ✓ ✓	\[\lambda \] \[\lambda \] \[\lambda \]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	\[\lambda \] \[\lambda \] \[\lambda \]	\[\lambda \] \[\lambda \] \[\lambda \]	✓ ✓ ✓
Q3 Q4 <i>Q5*</i> Q6	100% 100% 100% 100%	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	\[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \]	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
Q3 Q4 <i>Q5*</i> Q6 Q7	100% 100% 100% 100% 100%	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	\[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \]	\[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \]	✓ ✓ ✓	✓ ✓ ✓	\[\lambda \]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓			\[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \] \[\lambda \]
Q3 Q4 <i>Q5*</i> Q6 Q7 Q8	100% 100% 100% 100% 100%	\[\frac{1}{2} \] \[\frac{1}{2} \]	\[\lambda \] \[\lambda \]				\(\) \(\) \(\) \(\) \(\) \(\) \(\)	\[\lambda \] \[\lambda \]			\(\) \(\) \(\) \(\) \(\) \(\) \(\)	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)			
Q3 Q4 <i>Q5*</i> Q6 Q7 Q8 Q9	100% 100% 100% 100% 100% 100%	\(\) \(\) \(\) \(\) \(\) \(\) \(\)						\(\) \(\) \(\) \(\) \(\) \(\) \(\)							
Q3 Q4 <i>Q5*</i> Q6 Q7 Q8	100% 100% 100% 100% 100%	\[\frac{1}{2} \] \[\frac{1}{2} \]	\[\lambda \] \[\lambda \]				\(\) \(\) \(\) \(\) \(\) \(\) \(\)	\[\lambda \] \[\lambda \]			\(\) \(\) \(\) \(\) \(\) \(\) \(\)	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)			

 $^{^{122}}$ Please note that the question marked with an asterix were excluded from the final analysis. See sub-chapter 3.2.1.1 for further details.

