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IMPACT ASSESSMENT REPORT

Accompanying the document

**Proposal for a Regulation of the European Parliament and of the Council
on data collection and sharing relating to short-term accommodation rental services and
amending Regulation (EU) 2018/1724**

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Contents

1. INTRODUCTION: ECONOMIC, POLITICAL AND LEGAL CONTEXT	3
2. PROBLEM DEFINITION	7
3. WHY SHOULD THE EU ACT?.....	17
4. OBJECTIVES: WHAT IS TO BE ACHIEVED?	19
5. WHAT ARE THE AVAILABLE POLICY OPTIONS?	20
6. WHAT ARE THE IMPACTS OF THE POLICY OPTIONS?.....	29
7. HOW DO THE OPTIONS COMPARE?.....	49
8. PREFERRED OPTION	52
9. HOW WILL ACTUAL IMPACTS BE MONITORED AND EVALUATED?	53
ANNEX 1: PROCEDURAL INFORMATION.....	55
ANNEX 2: STAKEHOLDER CONSULTATION	67
ANNEX 2A: RESULTS OF THE ADDITIONAL TARGETED SURVEY TO PUBLIC AUTHORITIES.....	87
ANNEX 2B: RESULTS OF THE ADDITIONAL TARGETED SURVEY TO PLATFORMS	102
ANNEX 3: WHO IS AFFECTED AND HOW?.....	124
ANNEX 4: ANALYTICAL METHODS & SME TEST	129
ANNEX 5: DESCRIPTION OF THE SECTOR	157
ANNEX 6: LIST OF EXISTING AND PLANNED INSTRUMENTS	183
ANNEX 7: EXAMPLES OF LITIGATION	197
ANNEX 8: OVERVIEW OF REGISTRATION PROCEDURES AND REQUIREMENTS ON PLATFORMS CONCERNING STR IN EU MEMBER STATES	200
ANNEX 9: LITERATURE REVIEW	206

Glossary

<i>Term or acronym</i>	<i>Meaning or definition</i>
B&B	Bed and Breakfast accommodation
B2G	Business to Government
CJEU	Court of Justice of the European Union
CoC	Code of Conduct
DAC7	7th Directive on the Administrative Cooperation
DSA	Digital Services Act
DMA	Digital Markets Act
EU	European Union
GDPR	General Data Protection Regulation (EU) 2016/679
IA	Impact Assessment
IIA	Inception Impact Assessment
TFEU	Treaty on the Functioning of the European Union
SDG	Sustainable Development Goal
STR	Short-term accommodation rental
SME	Small and medium sized enterprises including micro enterprises

1. INTRODUCTION: ECONOMIC, POLITICAL AND LEGAL CONTEXT

1.1 Economic and societal context

Short-term accommodation rentals (STRs) are accommodations used for short-stays by guests. STRs may take the form of a room in a dwelling, an entire apartment or house where very minimal complementary services (e.g. cleaning services, breakfast), if any, are provided on location.¹ STR services consist of the repeated letting (on a daily, weekly or monthly basis), for remuneration, whether on a professional or non-professional basis, of furnished accommodation.

STRs have existed for many years as an alternative to more traditional accommodation services such as hotels. The number of **STRs is however increasing significantly across the EU**, a trend, which has been confirmed during the COVID crisis². For example, the number of listings on Airbnb grew from 2 500 listings in 2007, to over 5.6 million listings in 2021.³ The growth of STRs is mainly driven by **the emergence of online platforms**⁴, which allow hosts to reach out directly to guests from all over the world and facilitate bookings by the latter. ‘Platformisation’ has greatly contributed to the diversification of the STR offer, both in terms of property rented out (room in or entire apartment or primary or secondary residences) and locations. In 2019, 512 million guest nights were booked in the EU via the main online platforms (Airbnb, Booking.com, Expedia Group and TripAdvisor)⁵, representing an increase of 15.8% compared with 2018.⁶ Together, the four online platforms referred to above represent approximately 83% of the STR segment in terms of number of guest nights booked, with Airbnb leading with an average traffic share of 55%⁷. There are also many smaller STR online platforms, many of which have developed in the EU.⁸ Several of them offer more ‘niche’ services, focusing on specific types of STR accommodation (e.g. Fairbnb⁹, promoting fair and sustainable hosting) or STRs located in specific geographical areas. Some smaller players also combine intermediation services with management services.¹⁰ It is estimated that there are a total of 710 online platforms in the EU, many of which operate cross-border.

¹ The Nomenclature of Economic Activities (NACE) codes provide a definition of STR. See Group 55.2 (available [here](#)). It excludes forms of accommodation such as hotels or camping grounds.

² The number of STR bookings during the summers of 2020 and 2021 were above 2018 levels during the same period; see [ESTAT data](#) and [ECFIN data](#).

³ [2021 Airbnb Statistics: Usage, Demographics, and Revenue Growth \(stratosjets.com\); About us - Airbnb Newsroom;](#)

⁴ C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. Platforms-based property rentals in European Cities: the policy debates* (2021): https://www.propertyresearchtrust.org/short_term_rentals.html.

⁵ See [ESTAT data](#) of June 2021. See also Annex 5.

⁶ See [ESTAT data](#) on COVID-19 effects.

⁷ Based on Eurostat data, 554 million nights were booked in 2019 via the four main platforms, while 664.1 million nights were booked in all STRs; see Duch Brown N. (coord), *The Short-Term Accommodation Rentals market in the EU, JRC Digital Economy Working Paper 2021-09*, Table 2.1.; see also Annex 5, for an indication of the traffic shares of the TOP 20 STR platforms.

⁸ EU platforms include e.g. Fairbnb, Dogwelcome, MrBnb or Vacanzeanimali, Kidandco.

⁹ See [Fairbnb](#).

¹⁰ See for instance [Arndn-Bnb](#). For a detailed mapping the STR segment, see Annex 5.

New profiles of hosts have also developed. Whilst STRs mainly started as an offer from one individual to another individual (peer-to-peer), the share of ‘professional’ hosts, letting several properties on a more commercial basis¹¹, has more than doubled between 2014 and 2020, with professional hosts accounting today for more than 45% of the offers and representing the 13% of all hosts.¹² A small minority of them have STR listings in several EU Member States: between 2014 and 2019, 2.5% of EU hosts have offered STR services in more than one Member State.¹³ It should be noted that 16.3% of the hosts that responded to the public consultation stated that they offer STR services in an EU country that is not their country of residence/place of establishment.¹⁴

STRs create opportunities for guests, hosts and the entire tourism ecosystem. Guests appreciate STRs because they increase choice and, often, provide more competitive prices, better facilities and better locations.¹⁵ For hosts and other service providers active in the tourism sector, STRs are a source of income and employment. Some public authorities also help promote STRs, e.g., as a means to attract tourism to more rural or undervalued areas (in France, for example, rural areas have developed partnerships to create 15 000 new STRs¹⁶), as a means to complement the hotel infrastructure¹⁷ and/or to pursue other objectives, such as the renovation of buildings. The development of the STR segment has also boosted the development of a multitude of auxiliary service providers, such as companies offering management, cleaning and/or reception services, some of which operate cross-border.¹⁸

However, the growth of STRs is also triggering **concerns and challenges**. STRs have deeply impacted certain areas, in particular touristic urban and coastal areas in the EU.¹⁹ Public authorities and citizens in these areas have expressed concerns, ranging from increase in nuisances by tourists, such as noise, congestion and waste, to negative impacts on price and availability of long-term housing.²⁰ Studies point at a correlation between the increasing number of STRs in certain neighbourhoods and the affordability of housing²¹ and/or the quality of life in those neighbourhoods, although findings are

¹¹ There is no EU-wide, agreed definition of ‘peer’ hosts versus ‘professional’ hosts. In general, peers tend to put on the market their own primary or secondary residences. Professional hosts are, by contrast, renting out multiple properties (assumed more than 2 listings), without using them for residential purposes. The figures here take the number of listings as the basis to differentiate between peers and professionals, see Annex 5

¹² Raising from 18.7% to 45.6%. See Annex 5, Figure 15.

¹³ See Annex 5, Table 16. These hosts have at least two properties rented out as STR in 2 different Member States.

¹⁴ See Annex 2. This probably reflects the fact that lettings often concern secondary residences.

¹⁵ [Surveys - Eurobarometer \(europa.eu\)](#): a representative sample of citizens, aged 15 and over was interviewed in each of the 27 EU Member States. Between 1 and 9 September 2021, 25700 interviews were conducted over the telephone.

¹⁶ See the Association des Maires Ruraux de France, [AIRBNB – AMRF](#)

¹⁷ Feedback received from the city of Cannes and from Croatia (public consultation).

¹⁸ See Cocola-Gant, A. et al. "Corporate hosts: The rise of professional management in the short-term rental industry." *Tourism Management Perspectives* 40 (2021): 100879. See also data available at [Inside Airbnb. Adding Data to the Debate. Management companies operating cross-border include for instance GuestReady.](#)

¹⁹ C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. op. cit.*

²⁰ [Short-term rentals in the EU - October 2021 - - Eurobarometer survey \(europa.eu\)](#).

²¹ Barron, Kyle, Edward Kung, and Davide Proserpio. "The effect of home-sharing on house prices and rents: Evidence from Airbnb." *Marketing Science* 40.1 (2021): 23-47.

mixed.²² STRs also raise concerns related to health and safety and tax compliance.²³ For representatives of hotels, STRs create allegedly unfair competition in certain areas, as they are not subject to similar requirements as hotels.²⁴ Associations (e.g. of local residents) often denounce the negative impacts of STRs on their neighbourhoods.²⁵

1.2 Political context and legal context

As a result of the abovementioned challenges, STRs are **increasingly regulated, at national, regional and/or local level**. Public authorities have taken actions to enhance the transparency of the STR segment, by imposing, for instance, registration requirements and/or by requesting online platforms to share data. In some cities, steps have been taken to limit the offer of STRs by imposing a variety of market access restrictions (e.g. zoning restriction, limit on the number of nightly stays). In some areas STRs have been subject to outright bans.²⁶ STR regulations are often being challenged in court however, often on grounds of incompatibility with EU law (notably the Services Directive and the e-Commerce Directive).²⁷

This situation has triggered increasing **calls for action at EU level**. In 2016 and 2018, the Commission offered guidance on how to design proportionate market access rules and obligations on online platforms, via its Communication on the collaborative economy²⁸ and the development of policy principles.²⁹ A number of stakeholders did not consider this sufficient, however, as exemplified by calls for more legal certainty and transparency coming from the Council³⁰ and the Parliament.³¹

Recently, the Court of Justice of the EU (CJEU) in its *Cali Apartments* decision has confirmed that under the TFEU and the Services Directive public authorities can impose market access restrictions on STRs in order to protect public interest objectives, such as combating the long-term rental housing shortage, as long as the rules adopted are proportionate. In this context, the CJEU emphasized the importance of available data and analysis for proportionate policy making.³²

However, public authorities struggle to have reliable data. A first step to obtain specific data on STRs at EU level was achieved in 2020, when the Commission signed a landmark agreement with Airbnb, Booking, Expedia Group and Tripadvisor, to publish

²² [Short-term accommodation rental in Amsterdam - Publications Office of the EU \(europa.eu\)](#).

²³ [DocsRoom - European Commission \(europa.eu\)](#).

²⁴ Feedback received from associations of hotels such as HOTREC during the consultation process.

²⁵ See feedback collected during 2021 workshops with [Valencia](#) and [Lisbon](#). See also [Parisvsbnb - Search \(bing.com\)](#)

²⁶ Total bans have been introduced (and sometimes reversed by the courts) in Nice, Amsterdam, Balearic Islands or Barcelona.

²⁷ More information in Annex 2. For examples of litigation, see Annex 7.

²⁸ [2016 Communication](#) 'A European agenda for collaborative economy' (COM/2016/0356 final).

²⁹ [DocsRoom - European Commission \(europa.eu\)](#).

³⁰ Council Conclusions on 'The competitiveness of the tourism sector as a driver for sustainable growth, jobs and social cohesion in the EU for the next decade' (adopted on 27/05/2019).

³¹ European Parliament Report 'on access to decent and affordable housing for all ([2019/2187\(INI\)](#))'.

³² Judgment of 22 September 2020, C-724/18, *Cali Apartments SCI and HX v Procureur général près la cour d'appel de Paris and Ville de Paris*, para. 88.

data on STRs offered via these online platforms across the EU.³³ These online platforms now provide regular statistical/aggregated data on the number of nights booked and the number of guests, per municipality in the EU. The Digital Services Act³⁴ and the taxation transparency requirements under DAC7³⁵ will also help to bring more transparency for public authorities on STRs, without however fully addressing the specific problems and drivers of this initiative.³⁶

In its SME strategy for a sustainable and digital Europe³⁷, the Commission announced that it would look into developing a framework for STRs. In its IIA published in September 2020, the Commission identified problems related to a lack of transparency and data sharing, and problems related to burdensome market access restrictions for hosts. Stakeholder consultations following the IIA clarified a need for EU action to bring more transparency and clearer rules on data access and sharing, whilst pointing at the local dimension of market access requirements for hosts.³⁸ In the context of the Transition Pathway for Tourism³⁹ and the Urban Agenda⁴⁰, stakeholders also called for the adoption of an EU framework bringing more transparency to the STR segment.

It has therefore been decided to **focus, as a matter of priority, on problems relating to transparency via a dedicated initiative**. As will be explained, it is expected that the initiative will help reduce unjustified market access restrictions for hosts as well. The Commission will continue to monitor market access restrictions and might take steps (including possible guidance) at a later stage.

Any action under this initiative will seek to address gaps and overcome remaining uncertainties in a targeted manner, to facilitate a balanced development of STRs. It will be in line with, and contribute to, the fulfilment of the Sustainable Development Goals ('SDG')⁴¹, in particular SDG 11 (sustainable cities and communities), by giving public authorities the tools and the data to regulate the STR sector in a proportionate and sustainable way. It will also support the proposed measure from the Conference on the Future of Europe to "invest in an economy based on tourism and culture, including the many small destinations in Europe"⁴². It will complement and build on all existing legal instruments be in line with EU competition law, international trade commitments⁴³ and the proposed European Declaration on Digital Rights and Principles.⁴⁴

³³ See https://ec.europa.eu/commission/presscorner/detail/en/ip_20_194.

³⁴ COM/2020/825 final.

³⁵ Council Directive (EU) 2021/514 of 22 March 2021 amending Directive 2011/16/EU on administrative cooperation in the field of taxation, OJ L 104, 25.3.2021, p. 1.

³⁶ See Section 2 'Problem definition' and Annex 6 (description of EU law applicable to STRs).

³⁷ COM(2020)103.

³⁸ See *infra* and Annex 2.

³⁹ [Transition pathway for tourism - Publications Office of the EU \(europa.eu\)](#)

⁴⁰ See [Final Action Plan of the Partnership on Culture/Cultural Heritage | Futurium \(europa.eu\)](#).

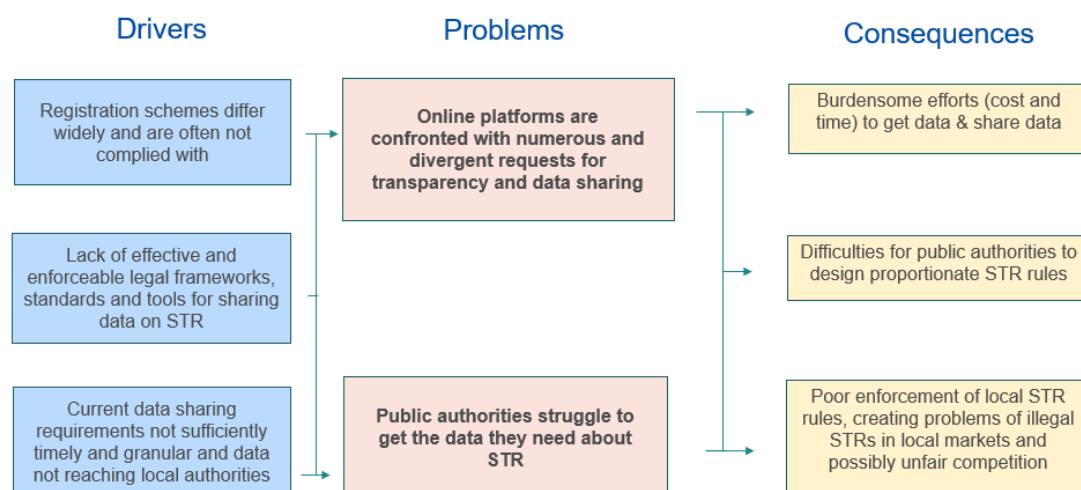
⁴¹ [THE 17 GOALS | Sustainable Development \(un.org\)](#)

⁴² Conference on the Future of Europe, Report on the Final Outcome, proposal 12, <https://futureu.europa.eu/pages/reporting>; see also COM/2022/404 final

⁴³ GATS – General Agreements on Trade in Services. Available [here](#).

⁴⁴ COM/2022/28 final.

2. PROBLEM DEFINITION



2.1 What are the problems?

This impact assessment focuses on two interrelated problems, which both concern transparency.

Public authorities that are concerned by STRs need specific and granular data about hosts and their offers to be able to monitor, regulate and control the fast-moving STR segment. Consultation results show that a large majority of public authorities across the EU need reliable data on STRs. Needs for data have been expressed by public authorities from 20 Member States⁴⁵, reflecting the importance of STR bookings in these areas⁴⁶. In response to a targeted survey, 72 out of 80 authorities said they needed reliable data on STRs. Needs are expressed by all types of public authorities, mainly cities but also regional authorities, and to a lesser extent by national authorities.

Among the authorities that require data, the type of data needed is very similar across the EU. They need **identification data** about hosts (i.e., who is renting out) and about the accommodation rented out (in particular address, type of real estate unit and accommodation capacity)⁴⁷ to understand who is renting out what and where, and verify compliance with local rules (e.g., local health and safety requirements). Public authorities wanting to monitor and control STRs also need **activity data**, that is the number of nights each accommodation is rented out for⁴⁸ and the number of guests welcomed. Activity data aim to trace and measure the activity of STR service providers, helping public authorities to monitor tourism flows, design appropriate policy responses and enforce the rules. Survey results indicate that public authorities need activity data on a very regular basis, at least once a month (29 out of 80 authorities) or once per year

⁴⁵ AT, BE, CZ, DE, DK, EE, EL, ES, FIN, FR, HR, IE, IT, LUX, MT, NL, PL, PT, SI, SK

⁴⁶ See ESTAT Map-Guests night spent at short-term accommodations

⁴⁷ See [results of workshop 1](#) and public consultation in Annex 2.

⁴⁸ According to some stakeholders, this information would include number of nights per visit, total number of nights the premise rented out and which specific nights an accommodation is rented out.

(14), with a significant minority (16) asking for such data in real time and 3 authorities requesting data on a daily basis.

Public authorities often use a variety of means to obtain data, with diverse efficiency results. The most used and also most successful tool for public authorities to obtain identification data is the use of a registration system, whereby hosts offer details about who they are and the accommodation they offer. Activity data, however, cannot be obtained via registration schemes. Public authorities tend to turn to platforms to obtain activity data. Only 16 out of 80 authorities in the targeted survey indicated that they oblige hosts to report their activity ex-post.⁴⁹ This can be explained by the fact that the data received from online platforms is considered more reliable, as hosts may not always declare properly their activity, and/or easier to manage one source of data instead of data from individual hosts). In cases where data is received from hosts, public authorities may need to cross-check it with data from online platforms.

At present, there are **two main problems relating to data generation and data sharing on STRs**. First, online platforms are increasingly confronted with numerous and divergent data sharing requests and or type of transparency requirements (such as an obligation to display of registration numbers). Second, public authorities struggle to get the data they need about STRs in an efficient manner. These problems have a series of negative consequences, as will be explained below.