Q12	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	100%	✓	√	✓	√	√	✓	✓	√	√	√	√	✓	✓	√
Q14	100%	✓	✓	✓	· ✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q15	100%	✓	√	✓	✓	√	✓	✓	√	✓	✓	✓	√	✓	√
QIJ	per MS	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
FIN	per	100%	94%	100%	100%	100%	100%	88%	100%	100%	100%	100%	94%	100%	100%
	question	10070	3 1,70	20070	20070	10070	10070	0070	10070	10070	20070	20070	3 1,70	20070	10070
Q1	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q2	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q4	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q5	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q6	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NA	✓	✓
Q7	93%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q8	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q9	89%	✓	✓	✓	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	✓
Q10*	93%	✓	✓	V	/	~	✓	NA	✓	V	✓	✓	~	/	√
Q11*	96%	✓	✓	✓	~	✓	~	~	✓	~	✓	✓	✓	~	√
Q12	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q14	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q15*	93%	✓	NA	✓	~	~	~	✓	~	/	✓	✓	✓	~	✓
Q16	100%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q17	96%	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	per MS	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
PUB-	per	100%	100%	100%	63%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
AD Q1	question 100%	√	√	√	√	√	√	√	√	√	√	√	√	✓	√
Q2	100%	·	·	<i>'</i>	· /	·	·	<i>'</i>	·	·	·	·	·	· /	·
Q3	100%	· ✓	· ✓	√	·										
Q4	96%		-	-		✓	✓	✓	✓	✓	✓	✓	✓	✓	√
Q5	3070	✓	√	✓		✓ ✓	✓	✓ ✓	✓ ✓	✓	✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓
	100%	√	✓ ✓	✓ ✓	NA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
06	100%	✓	✓	✓	NA ✓	✓ ✓	✓	✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓
Q6 07	100%	✓	✓	✓	NA ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Q7	100% 96%	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	NA ✓ ✓ NA	✓ ✓ ✓	✓	✓ ✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	\[\lambda \] \[\lambda \] \[\lambda \]
	100% 96% 96%	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	NA ✓ NA NA	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
Q7 Q8	100% 96% 96% per MS	✓ ✓ ✓ ✓ ✓ ✓ IE	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ LT	NA ✓ ✓ NA	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ MT	✓ ✓ ✓ ✓ ✓ ✓ ✓ NL	✓ ✓ ✓ ✓ ✓ ✓ ✓ PL	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SE	✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SK	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7	100% 96% 96%	✓ ✓ ✓ ✓ IE 100%	✓ ✓ ✓ IT 100%	✓ ✓ ✓ ✓ ✓ LT 100%	NA V NA NA LV 100%	✓✓✓✓LU100%	✓✓✓✓MT100%	\frac{1}{2} \ldots \frac{1}{2} \	✓✓✓✓PL100%		✓✓✓✓RO100%	✓✓✓✓SE100%	✓ ✓ ✓ ✓ SI 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SK 100%	V V V V V V V V V V V V V V V V V V V
Q7 Q8 BS-	100% 96% 96% per MS	✓ ✓ ✓ ✓ IE 100%	✓ ✓ ✓ IT 100%	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)	NA V NA NA LV 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓✓✓✓MT100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Y Y Y Y 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ × × × × × × × × × ×	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SE 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SK 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7 Q8 BS- SUP	100% 96% 96% per MS per question	✓ ✓ ✓ ✓ IE 100%	✓ ✓ ✓ IT 100%	✓ ✓ ✓ ✓ ✓ LT 100%	NA V NA NA LV 100%	✓✓✓✓LU100%	✓✓✓✓MT100%	\frac{1}{2} \ldots \frac{1}{2} \	✓✓✓✓PL100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓✓✓✓RO100%	✓✓✓✓SE100%	✓ ✓ ✓ ✓ SI 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SK 100%	V V V V V V V V V V V V V V V V V V V
Q7 Q8 BS- SUP Q1	100% 96% 96% per MS per question 100%	✓ ✓ ✓ ✓ IE 100%	✓ ✓ ✓ IT 100%	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)	NA V NA NA LV 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓✓✓✓MT100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Y Y Y Y 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ × × × × × × × × × ×	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SE 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SK 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7 Q8 BS- SUP Q1 Q2	100% 96% 96% per MS per question 100% 100%	/ / / IE 100%	✓ ✓ ✓ IT 100%	\(\frac{1}{2} \)	NA V NA NA LV 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ UK 100%