Problem 1: Online platforms are confronted with numerous and divergent requests for transparency and data sharing on STRs creating market fragmentation and barriers

Online platforms, in particular those operating in more than one city or Member State and having more data, are increasingly confronted with a variety of national and local rules concerning data sharing requirements and other transparency obligations (such as obligations to display registration numbers). A growing number of public authorities are putting in place regulations to collect specific STR data from online platforms⁵⁰ and in some places, authorities have entered into voluntary agreements with platforms to obtain data. Also outside these frameworks, authorities increasingly reach out to platforms with requests for data. This is confirmed by the survey targeted for public authorities (out of 80 public authorities replying, 33 state that their national law has rules allowing them to obtain data from platforms, nine state to have voluntary agreements with platforms).

This is an EU-wide phenomenon which appears to affect the large majority of platforms: requests come from almost all over the EU⁵¹ and from all levels of public authority (national⁵², regional or local level⁵³). For example, based on the 15 replies

⁴⁹ Based on the results of the targeted survey to public authorities. See Annex 2a.

⁵⁰ See for example in France: [Ce qui va changer pour les hôtes en matière de transmission de données \(airbnb.com\)](#). See also Annex 8.

⁵¹ Based on the responses to the targeted survey, platforms declared that they received requests from all Member States except Belgium, Latvia and Portugal.

⁵² Based on the responses to the targeted survey, this is the case for Italy, Poland, Sweden.

⁵³ This is the case in the remaining Member States.

received to a targeted survey sent to online platforms⁵⁴, 12 online platforms declared that they have received at least one data request from a public authority.⁵⁵ Not only larger platforms are requested to share data, also small platforms are. In terms of numbers of data requests received, online platforms indicate that, in 2017, they have received a total of 13 data requests from public authorities. This number has increased over the years, with 43 requests received in 2018, 616 in 2019, 1 732 for 2020 and 869 so far for 2021⁵⁶.

While the core type of data requested is similar, platforms declare that the data requests otherwise diverge in terms of frequency, origin of the data request (the type of authority), additional information or evidence requested (in addition to the core data set) and procedural requirements/technical means used to request and transfer the data.⁵⁷ Data requests from public authorities for public policy purposes often have a regional or local focus, concern specific information and frequencies and thus are different by their very nature. Increasing and divergent requests, combined with regulatory complexity and a lack of legal certainty, make it difficult and costly, in particular for smaller online platforms who would like to expand their services in other Member States, to enter markets and/or scale up.⁵⁸ In their response to the targeted survey, 7 online platforms indicated they have already denied a data request from a public authority, mainly for legal and cost-related reasons.⁵⁹ Platforms are also confronted with diverging requirements to display information on their web interface, such as e.g., registration numbers, although such requirements are not always complied with (see below, under the drivers).

This market fragmentation affects small, medium and larger platforms which operate in several cities or have a cross-border activity, or have the intention to do so.⁶⁰ Indeed, this is not a problem that affects only larger operators. Evidence points to the fact that also smaller platforms active in this sector operate cross-border.⁶¹

⁵⁴ The survey was sent to 27 platforms operating in the EU, including big and SME platforms.

⁵⁵ See Annex 2b.

⁵⁶ This decrease can probably be explained by the COVID-19 crisis.

⁵⁷ See Annex 2b.

⁵⁸ This was confirmed by two EU SME online platforms during bilateral consultations.

⁵⁹ Based on the results of the targeted survey to platforms.

⁶⁰ Feedback from small and medium platforms that were consulted during the consultation process as well as in bilateral exchanges, for example with Fairbnb or Badi. These platforms have indicated that they encounter several barriers to expansion, including the legal uncertainty and the costs associated with potential data requests coming from all levels of public authorities.

⁶¹ Calculations indicate that around 40% of smaller platforms provide their intermediation services in more than one Member State. The application of the results of this sample to the full list of platforms indicates that 50% of online platforms active in this sector operate cross-border (corresponding to 97% of total traffic), another 30% have listings in several regions or localities within the same Member State, and the remaining 20% operate at a purely local level. This means that, for smaller platforms, the likelihood of receiving multiple and fragmented data sharing requests from public authorities is very high. This is confirmed by the results of the platform survey, where 80% of total respondents and 75% of smaller platforms indicate having received data requests from a public authority. See Annex 5 for a more detailed analysis.

In addition, fragmentation also limits the capacity of local platforms to expand their operations to other markets.⁶² Neither network effects⁶³ nor economies of scale⁶⁴ can develop in fragmented markets, where the potential numbers of users and transactions are limited by the reduced dimension of local or national markets and by the existing barriers to market integration.

Problem 2: Public authorities struggle to get the data they need about STRs

Consultation results show that public authorities have similar needs with regards to a core set of data (identification of the host, the accommodation and the activity), while certain public authorities can require additional information or evidence based on the local needs. Public authorities report that they use different sources to obtain this data: registration schemes for hosts, data from platforms, reporting from hosts, or independent data sources.

This consultation also indicates that public authorities that need data have difficulties in obtaining them, and often end up with insufficient, incomplete or inaccurate data on STR⁶⁵. This is not the case for other forms of accommodation such as hotels⁶⁶. Out of 80 replies from public authorities to the targeted consultation, 77 declared they have difficulties in getting data.⁶⁷ Problems occur at all levels of government, national, regional and local, and problems relate to both identification and activity data. These findings are also corroborated by a study carried out in 12 large touristic cities (from 12 Member States).⁶⁸ Whilst the situation may vary across and even within Member States, public authorities report similar difficulties across the EU, including delays, oppositions or rejections of their data requests.⁶⁹ In spite of national, regional or local initiatives to obtain data, public authorities are often confronted with several data gaps. Public authorities put two main reasons forward to explain why they are not able to obtain the data they need: insufficient level of cooperation of online platforms, and the difficulties in enforcing registration schemes, in particular without the cooperation of online platforms. These causes are further explained below.

⁶² The assumption is that a relevant proportion of platforms not operating cross-border would want to expand their operations to other Member States.

⁶³ Network effects imply that the efficiency and user benefits of platforms increase with their size. Network effects emerge when the benefits a user receives from a particular service directly grow as the number of other users increases. For more in-depth analysis, see Néstor Duch-Brown, “The Competitive Landscape of Online Platforms”, JRC Digital Economy Working Paper 2017-04, available at https://joint-research-centre.ec.europa.eu/publications/competitive-landscape-online-platforms_en.

⁶⁴ Most online platforms are characterised by a cost structure that has a relatively high proportion of fixed costs and relatively low variable costs. For instance, the costs of developing, establishing, and maintaining the algorithms and databases needed to operate are, to a certain extent, independent of the volume of transactions.

⁶⁵ See results of Workshop 1. More details in Annex 2.

⁶⁶ Hotels report monthly to authorities and this requirement is normally based on national law. Hotels also report their activities to national statistics bodies, which report to EUROSTAT (Regulation 692/2011).

⁶⁷ See results of the targeted survey to public authorities, Annex 2a.

⁶⁸ C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. op. cit.*

⁶⁹ Examples include authorities from DE, BE, FR, AT, NL (11 distinct Member States out of 19: 62%). 93% of public authorities (77 out of 80) say that their data requests have been rejected/opposed/delayed by platforms.

2.2 What are the drivers?

Several root causes lead to the two main problems identified.

Driver 1: Registration schemes differ widely and are often not complied with

As mentioned above, registration schemes have proven to be an effective way for public authorities to obtain identification data. Registration numbers, granted per accommodation, are a key tool to enforce registration schemes.⁷⁰ However, there are a few challenges connected to registration schemes.

First, there is a **significant level of divergence of registration schemes** across (and sometimes within) Member States. An increasing number of national or local authorities have put in place registration schemes. Registration schemes now exist in 22 Member States and at various levels (national, regional and/or locally) and other Member States are considering introducing them too. Some Member States have registration schemes at local level (e.g. the Netherlands, with currently nine local registration schemes⁷¹, France with over 50 local registration schemes⁷²), or both at regional and local levels (e.g., Spain has regional registration schemes in place in 19 regions and at least 6 local registration schemes⁷³). Registration requirements differ however significantly both in terms of procedural and substantive requirements. Some authorities impose particularly burdensome requirements (e.g., requirements to submit a variety of documents) or procedures⁷⁴. This, in turn, can have a chilling effect on the number of hosts, and hence on the business opportunities for online platforms.⁷⁵

In addition, public authorities also impose **diverging requirements on platforms to co-operate in the enforcement of registration schemes** (e.g., diverging requirements relating to the control on and/or display of registration numbers). This is particularly burdensome for online platforms.

Second, according to public authorities who answered the public consultation, **hosts do not systematically register**, even where an obligatory registration scheme is in place. This may be because they are not aware of the obligation to register, or, if they are, they chose not to comply and are not technically prevented from offering their accommodation on online platforms without registering (or in other words, online platforms allow hosts without a registration number to publish their accommodation on the platform). Research indicated that 87% of Berlin listings on the AirBnB platform did not include a registration number⁷⁶, and it appears that this trend is widespread across the EU⁷⁷. Non-compliance with registration requirements is not only a problem for public authorities, but may negatively affect platforms as well.

⁷⁰Oxford Research, “Study on national regulatory approaches to short-term accommodation...”, op cit.

⁷¹[Overzicht registratieverplichting | Toeristische verhuur | Woningmarktbeleid](#)

⁷²[Hébergement responsable en France - Centre d'aide Airbnb](#)

⁷³ Islands of Mallorca, Menorca, Ibiza, Formentera, Madrid, Valencia.

⁷⁴ Oxford Research. “Study on national regulatory approaches to short-term accommodation...” op cit.

⁷⁵ Oxford Research. “Study on national regulatory approaches to short-term accommodation...” op cit.

⁷⁶ RBB and information provided by insideairbnb.com, see [Der Tagesspiegel](#).

⁷⁷ For instance, in Rome, estimates show that there are currently 50 000 apartments offered for STR online, while only 11 000 units are officially registered. Source: presentation by Marco Celani, AIGAB,

In certain jurisdictions, hosts experience **challenges** in understanding and completing the registration procedures.⁷⁸ Public consultation results also show that platforms are not always aware of registration requirements, in particular where schemes are local and are changing. In addition, registration requirements are often not being taken seriously by hosts.⁷⁹ Registration avoidance most often occurs where online platforms do not cooperate with public authorities to share data or do not require (and then display) registration numbers when a host is listing its accommodation on their websites, even when they are required to do so⁸⁰. Public authorities cannot identify hosts who do not register and need therefore data from online platforms intermediating STR services. As a result, the ability of public authorities to enforce registration obligations is weakened, and they are likely to rely even more on data from online platforms to carry out checks on the legality of the offers. The cooperation of online platforms is therefore key to reduce the burden resulting from data sharing requests.⁸¹

When online platforms disregard their obligations, some public authorities have decided to initiate legal proceedings leading in some cases to fines under national law.⁸²

Driver 2: Lack of effective and enforceable legal frameworks, standards and tools for sharing data on STRs

Even where effective registration systems are in place, public authorities struggle to have complete sets of data on STRs, offering them insights on STR activity on their territories, for different reasons.

Data requests from public authorities are often rejected by online platforms, notably because of an alleged absence of a (clear and undisputed) legal basis for data sharing (48% of the replies)⁸³. Online platforms also have pointed out they sometimes do not have the requested data (14% of the answers), or have technical (e.g. mismatch between data sets and data collection systems) and practical problems. Platforms also point at the heavy resources they needed to respond to data-sharing requests (costs, manpower and time).

In fact, **diverging national data sharing requirements** create fragmentation and additional complexity for online platforms operating cross-border. Whilst the number of data requests is starkly increasing, the type, the format and the frequency of the data requested by public authorities differs across the EU.⁸⁴ This creates a lack of traceability and interoperability of the data. In particular, **a lack of standardisation and legal framework** including an agreement for a shared identifier (e.g. the registration number, the host's name and address, the cadastral number of the STR) used by both hosts and

at the [Short Stay Week](#) on 26 November 2021.

⁷⁸ Oxford Research. "Study on national regulatory approaches to short-term accommodation..." *op cit*.

⁷⁹ See Annex 2.

⁸⁰ This is for instance the case in [France](#) where Airbnb was eventually [fined](#) for not displaying registration numbers; or in the [Netherlands](#).

⁸¹ The "Study on national regulatory approaches to short-term accommodation services", *op cit*, indicates that cooperation of platforms has proven key for effective enforcement.

⁸² See the example of Paris and the 1.2 million euro fine imposed on [Booking.com](#).

⁸³ See Annex 7 on litigation.

⁸⁴ See Annex 2a and Annex 2b.

online platforms makes it difficult to have compatible data and easy to process.⁸⁵ This implies that the same data produced by different stakeholders might not be reconcilable because data is not generated and stored in the same format (or, more generally, with the same IT standards).

In addition, **electronic tools** to share data might not be in place or may be **inadequate**. For example, large amount of data might be shared by online platforms through inefficient and inappropriate tools – e.g. excel sheets. The absence of a standard for data sharing might result in corrupted data. Finally, using non-automated data sharing systems increase the probability of data corruption. This creates extra costs, possibly mistakes and translates into further delay of the availability of data about STR activity. All this leads to additional barriers for online platforms to operate in the single market.

Driver 3 - Newly introduced data sharing requirements are not sufficiently timely and granular and data is not reaching local authorities

A number of initiatives have been taken recently at the EU level to address the calls for greater transparency on STRs, and on the collaboration of online platforms in this regard. However, they still do not fully address the needs of public authorities.⁸⁶

In March 2020, **ESTAT** entered into a **voluntary data sharing agreement with the four main online platforms**.⁸⁷ The agreement allows ESTAT to obtain key data from these online platforms and publish experimental statistics on STRs. Public authorities thus have access to data about STRs offered via these online platforms. This offers an interesting but yet not fully complete picture of the sector, because the data that ESTAT receives and publishes is aggregate (non-personal) data and therefore not granular, detailed and timely enough, in particular for local authorities, for policy making and law enforcement purposes. Public authorities therefore impose further obligations on online platforms to share data with them, which can, in turn, create barriers for these platforms to operate in the single market.

Some online platforms have also started making available aggregated data⁸⁸ through dedicated portals. Public authorities consider however that this data is often incomplete or difficult to process⁸⁹ and not sufficient for policy-making purposes, in particular at local level, where much targeted measures, which may differ depending on the districts or streets concerned, are often needed to regulate STRs. Aggregated data may for example provide a number of STRs but not the type of STRs (room or apartment...) and do not provide any information on the owner (natural or legal persons), which are often essential for policy-making purposes⁹⁰.

⁸⁵ For example, data shared by platforms might refer to the transactions operated by property managers who have been entrusted by owners to manage their properties. This data cannot be consolidated with data referring to the owners of the accommodation or with data referring to accommodation. Information is therefore incomplete.

⁸⁶ See Open Public Consultation, results of [workshop 1](#).

⁸⁷ See [data sharing agreement](#) between Eurostat and four main booking platforms.

⁸⁸ [City Portal \(airbnb.com\)](#).

⁸⁹ Feedback from public authorities during bilateral meetings.

⁹⁰ See Saint-Malo, who has specific rules for natural persons and legal persons. Le Monde, 12 November 2021.

In the area of taxation, under **DAC7**, new rules create an obligation for online platforms to report the income earned by sellers pursuant to, among other activities, the rental of immovable property on a short-term basis⁹¹. A significant part of the information to be reported by online platforms is relevant for the enforcement of STR rules, too. However, this data is not immediately reusable. A legal basis would have to be introduced in each national legal system in order to allow the transfer of data from the tax authorities to the relevant public authorities enforcing STR rules. Data under DAC7 may also not be sufficiently granular, as it does not provide information on the number of nights and the number of guests hosted. In addition, the reporting frequency under DAC7 is annual, after closure of the fiscal year, and that is too late for STR purposes (as explained above).⁹²

Finally, whilst the **DSA** imposes certain obligations on platforms to respond to specific requests for information, it does not require online platforms to share data with public authorities on a systematic basis. In addition, the DSA requires online platforms to enable the display of registration numbers only for hosts that qualify as ‘traders’ (a term which does not necessarily cover all hosts active in the short-term rental sector) and this may lead to enforcement gaps in a sector, like the STR sector, where hosts are often private individuals offering assets or services on an occasional peer-to-peer basis.⁹³

2.3 What are the consequences?

As a consequence of the insufficient and inefficient gathering of STR data by public authorities, and the fact that online platforms are confronted with numerous and divergent requests for data sharing and obligations to display registration numbers, **both public authorities and online platforms are faced with burdensome efforts (in terms of costs and time) to get and share data**. Online platforms have stressed the increasing costs related to data requests.⁹⁴ Current costs for online platforms to manage each request for data submitted by a public authority concerning STRs on its geographical territory are estimated to amount on average to EUR 13 549 and take from one to three months to be processed and dispatched⁹⁵. These costs result from the diversity of the requests in terms of data requested, format, frequency and technical means used to transmit the data. Resources spent by online platforms to handle data requests in 2019 is estimated to have amounted to around EUR 30 million⁹⁶. Over recent years and due to the increasing number of data requests, the number of requests

91 For more information on the obligations included in the Directive and content of the reporting requirements under DAC7 see Annex 6.

92 See above the explanation about the frequency needs for STR data.

93 See Annex 6.2.1.

94 See Annex 2.

95 The cost estimation takes into consideration many factors: assessment of the request, data processing and preparation, follow up to ensure proper communication to public authorities and internally. It is based on the calculation of an average cost for one data request per platform, following a model of the cost function detailed in Annex 4.2. The model is based on the information provided by a limited number of platforms during the consultation process, and does therefore not reflect the different costs possibly incurred by platforms of different sizes. See Annex 4.2 for further details.

96 This estimation is made assuming that only 60% of the biggest online platforms identified received data-sharing requests by 40% of the total number of public authorities requesting data. See Annex 4, 4.1 - Table 3 Costs for Platforms data-sharing requests in the baseline scenario.

that online platforms have answered and the associated costs have also increased significantly. The fragmentation of data sharing requests and obligations to display registration numbers increases the costs for online platforms, which in turn, may affect their ability to expand cross-border and offer their services in the internal market.

Public authorities, in turn, indicate that the data they receive from online platforms often needs to be double checked, as there can be incomplete or contain incorrect values even for identification data, and that no clear improvement in quality has been observed over the years.⁹⁷ As a result, they have to continue collecting data with techniques such as web scraping, which are time consuming and costly (for example, a big EU city signed a yearly contract in 2022 of EUR 7 500 to collect this kind of data from online platforms).⁹⁸

The insufficient and inefficient gathering of STR data also creates **difficulties for public authorities to design proportionate STR rules**, even if other factors (e.g. political factors) can affect the design of such rules. For example, the city of Barcelona explained that before they started a collaboration with online platforms to obtain data on STRs, there were around 6 000 illegal listings in the city; the exact location of such listings was impossible to determine without data from online platforms; the city had to rely on citizens to flag the illegal activity; and the absence of data possibly made it difficult to design new tourism and housing policies.⁹⁹ There is a vast body of literature confirming that better regulation and sound policies must be based on evidence and data, in any sector.¹⁰⁰ The CJEU has also stressed the importance of data for proportionate policy making.¹⁰¹ There are also a number of initiatives aiming at improving policy making, e.g. urban planning processes, with data.¹⁰² Ill-designed STR rules can have a negative impact on the STR / tourism ecosystem.

Finally, these problems can contribute to **poor enforcement of local STR rules**, where such rules exist. As mentioned earlier, data is needed for enforcement purposes. For instance, where no registration exists, authorities may simply not be aware of STR offers on their territories; where registration exists but online platforms fail to display registration numbers, identifying illegal STR listings (i.e. without valid registration number) may be challenging for authorities. In addition, where online platforms do not share activity data, authorities are unable to assess whether possible restrictions (in terms of numbers of nights a property can be rented out, or how many guests can be accommodated) are being respected¹⁰³. The problems identified can therefore create problems of **illegal STRs in local markets** and possibly **problems of unfair competition** (e.g. with hotels).