Q7 Q8 BS- SUP Q1 Q2 Q3	100% 96% 96% per MS per question 100% 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ IT 100% ✓ ✓ ✓ ✓	\frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{}	NA V NA NA LV 100%	\(\frac{\frac{1}{2}}{2} \)	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{2}}{\sqrt{2}} \	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Y Y Y Y T 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ SI 100% ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7 Q8 BS- SUP Q1 Q2 Q3 Q4	100% 96% 96% per MS per question 100% 100% 100%	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ IE 100% ✓ ✓ ✓ ✓ ✓ ✓ ✓	/ / / IT 100% / /	\frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{} \frac{}{}	NA V NA NA LV 100%	\frac{\sqrt{\sqrt{\chi}}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\text{LU}}{\sqrt{\chi}} \frac{100\%}{\sqrt{\chi}}	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{1}}{\sqrt{2}} \) \(\frac{\sqrt{2}}{\sqrt{2}} \) \(\frac{\sqrt{2}}{\sqrt{2}} \) \(\frac{\sqrt{2}}{\sqrt{2}} \)	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Y Y Y Y 100% PT 100% Y Y Y	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\frac{\sqrt{\sq}}}}}\sqrt{\sq}}}}}}}\signtarinftite{\sintitta}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7 Q8 BS- SUP Q1 Q2 Q3 Q4 Q5	100% 96% 96% per MS per question 100% 100% 100%	V	\frac{1}{\sqrt{1}} \frac{1}{\sqr	\frac{\sqrt{\chi}}{\sqrt{\chi}} \tag{LT} 100% \frac{\sqrt{\chi}}{\sqrt{\chi}}	NA V NA NA LV 100% V V V	\(\frac{1}{2} \) \(\frac{1}{	\frac{}{}	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)	Y Y Y Y Y 100% V Y Y Y Y Y Y Y Y Y	Y Y Y Y Y 100% PT 100% Y Y Y Y Y	* * * * * * * * * * * * *	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\frac{\sqrt{\sq}\sqrt{\sq}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sq}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \sqrt{\sqrt{\sq}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}} \sqrt{\sqrt{\sqrt{\sq}	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	V V V V V V V V V V V V V V V V V V V
Q7 Q8 BS- SUP Q1 Q2 Q3 Q4 Q5	100% 96% 96% per MS per question 100% 100% 100% 100% per MS per MS per	V	/ / / IT 100% / / / /	\frac{\frac{1}{2}}{2} \frac{1}{2} \frac{1}	NA	\(\frac{1}{2} \) \(\frac{1}{	\frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}} \frac{\sqrt{\chi}}{\sqrt{\chi}}	V V V V V 100% V V V V V V V V V V V V V V V V V V	Y Y Y Y 100% Y Y Y Y Y Y Y Y Y Y Y Y Y	Y Y Y Y 100% PT 100% Y Y Y Y Y Y Y	*	\$\frac{1}{\sqrt{1}}\$\$	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	V V V V V V V V V V V V V V V V V V V
Q7 Q8 BS- SUP Q1 Q2 Q3 Q4 Q5 Q6	100% 96% 96% per MS per question 100% 100% 100% 100%	V	\frac{1}{\sqrt{1}} \frac{1}{\sqr	\frac{\fir}}}}}}}{\firac{\frac{\fir}{\firi}}}}}{\frac{\frac{\frac{\frac}	NA V NA NA LV 100% V V LV LV	\frac{\frac}}}}}}}{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\(\frac{1}{2} \) \(\frac{1}{	/ / / / PL 100% / / / / PL PL	Y Y Y Y 100% PT 100% Y Y Y PT PT	V V V V RO 100% V V V RO RO	\frac{\fir}}}}}}}{\firac{\frac{\fir}{\firi}}}}}{\frac{\frac{\frac{\frac}	\frac{\sqrt{\sq}\sqrt{\sq}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \sqrt{\sqrt{\sqrt{\sq}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \sqrt{\sqrt{\sq}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}} \sqrt{\sqrt{\sqrt{\sq}	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Q7 Q8 BS- SUP Q1 Q2 Q3 Q4 Q5 Q6	100% 96% 96% per MS per question 100% 100% 100% 100% per MS per MS per question	V	V	\frac{1}{\sqrt{100\%}} \tag{100\%}	NA V NA NA LV 100% V LV LV 100%	\(\frac{1}{2} \) \(\frac{1}{	/ / / / / 100% / / / / / / / / / / / / / / / / / /	V V V V V V V V V V V V V V V NL 100%	PL 100% PL 100%	PT 100% PT 100%	RO 100% RO 100%	SE 100% SE 100%	\(\frac{1}{2} \) \(\frac{1}{	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	V V V V V V V V V V V V V V V V V V V