⁹⁷ Based on confidential information submitted by major EU cities in June 2022.

⁹⁸ Based on confidential information submitted by a major EU city in June 2022.

⁹⁹ Based on a position paper received from the Adjutament de Barcelona in May 2022.

¹⁰⁰ See [Principles of Evidence-Based Policymaking](#), 2016; Cartwright, Nancy, and Jeremy Hardie. *Evidence-based policy: A practical guide to doing it better*. Oxford University Press, 2012.

¹⁰¹ Judgment of the Court, C-724/18, *Cali Apartments SCI and HX* para. 88.

¹⁰² See for example [Barcelona bets on 'digital twin' as future of city planning – POLITICO](#).

¹⁰³ See workshop on “Enhancing transparency on short-term accommodation rentals in the EU” of 22 October 2021, available [here](#).

2.4 How will the problem evolve?

STRs are expected to stay and some studies project a possible significant growth of STRs in the EU¹⁰⁴. Public authorities will need to monitor the development of STRs and new trends like the greater use for teleworking or increased professionalization of hosts. As STRs may develop in new locations, more authorities may need to carry out **monitoring activities and adopt rules** (either limiting their presence to combat negative societal externalities or to promote STRs in order to attract more tourists). They will have to ensure compliance with their rules and be able to adapt them swiftly once they are in place. For these reasons, it is likely that **public authorities will need more, better quality and sufficient detailed data**, on a more frequent basis in order to pursue their policy objectives in a justified and proportionate manner. The City of Porto for example indicated that they needed more data on the compliance of the accommodation with health and safety regulations.

Online platforms are likely to receive an **increasing number of diverse data requests** from local and national public authorities and could be subject to new obligations to share data.¹⁰⁵ This will increase burdens on platforms, in particular smaller platforms. However, it is likely that online platforms would not be able to address all the requests they receive, or address them swiftly, particularly should it remain unclear on what legal basis they can share data to comply with the request.

As public authorities would not get the data they request, **litigation would likely increase** as public authorities could try to turn to courts to force data sharing and to ensure that requests to delist illegal listings are acted on¹⁰⁶. In order to avoid such litigation, online platforms may agree to share data on a case-by-case basis to avoid the risks if they do not reply to public authorities' requests. Only case-by-case solutions would therefore be provided that may be detrimental especially for smaller / less organised urban areas that are not able to negotiate with big online platforms or do not have in place a legal framework to request data.

In the absence of change, **the size of the data gap for public authorities could continue to increase**. The data needs of public authorities may never be fully addressed, and more and more authorities will experience the same problems (costs, time) when they try to get the data from online platforms. This may limit their ability to enforce existing rules and deprive them of relevant information e.g., on trends or limit the possibility to compare their local situations with others. Possibly, future STRs rules will not be based on evidence. Public authorities would still be required to combine several methods to collect data, including web scraping, and several types of data sets which may not be interoperable. Inefficiencies in data collection and processing are likely to remain or increase.

¹⁰⁴ Duch-Brown, N. (Coord.), *The Short-Term Accommodation Rentals market in the EU*, op cit

¹⁰⁵ Source: confidential information shared by one online platform.

¹⁰⁶ See the example of Paris and the 1.2 million euro fine imposed on [Booking.com](https://www.booking.com).

Online platforms however could also try to **improve their cooperation with public authorities**. Airbnb for example has created a city portal open to communities, which provide certain data and tools to their partners.

3. WHY SHOULD THE EU ACT?

3.1 Legal basis

If the EU intervention takes the form of a legislative proposal, Article 114 TFEU would be the appropriate legal basis. Article 114 TFEU allows for the adoption of measures that are considered necessary for the approximation of the provisions laid down by law, regulation or administrative action in Member States that have as their object the establishment and functioning of the internal market. It is, therefore, the appropriate legal basis for a legislative intervention covering online service providers in the internal market and addressing divergences between Member States' regulations and requirements, which affect the functioning of the internal market for online platforms.

This initiative intends to ensure the proper functioning of the single market, in particular in relation to the provision of intermediating services. The majority of online platforms intermediating the offer of STR services operate across the EU and are confronted with several and diverging requirements and requests concerning information sharing on hosts and their activity and the display of information on STR services. Differences in national laws exist and are likely to increase, as national laws will continue to develop, given that some Member States have legislated or intend to legislate on the intermediation of STR services. Online platforms will also continue to be confronted with more and diverging data requests as a result of the growing need for transparency in the STR segment. Moreover, as a matter of Union law, information society services are in principle subject to the law of the Member State in which the service provider is established, and the adoption of national measures that restrict the cross-border provision of such services is subject to strict substantive and procedural conditions¹⁰⁷.

In line with this objective, this intervention aims to establish a harmonised European framework for data generation and data sharing on STR services. The approximation of rules applicable to intermediary services is necessary to avoid the diversity of rules and requirements in the single market and facilitate data-sharing with public authorities and the cross-border provision of STR services. The data sharing framework proposed is expected to have a positive effect on market access, as it will provide the authorities with the data they need, supporting Member States in discharging their obligation to enact and maintain proportionate rules. This initiative will complement other horizontal acts/proposals (e.g. the DSA) which are also based on Article 114 TFEU.¹⁰⁸ The use of Article 114 is also justified by the fact that the vast majority of data will be provided by online platforms operating cross-border (giving their share in the traffic). Covering, as a complement, online platforms with no or limited cross-border activity will contribute to giving a comprehensive set of data to public authorities and thus make the proposed EU framework fully efficient.

¹⁰⁷ See Article 3 of Directive 2000/31.

¹⁰⁸ See Annex 6.

If the intervention takes the form of recommendations, then Article 292 TFEU would be the appropriate legal basis.

3.2 Subsidiarity: necessity and added value of EU action

According to the subsidiarity principle¹⁰⁹, the EU should only act where the objectives of the proposed action cannot be achieved sufficiently by Member States alone and can, therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU.

Several Member States have established mechanisms that require hosts to register their activity; without prejudice to the compliance of such rules with EU law, in some cases Member States have introduced an obligation for online platforms to display these registration numbers on STR services intermediated by them. Several Member States are also imposing data reporting requirements on platforms. However, without the cooperation of online platforms in enabling that only listings with registration numbers are displayed, public authorities struggle with the enforcement of the obligation on hosts to register.

In addition, as explained in more details in chapter 2, divergent and burdensome frameworks concerning data sharing are affecting the ability of online platforms to comply with such requirements and therefore to operate cross-border. The fragmentation of data sharing requirements therefore currently creates barriers for online platforms to operate in the single market. In addition, even where data sharing rules are in place at local, regional or national level, online platforms do not always share the data with public authorities for legal, technical or cost-related reasons. For all of these reasons, the current interventions at national, regional and local level are often not effective, and authorities are complaining that they have difficulties in enforcing existing data generation and sharing requirements and therefore in obtaining data from platforms and hosts.

This proposal primarily aims at streamlining data requests across the EU to facilitate compliance with such data requests for online STR platforms, hence reducing costs and removing barriers to operate in the single market for these platforms. An EU legal basis for data sharing by online STR platforms with public authorities, as well as an EU framework for such data sharing to take place, will increase legal certainty, ensure that the obligation to share data is compliant with EU law (GDPR, DSA...) and consistent with other reporting requirements (e.g. DAC7). It will also ensure that the data exchanged is standardised and interoperable. The EU framework will be applicable across the EU and will in particular simplify/streamline the landscape of reporting obligations on platforms. This harmonised framework will also prevent differentiated implementation of the obligation on platforms between Member States as the conditions for data sharing are the same for all (no selective avoidance).

The combination of an EU obligation for authorities to issue registration numbers and for online platforms to enable hosts to display only listings with such registration numbers, where a registration system is in place, will ensure that such requirements on

¹⁰⁹ Article 5(3) TFEU.

hosts are easily enforceable. It will also increase the traceability and facilitate data exchanges based on this registration number. The common EU framework will hence offer national and local authorities the level of transparency they need to enforce the rules and adopt informed policy responses in line with existing EU law.

The principle of subsidiarity is also respected by giving local, regional or national authorities flexibility with regards to the implementation of registration schemes (whether to introduce them or not, and at which level), but also with regards to the information and evidence that each authority can request from hosts, to ensure that local circumstances and needs are respected and taken into account. The measures proposed also strike a balance between the interests of all stakeholders involved, by requiring concrete action from public authorities, hosts and online platforms, and offering benefits to these actors, ensuring the proportionality of the foreseen intervention.

4. OBJECTIVES: WHAT IS TO BE ACHIEVED?

4.1 Objectives tree

General Objective

Enhance transparency in the STR segment as part of efforts to promote a balanced tourism ecosystem

Specific Objectives



Reduce the burden on online platforms of STR data collection and sharing, and avoid fragmentation of these transparency requirements across the EU

Ensure that public authorities have the tools they need to gather data for policy making and enforcement of STR rules

4.2 General objective

The main policy objective of this initiative is to enhance transparency in the STR segment as part of efforts to promote a balanced tourism ecosystem. The initiative will improve and harmonise the framework for data generation and sharing on STR across the EU, remove related barriers to the provision of online services by online platforms and ensure that public authorities have sufficient and reliable data to develop sound policies in line with public policy objectives. This will ensure that online platforms do not face unjustified and disproportionate barriers to offer their services in the internal market. It will also help ensure that illegal STR services would no longer be offered, providing more certainty on enforcement of registration.

4.3 Specific objectives

The specific objectives pursued with this initiative are to:

1. Reduce the burden on online platforms of STR data collection and sharing, and avoid fragmentation of these transparency requirements across the EU;
2. Ensure that public authorities have the tools they need to gather data for policy making and enforcement of STR rules.

In order to **reduce the burden on online platforms and avoid fragmentation of these transparency requirements across the EU**, the initiative aims to put in place a common approach to data generation and data sharing, whilst clarifying the responsibilities of online platforms, hosts and public authorities.

With respect to the second objective, the intervention aims at **ensuring that authorities have access to the information that is needed** for policy making and enforcement of STR rules (e.g. to ensure a sufficient supply of affordable long-term rental housing), in accordance with the applicable national rules.

5. WHAT ARE THE AVAILABLE POLICY OPTIONS?

5.1 What is the baseline from which options are assessed?

The baseline scenario entails a ‘no policy change’ approach.

The EU would not specifically act to solve the transparency issues of the STR segment. It is expected that an increasing number of Member States and/or public authorities would continue to develop STR rules and mechanisms to obtain data from hosts and online platforms at national, regional and local level. The STR framework would therefore remain fragmented, uneven regulatory burdens would remain (and might even increase, as online platforms are confronted with increasing data sharing requests), and fragmented enforcement issues are likely to persist. Litigation is, in particular, likely to continue and increase, with STR rules being challenged in national courts and the CJEU.¹¹⁰ Public authorities and online platforms could also continue developing voluntary cooperation solutions, which take time to negotiate and only bring solutions for parties to the agreement. In their general contract conditions with hosts, certain online platforms provide that hosts are responsible for complying with local STR laws, or require hosts to acknowledge that they have complied with all the existing local rules before proceeding with the listing of the STR property.¹¹¹ These conditions may also foresee the possibility for these platforms to take appropriate action in response to a host’s breach of applicable rules that they may become aware of, in particular following a notification of an illegal listing by public authorities.

With no specific policy action, existing voluntary agreements for data sharing, as well as the recent DAC7 and DSA will bring some improvements to the data sharing and enforcement landscape in the EU without, however, comprehensively solving the problems identified (see above, section 2 ‘problem definition’). The DSA introduces due diligence requirements for online platforms to make sure that they behave more responsibly and transparently. Among these, a specific provision (applicable to online

¹¹⁰ For examples of litigation see Annex 7.

¹¹¹ Information based on feedback received by certain platforms.

platforms that constitute marketplaces) will, in particular, require online marketplaces to ensure ‘compliance by design’ through an obligation to enable the display of registration numbers (where a registration procedure is in place), but only with respect to listings offered by hosts who qualify as ‘traders’¹¹², a term which does not necessarily cover all hosts active in the short-term rental sector. In addition, the DSA will give public authorities a tool to facilitate the enforcement of orders to provide specific information about individual users, and thus to investigate in more detail individual providers of STR services that authorities suspect act in a fraudulent manner. However, its provisions do not extend to an obligation to collect and share data that applies to all hosts and their activities from platforms.¹¹³ These limitations may lead to enforcement gaps with respect to hosts’ compliance of STR rules, including compliance with registration obligations.

A common European data space for tourism is currently being developed.¹¹⁴ This data space aims to bring together various data sets on tourism for use by tourism businesses and public authorities alike (e.g., allowing them to monitor tourism trends). The creation of a tourism data space will not, however, solve the problems identified above (inter alia because it will not as such lead to generation of the data that is required by public authorities). Public authorities would still require specific STR type of data, notably specific identification and activity data regarding host offers with a certain frequency to design precise policy responses and to enforce STR rules.

Finally, CJEU jurisprudence will provide binding interpretation, the Commission’s 2016 Communication on the collaborative economy and the 2018 policy principles and good practices will continue to serve as a guidance¹¹⁵, notably to ensure that measures taken by public authorities in relation to STR are justified in light of the TFEU, the Services Directive and the e-Commerce Directive in particular. The Commission will continue monitor and might update its guidance documents.

5.2 Description of the policy options

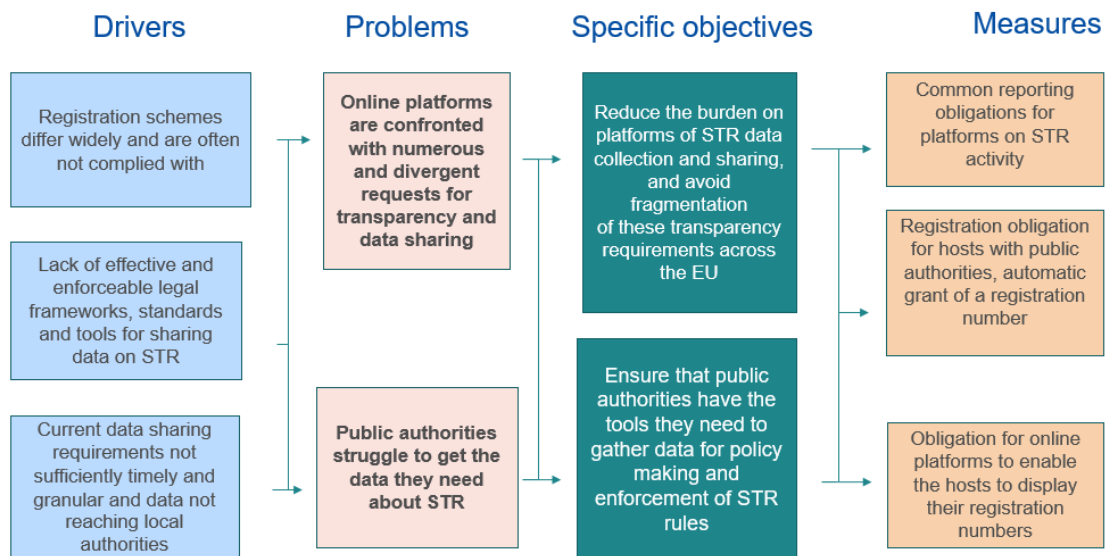
Three policy options have been identified. All aim to facilitate data generation and data sharing, by clarifying the respective duties of public authorities and online platforms and ensuring that effective tools are in place. Whilst the three options contain comparable measures, there differ considerably in terms of intensity of the intervention. The below intervention logic shows how the measures considered relate to the drivers, the problems and the specific objectives.

¹¹² As mentioned above, in section 2.2, the concept of ‘trader’ does not necessarily cover all hosts active in the short-term rental sector. Traders are defined under the DSA as any natural or legal person “*acting...for purposes relating to his or her trade, business, craft or profession*”. STR service providers (i.e., hosts) are often private individuals offering assets or services on an occasional peer-to-peer basis. A case-by-case assessment would be required to understand if in any given case such providers would qualify as traders for due diligence provisions to apply.

¹¹³ See, for more details on the DSA, Annex 6, section 6.2.1.

¹¹⁴ As announced in the European strategy for data, COM(2020) 66 final. To be possibly launched in 2023. The project is still in its inception phase.

¹¹⁵ See the [2016 Communication](#) (COM/2016/0356 final); ‘[Collaborative Short-Term Accommodation Services: Policy Principles & Good Practices](#)’.



Policy option 1 – Soft measures to promote data generation and data sharing

Under this option, the EU would issue a **Recommendation**

- Encouraging public authorities to put in place **registration schemes** for hosts. Under such schemes, hosts would have to register with public authorities to offer STR services. As part of the registration process, they would be asked to provide certain data to the relevant public authorities about themselves and the property they put out for rent. The EU could encourage Member States to ensure that registration schemes are user-friendly and online, and lead to the automatic grant of a unique registration number per accommodation. It could also recommend to put in place a digital single entry point, to facilitate registration and data sharing (see further below, under Option 2).
- **Requiring online platforms** to design and organise their online interface in a way that enables all hosts to **display the registration numbers on their websites** for each listing.¹¹⁶ Online platforms would have to require a registration number for each accommodation from hosts who offer their accommodation on the online platform. This measure would ensure that hosts register their activities with public authorities (as without registration, they would not be able to offer STR services on online platforms), which would enable public authorities to better control compliance of STRs with local rules.
- **Requiring online platforms to share pre-agreed activity data on each listing with public authorities.** Information on such data sharing would be clearly communicated to the hosts at the time of the registration. This will enable public authorities to have a detailed knowledge of the activity of each STR accommodation. Activity data is relevant for areas where a limit on the number of nightly stays is in place, but also in order to design and implement proportionate rules and ensure compliance with them.

¹¹⁶ The DSA foresees this obligation only with listings uploaded by traders, not all hosts.

Such Recommendation would be based on good practice examples, whilst taking into account applicable Union law.

The Recommendation could be complemented by an **EU Code of Conduct** between public authorities and online platforms, and national legislation aiming to facilitate data sharing in practice in accordance with the GDPR.¹¹⁷ The specific STR Code of Conduct could build on and complement other voluntary agreements to data sharing on STRs, such as the Eurostat agreement or the future Code of Conduct for data sharing in tourism.¹¹⁸ It would in particular seek to:

- Specify which type of data online platforms could share with public authorities and with what frequency;
- Include agreements to use certain technical solutions to facilitate data sharing (e.g. the use of APIs¹¹⁹ or simpler alternatives such as ‘drag and drop’ for SMEs which might not have a sufficiently developed technological infrastructure);
- Include IT specifications to ensure, to a limited extent, interoperability of the data shared between public authorities and online platforms and security safeguards.

The Code of Conduct could be initially developed between a limited group of online platforms and public authorities, giving other online platforms and public authorities the possibility to enter similar commitments voluntarily once it is adopted.

The data collected voluntarily through the STR initiative could, in an aggregated format, feed into the Tourism Data Space.

Policy option 2 – Legislative initiative containing a common approach to data generation and data sharing

Under this option, a legislative initiative would be adopted, covering the following key measures:

1. Obligation for public authorities to maintain a registration system for hosts and their accommodations if they want to obtain STR data from online STR platforms (opt-in)

Public authorities (national, regional or local) who would like to obtain data on STRs for policy making and enforcement purposes (e.g. to ensure a sufficient supply of affordable long-term rental housing) from online STR platforms would be required, as a first step, to establish or maintain a **mandatory registration scheme for hosts that announce their offers via online platforms**.¹²⁰

¹¹⁷ Note that a CoC cannot be a legal basis for government asking for data, nor for the company to sharing this data. In order to be in line with GDPR, legislation would be required for sharing personal data.

¹¹⁸ This Code of conduct foresees the sharing of data on tourism in general (not specifically on STR) and for commercial purposes mainly (rather than for policy design and enforcement).

¹¹⁹ Application Programming Interface (‘API’): It is a set of programming code that enables data transmission between one software product and another.

¹²⁰ The registration system could be established or maintained at local, regional or national level. Public authorities could decide to create one single registration scheme applicable to several localities or regions.

Hosts would be required to provide **information relating to the host/owner** (name, address, contact details) **and the accommodation** (type of accommodation, capacity, address, cadastral number). Public authorities would also be allowed to ask for additional information or evidence, such as health and safety certificates, fire safety certificates, insurance, landowner permission, etc...), on the condition that these additional requirements are necessary and proportionate to achieve a public interest objective (as required by the Services Directive and TFEU).

The registration procedure would lead to the automatic grant of a **unique registration number per accommodation**. This would ensure full traceability of who offers what STRs on their territories. Verification of the information and supporting documents provided by the host, as well as any inspections, if necessary, would be carried out by public authorities ex post.

The requirement to maintain a registration scheme would apply only to public authorities (at national, regional or local level) interested in obtaining data on STRs for policy making and enforcement purposes (e.g., to ensure a sufficient supply of affordable long-term housing) from online platforms. This may result in a situation wherein some local authorities maintain registration systems, and others not. Only the authorities that have put in place registration systems would be able to benefit from the data reporting obligations on platforms under this initiative (see below). This **‘opt in system’** aims to keep administrative burdens for authorities limited and to ensure that data is only exchanged where it effectively serves a public purpose.

To reduce administrative burdens for online platforms and hosts, and in line with the Single Digital Gateway Regulation,¹²¹ Member States would be required to ensure that the information regarding the existence of (and links to) registration schemes at local, regional or national level is accessible via a national **single digital entry point** (the single digital entry point would also facilitate data sharing, see below). Member States should also ensure that hosts with multiple listings can re-use data they have already submitted during the first registration (notably data relating to the hosts itself), in accordance with the once-only principle.¹²²

An EU Member State in the territory of which public authorities are not, at any level (national, regional or local), interested in obtaining data from online platforms would not be required to establish or maintain a registration system, nor a related single digital entry point (opt-in system, as explained above). Where registration schemes are already in place at national, regional or local level, Member States could maintain them, but would need to ensure that their existing registration schemes are in line with EU requirements. The obligation on a Member State to set up the single digital entry point is triggered by the wish of a local, regional or national authority to participate in the registration and data sharing systems as described under this policy option.

¹²¹ Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012, OJ L 295, 21.11.2018, p. 1–38.

¹²² Hosts with multiple listings in several EU countries will benefit from the once only technical system created under the Single Digital Gateway.

2. Obligation on online platforms to enable the hosts to display their registration numbers

Online platforms would be obliged to create a field for registration numbers, which is already envisaged, in case of listings published by traders, under the “compliance by design” obligation under the DSA, where registration systems are in place. This obligation would therefore complement the DSA, covering all hosts, and not only hosts that would act as traders.

In line with what the DSA currently foresees with respect to listings published by traders, online platforms would be required to make best efforts to assess, prior to the allowing of the offering of the service, that such registration information is provided. Similarly, online platforms would be required to make reasonable efforts to randomly check that the information provided by the host is reliable through the use of any freely accessible official online database or online interface made available by Member States (assuming such database would exist at national, regional or local level).¹²³

Where an online platform would obtain sufficient indications or would have reasons to believe that the information provided by the host is inaccurate, incomplete or not up to date, this would, pursuant to the DSA, trigger an obligation for online platforms to suspend the provision of their services to those hosts until they provided all the required information.

The obligation for platforms to enable all hosts to display their registration numbers would ensure that hosts effectively register their activities, which facilitates compliance by local authorities.

3. Obligation on online platforms to share activity data

Online platforms would be required to report a **closed list of specific data** on the activity of hosts to public authorities, notably data on the number of nights an accommodation is rented out, and the number of guests to which it rented out. They would be required to share data only with public authorities that have put in place a registration scheme, and the reporting would be linked to the unique registration number issued for each rental unit for each host.

This will allow public authorities to combine the activity data shared by the online platforms (i.e., registration number, number of night and number of guests) with the data provided by hosts through the registration scheme (i.e., identification of the host and the property), to obtain the complete information on STR services provided by each host. Complete information should enable authorities to order (based on applicable national or EU law) the online platforms to remove, under the rules of the DSA and in full compliance thereof, any specific illegal listing that these authorities have identified (e.g. listing with invalid registration number, or breach of any other requirement in place). The DSA rules will apply with respect to orders for removal of specific illegal listings, orders for obtaining specific information about individual users, insofar as

¹²³ In line with what the DSA currently foresees for the information provided by traders to the platforms.

those orders fulfil the conditions of the DSA. The limitations of liability of online platforms for the illegal content they store at the request of their recipients will be governed by the DSA.

Platforms would have to share data via an API (or similar tool) linked to a single digital interface made available at the national level, and linked to the single digital entry point referred to above. This interface would in practice serve as a data hub, collecting all relevant data from all relevant online platforms, and sending on these data to relevant public authorities within the national territory (with each public authority receiving data concerning its respective jurisdiction only). National authorities would therefore need to develop an IT infrastructure (or adapt any existing one already in place) to allow online platforms to share data through it.

Online platforms would be requested to report activity data at least on a weekly basis. They are expected to share data through automated means – e.g. with API – through the single digital entry point. **More lenient reporting obligations would apply to small and micro online platforms** (within the meaning of Recommendation 2003/361/EC),¹²⁴ unless these online platforms reach a certain threshold of active users (hosts) in the EU. Small and micro online platforms that do not reach such threshold are not expected to share data through automated means and can report data to public authorities every three months. This solution should ensure that authorities get data from all platforms, whilst minimising burdens on the smallest platforms with a limited impact on the market.

Member States would be responsible for the implementation of the measures foreseen under this option, and would also have to ensure that the necessary safeguards are in place to comply with the GDPR. The responsibility for the enforcement of these measures would lie in principle with the Member States and consistently with the DSA framework.

The data collected by public authorities through the STR initiative could also, in an aggregated format, feed into the Tourism Data Space.

Policy option 3 – Legislative initiative containing a common approach to data generation and data sharing, with mandatory national registration schemes for all hosts

A legislative initiative would be adopted, covering the three key measures set out above, including more lenient obligations for small and micro online platforms, but with the following difference: all Member States would maintain a **single registration system at national level for all hosts offering STR listings via online platforms**.

This option would require all Member States to adapt their current practices in terms of registration schemes. Member States where registration schemes currently do not exist, would have to introduce one, and where registration schemes have been created at local or regional level, they would need to be centralised at the national level.

¹²⁴ Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, OJ L 124, 20.5.2003, p. 36–41.

Whilst this system can be more burdensome for Member States on the short-term, it would increase efficiency for online platforms, hosts and public authorities on the long-term, and is likely to be more future proof (as, with the rise of STRs all across the EU, it is likely that overtime all Member States would want to have data on STRs). Online platforms, in particular, will benefit in terms of efficiency by setting up a single IT system applicable across all EU at the same time.

As under option 2, Member States would be responsible for the implementation of the measures foreseen under this option, and would also have to ensure that the necessary safeguards are in place to comply with the GDPR. The responsibility for the enforcement of these measures would lie in principle with the Member States and consistently with the DSA framework.

The data collected by public authorities through the STR initiative could also, in an aggregated format, feed into the Tourism Data Space.

5.3 Options discarded at an early stage

Five measures have been discarded upfront, for the reasons set out below.

1. Mandatory EU registration scheme

The EU would set up a unique registration system for all hosts across the EU. All hosts would receive a unique registration number. The EU would collect data from online platforms, linked to the registration number, through a single digital entry point set up at EU level. Local and national public authorities would be able to extract the necessary data from this database (manually or with automated tools such as APIs) as well as EU institutions and bodies¹²⁵ (aggregated data). While bringing some simplification and clarity to hosts and online platforms in the EU with regards to their obligations to register and share data, this option does not sufficiently take into account the principle of subsidiarity.

2. A legislative approach providing for a legal basis for national tax authorities sharing data they obtain under DAC7 with local authorities (G2G dimension)

The DAC7¹²⁶ will apply as from 1 January 2023. It creates an obligation for online platforms to report annually some data on STR activity (including the income earned) and for the Member State where reporting takes place, to exchange this information automatically with the competent tax authorities of the other relevant Member State(s). Online platforms must report, *inter alia*, the following data to the relevant Member State: details of the platform; identification data on the host and the accommodation¹²⁷;

¹²⁵ Any technical tool developed and managed by the EU institutions would have to comply with Regulation (EU) 2018/1725 with regard to the processing of personal data.

¹²⁶ See Council Directive (EU) 2021/514, *op cit*.

¹²⁷ More specifically: the first and last name of the host who is an individual, or its legal name if the host is an entity; the primary address; the tax identification number (TIN) of the host; the business registration number of the host that is an entity; the VAT identification number of the host, where available; the date of birth of the host who is an individual; the address of each property listing and, where issued, respective land registration number or its equivalent under the national law of the Member State where it is located, where available

the revenue received during each quarter and the number of relevant activities provided with respect to each property listing; any fees, commissions or taxes withheld or charged by the platform during each quarter; where available, the number of days each property listing was rented and the type of each property listing.

Under this measure, a legal basis would be introduced at the European level to allow the transfer of this data from the competent tax authorities of Member States to their public authorities enforcing STR rules (regional or local authorities). However, this option was discarded as the frequency of data sharing (annually) and timing (year+1) would prevent public authorities from obtaining up-to-date information on hosts that would allow them to undertake effective and timely law-enforcement action. The type of data collected is also incomplete, as it does not cover for instance the number of guests.

3. A legislative approach imposing obligations on online platforms only; no obligations on Member States

This option would foresee the obligations on online platforms to share data as presented under options 2 and 3, without however considering the obligation to set up a registration scheme or to issue a registration number. While with this option, public authorities could get some data on STRs from online platforms directly, it would not allow public authorities to cross-check the data received from online platforms with data received directly from hosts. This could lead to poor data quality and traceability. The burden on the online platforms would also be increased, as in the absence of registration schemes and registration numbers, online platforms might have to share also identification data. As this option would put all the burdens on online platforms, without creating any efficiency gains for them (i.e. harmonised data set to be shared with public authorities, automated data sharing mechanisms, information available on a single digital entry point), it has been discarded upfront.

4. Exemption for certain online platforms from data-sharing obligations

The option of a full exemption for certain small and micro online platforms from reporting obligations, based on the volume of STR activity intermediated (number of active hosts) was assessed but also discarded at an early stage. For the purpose of this assessment, it has been identified that 680 companies¹²⁸ could fall into the reporting exemption. There would be a direct positive effect for online platforms which would be able to save “costs” deriving from the data sharing obligations: the implementation of this variant will translate into around EUR 1.6 million savings per year for all EU companies falling into this reporting derogation. However, other considerations (below) need to be taken into account.

Whilst such exemption might entail benefits for smaller online platforms (because they would be able to save costs related to data sharing), excluding certain online platforms from the scope of the initiative could create a loophole in the stream of information public authorities will be able to receive. This will lower the completeness and

¹²⁸ In the calculations, it is assumed that 30 companies cover more than 60% of the biggest platforms in terms of traffic and 680 would qualify for the more lenient reporting obligations. See Annex 4 and Annex 5 for further details.

reliability of information at the disposal of public authorities to tackle positive and negative externalities linked with STR activity. Consequently, the enforceability of STR rules in place will be jeopardised. In addition, an exemption from reporting requirements could incentivise circumvention of the rules, by directing traffic towards online platforms that would be exempted from the reporting obligations. Hosts who do not want to see their activities reported partially or fully could easily resort to these platforms. This would clearly defeat the objective of the reporting requirements by hampering the ability of public authorities to monitor compliance and enforce the rules. At the same time any initial benefit for these smaller online platforms will not represent a consistent incentive prolonged in time (because as soon as these smaller online platforms will reach the minimum volume of transactions they would need to report data). It should be noted that also the DAC 7 does not entail an exemption from data sharing for smaller platforms.

5. *Proportionality assessment of market access conditions for hosts*

Under this option, the EU would have developed a dedicated proportionality assessment to ensure that any additional market access requirements, going beyond registration and reporting requirements (for instance quantitative restrictions such as night caps, or zoning restrictions), do not go beyond what is strictly justified and proportionate. This assessment would include both procedural and substantive requirements that public authorities must respect when introducing market access restrictions on hosts. Public authorities would be required to evaluate market access requirements to demonstrate they are necessary and proportionate to meet a specific public interest objective. They would also have to differentiate between types of hosts and types of STR offers (e.g., differentiate between ‘peers’ and professional hosts). A list of un-recommended market access requirements, that are not considered justified and proportionate, such as the imposition of undifferentiated bans on STRs, would be imposed. However, this option was discarded for a number of reasons. Stakeholders, and in particular public authorities, did not express support for such intervention. The *Cali apartments* judgment already clarified the requirements under the Services Directive, and notably the requirement to conduct a proportionality test based on objective facts, already apply.

6. WHAT ARE THE IMPACTS OF THE POLICY OPTIONS?

Whenever possible, economic, social and environmental impacts were assessed quantitatively. Data needed for the analysis has been obtained from multiple sources¹²⁹ and triangulation between sources was used to confirm the cost estimation. For indirect impacts on STR players, a more qualitative analysis has been conducted in order not to rely on weak estimations, which could be misleading.

Direct impacts of the initiative are assessed on three categories of stakeholders. **Online platforms** and **public authorities** are directly targeted by the initiative (as a result of new recommendations/obligations for them). **Hosts** are directly affected but in different degrees depending on the policy option analysed. We refer to ‘other players’ as the set

¹²⁹ Open Public Consultation, bilateral meetings with stakeholders, dedicated survey to Public Administrations and dedicated survey to Platforms, literature review, JRC market analysis, etc. See Annex 4 for a complete assessment of data sources and methodology in the modelling of the analysis.

of economic agents operating in the tourism ecosystem impacted by the STR segment; these are impacted mildly and indirectly.

For public authorities, the maximum cost in the estimated range was considered. It is assumed that Member States shall assess what existing IT infrastructure they can adapt to comply with recommendations or provisions set up by the initiative, being able to lower costs by re-using existing solutions.

With regards to social and environmental impacts, quantification of impacts were requested to public authorities, but the feedback provided did not allow to quantify substantially these possible impacts of the measures. These are therefore described in a more qualitative manner.

An implementation (transition) period of two years will provide public authorities and online platforms sufficient time to adapt and implement the new requirements.

6.1 POLICY OPTION 1 - SOFT MEASURES TO PROMOTE DATA GENERATION & DATA SHARING

Economic impacts:

In light of the voluntary nature of this option and the absence of information on whether Member States shall implement all or only some of the recommendations, the estimation of the economic impacts at EU level in quantitative terms depends on how many Member States are likely to implement them, the exact nature of commitments made under a Code of Conduct and the amount of participants, as well as the diversity of existing registration schemes. Some elements to assess qualitatively the impact on the different players are also presented below, in order to allow for a comparison between the options both qualitatively and quantitatively.

Impacts on online platforms:

1. Benefits

The cost for an online platform to process a single request for data submitted by a public authority amounts to EUR 13 549¹³⁰. As explained in chapter 2, the dedicated survey for online platforms has shown an exponential growth in data requests in the past years. Online platforms reported to have received more than 1700 requests for data sharing in 2020 and 800 in 2021 (the number lowered due to the impact that the COVID pandemic had on tourism flows and therefore on the need of local public authorities to check STR activity). Taking these numbers of data requests as a baseline, we can estimate a cumulative administrative cost for online platforms in the next 5 years between EUR 54 million (based on 800 requests per year) and EUR 115 million (based on 1700 requests per year) at least. This estimate is based on a conservative assumption

¹³⁰ The cost estimation takes into consideration many factors: assessment of the request, data processing and preparation, follow up to ensure proper communication to public authorities and internally. It is based on the calculation of an average cost for one data request per platform, following a model of the cost function detailed in Annex 4.2. The model is based on the information provided by a limited number of platforms during the consultation process, and does therefore not reflect the different costs possibly incurred by platforms of different sizes. See Annex 4.2 for further details.

of only 60% of the biggest platforms (18) are confronted with data requests so any requests directed to smaller platforms are not included in these estimates (see table 7 annex 4). At the same time is assumed that each online platform will receive requests only from 40% of the total 150 local public authorities identified. A leaner and more predictable way to share data will reduce the time and full time equivalents (FTEs) needed to deal with each data request. This option foresees soft tools to streamline the way data is generated and shared by online platforms. If the recommendations are put in place consistently by public authorities and online platforms, **uncoordinated requests for data would be replaced by a more streamlined approach** based on pre-defined data sets and data sharing mechanisms. This will benefit all platforms, especially SMEs.

The benefits for online platforms will however strongly vary depending on the exact principles agreed in the Code of Conduct and the number of public authorities voluntarily joining the Code of Conduct and implement the recommendations. It is therefore not possible to quantify the benefits resulting from a reduction in the number of uncoordinated requests. In addition, it should be noted that some public authorities will continue to request data via means other than those set forth in the recommendation and/or Code of Conduct. This means that online platforms could continue to be exposed to uncoordinated requests by public authorities.

2. Costs

Online platforms would bear costs to **adapt their IT infrastructure to ensure automated sharing of data with public authorities**. The one-off costs per platform that would decide to share data via an API could be estimated at EUR 30 000 with yearly maintenance costs of around EUR 36 000¹³¹. However, as these costs would depend on the characteristics of the available technical solutions (automated and less-automated ones) to facilitate data sharing and would only apply to online platforms who decide to voluntarily comply with the framework, it is not possible to properly model the costs estimations.

In Member States where registration schemes are put in place and registration numbers are issued, online platforms may also be required to display such registration numbers. For online platforms to enable the display of registration numbers, minor technical adjustments would be needed, the cost of which is expected to be negligible.

Impact on public authorities:

1. Benefits

Positive impacts would be only ensured where and to the extent public authorities and online platforms implement the soft tool set forth under this option. Benefits for public authorities would in that case include a **reduction of costs in obtaining the data they need**. Authorities would receive better quality and more complete data sets, in a much more streamlined and cost-effective manner, with less litigation.

The benefits are difficult to quantify under this option, as they would depend on the willingness of online platforms to comply with the soft tools. Better quality data will

¹³¹ See Annex 4, 4.4 - Table 5 Costs estimations (ROM) for APIs (data push and pull).

also **reduce public authorities' costs in monitoring and securing compliance with local rules**, as authorities would be able to identify and act against illegal listings in a more effective manner.

2. *Costs*

Authorities deciding to implement the soft tools would face a set of administrative costs, related to the creation or adjustment of registration schemes, and the creation of an IT infrastructure facilitating data sharing with online platforms.

The one-off cost per national authority for setting up a new IT infrastructure is estimated to be around EUR 137 000¹³² but assuming that every national authority will exploit (at least partially) existing IT infrastructure, 30% of cost savings could be made. Yearly costs for hosting and maintenance have been identified respectively to around EUR 60 000 and EUR 36 000, for a total of roughly EUR 96 000. Assuming that 16 Member States¹³³ will implement the recommendations under option 1, total costs for national authorities under this option will amount to around EUR 1.55 million for setting up the system and EUR 1.55 million for each subsequent year for hosting and maintenance.

In addition, regional or local authorities may also bear costs related to the connection of their systems with the IT infrastructure created by national authorities, which are estimated at EUR 30 000¹³⁴ with yearly maintenance costs at EUR 36 000. In the conservative assumption that around 100 cities/areas¹³⁵ in the 16 Member States mentioned above will want to implement the provisions and will adapt their existing systems gaining additional 80% savings in the above mentioned cost to connect their systems, this could entail a cumulated adjustment cost of EUR 600 000 and a recursive yearly maintenance cost of about EUR 720 000.

There may also be indirect costs associated with upskilling public authorities in relation to data analysis and business intelligence, depending on the existing level of expertise. It is, however, difficult to quantify such costs as it is impossible to know in advance which public authorities will need to develop from ex-novo or are already in possession of such skills.