3.1.1.4 Replication

The data collection process has been designed to feed into the Single Market Scoreboard every year. However, the regulatory environment affecting the collaborative economy is constantly evolving, and additional steps will be needed to ensure continuity in the accuracy and reliability of results.

To update the information collected on a yearly basis the following working steps will be needed:

- Revision and update of contact lists for experts and collaborative platforms;
- Regulatory desk research to account for potential changes in national regulations;
- Interviews to confirm results. The number of interviews could be reduced to one expert, while keeping the number of interviews with platforms/input of peer providers to one per theme (to account for potential sector differences) and reduce it further if the experts point out that no major changes occurred in some sectors.

In this project the data collection was budgeted with overall 96 days, which was broadly sufficient for the country researchers. With reducing desk research time and the number of interviews, this number could decrease to an estimated 50-65 working days.

It is also worth noting that some challenges of the first data collection process could be avoided in a renewed data collection process. These challenges and their remedial actions are summarised in the table below.

Table 11: Data collection limitations and remedial actions

Limitations	Remedial actions
Data collection had to be conducted during holiday period, limiting responses to interviews.	 The core team insisted on the necessity to immediately contact stakeholders in mid-July, to allow them to answer before/after their holidays; Some interviews have been conducted in the first week of September and integrated at a later stage.
Difficulty to phrase research questions that could capture the diversity of the 28 different regulatory frameworks affecting the collaborative economy at Member-State level.	 Research questions are the result of a 2 month-process (from the submission of the revised inception report to the start of data collection) involving the team, the European Commission, EU-level experts and collaborative platforms, to ensure their accuracy and their relevance. The "reasoning and references" column of the data collection allowed country researchers to outline potential national specificities.
Difficulty to answer to the research questions with Yes/No when national	 The "reasoning and references" allowed country researchers to

regulations can be ambiguous/not specific to the collaborative economy, and therefore interpreted differently.

- justify their answers.
- The core team has checked answers at the interim and final phases of the data collection to make sure that the answers provided correspond with the reasoning and references.

3.2 Indicator design and calculation

Based on the Terms of Reference, a composite indicator – the Collaborative Economy Index – has been developed to capture a more detailed picture of the collaborative economy while still offering the ease of interpretation. This chapter describes the elements of the Index and how it has been calculated based on the data.

3.2.1.1 Question formulating and coding

Chapter **Error! Reference source not found.** has identified the most relevant features to assess the business environment surrounding the collaborative economy. Each of these features, and respective sub-features, has been assigned data collection questions, following three criteria: ensuring unambiguous responses, unambiguous interpretation, and addressing one issue per question.

As explained in the above chapter, data has been collected on a scale (No/Partially/Mostly/Yes) for each of the questions. Following the data collection, it was agreed with the European Commission that the results should be transformed based on the justifications provided per question, to a scale of "No/Partially/Yes". Depending on the question, the answers have been assigned a score of "0/0.5/1" to allow the calculation of the Collaborative Economy Index.

For a limited number of questions in the finance theme (questions 5, 6, 7, 8) the data collected has been normalised (data points were revalued so that their average is zero and standard deviation one) and normalised to range from 0 to 1. For example, in Q5 of the finance theme, the national experts have indicated that in Finland, an authority needs to take a decision on issuing a license for P2P equity investment platforms within 365 days whereas in Austria, the relevant authority has only 90 days. Once all the values in Q5 are normalised and normalised, the scores allocated are for Austria = 0.75 and for Finland = 0.00. In line with the method used for the other indicators, the higher score of Austria indicates better performance, i.e. collaborative economy operators in Austria need less time to obtain the required authorisations than in Finland.

In Member States with larger population, data from more than one city has been collected for some of the questions. For these questions, the average score of the data collected per question has been calculated. This has ensured that in the end all questions have been valued in the range between 0 and 1. For example, if in Country X, two out of the three cities studied have answered "Yes=1" to question Y, the score of the Member State for this question is 0.67 (2/3).

All questions have been valued between 0 and 1, with higher values indicating a more supportive environment for participants in the collaborative economy. This has ensured that the data for all questions on the business and regulatory environment are easily comparable.

It is worth noting that after the data collection was conducted, some questions were excluded from the final results.

In the transport theme, the following question was excluded:

5. Is the requirement for a professional car sharing license dependent on the level of income/profit from the activity?

The decision was made to group this question with question 4: "Is P2P car sharing permitted without obtaining a professional license/authorisation?" Data collection results showed that, in the Member States where a car sharing license is required¹²³, licensing requirements were never dependent on the level of income/profit.

In the finance theme, the following questions were excluded:

- 9. What are the indirect costs to obtain all necessary licenses for P2P equity investment platforms?
- 10. What are the indirect costs to obtain all necessary licenses for P2P equity investment platforms? (There was no way to measure and varied too much depending on the member state what includes indirect costs was not sure. Also, results were not reliable because they dependent solely on the interview of several respondents)

The decision to exclude these questions was made due to the following reasons. The measurement of indirect costs turned out to be very difficult. Very few respondents were able to provide an answer. In a very few cases where answers were given, their values differed significantly between them, mostly because the concept of indirect costs had elements which varied between respondents. Consequently, due to very few and varied responses, the decision was made to exclude the questions because their results were both not representative and reliable.