Finally, it should be noted that under option 1, Member States would still have to adopt national legislation facilitating data sharing, to be compliant with the GDPR, since there

¹³² See Annex 4, Section 4.4 - Table 4 Cost estimations for registration scheme and Single digital entry point. Since the Code of Conduct might not systematically include data-sharing through APIs, the API connection is not factored in under option 1, but it is under option 2 and 3.

¹³³ For the purpose of this exercise, we assume that around 16 Member States might adopt the recommendations under option 1. This is based on the fact that currently, 22 Member States have registration schemes in place. Based on the assumption that 9 Member States will not follow the recommendation, either because they already have best practice schemes in place, or because of lack of interest, and that 3 Member States who do not have any scheme in place will decide to implement the framework, we consider that 16 Member States might adopt the recommendations for the purpose of calculations under this option.

¹³⁴ See Annex 4, 4.3 - Table 5 Costs estimations (ROM) for APIs (data push and pull).

¹³⁵ The working hypothesis is that local authorities that have already in place a system in place for monitoring STR activity – a registration scheme – will voluntarily implement the recommendations.

would be no formal legal basis created under EU law. This would reduce the (cost) effectiveness of this option.

Impacts on hosts:

1. Benefits

According to the study made by Oxford Research¹³⁶, hosts suffer from burdensome registration requirement and have, on average, to wait 15 days before their registration is complete (e.g., because of ex ante checks carried out by public authorities). Where the soft tools are implemented, new hosts entering the market in the assumed 16 Member States implementing the recommendations under this option, would benefit from more streamlined registration procedures and from a significantly reduced waiting time, translating into a total saving of about EUR 438 million in the first 5 years after implementation (based on baseline number of 2019 and growth rate estimations¹³⁷). This estimation represents the monetisation of the time hosts are expected to dedicate to this activity and it is based on the average hourly wage and the assumption that the waiting time for registration will be reduced from 15 days to between 1.4 and 1.7 day, which is in line with time currently needed to complete a registration procedure in Portugal and Greece. These two have been identified as benchmark because they are in line with the proposed soft tools. Based on the assumption that 87% of the hosts are peers¹³⁸ and 13% professional hosts, the cumulative cost savings for citizens over five years are estimated at around EUR 381 million and for professional hosts at around EUR 57 million.

2. Costs

Hosts in the 100 cities/areas¹³⁹ in the 16 Member States mentioned above will possibly be requested by competent local authorities to adapt their registration information. Using the assumption that data already used in the active systems will be re-used, it is possible to assume that any adaptation will not cost more than ~30% of a new registration for each host (the cost associated with a new registration under the characteristics required in this initiative is at around EUR 320¹⁴⁰). A rough estimation brings a total one-off administrative cost for hosts of around EUR 15.8 million.¹⁴¹ Based on the assumption that 87% of the hosts are peers and 13% professional hosts, the one off administrative costs for citizens are estimated at around EUR 13.7 million and for professional hosts at around EUR 2.1 million.

¹³⁶ Oxford Research. “Study on national regulatory approaches to short-term accommodation”, op.cit .

¹³⁷ It is assumed that 165.385 hosts will be impacted in the first year after implementation and 158.618 over the next 5 years. For details see Annex 4, Section 4.5.1 – Table 11 Savings for Hosts under option 1 and Section 4.2- Table 2 Costs for hosts’ registration in the baseline scenario.

¹³⁸ Peers are considered hosts having maximum 2 listings. See Annex 5 – Table 10 Number of listings per Airbnb hosts.

¹³⁹ The working hypothesis is that local authorities that have already in place a system in place for monitoring STR activity – a registration scheme – will voluntarily implement the provisions in the recommendations.

¹⁴⁰ For detailed calculation see Annex 4, Section 4.4 – Table 7 Cost estimation for registration for hosts.

¹⁴¹ For detailed calculations see Annex 4, Section 4.5.1 – Table 10 Costs for hosts for new/adjusted registration under option 1.

Impacts on Tourism Ecosystem and other accommodation service providers:

If the soft tools referred to above are implemented, the tourism sector as a whole is likely to benefit, in an indirect manner. Better data about STR would give authorities the tools to assess and address any problems related to unfair competition between STR providers and providers of other accommodation services, such as hotels. This is likely to have a positive economic impact on the latter.

Further, public authorities might decide to make data collected on STRs available on an aggregate basis to the various stakeholders active in the tourism sector. This is the aim of the envisaged tourism data space. Better quality data on STRs would allow a variety of actors in the tourism sector (e.g., restaurants, tourist guides, cleaning services, management companies – often operating cross-border) to monitor and anticipate trends, and to adjust their service offers to these trends.

Social impacts:

The potential impacts are presented below in a qualitative manner, as the social impact of the measures under this option will depend on the implementation of the measures by public authorities and online platforms, and also on what public authorities will do exactly with the better quality data they will receive. Expected impacts include:

- Increased trust of consumers/guests

In the areas where the recommendations foreseen in option 1 will be implemented, **guests' trust is expected to increase** thanks to the use of the registration number. In addition, public authorities would be able to better monitor and enforce health and safety requirements, thanks to the data received from hosts and online platforms.

- Less illegal listings

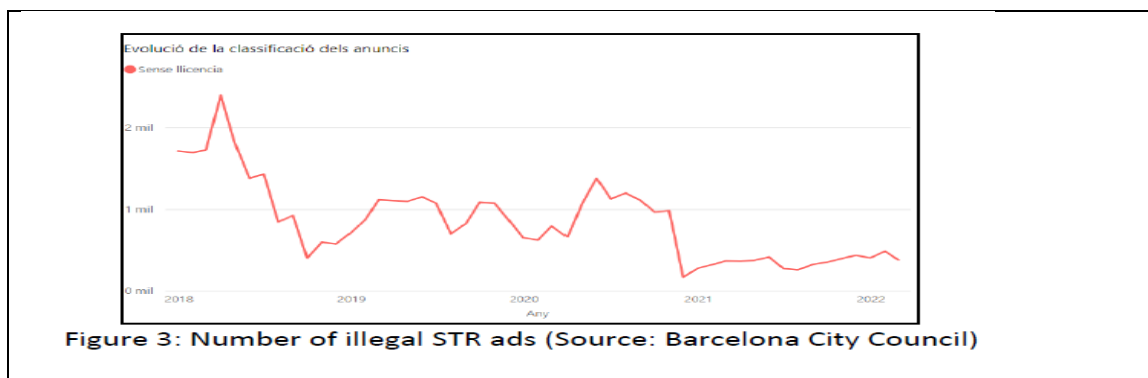
Since traceability of hosts and their activity, including with the obligation to enable all hosts to display the registration numbers, will increase substantially the ability of public authorities to enforce local rules on STR activity, it is expected that fewer unlawful STR accommodations will be offered. This would benefit the final consumers – i.e. the guests – and/or the local communities, as authorities would be better able to ensure the quality of offer to tourists and the quality of life of residents.

***The case of French cities:** In December 2021, Airbnb delisted non-registered offers in 10 touristic French cities. It is estimated that this led to a decrease of the offer ranging from 10 to 40% depending on the city¹⁴². This delisting followed the decision of the Paris Tribunal to impose a 8.4 million fine to Airbnb for publishing non-registered listings. In Paris, it is claimed that around 10 000 ads were suspended for non-registration related reasons¹⁴³.*

***The case of Barcelona:** Using data provided by a cooperation agreement with one important STR online platform, as well as other complementary sources, Barcelona has been able to reduce significantly the number of illegal listings since it started to fight it in 2018.*

¹⁴² Le Monde, '[La grande offensive des villes contre Airbnb](#)', 17 December 2021.

¹⁴³ Based on a position paper submitted by the City of Paris in June 2022.



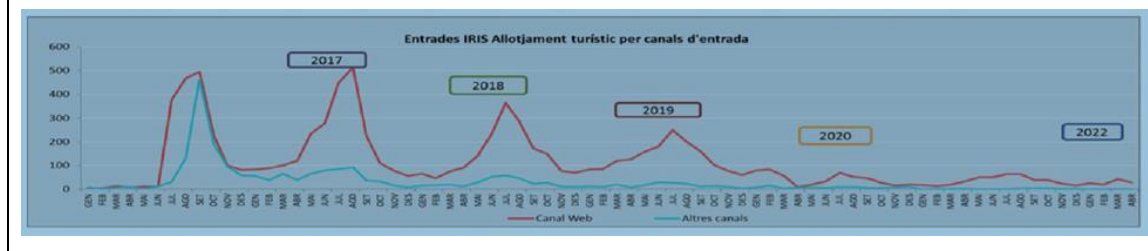
- Better management of tourism flows and increased ability of public authorities to assess and mitigate negative externalities of STRs

Thanks to better data-sharing between online platforms and public authorities, the latter would have better information and tools to predict and manage touristic flows. Completeness, reliability and extensiveness of information on the STR segment, if properly used, will help public authorities in their public policies duties. They will be able to **design evidence based policies**, producing better targeted policies to address specific externalities of the STR activity – positive or negative – to the benefit of local communities. This could, for instance, have a positive impact on the availability of affordable housing in high pressure areas. In these areas, public authorities would be able to better regulate STRs to ensure a balance between the STR offer and the availability of affordable housing. Better data could also positively affect the capacity of public authorities to deal with health and safety, as well as possible security issues related to STRs.

Benefits of a better data sharing framework for tourism hot spots detection and management of the coexistence between tourists and residents - The case of Barcelona

Barcelona¹⁴⁴ has indicated that more efficient data sharing with online platforms leads to a better detection of areas with great tourist demand, the so-called “Great Affluence Areas” (GAA) of Barcelona city. According to the city of Barcelona, identifying GAAs is necessary to better define specific tourism policies, to mitigate the potential negative effects of tourism on public spaces and neighbourhoods.

In particular, the City of Barcelona has created a team of Civic officers to improve the coexistence between visitors and residents. They provide advice about civic rules and behaviours and help visitors enjoy responsibly of the sites. Knowing the flows of tourists allows the City to better manage its Civic officers team. Data show a clear decreasing trend of reports by citizens of incidents due to touristic activity, in particular related to STR (specific entry), since the creation of the Civic officers team.



¹⁴⁴ Based on a position paper submitted by the Ajuntament de Barcelona in June 2022.

Better management of STRs to ensure availability of affordable housing -The case of Amsterdam

Several studies have looked into the impact of the growth of STRs on the availability of affordable housing. A study¹⁴⁵ has specifically looked into statistical correlations between the rise of STR listings in Amsterdam and the housing prices in the city. While the research highlights the complexity in finding any correlation in this regard, the results however suggest that in particular in the high-density city centre, the growth of STRs can lead to higher housing market prices. Better data on STRs would allow public authorities to better manage STRs in given areas, which could have a positive impact on the availability of affordable long-term housing.

- Impacts on fundamental rights

The recommended provisions under policy option 1 are expected to affect the fundamental right of the protection of personal data¹⁴⁶, since it would increase data collection and sharing. However, such processing would be necessary and proportionate to achieve the objectives as described above. With respect to the impact on the fundamental right of protection of personal data, the Code of Conduct on data-sharing between online platforms and public authorities could specify the application of the GDPR to the processing of STR data and provide for data protection safeguards to mitigate the effects of data sharing by setting standards on data, their format and the tools needed to perform such operation which are in line with the principles of GDPR (data minimisation and purpose limitation, integrity and confidentiality, etc.). If implemented by players, the agreement will streamline the operations, reducing the heterogeneity of formats data are shared at the moment. The expected result is the development of a data-sharing process that better guarantees the privacy and data protection of individuals, i.e. the hosts. If widely (voluntarily) adopted, the Code of Conduct should assist with the compliance with GDPR rules. In order to ensure the lawfulness of the processing of those data, a national legislative act to establish the legal basis for the processing would still be required.

Environmental impacts:

The potential impacts are presented below in a qualitative manner as the actual quantitative impacts of the measures under this option will (i) depend on the level of implementation of the measures by public authorities and online platforms, and (ii) on what public authorities would decide to do with the data they receive. Nevertheless, it is possible to forecast certain types of indirect positive impacts as presented below, if public authorities get more data, and if the data collected is used by public authorities to develop green policies:

- Increased ability of public authorities to assess and mitigate the ecological footprint of STR activity

¹⁴⁵ Van Haaren, Jeroen, and Susan Vermeulen, Jeroen Klijs, Ko Koens, and Jorrit Bijl. “[Short-term accommodation rental in Amsterdam. An empirical investigation of statistical correlations between short-term rental, housing prices and quality of life index.](#)” *European Commission, Luxembourg* (2021).

¹⁴⁶ Charter of Fundamental Rights of the European Union, OJ C 326, 26.10.2012, p. 391–407, Article 8.

More data on tourism flows via STRs could give public authorities the possibility to size energy consumption of such accommodation and their contribution to the ecological footprint. Public authorities would also possibly be able to better assess the needs for waste management and coordinate resources at local level accordingly, reducing the urban impact of STR activity.

The impact of better STR data on green policies and mobility – The case of Barcelona

The city of Barcelona has been able to assess the environmental externalities of tourism, including STR¹⁴⁷.

- *STR is the fourth most water-consuming per person, and it is 1.9 times the normal water consumption of Barcelona residents*
- *Energy consumption of a STR guest is 1.3 times the average energy consumption of a Barcelona residents (although less than other touristic options)*
- *STR is the second main waste generator from tourist accommodation and responsible for 9.2% of the total waste generated in the city.*

The city also assessed that better data on STRs could allow to better forecast the number of overnight stays, the volume of daily travel within the city and hence allow to better design urban policies to plan and manage tourist mobility.

- Impact on rural areas

Better data should allow public authorities to attract STRs in rural areas where STRs have a positive overall impact, for example where STRs can allow to invest in the renovation of houses, including for the greening of buildings. It should be noted that all positive impacts mentioned before would materialise only if and to the extent the soft tools under this option are complied with.

Stakeholders' views on the policy option 1¹⁴⁸: All stakeholders groups supported in some manner the measures presented under this option during the stakeholder and the public consultations. However, public authorities and online platforms – as well as local associations - notably have stressed the limits of soft approaches in this regard. In particular, they stress that soft approaches have already been put in place since the Communication of 2016 and the policy principles of 2018, but that these have not led to major improvements in terms of transparency in the STR sector.¹⁴⁹ Barcelona explained that, while the collaboration they have put in place with online platforms to obtain periodic data on STRs and flag illegal listings brought some improvements in policy making and enforcement, they still observe major quality problems with regards to the data received, which has forced the authorities to continue to collect data through web scraping.¹⁵⁰ This example therefore shows the limits of voluntary cooperation.

Stakeholders, including local associations, therefore, express a preference for a more structured framework for data sharing, taking the view that only a binding common EU framework, by preference of a legislative nature, could achieve it. This is confirmed in

¹⁴⁷ [br externalitats ambientals turisme.pdf \(barcelona.cat\)](https://br.externalitats.ambientals.turisme.pdf(barcelona.cat))

¹⁴⁸ Based on the feedback received during the public consultation, the workshops, the targeted surveys, bilateral meetings with and ad hoc submissions from the stakeholders. See Annex 2 for more information.

¹⁴⁹ See in particular the analysis in Chapter 2.

¹⁵⁰ Based on a position paper submitted by the Ajuntament de Barcelona in May 2022.

the *Memorandum of the Urban Agenda Culture and Cultural Heritage 2021*¹⁵¹ (which concludes that without mandatory collaboration of online platforms, the regulatory powers of public authorities remains ineffective).

6.2 POLICY OPTION 2 - LEGISLATIVE INITIATIVE CONTAINING A COMMON APPROACH TO DATA GENERATION AND DATA SHARING

Economic impacts:

The main difference with respect to option 1 is that **option 2 makes the system compulsory through legislation where there is a need for STR data**. Impacts are similar in nature, but different in probability of realisation and magnitude. While in option 1, the implementation of the framework (and therefore the costs) is voluntary, and solely rely on the good will of public authorities and online platforms, in option 2, the implementation of the framework is mandatory for all public authorities (local or national) who would like to collect data on STRs, and for all online platforms. Repetitions of the descriptive parts of the analysis are omitted and analysis below will rather focus on the differences.

Impacts on online platforms:

Under option 2, all online platforms in the EU would have to put in place the data sharing framework. This will result in much bigger (and much more certain) benefits for online platforms, whilst also increasing compliance costs.

1. Benefits

The main benefit for online platforms results from the **replacement of uncoordinated data requests by more streamlined and proportionate requests** (in particular with regards to the type of data to be shared, the frequency and the technical means), which can be translated into cost savings on the long term.

Contrary to option 1, online platforms will have the same data sharing obligations and obligations to allow the display of registration numbers (when data are requested) within the entire single market. Under this option, the data set that online platforms have to share with selected public authorities (those that have put in place the data framework) will be pre-defined and closed. This will therefore create economic benefits for online platforms, and in particular for smaller platforms, as they will always have to share the same data set with the same frequency with selected public authorities.

A streamlined data-sharing framework, which will be automated, will help concretely **online platforms to better plan and allocate resources due to the predictability of the data requests** as well as the predictability of the data to be shared, the tools to be used and the data standards to be respected. This will imply certainty for online platforms on the type and timing of data-requests coming from public authorities since

¹⁵¹ Martinez, Yolanda (Marimón Avogados), Memorandum for UA EU C&CH 2021 “Regulatory Enforcement Difficulties In The Short-Term Rental Accommodation Sector Stemming From The European Legal Framework For Digital Services” to be published at URBACT <https://right2housing.eu>

they will only receive data requests under the framework set up by the initiative, reducing the burdensomeness of requests.

Savings for online platforms are expected to be substantial. A streamlined data-sharing framework will enable online platforms to eliminate the costs for legal assessment and put in place an automated way to process incoming data requests from public authorities, thus making the cost to process a single request very limited and negligible (therefore reducing the cost to process single requests from EUR 13 549 to EUR 0). On this basis, it is estimated that savings for online platforms over a period of 5 years will amount to between EUR 54 million (based on 800 requests per year) and EUR 115 million (based on 1700 requests per year) and net savings to around EUR 35.8 million and EUR 96.8 million (baseline costs related to data requests from public authorities minus one-off costs for online platforms¹⁵² of around EUR 8.2 million as presented below and cumulative maintenance costs of EUR 10 million¹⁵³).

Small and micro-enterprise online platforms with average monthly active hosts equal or lower to 1 000 will benefit greatly from the possibility to use adapted reporting obligations (every three months, and manually, rather than weekly and automated for bigger online platforms). Moreover, the targeted survey for online platforms has shown that online platforms that would qualify for more lenient reporting obligations are already recipients of requests for data submitted by public authorities and this is likely to continue considering that there are national frameworks (e.g. France) that do not foresee any exemption to the collection of STR data from online platforms, including small and micro-enterprises. The data available doesn't enable to quantify the exact number of data requests received by small and micro-platforms and the related cost savings for small and micro-platforms. However, a single data request might currently cost EUR 13 549 to process, which is significantly higher than the estimated cost of the adapted reporting obligations (around EUR 600 for each reporting activity per small or micro-platform or EUR 2400 per year)¹⁵⁴.

Additional **legal certainty** will be given to online platforms by the legal basis that provisions in this policy option will provide – differently from option 1. Due to the diversity of requests, online platforms often fear that data requests from public authorities could breach privacy laws and other legal instruments at the level of the Member States' domestic law or at the level of Union law (e.g. GDPR). Without a specific basis in Union law, online platforms are therefore obliged to analyse every single data request in order to make sure that these requests do not breach any existing legal instrument, incurring in extra costs and delaying the provision of data to public authorities. The new ad hoc legal basis set by this policy option will increase legal certainty for all online platforms and therefore reduce costs for legal assessment and processing time linked to data requests, while still complying with applicable Union legislation in the field of data protection, such as the GDPR.

¹⁵² In the cost calculations, it is assumed that 30 companies (the top 60% of the biggest platforms) will need to connect to single digital entry points through APIs as some of the online platforms might qualify for the option with more lenient reporting obligations. See Annex 4, Section 4.1 & 4.2.

¹⁵³ See Annex 4, 4.5.2 - Table 15 Costs for platforms for data sharing under option 2.

¹⁵⁴ See Annex 4, 4.3 - Table 6 Costs estimations – Option with more lenient reporting obligations.

2. Costs

Under this option, online platform will mainly incur administrative costs linked with the adaptation of their IT infrastructure and the connection to the single digital entry point.

Larger companies will face the one-off cost of adapting their IT infrastructure to share data by automated means (APIs) through each single digital entry point of Member States in which they operate and in which local, regional or national authorities request data. **Small and micro-enterprise online platforms with 1 000 average monthly active hosts will benefit greatly from the possibility to use adapted reporting obligations** (every three months, and manually, rather than weekly and automated for bigger online platforms).

The cost of creating one connection between an online platform and the single digital entry point is estimated at around EUR 30 000. In the computation of the costs per online platform, the complexity linked with the number of connections to establish has been taken into consideration. An intermediary that operates in more than one country will need to connect to each national single digital entry point but once the first connection has been developed, a 20% extra cost should be considered for each additional connection. Additionally, in the breakdown of the costs, costs for maintenance have been identified with one third of FTE for each year. Considering an hourly IT specialised salary of 75 EUR, the computation for yearly maintenance is estimated at EUR around 36 000 per year¹⁵⁵.

Under these hypotheses, the one-off administrative costs for online platforms¹⁵⁶ are estimated at around EUR 8.2 million, while yearly maintenance (administrative) costs are expected to be around EUR 2 million that over a period of five years it amounts to a total of around EUR 10 million (EUR 18.2 million including one-off administrative costs).

As stated before, small and micro-enterprise online platforms with average monthly active hosts equal or lower to 1 000 will benefit greatly from the possibility to use adapted reporting obligations. Therefore, they will not face costs to adapt their IT infrastructure but they will be able to share data by uploading them every three months with an estimated cost to be around EUR 600 for each reporting activity per platform (or EUR 2 400 per online platform per year)¹⁵⁷ which is significantly lower than the estimated cost for processing one data request (EUR 13 549). Based on the estimation that 680 online platforms would qualify for the more lenient reporting requirements¹⁵⁸, there is only a yearly total reporting (administrative) cost of around EUR 1.6 million. Adjusted reporting obligation will ensure the completeness of data collection – not creating loopholes in the system – and a very limited cost impact for small and micro-enterprises, while making sure that collection and data sharing are embedded in the business process since early stages of company life. This will also help to avoid the

¹⁵⁵ See Annex 4, 4.3 - Table 5 Costs estimations (ROM) for APIs (data push and pull).

¹⁵⁶ In the cost calculations, it is assumed that 30 companies (the top 60% of the biggest platforms) will need to connect to single digital entry points through APIs as some of the online platforms might qualify for the with the more lenient reporting obligations. See Annex 4, Section 4.1 & 4.2.

¹⁵⁷ See Annex 4, 4.4 - Table 10 Costs estimations – Option with more lenient reporting obligations.

¹⁵⁸ See Annex 4, 4.1 - Table 1 Number of hosts and platforms.

creation of artificial obstacles for this type of online platforms to their business development and growth.¹⁵⁹

Online platforms would also incur the (expected negligible) cost related to the creation of the field to request the registration number to hosts and to enable its display in the relevant listing.

Impacts on public authorities:

Under option 2, all public authorities (whether local, regional or national) who want to collect data on STRs would have to implement the framework, whereas under option 1, the implementation of the data framework is purely voluntary. The number of public authorities affected is therefore expected to be higher than in option 1 (for the purpose of calculating costs and benefits, it is assumed that 25 Member States compared to 16 Member States under option 1 will implement the framework). However, the net benefits at EU level will also be higher.

1. Benefits

- Reduction of costs to obtain data

All public authorities interested in data will be able to have the full picture on the online STR activity intermediated by online platforms. This is due to the fact that all online platforms, SMEs companies included, will be required to share activity data, avoiding the creation of loopholes in the data sharing flow. Additionally, the provisions foreseen by policy option 2 will ensure **certainty on data traceability and optimisation of data-sharing processes** through the implementation of the framework in areas interested in data. The ability to link data on STR activity to the registration number will ensure the traceability, giving the ability of public authorities to consolidate properly data coming from different online platforms on the same host. On the other hand, the defined data set to be shared by online platforms as well as the standards and the tools to be used for sharing it will ensure consistency in the data shared and optimizing the process, hence reducing overall costs.

The full transparency on STR activity that will be achieved will additionally ensure “transparency level-playing field” between STR activity and activity of other accommodation services (hotels, hostels, etc.) that are already monitored by local authorities. 49 out of 80 (61%) respondents declared to the dedicated survey for public authorities that they collect data from other tourism businesses, most of the time (46%) at least bi-monthly¹⁶⁰. Public authorities will obtain another important piece of information on the accommodation services in their areas and will be able to properly address public interest objectives as management of tourism flows or affordability of housing. Acquiring the comprehensive and reliable knowledge on activity of STR

¹⁵⁹ Full exemptions for SMEs are not favoured by SMEs companies. Once example could be the clear statements of Fairbnb during a bilateral meeting. Full exemptions for SMEs will indeed create an artificial additional barrier to the company scaling up process since it will be obliged to comply with obligations (many, if we take into consideration also other exemptions on other issues) one day to the other, and not in a gradual way.

¹⁶⁰ See Annex 2a.

accommodations will give a complete overview of the dynamics of the whole accommodation sector.

While it is not possible to quantify the exact cost reduction resulting from the implementation of the framework under option 2¹⁶¹, it is possible to assume that such benefits would materialize for public authorities implementing the data sharing framework. Indeed, while some costs (see below) are associated with the implementation of the data sharing framework, these are one-off costs (adjustment costs). The current costs for gathering data based on fragmented and non-efficient means are expected to be higher than the costs to gather data in a more automated way. Therefore, while on the short-term, absolute costs for public authorities may be higher due to adjustment costs, the benefits would be higher and outweighing the costs on the long term.

- Reduction of enforcement costs of STR rules

Areas that implement the data-sharing framework¹⁶² would obtain the full benefits of transparency and have detailed, traceable, interoperable and timely data. Therefore, this would enable better policy-making, more targeted and proportionate rules, and greater enforceability of their STR rules, helping public authorities better achieve public policy objectives. Additionally, costs will likely be offset by a consistent reduction of the delay in enforcement that public authorities need to bear due to their inability to (a) collect data on a timely manner and (b) communicate to online platforms which listings are unlawful and ask them to be delisted. For example, as obligations will be clearly set by the provisions, savings are foreseen coming from the decrease of legal challenges between public authorities and online platforms to get the data. Similarly, as the single digital entry point shall enable public authorities to match the activity data shared directly by hosts (e.g. in relation to direct bookings), this shall also facilitate better enforcement and a complete understanding of the STR segment.

Costs of web scraping to obtain STR data - The case of one big EU city¹⁶³

In order to obtain STR data, certain local authorities sign contracts with private companies who scrape the web (in particular big online booking platforms) to obtain data such as occupancy rates, active listings, price for one night, maps with location of listings or even excel sheets with all the data for one listing. Depending on the company and the type of data scrapped, these contracts can vary in terms of costs (a major EU local authority paid EUR 1.500 in 2021 and it is expected to pay EUR 7.500 in 2022).

2. Costs

- One-off costs to adapt to the new registration system and the single digital entry point

¹⁶¹ Data about costs related to the gathering of STR data by different means has been requested to public authorities, who have not been able to quantify these costs.

¹⁶² It can be assumed that at least 25 Member States would need to adjust to comply with the single digital entry point requirements.

¹⁶³ This information has been provided by a major EU city (local authority), and was anonymised as the data provided is confidential.

The number of public authorities that will implement the provisions will vary based on their present or future appetite for data on STR activity. We can estimate that, at the moment, there is interest for data in at least one locality (big city) in 25 of the 27 Member States of the European Union. This number is calculated taking into account that in 22 Member States some kind of registration scheme is present – at least in one locality in their territory and other 3 Member States have introduced market access restrictions and they are planning to move towards taking additional measures including the creation of registration schemes.

- Costs per national authority for setting up an IT infrastructure including API connection, as well as yearly costs for hosting and maintenance are similar to those described in option 1. National authorities are expected to have one-off administrative costs estimated at around EUR 3 million to setup the infrastructure for the registration schemes and develop the national single digital entry point. Additionally, a yearly cost for hosting and maintenance is calculated to be around EUR 96 000 for each Member State, for a cumulative cost of EUR 2.4 million per year¹⁶⁴.
- Costs for local/regional authorities to connect to the single digital entry point

It is expected that local authorities will connect their systems to the national one in order to retrieve data from online platforms. The assumption is that (at least) local authorities with already a system for a registration scheme in place will develop such connections. In line with Option 1, we can assume that 100 local authorities within the 25 Member States have already a system in place and at least 100 will develop a new one (in total at least 200¹⁶⁵ local authorities within the 25 Member States). The 100 local authorities that have already a system in place will therefore save ~80% of the costs estimated for both the creation and yearly maintenance of a new system and the other 100 local authorities will face the whole cost of setting up the connection with the IT infrastructure created by national authorities, which are estimated at EUR 30 000¹⁶⁶ and yearly maintenance costs at EUR 36 000. It is possible to foresee a cumulative one-off cost for local authorities of around 3.6 million. Additionally, a cumulative yearly cost for hosting and maintenance is estimated to be around EUR 4.3 million.

Impacts on hosts:

As the sharing of identification and activity data shall become consistent and reliable for all hosts and online platforms in all areas interested in data, the benefits under option 2 will materialise in a more systematic manner in those areas. Considering a scenario based on the *status quo*, it is expected that all areas where there is already an interest in data will use the framework set by provisions in policy option 2.

¹⁶⁴ As in PO1, the cost per national authority for setting up an IT infrastructure including API connection is estimated to be in a range between EUR 150.000 and EUR 190.000. Yearly costs for hosting and maintenance have been identified respectively to around EUR 60.000 and EUR 35.000. These costs could be reduced by 30% if existing IT infrastructure is being re-used. See Annex 4, section 4.4.2, Table 12 – Costs for National Public Administrations for coordination under option 2

¹⁶⁵ Inference based on the Airbnb mapping mentioned in the previous note.

¹⁶⁶ See Annex 4, Section 4.4 - Table 5 Costs estimations (ROM) for APIs (data push and pull).

1. Benefits

- Savings in the time spent to complete registration procedures

There will be a marginal impact on hosts who are already subject to similar obligations, as it is expected public authorities will only request the data that is missing to have the minimum set of data required in the EU template and reuse the data already provided by hosts. Thanks to the provisions on a minimum, easy registration process, all future hosts in all areas should benefit from a more user-friendly and fast registration process in order to obtain a registration number and start to offer accommodation STR services.

In line with Option 1 and taking as a benchmark the most efficient and fast systems in place in the EU, it can be estimated that the waiting time for the hosts to complete a registration process will be reduced from 15 days to between 1.4 and 1.7 days. When translated into the monetisation of the time, hosts are expected to benefit from the reduction of around EUR 3000¹⁶⁷ to around 320 EUR per new registration (based on the average hourly wage)¹⁶⁸. Taking into consideration that 25 Member States will be adopting the data sharing framework and for the cost considerations made above, it could be possible to save more than EUR 1480 million (monetisation of time saved in the registration process) for the new hosts that will be starting their activities (hence need to register in those areas) in the first 5 years after implementation (based on baseline number of 2019 and growth rate estimations)¹⁶⁹. Based on the assumption that 87% of the hosts are peers¹⁷⁰ and 13% professional hosts, the cumulative cost savings for citizens over five years are estimated at around EUR 1287.6 million and for professional hosts at around EUR 192.4 million.

- More proportionate other STR rules

As expressed in the previous section, a medium/long-term positive effect for hosts expected is the higher probability of more proportionate rules on STRs issued by public authorities, with a higher probability of realisation with respect option 1.

2. Costs

As stated before, the estimated monetisation of the time hosts are expected to dedicate to a new registration is around EUR 320. We assume that 50% of the hosts will need to register ex novo and the other 50% will need to (eventually) adjust the info they already provided, which in line with Option 1 will not cost more than ~30% of a new registration. Considering the number of the hosts in the above-mentioned 25 Member States, it is expected one off administrative costs of around EUR 112.4 million for them and cumulative yearly administrative costs over a period of five years of around EUR 171.3 million.¹⁷¹ Based on the assumption that 87% of the hosts are peers¹⁷² and 13%

¹⁶⁷ See Annex 4, Section 4.1 – Table 2 Costs for Hosts' registration in the baseline scenario.

¹⁶⁸ See Annex 4, Section 4.4 - Table 7 Cost estimation for registration for hosts.

¹⁶⁹ It is assumed that 540.649 hosts will be impacted in the first year after implementation and 535.476 over the next 5 years. For details see Annex 4, Section 4.4.2 – Table 16 (Savings for Hosts under option 2) and Section 4.1- Table 2 (Costs for hosts' registration in the baseline scenario).

¹⁷⁰ Hosts having max 2 listings.

¹⁷¹ See Annex 4, 4.5.2 - Table 14 Costs for hosts for new/adjusted registration.

professional hosts, the cumulative administrative costs for citizens over five years are estimated at around EUR 149 million and for professional hosts at around EUR 22.3 million.

Impacts on Tourism Ecosystem and other accommodation service providers:

The same types of impacts as described under option 1 would apply, with a wider benefit expected overall as the number of public authorities putting in place the framework would be higher than under option 1. More data would be available for the tourism data space which could allow for e.g. for more innovative services.

Social impacts:

Social impacts are expected to be similar to those described in option 1, but are expected to be more probable and more important, given that a consistent data framework would be in place in all areas in the EU where STR is currently an issue. It is however not possible to quantify the impacts, as social impacts would largely depend on what authorities would do with the data. In addition, better rules on data sharing are expected to have a positive impact on respect for privacy (see under option 1).

Environmental impacts:

Environmental impacts are expected to be similar to those described in option 1, but are expected to be more probable and more important, given that a consistent data framework would be in place in all areas in the EU where STR is currently an issue. However, it is not possible to quantify those impacts as explained above, as impacts would only materialize where public authorities make use of the data collected to design green policies.

Stakeholders' views on policy option 2¹⁷³: all stakeholders support in substance the measures put forward under this option (similarly to option 1 and option 3). The public consultation show that respondents, in particular public authorities, local associations and representatives of the tourism industry, are in favour of requiring online platforms to share data on STRs with public authorities to increase transparency and facilitate public policy and enforcement activities. The majority of respondents also consider that such measures should be put in place and/or facilitated at EU level.¹⁷⁴ Public authorities are strongly in favour of this option, compared to the other options, as it leaves some flexibility to Member States and local authorities to regulate, taking into account local preferences and needs, both in terms of data needs and data sharing requirements. Online platforms, in turn, are usually in favour of a more harmonised approach to data sharing, avoiding fragmentation notably of registration obligations which they need to enforce by enabling the display of registration numbers.

¹⁷² Peers are considered hosts having maximum 2 listings. See Annex 5 – Table 10 Number of listings per Airbnb hosts.

¹⁷³ Based on the feedback received during the consultation process, including the public consultation, the workshops, the targeted surveys, bilateral meetings with and ad hoc submissions from the stakeholders. See Annex 2 for more information.

¹⁷⁴ See Figure 11 in Annex 2 for a detailed assessment of replies from stakeholders on this point.

6.3 POLICY OPTION 3 - LEGISLATIVE INITIATIVE CONTAINING A COMMON APPROACH TO DATA GENERATION AND DATA SHARING, WITH MANDATORY NATIONAL REGISTRATION SCHEMES FOR ALL HOSTS

Option 3 foresees the obligation for all hosts in the EU to register in national registration schemes. Public authorities and hosts are the stakeholders that will be directly affected compared to option 2. Online platforms will also be further impacted, but only marginally.

Economic impacts:

Impacts on online platforms:

1. Benefits

On a general level, the types of impacts on online platforms are similar to option 2. Online platforms would slightly gain in terms of efficiency, as diverging local and regional registration systems for hosts would be replaced by national ones, making it also easier for platform to track what systems exist and which requirements their hosts need to comply with. However, while online platforms would have to share the same type of data with public authorities, they would have to share a higher volume of data, namely data regarding all hosts in the EU (compared to data on hosts for selected public authorities under option 2). Similar to option 2, small and micro-enterprise online platforms with average monthly active hosts equal or lower to 1000 will benefit greatly from the possibility to use adapted reporting obligations (every three months, and manually, rather than weekly and automated for bigger online platforms).

On this basis and in line with the calculations under Option 2, it is estimated that net savings for online platforms over a period of 5 years will amount between around EUR 36.3 million and EUR 97.3 million (baseline costs related to data requests from public authorities minus one-off costs of EUR 8.2 million and yearly maintenance (administrative) costs of EUR 2 million¹⁷⁵). Similarly to Option 2, for online platforms that would qualify for the more lenient reporting obligations, the data available doesn't enable to quantify the exact number of data requests they receive and the related cost savings. However, a single data request might currently cost EUR 13 549 to process, which is significantly higher than the estimated cost of the adapted reporting obligations (around EUR 600 for each reporting activity per small and micro-platform or EUR 2400 per year)¹⁷⁶.

2. Costs

Specifically on the cost structure, it will follow exactly what has been discussed in the previous section of Option 2¹⁷⁷. One-off costs associated with data reporting for online

¹⁷⁵ In the cost calculations, it is assumed that 30 companies (the top 60% of the biggest platforms) will need to connect to single digital entry points through APIs as some of the online platforms might qualify for the option with the more lenient reporting obligations. See Annex 4, Section 4.1 & 4.2.

¹⁷⁶ See Annex 4, 4.4 - Table 6 Costs estimations – Option with more lenient reporting obligations.

¹⁷⁷ Cost of creating one connection between an online platform and a single digital entry point is estimated at around EUR 30.000 with a yearly maintenance costs at EUR 36.000. For an intermediary that operates in more than one country, once the first connection to a national single digital entry point is

platforms¹⁷⁸ under this option are estimated around EUR 8.2 million, while annual administrative costs would be of around EUR 2 million. For small and micro-enterprises with average monthly active hosts equal or lower to 1000 and based on the estimation that 680 online platforms would qualify for the more lenient reporting requirements¹⁷⁹, there is only a yearly cumulative reporting (administrative) cost of around EUR 1.6 million (EUR 2400 per year per online platform that would qualify for the more lenient reporting obligations).

Impacts on public authorities:

1. Benefits

Benefits are expected to be the same as under option 2.

2. Costs

Costs are expected to be of the same nature as under option 2. However, in Member States where registration schemes already exist at local or regional level, national authorities will have to centralise these registration schemes at the national level. Important adjustment costs are therefore foreseen for Member States where registration schemes already exist at local or regional level.

In addition, all 27 Member States will have to create a single digital entry point, and adapt/create ex-novo a centralised national registration scheme as well as the needed IT infrastructure, including the APIs predisposition. We assume that 20 Member States will create a new system (IT infrastructure costs at around EUR 170.000 per Member State) and cost savings (30%) will apply only to 7 Member States that already have in place some form of IT infrastructure at national level¹⁸⁰. Therefore, for the setting up of the systems in the 27 Member States, a total one-off cost of around EUR 3.6 million is expected to set up the IT infrastructure at national level. Additionally, a yearly administrative cost for hosting and maintenance as under option 2 is calculated at around EUR 96.000 for each Member State¹⁸¹.

It is expected that local authorities would develop automated connections to the single digital entry point in order to receive activity data, linked with the (newly created) registration scheme at national level. It can be assumed that at least 220¹⁸² local authorities within the 27 Member States will develop a new system or adapt an old one. In line with option 1 and 2, it is possible to assume that 100 of the urban/local areas opting in in the system have already a system in place (45% of the 220) and therefore will save ~80% of the costs estimated for the creation of a new system. The other 120

developed, a 20% extra cost should be considered for each additional connection with a single digital entry point of other Member States.