15. Is there a cap in the amount peer providers can receive from collaborative platforms?

The decision to exclude this question, and consequently the indicator on investment limits, was made because in almost all member states there was no cap in the amount received by peers. In retrospect, the question should have inquired in a clear manner about a cap for the amount the peer providers can *provide* to collaborative platforms.

3.2.1.2 Index design and calculation

Based on the results and the discussions with the European Commission, it has been decided that the overall Collaborative Economy Index should be directly based on the underlying questions. Furthermore, after a careful consideration of three different calculation methods of the Collaborative Economy Index (simple average, average of the themes, and using the Rasch method – see Annex 7), it has been decided that the best way to calculate the Index is to use a simple average of all the underlying questions. This approach indicates that all questions have equal weight in the index, irrespective of the theme.

¹²³ Bulgaria, Cyprus, Czech Republic, Latvia, Luxembourg, Malta, Poland, Romania, Sweden, Slovenia.

Providing equal weight to all questions in the overall index has the advantage of transparency and equal representation of all issues addressed by the questions. The simple average of all underlying questions has been selected as the most appropriate method based on two main arguments:

- There is no universal agreement which questions have the highest effect on the development of the collaborative economy;
- Each of the questions represents an aspect which is by itself relevant (because it addresses a different sector, business model, or another aspect of the issue) and should thus be monitored.

The Collaborative Economy index is calculated in two steps. First, the score per Member State per question has been calculated. For Member States with larger population, data from more than one city has been collected and the overall score per question has been calculated by taking the average of the scores in the different cities. This ensures that each question is in the range between 0 and 1, with higher values indicating better performance. As a second step, the simple average of all questions has been calculated per Member State. Lastly, for clear representation, the score is multiplied by 100.

3.2.1.3 Performance on theme level

The business environment of the collaborative economy has been studied along three vertical and three horizontal themes. The selected method of calculation of the simple average of all questions, while providing a very good overview of the overall performance of Member States, does not distinguish between these themes.

To provide indication of the Member States' performance per theme and a less aggregated overview, it has been decided that the simple average of all questions per theme also needs to be calculated to provide a theme score. This allows a quick and easy overview of where a Member State is performing relatively well, and which are the themes for which the performance can be improved.

As with the overall index, the first step is to calculate the results per question, followed by an average of all questions in that theme. The end results are again multiplied by 100 to make visualisation of the results easier.

It should be noted that the overall index results do not consider the theme scores but only the average score of all questions. This means that the sum of all theme scores does not equal the overall Collaborative Economy Index. Nonetheless, this approach ensures that the overall Index score provides an effortless way to compare the performance per Member State, while the scores per theme provide insight into the sectoral performance and horizontal themes.

To provide an even more in-depth overview, the performance per indicator has been presented. The performance per indicator is calculated based on the simple average of the questions allocated to this indicator.

3.2.1.4 Visualisation of results

To visualise the results of the Collaborative Economy Index in accordance with the traffic light system used in the Single Market Scoreboard, the scores per Member States have been assigned colors following the rule that:



The boundaries of these groups can be adjusted in the future. As this is the first time the collaborative economy index has been calculated, the boundaries have been established in a discussion with the Commission service. To ensure that a comparison to the highest scoring Member State is also available, the individual Country Fiches will also provide a comparison between a country and the highest EU score in the proposed form of a radar (spider) chart.

3.2.1.5 Replication

The indicator design and calculation are appropriate for subsequent replication. Most of the indicator questions target official legislation and policies in the Member States. This ensures that the indicators are stable.

The indicator list could be extended with more questions. As the national legislation of the Member States advances and integrates the collaborative economy model, new features might become relevant. By asking the experts in the different Member States whether key features are neglected, the data collection could also gain important insights into the need to change the structure of the indicator set.

Visualisation of results could also be improved in the future versions of the Index. For instance, an arrow indicating the change in performance can be included, as in the Single Market Scoreboard.