¹⁷⁸ In the cost calculations, it is assumed that 30 companies (the top 60% of the biggest platforms) will need to connect to single digital entry points through APIs as some of the online platforms might qualify for the option with more lenient reporting obligations. See Annex 4, Section 4.1 & 4.2.

¹⁷⁹ See Annex 4, 4.1 - Table 1 Number of hosts and platforms.

¹⁸⁰ See Annex 4, 4.5.3, Table 17 – Costs for National Public Administrations under Option 3

¹⁸¹ Calculations are based on the same assumptions with option 2 with the main difference being the number of impacted Member States (27 under option 3 instead of 25 under option 2).

¹⁸² Inference based on the Airbnb mapping mentioned in the previous note.

(55% of the 220) of the urban/local areas will face the whole cost of setting up (of around 30.000 EUR for APIs development). It is possible to foresee a cumulative one-off cost for local public authorities at around EUR 4.3 million. Additionally, a yearly cost for hosting and maintenance is calculated to be around EUR 5.2 million.

Impacts on hosts:

The same types of impacts as under option 2 apply. However, the impacts will affect (positively and negatively) all hosts in the EU, rather than only hosts in areas putting in place the framework. Hosts that had not been subject to any kind of registration before will pay the full cost of registration estimated.

1. Benefits

In line with options 1 and 2 and taking as a benchmark the most efficient and fast systems in place in the EU, it can be estimated that the waiting time for the hosts to complete a registration process will be between 1.4 and 1.7 days across all 27 Member States (around 320 EUR per new registration based on the monetisation of an average hourly wage)¹⁸³. The cost savings are expected to be similar as in Option 2¹⁸⁴. Option 3 introduces registration schemes in all 27 Member States, covering all local authorities, including the ones not having any intention to do so (e.g. small communities in Member States that have no intention to register or regulate STRs) so creating additional registration costs for hosts that would probably never need to register.

2. Costs

Costs associated with hosts follows the same reasoning of option 2. Under option 3, however, all hosts will be subject to the same obligation to register. Hosts in Europe that had not be subject to any kind of registration before will incur full cost of registration estimated (i.e. 320 EUR). The total one-off costs for hosts will be at around EUR 376.6 million. This estimation takes into account the total number of hosts in the EU and that the majority of the hosts will need to perform a new registration (i.e. all hosts in 2 MSs and 80% of all hosts in the remaining 25 MSs) as well as the hosts who would need to adapt their actual registration to the new template (20% of hosts in 25 MSs already subject to some form of registration). This means that compared to Option 2, as the registration is obligatory across all 27 Member States, around 825 683 additional hosts would need to register under Option 3, with an estimated one-off cost of EUR 264.2 million. Additional yearly administrative costs for the next 5 years after the implementation of the provisions foreseen by option 3 are estimated to be around EUR 438.4 million for new hosts that will be starting their activities (hence need to register in those areas)¹⁸⁵. Based on the assumption that 87% of the hosts are peers¹⁸⁶ and 13% professional hosts, the one off administrative costs for citizens (peers) are estimated at

¹⁸³ See Annex 4, Section 4.4 - Table 7 Cost estimation for registration for hosts.

¹⁸⁴ The difference in number of local authorities interested in the data on STRs is assumed to be marginal compared to option 2 i.e. 20 additional local authorities from 2 MS.

¹⁸⁵ See Annex 4, 4.3 - Table 19 Costs for hosts for new/adjusted registration.

¹⁸⁶ We assume that hosts having max 2 listings are citizens.

around EUR 327.14 million and cumulative yearly administrative costs over a period of five years at around EUR 381.4 million.¹⁸⁷

Impacts on Tourism Ecosystem and other accommodation service providers:

The same types of impacts as under option 2 apply. However, the magnitude of the impacts are much wider as data will be available on all hosts in the EU. If public authorities make the data available at aggregate level, for e.g. through the future tourism data space, players in the tourism ecosystem will have more predictability of the market. Local communities could also potentially enjoy the complete data availability.

Social impacts:

The indirect impacts on society will be more consistent and structural compared to option 1. However, less positive impacts on the society are expected under option 3 as this option reduces the regulatory freedom of local and regional authorities to maintain their own registration requirements and decide on the type of data they would like to request from hosts and online platforms. As for fundamental rights, the same types of impacts as under option 2 apply, but such impacts will apply more widely to all hosts.

Environmental impacts:

With a global picture on the STR activity on their territory, public authorities will be able to better address the negative externalities of STRs impacting the environment. However, as also mentioned above, national registration schemes might reduce the scope for specific local and/or regional actions to promote sustainability (e.g., the scope for requiring the submission of additional certificates etc.)

Stakeholders' views on policy option 3¹⁸⁸: this option is mainly supported by online platforms, for whom a full harmonisation of registration requirements, obligations to enable the display of registration numbers and data sharing obligations will substantially decrease compliance costs. While hosts stand to benefit from more proportionate registration schemes and STR rules in general, they are not necessarily in favour of more administrative burden (registration obligations) from the outset. Finally, public authorities have stressed the need for any regulatory intervention to respect subsidiarity, and are therefore not in favour a full harmonisation at EU level, but would rather welcome more flexibility to implement the framework where it is really needed.

7. HOW DO THE OPTIONS COMPARE?

Table 1 - Policy objectives and policy options

Options	Reduce the burden on online platforms of STR data collection and sharing, and avoid fragmentation of these transparency requirements	Ensure that public authorities have the tools they need to gather data for policy making and enforcement of STR rules
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¹⁸⁷ See Annex 5.2, - Table 12 - Number of listings per Airbnb hosts.

¹⁸⁸ Based on the feedback received during the consultation process. See Annex 2 for more information.

across the EU

Option 1 – soft approach	+ (if implemented)	+ (if implemented)
Option 2 – Regulation voluntary opt-in	+++	+++
Option 3 – Regulation All-hosts-in	+++	+++

Legend: +- almost no impact; + reduced positive impact; ++ positive impact; +++ significant positive impact; - minor negative impact; -- negative impact; --- significant negative impact; +/- mixed impacts.

The options that allow meeting the policy objectives best are those relying on a legislative approach. In both Options 2 and 3, public authorities will have the possibility to retrieve data and online platforms will gain certainty on how to share data. With the flexibility to opt-in, Option 2 makes sure that public authorities with immediate needs get the data while under Option 3 public authorities will have data on all hosts, even where there is not an immediate need for data.

Table 2 – Cost and benefits of policy options for key stakeholders

Options	MSs	Local Public authorities	Hosts	Online Platforms
Option 1 – Soft approach	+	+	+	+
Option 2 – Regulation voluntary opt-in	++	+++	++	+++
Option 3 – Regulation All-hosts-	++	++	+/-	++

Legend: +- almost no impact; + reduced positive impact; ++ positive impact; +++ significant positive impact; - minor negative impact; -- negative impact; --- significant negative impact; +/- mixed impacts.

The cost-benefits ratio as a whole is the best where flexibility is provided to public authorities to opt in. Public authorities will incur costs only where there is a real need for data – hence a potential big benefit in using data and better assess STR related issues. Option 3 will provide data to all public authorities, including those not asking (yet) for data. Only in the medium/long term will the benefits for public administrations exceed the initial costs they will face to comply with Option 3. For hosts, Option 3 will have mixed effects since all hosts in EU will have to register, even where public authorities do not need data, therefore creating additional unnecessary costs for such players. However, hosts will benefit in the medium/long term from preventive assessment of externalities linked with STR activity, avoiding undifferentiated policies for STR activity.

Table 3 - Comparison of policy options

Options	Effectiveness	Efficiency	Proportionality
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Option 1 – Soft approach	+	+	++
Option 2 – Regulation voluntary opt-in	+++	+++	+++
Option 3 – Regulation all-hosts-in	+++	+	+

Legend: +- almost no impact; + reduced positive impact; ++ positive impact; +++ significant positive impact; - minor negative impact; -- negative impact; --- significant negative impact; +/- mixed impacts.

The key difference in terms of **effectiveness** between the 3 options lies in a legislative approach imposing obligations on stakeholders, as foreseen under Options 2 and 3. Options 2 and 3 are the most effective as they reduce the burden on platforms and ensure that public authorities have tools to get the STR data.

When it comes to **efficiency**, the impacts differ. The most efficient option is the one where the flexibility of the opt-in system is provided to public authorities immediately interested in data. Option 1 seems less efficient due to the voluntary nature of the measures, and the efficiency of Option 3 is reduced at EU level as it imposes an obligation even on public authorities not interested in data.

Finally, with regards to **proportionality** Option 2 scores the best, as it takes the preferences of local authorities into account, in full respect of the subsidiarity principle. Some liberty is also achieved with Option 1, but the possible lack of collaboration of online platform reduces the overall proportionality of this option. Option 3 seems to be the least proportionate as it imposes obligations on all Member States even though they might not have any needs for STR data.

Table 4 - Impact of policy options

Options	Economic	Social	Environmental
Option 1 – Soft approach	+	+	(+/-)
Option 2 – Regulation voluntary opt-in	+++	++	(+/-)
Option 3 – Regulation All-hosts-in	+	+	(+/-)

Legend: +- almost no impact; + reduced positive impact; ++ positive impact; +++ significant positive impact; - minor negative impact; -- negative impact; --- significant negative impact; +/- mixed impacts.

Summarising how the three options compare under the economic, social and environmental impacts, Option 2 seems to maximise the general positive impacts on the three levels. The reasoning for each option is developed in chapter 6.

Table 5 - Support of stakeholders to policy options

Options	MSs	Local Public authorities	Hosts	Online Platforms
Option 1 – Soft approach	+	+	+	+

Option 2 – <i>Regulation voluntary opt-in</i>	++	+++	++(+)	+++
Option 3 – <i>Regulation all-hosts-in</i>	-	--	++(-)	//

Legend: --- completely adverse; -- not in favour; - not so in favour; +- neutral; + marginally in favour; ++ in favour; +++ significantly in favour – for a more detailed explanation, see Section 6.

The interactions with stakeholders involved in the STR segment and therefore potentially impacted by this initiative show that all of them welcome an EU initiative that could streamline data sharing between online platforms and public authorities. This is also the case of local association. Stakeholders, however, stressed their need for flexibility (for public authorities, obligations only where there is a need for data) and for certainty (for online platforms, clarity on data set to be shared and tools to be used; for public authorities: clarity of the legal basis for data requests and consistent enforcement of their rules). Hosts favour simplified registration but only in areas where this is considered necessary.

8. PREFERRED OPTION

8.1 PREFERRED POLICY OPTION

Option 1 does not ensure that the burden on platforms and access to data will be adequately addressed. It will only lead to improvements in some areas and only between limited online platforms and public authorities. This option, as voluntary, is heavily reliant on cooperation and the good will of those making commitments and abiding by them and lacks any means of enforcement to make the more effective. This option will provide little or no improvement in addressing the problems faced by platforms with burdensome requests and public authorities for data.

Option 2 does meet the objectives in a flexible and proportionate way. It would provide a clear and coherent framework for data access and sharing, which provides detailed, traceable, interoperable and timely data in a simple and balanced way for all stakeholders. This would enable better policy-making, greater enforceability of their STR rules and help public authorities better achieve public policy objectives. The burden on platforms will be significantly reduced.

Option 3 would provide an effective data sharing framework across the EU, but requires high adjustment costs for authorities, whilst reducing possibilities to address specific concerns at local and/or regional level. This option ensures full transparency on the STR segment in the EU, including in areas where data are not of interest for public authorities. As one registration system will be created at national level in each Member State, local and regional authorities would not incur any direct costs, but Member States who are not currently interested in STR data would incur costs regardless of their preferences. The costs on hosts across the EU would also be increased, as all hosts in the EU would be required to register. Additional benefits will be reached in the medium/long-term, since public authorities will be given the right tools to have full transparency and assess in advance negative and positive externalities linked with STR activity.

The preferred option is therefore, Option 2. It addresses the specific objectives in a consistent, proportionate, effective and efficient way across the areas in the EU where

main problems are *de facto* present. It ensures the use or adaptation of existing national and regional registration schemes and IT infrastructures (if any). It optimises costs and preserves the ability for public authorities to set the data-sharing framework in compliance with the **principles of subsidiarity and proportionality**. The principle of subsidiarity is respected. Member States are not able to address alone the issues faced by online platforms operating cross-border. It is also respected by giving local and regional authorities flexibility with regards to the implementation of registration schemes (whether to introduce them or not, and at which level), but also with regards to the information and evidence that each authority can request from hosts, to ensure that local circumstances and needs are respected and taken into account. The measures proposed also strike a balance between the interests of all stakeholders involved, by requiring action from public authorities, hosts and online platforms, and offering benefits to these actors, ensuring the proportionality of the foreseen intervention.

It also contributes to the fulfilment of the Sustainable Development Goals, in particular SDG 11 (sustainable cities and communities), by giving public authorities the tools and the data to regulate the STR sector in a proportionate and sustainable way.

8.2 REFIT (SIMPLIFICATION AND IMPROVED EFFICIENCY)

REFIT section is not applicable to this proposal.

9. HOW WILL ACTUAL IMPACTS BE MONITORED AND EVALUATED?

The Commission will monitor the implementation, the application and the compliance to the new system a view to assessing its effectiveness. To do so, it will work together with the Member States. For instance, it intends to assess whether the rules effectively lead to better quality data for public authorities, based on registration schemes for hosts and data sharing rules for platforms that are effectively complied with.

After the adoption, a transitional period of 2 years will be given to Member States to map the interested local authorities, create or adapt local/national existing registration systems (connecting local registration schemes, if any) and set up the IT infrastructure at national level to streamline data-sharing with online platforms (through the *single digital entry point*). The first evaluation should take place not earlier than five years after the full implementation of the Regulation (i.e., five years after the initial first two years which will be the transition period). The general effectiveness will be monitored based (but not solely) on the set of KPIs identified in Table 6 below.

Table 6 – Key Performance Indicators for the evaluation of the implemented measure

Indicator	Definition / Objective	Baseline	Data Source
Δ of local authorities opting in y5 vs y3 (vs y1)	Number of local authorities deciding to use the provisions for data-sharing / Objective: monitor the (growing) interest of local authorities for data. Expected result: higher	Reported mapping of Public authorities adopting provisions in y1 and y3.	Data generated by national authorities

	number of local public authorities in y5 with respect y3, Δ+.		
# of registered hosts (Absolute number)	Number of hosts registered by country / Objective: verify the ease and friendliness of the registration scheme with the EU Template. Expected result: higher number of hosts registered with respect the forecasted numbers	Previously estimated volumes (by country, year of adoption)	Data generated by national authorities
% of total data volume shared through APIs (Percentage of total Data volumes)	Use of APIs as % of the total data shared by online platforms / Objective: monitor the good implementation of the alternative reporting system for small and micro enterprises. Expected result: volumes of data shared through alternative reporting system should be marginal	N/A	Statistical operational reporting by national authorities
# of illegal listings identified (Absolute number)	Number of listings not compliant with local/national STR rules (per year, per MS) / Objective: verify effectiveness of data sharing. Expected result: higher number than the public authorities (easy sharing and accessibility)	N/A	Proxy: Notification sent by Public authorities (possibly through single digital entry point)
Use of data by other STR players (Absolute number)	Number of download by non-PAs requesters / Objective: monitor the use and exploit of new data on STR segment. Expected value: n/a.	N/A	Statistical operational reporting by national SDEP

Legend: # number, % percentage, Δ% percentage difference

ANNEX 1: PROCEDURAL INFORMATION

1. Lead DG, Decide Planning/CWP references

Lead DG: DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW)

Directorate: G - Ecosystems II: Tourism & proximity

Decide number of the underlying initiative: PLAN/2021/11047 (Short-term rental initiative)

2. Organisation and timing

The inception impact assessment was published on 16 September 2021. It was followed by a feedback period that lasted from 16 September 2021 to 14 October 2021. 71 stakeholder feedbacks were received.

The Commission held a public consultation from 27 September until 13 December 2021. This consultation was available on the [Have your say](#) portal and open to anyone who wished to reply. The public consultation received 5696 stakeholder feedbacks. The Commission launched two additional targeted EU surveys in April 2022: the first one to public authorities, for which it received 80 replies, and the second one to online platforms, for which it received 15 replies. The results of the targeted surveys are presented in Annex 2a and Annex 2b.

The following DGs (Directorates General) have been invited to contribute to this impact assessment: SG (Secretariat-General), CLIMA (Climate Action), COMP (Competition), CNECT (Communications Networks, Content and Technology), DIGIT (Informatics), ECFIN (Economic and Financial Affairs), EMPL (Employment, Social Affairs & Inclusion), ENV (Environment), ESTAT (Eurostat), JRC (Joint Research Centre), JUST (Justice and Consumers), REGIO (Regional and Urban Policy), MOVE (Mobility and Transport), SJ (Legal Service), TAXUD (Taxation and Customs Union) and TRADE (Trade).

The ISSG met three times in 2021 (15 July, 25 October, 15 December) to give an update on the ongoing work and discuss preliminary versions of the Impact Assessment report, together with all the supporting documents. The final ISSG meeting took place on 14 January 2022. Following the negative opinion of the RSB, an additional ISSG meeting took place on 14 June 2022 to discuss the revised impact assessment.

3. Consultation of the RSB

The RSB was consulted in an upfront meeting on 15 November 2021. The impact assessment report was submitted to the RSB on 19 January 2022. The impact assessment was discussed with the RSB on 16 February 2022, and the RSB issued a negative opinion on 18 February 2022. Based on the RSB recommendations, the impact assessment has been significantly revised in accordance with the following points:

RSB Recommendations	Revisions introduced
(B) Summary of findings	
(1) The problem definition and its scope are not precisely defined. The report does not provide sufficient evidence to substantiate the problems. It does not demonstrate the scale of the problems. It does not clearly delimit the internal market dimension of the problems.	The problem definition and scope of the initiative have been thoroughly revised and are now more targeted. The IA now focuses on the main problem, which relates to data sharing. This problem has a clear single market dimension, as platforms are increasingly confronted with diverging and burdensome data sharing requests, which hampers their development in the single market. More evidence and a better analysis of the problems and the scale thereof has been provided, based on additional information gathered through additional surveys and research. Chapter 2 has been entirely revised on this basis.
(2) The report is unclear about the objectives and the intervention logic. It does not adequately explain how to reconcile the objectives of developing the internal STR market and promoting a sustainable tourism sector at the local level. It does not demonstrate the need to act at the EU level.	The objectives and intervention logic have been thoroughly revised and are now more targeted. A new description of the objectives and the intervention logic, showing the direct link between the problems and proposed measures, is presented in Chapters 4 and 5 in particular. Chapter 4 now also makes clear that the initiatives aims to promote sustainable tourism, by improving data generation and data sharing. Chapters 2, 3 and 5 clarify that only action at the EU level will achieve effective and efficient results in terms of data sharing.
(3) The report does not sufficiently explore less ambitious and more flexible alternatives focusing on key issues. It does not demonstrate the proportionality of the preferred policy option.	The three policy options have been revised and clarified and vary from a less ambitious and flexible policy option to a more ambitious policy option with more harmonisation. This is now better reflected in Chapter 5. The preferred option is now option 2, and the proportionality of the preferred option is explained in section 6.2., 7 and 8. The proportionality framework for market access restrictions for hosts, which was promoted in the previous IA, has now been discarded, with an indication of the reasons why, in Chapter 5, section 5.3.
(4) The report does not assess the potential impacts of the initiative on local communities, society and the environment.	Potential social and environmental impacts of each policy options are identified and an assessment is provided in Chapter 6.
(C) What to improve	

<p>(1) The report should describe clearly the problems and provide supporting evidence:</p> <ul style="list-style-type: none"> The description of the market should include estimates of the market shares of different market players, including specific segments (e.g. peer vs. professional hosts; hosts in rural areas or small cities vs. tourist centres; operators and platforms offering cross-border services vs. local ones, etc.), as well as market boundaries, i.e. whether the STR is a distinct (relevant) market or a broad one including all other alternatives (hotels etc.). 	<p>The report clarifies that STRs are a segment and not a distinct market. STRs offers are largely interchangeable with for e.g. hotels offers from the point of view of consumers, in particular for price reasons (demand-side substitution) (Chapter 1). The revised draft includes additional information on the shares of the different STRs players (see Chapter 1 and Annex 5).</p>
<ul style="list-style-type: none"> The problem description should be more precise on streamlining the core problem (data gathering, data standardisation and data access) from other specific problems. It should distinguish the main problems from the consequences (i.e. poor policy design). 	<p>The problem definition (Chapter 2) has been streamlined. The initiative addresses only the transparency issue, which was the first identified in the IIA and which is considered the core issue. The main problems are (i) the numerous requests for data received by online platforms and (ii) the insufficient and inefficient data gathering by public authorities (see section 2.1). Burdensome market access requirements, which was identified in the IIA, is considered a consequence of the problem of the lack of data, although other political factors can lead to disproportionate rules (see section 2.3). With an enhanced transparency, the initiative will therefore contribute to a greater proportionality of rules. However, the initiative will not deal with proportionality as such, as it has to address the drivers of the core issues.</p>
<ul style="list-style-type: none"> When specific problems are outlined, the report should clearly explain the reasons behind them and which market players or authorities cause specific problems or are affected by them. <p>It should be clear on the scale of the specific problems (e.g. number of disproportionate or challenged STR rules, number of public authorities facing specific data needs), differentiating by Member States, type of region or agglomerate in case of significant</p>	<p>The report now describes and substantiates the two problems, explaining for whom this is a problem and what the problem is about (section 2.1). The drivers of these problems are explained in section 2.2. An assessment of the scale of the problems is included, building mainly on the feedback received from public authorities and from online platforms, in surveys and during the workshops organised by the Commission (see Annex 2).</p> <p>This feedback shows that the vast majority of Member States and different types of entities (national, regional or local) are currently affected by the lack of data/need data. The feedback shows also that an increasing number of requests for data, coming from a vast majority of Member States, affects online platforms (the big ones and</p>

variations.	some smaller ones). Figures are provided in the revised draft and can give indications of the scale/size of the problems. The IA now also shows variations between Member States and regions in terms of data needs. (Section 2.1 and also Annex 2a and 2b).
<ul style="list-style-type: none"> The report should provide specific information on the problems created by the rapid growth of STRs in certain areas, such as the increase in housing prices, noise, congestion or waste. <p>It should, objectively, describe the specific instances where these problems occur and link them to the problems identified (transparency, burdensome or disproportionate requirements for STRs).</p>	<p>The IA refers in section 1.1. to these problems, to explain the context of the proposal. However, the initiative does not aim to directly tackle problems related to the rapid growth of STRs. It rather tackles problems related to transparency and data sharing. Problems related to STRs in certain areas are an indirect consequence of the difficulties cities face in designing STR rules, and enforcing them, both as regards platforms and hosts.</p>
<ul style="list-style-type: none"> The report should be more precise on where cross-border problems exist. It should justify why and where the problems of transparency and disproportionality of requirements on STRs have a single-market dimension. <p>The discussion on the occurrence of cross-border problems should clearly distinguish between offering STR services to clients from different countries and offering STRs located in different countries. The report should also provide reliable estimates of the incidence of these types of services.</p>	<p>The report has been revised and underlines the cross-border dimension of the transparency issue (offering STR services is not addressed). In particular, online platforms that are key players of the STR segment, hold comprehensive data on STRs. Nearly all platforms operate cross-border and interact with public authorities from many Member States. The overwhelming majority of platforms – both big platforms as well as SME platforms – are also confronted with a rising number of diverging data requests (Chapters 1 and 2).</p> <p>In addition, it is also indicated that a small share of hosts, who are asked to provide data via registration schemes, offer listings in more than one Member State (Chapter 1).</p>
<ul style="list-style-type: none"> The report should consider other factors hampering the cross-border expansion of STRs companies, beyond the proliferation of rules and assess their relative importance. 	<p>The core problem addressed by the report is the transparency issue and not the cross-border expansion of STRs companies (see section 2.1).</p>
<ul style="list-style-type: none"> The report should explain why public authorities are not able to get the data 	<p>An additional targeted consultation was run with public authorities to better explain the difficulties</p>

that they need, even though the problem description considers that the frequent and diverse data requests by public authorities are a problem. It should estimate the frequency of this problem. It should clarify which types of data are needed by which authorities for policy development and policy enforcement.	they face to get the data they need (and/or sufficiently complete and accurate), on the frequency of this problem, on their needs for data and the purposes for which they need this data. The results are presented in Annex 2a and integrated into the report (chapter 1 – section 2.2)
<ul style="list-style-type: none"> The report should explain why there is a need for a specific STR initiative, given that STR services are subject to the Services Directive. 	The need for an initiative on data on STR results from the fact that the existing EU legal framework or tools do not address in an appropriate and efficient way the identified transparency issues. The Services Directive does not cover transparency issues (see Annex 6, section 6.1.1). The Services Directive mainly concerns the relationship between public authorities and hosts, by requiring the former not to impose market access restrictions until such restrictions are necessary and proportionate. The proposal does not deal with market access restrictions (the option to put in place a dedicated proportionality framework is now discarded in Chapter 5). It will indirectly secure better compliance with the Services Directive however, by ensuring that authorities have data to design appropriate policies, and by proposing a streamlined approach to registration schemes (which provide identification data).
(2) The report should specify the scope of the initiative. It should explain whether it focuses on specific segments such as cross-border STRs, platforms, professional hosts or SMEs or on mitigating the social and societal impacts on local communities. If the initiative addresses the STR sector in general, the report would have to show that the problems described affect the whole STR sector, and explain how the different actors will benefit from the initiative.	The report clarifies the scope of the initiative. It is a very targeted scope. It is about improving transparency (i.e. data generation and data sharing) in the STR segment. It addresses well-identified types of actors of the STR segment: public authorities, online platforms, and indirectly hosts. The report identifies the measures that would improve transparency in the STR sector (section 5.2) as well as the actors directly affected by those measures (see Chapter 6)
(3) The report should explain how the different objectives would be reconciled within the initiative. It should acknowledge potential trade-offs between facilitating the expansion of the STR sector and the aim to help remove the negative effects of STR growth on some local communities.	The objectives of the initiative have been streamlined (chapter 4). The aim is to provide transparency and give better data to public authorities to allow them to better manage STRs in their jurisdictions. The objective is therefore not to facilitate the expansion of the STR sector or to remove the negative effects of STR growth; these objectives are left to public authorities (in full respect of the subsidiarity principle). As such, the initiative has therefore a neutral impact

	on tourism (chapter 6 – sections 6.1;6.2; 6.3)
(4) The intervention logic should be strengthened. To this end, the problem definition, the description of the policy options and the analysis of potential impacts should be more coherent. The report should clarify how it addresses all the objectives of the initiative.	A revised intervention logic is proposed (chapter 5).
<p>(5) The report should demonstrate with evidence where the EU needs to act because of internal market problems. The report should explore less ambitious and more proportionate alternatives focusing on the key issues identified and clearly substantiated with robust evidence.</p> <p>It should consider the possibility of combining targeted legal obligations on certain market players (e.g. big platforms) with softer instruments such as a Recommendation based on existing experience and case law.</p> <p>Given the potential differences in the relevance of the problems in Member States, the report should pay more attention to voluntary, gradual and opt-in approaches while avoiding disproportionate conditions.</p>	<p>The report demonstrates the internal market dimension of the issue of transparency, in particular for online platforms, which provide intermediating services cross-border (chapters 2 and 3). As indicated, reporting obligations on platforms can be seen as a restriction to the provision of intermediating services, if they are not well justified.</p> <p>The report indicates a clear differentiated approach: transparency issues could be addressed in a piece of legislation; while market access issues (proportionality...) could be addressed separately (i.e. not by the initiative but by a guidance...) (see chapter 5 - section 5.1).</p> <p>The policy options take into account the specific situations in Member States. An opt-in system for public authorities is proposed. As a result of this initiative, a framework for data on STR will be put in place: if public authorities want data from online platforms, they will have to join this framework: they would have to issue a registration number for each listing and connect to a single digital entry point at national level. If they do not want or need data, they will be able to stay out of the system. Depending on the administrative organisation of Member States, the decision to opt-in could be made at national, regional or local level (chapter 5 - section 5.2). The requirement to put in place registration schemes as a pre-condition to get data is designed in a way that makes it as user-friendly for hosts as possible, including by allowing the latter to re-use part of their data in case of more than one listing.</p>
(6) The report should elaborate the content of the policy options. In particular, it should explain which criteria will be used to assess the proportionality of the requirements on STRs and	The content of the policy options has been streamlined to take into account the new targeted approach of the initiative (chapter 5). The proportionality of the requirements on STRs is

<p>where they will be defined.</p> <p>The report should present additional sub-options, since there may be alternative policy choices as regards certain elements of the policy options, such as the criteria to assess proportionality or the type of market players affected.</p> <p>The options should describe how compliance would be monitored and enforced.</p>	<p>not part of the initiative, which should not list criteria and where they will be defined. This issue (proportionality of requirements) could be addressed in documents relating to the implementation of the Services Directive.</p> <p>The report includes three options, with a possible variant for options 2 and 3 (chapter 5 - section 5.2). The monitoring and enforcement of compliance was raised with regards to the proportionality assessment, which is no longer considered as part of the policy options (chapter 5 - section 5.3).</p> <p>References to enforcement are included under each legislative options (chapter 5 – sections 5.2 and 5.3). Member States shall in principle ensure adequate and effective enforcement of the obligations. The Commission will, as part of its monitoring of the proposal, work together with the Member States to see whether the Regulation is complied with, by hosts and platforms.</p>
<p>(7) The options should consider appropriate mitigation measures for all types of SMEs active in the market, not only for small platforms.</p>	<p>Given the targeted new approach focussing on transparency, the measures do no longer impact all types of SMEs active in the STR segment, but only online platforms and hosts. Specific measures for small and micro online platforms are therefore presented (chapter 5 - section 5.2). Administrative costs and benefits for professional hosts are presented in chapters 6.1 – 6.3.</p>
<p>(8) The report should further develop the impact analysis. It should assess the potential impacts of the initiative on local communities, society and the environment. Even if the final impact on local communities cannot be quantified – because it depends on action at local level, the report should elaborate on the expected effects of actions at local level, which will be triggered by the initiative. The impact analysis should also present a more complete overview of the expected effects on the different types of market participants, including the more traditional local ones.</p>	<p>The report has been revised and for each of the policy options, an assessment of the potential social and environmental impacts has been included (chapter 6). Illustration of these impacts has been included when feedback from public authorities has been received. Environmental impacts of this initiative are limited. Impacts of policy options on “market” participants have also been included. Some examples of the potential impacts on local communities have been included. For these inclusions, see chapter 6 – section 6.1; 6.2; 6.3.</p>
<p>(9) The report should clearly demonstrate the respect of the subsidiarity principle and the proportionality of the preferred policy option, including the choice of a regulation as the preferred policy delivery instrument. It should justify why the most stringent options, which</p>	<p>The Impact Assessment has been revised and policy options have been reconsidered, in particular to better take into account subsidiarity considerations. The report has been amended to explain how the subsidiarity principle is respected (chapter 3 - section 3.2; chapter 5</p>

impose obligations for all actors across the whole EU, score better than more targeted options that only impose costs where these are needed. The comparison of options should be improved and clearly linked to the findings of the analysis.	section 5.2 and chapters 7 and 8 - section 8.1). The proportionality of the proportionality of the preferred policy option is also better explained (chapters 7 and 8 – section 8.1)
(10) The report should present the views of different stakeholder groups as regards the problems and possible policy solutions, including consumers, (associations of) citizens affected by STRs or NGOs. Given the low number of citizens responding to the public consultation and the sensitivity of this issue in certain areas, the report should complement the information from the public consultation with other sources.	The views of NGOs and associations on STRs in general have been included in the report: in chapter 1 section 1.1 (context, first and under the assessment of each policy option in chapter 6 (sections 6.1, 6.2 and 6.3). More than 4 000 hosts (mainly citizens) participated in the open public consultation.
(11) The report should explain how the initiative would affect the existing reporting by the STR sector under the Directive on administrative cooperation in the field of taxation (DAC7).	The report demonstrates, building on the feedback of public authorities, that the reporting under DAC7, which benefits national tax authorities, is not sufficient to meet the needs of public authorities managing STRs (content, timing, difficulties to access data from taxation authorities...) (see sections 1.2, 2.2, 5.1 and Annex 6). A specific policy option consisting in a legislative approach providing for a legal basis for national tax authorities sharing data they obtain under DAC7 with local authorities (G2G dimension) has also been discarded for the reasons explained in section 5.3.
(12) The standard tables on costs and benefits in annex should present a more comprehensive overview, in particular on compliance costs for citizens and businesses.	The Tables in Annex 3 have been revised. With reference to the preferred option, the figures have been updated. Table 2 includes 3 categories (citizens, businesses, public administrations).

The revised impact assessment was submitted to the RSB on 23 June 2022. The Board issued a positive opinion with reservations on 22 July 2022. The recommendations of the Board were addressed in the impact assessment as follows:

RSB Recommendations	Revisions introduced
(B) Summary of findings	
(1) The report does not clearly demonstrate the internal market dimension of the problems.	See improvements made in more details below.
(2) The report does not sufficiently demonstrate the necessity and value added of EU action.	See improvements made in more details below.
(C) What to improve	

<p>(1) The report still does not sufficiently demonstrate where the EU needs to act because of internal market problems.</p> <p>It should provide clear concrete evidence that information requests from public authorities result (or are likely to result) in market fragmentation and present an appreciable obstacle to the market entry and expansion of small and medium sized platforms. This assessment should take into account the results from the SME test.</p> <p>It should also recognise that information and data requests from public authorities for public policy purposes often have a regional or local focus, concern specific information and frequencies and thus are different by their very nature.</p> <p>Regarding the costs to platforms when replying to data requests of public authorities, the report should provide further ranges of such estimates to better reflect the differences in scope of such requests (e.g. requests to big platforms covering a whole country vs request to a small platform regarding a specific location or region).</p>	<p>The report now clarifies in section 2.1 why and how fragmented data requests affect online platforms, based on the results of the targeted survey to platforms. The report also clarifies which type of platforms are affected, namely small, medium and large platforms who operate or wish to operate in several cities and Member States. Further analysis has been conducted to estimate the number of large and small platforms operating in this sector and the percentage of platforms operating cross-border. Evidence indicates that a significant proportion of smaller platforms active in the short-term rental sector also operate cross-border, and therefore the likelihood of receiving multiple and fragmented data requests is high for smaller operators too. Annex 5 contains more detailed estimations of cross-border activity of short-term rental platforms.</p> <p>Section 2.1 also clarifies that there is a core set of data that public authorities always ask from online platforms (and this is also the set of data which is harmonised on this basis), while certain public authorities can require additional information or evidence based on the local needs.</p> <p>Annex 4.2 provides a detailed calculation of the average cost of one data request per platform. This calculation is based on the information provided by a limited number of platforms during the consultation process, while most platforms to which this information was requested did not provide this information, either for confidentiality reasons or because they declared not to have this information. It is therefore not possible to provide more detailed calculations of the costs as online STR platforms themselves do not have this information are not willing to share it. Moreover, the baseline cost burden calculation is based on a conservative assumption that only 60% of big platforms (18) are confronted with data requests (150 requests annually with an average cost related to request of €13.549. See table 7 Annex 4). The report adds a clarification and caveat to this calculation in sections 2.3 and 6.1.</p>
<p>(2) The report still needs to better explain why (local) public authorities are not able to get the data that they need for public policy design.</p>	<p>Section 2.1 of the report now explicitly states the reasons put forward by public authorities in the consultation process for not being able to get the data they need for policy design. Section 2.2</p>

<p>It should explain why (present and future) rules at local, regional or national level are not sufficiently effective and efficient in this regard. It should explain why EU level rules would lead to better compliance of hosts and platforms and better enforcement and sanctioning by public authorities.</p> <p>It should better justify the use of Article 114 to motivate more effective and efficient information request possibilities for public authorities in absence of a clear link to an established internal market problem.</p> <p>It should better demonstrate the respect of the subsidiarity principle and the proportionality of the preferred legislative policy option.</p>	<p>clarifies the three main reasons why rules in place at local, regional or national level are not sufficiently effective and efficient to get this data (lack of enforceability of registration schemes without the collaboration of online platforms, limited data sharing by online platforms for several reasons).</p> <p>Section 3.2 now clearly explains why EU rules regarding registration schemes, registration numbers and data sharing obligations are needed to ensure that such requirements are easily enforceable and complied with at EU level by hosts and online STR platforms, while reducing significantly the burden on those actors to do so compared to the status quo (fragmented requirements).</p> <p>Sections 3.1 and 3.2 clarify that this proposal primarily aims at streamlining data requests across the EU to facilitate compliance with such data requests for online STR platforms, hence reducing costs and removing barriers to operate in the single market for these platforms. Public authorities also benefit from this streamlining, but the internal market problem for online STR platforms is clearly identified and solved by this proposal.</p> <p>Sections 3.2 and 8 clarify how the subsidiarity principle is respected by the preferred policy option, in particular with regards to registration schemes, and how the preferred option strikes a balance between the different interests involved in order to ensure proportionality of the proposed measures.</p>
<p>(3) The report should better explain why the tools available to public authorities under the Digital Services Act are not sufficient to deal with hosts acting in a fraudulent manner. It should also clarify to what extent platforms require in their general contract conditions that their hosts comply with the applicable laws.</p>	<p>Section 5.1 states clearly the limitations of the DSA with regards to STR, related notably to the limited enforcement of registration numbers on ‘traders’ only, and the absence of data sharing mechanism (with only the possibility, under the DSA, to request information and order takedown on individual listings). Section 5.1 provides information on the general contract conditions imposed by platforms on hosts with respect to the compliance with the applicable laws.</p>
<p>(4) The report should clarify under the legislative policy option 2 who would trigger the</p>	<p>The report clarifies in section 5.2, policy option 2, that if a local, regional or national authority</p>

participation of a Member State in the common registration system (and the obligation to ensure a single digital entry point), in particular whether this would be an autonomous decision of that Member State or whether it would be triggered, if any public authority of that Member State would wish to do so.	wants to obtain data from online STR platforms as per the system described under this policy option, they have to put in place a registration system at their level and that would trigger the obligation for national authorities to set up the single digital entry point.
(5) Given that platforms did not answer to the question whether they offer their services in their country of residence or cross-border, the report should justify the assumption that many or the majority of platforms intermediating STR services operate cross-border. In particular, it should explore whether this assumption applies to small platforms or only to the bigger ones as if only the latter are concerned, the initiative risks benefitting the established players disproportionately.	<p>The report clarifies in section 2.1 which types of platforms are affected by fragmented data requirements (i.e. small, medium and larger platforms who operate or wish to operate in several cities and Member States).</p> <p>Annex 5 contains estimations of cross-border activity of short-term rental platforms. Evidence indicates that a significant proportion of smaller platforms active in the short-term rental sector also operate cross-border and are, therefore, affected by fragmented data requests.</p>
The Board notes the estimated costs and benefits of the preferred option(s) in this initiative, as summarised in the attached quantification tables.	The costs and benefits analysis is not altered by the clarifications brought to the text following the above recommendations.

4. Evidence, sources and quality

DG GROW conducted and contracted several studies in support of the impact assessment:

- Oxford Research. “Study on national regulatory approaches to short-term accommodation services” - *European Commission, Luxembourg* (2021) (upcoming).
- Van Haaren, Jeroen, Susan Vermeulen, Jeroen Klijs, Ko Koens and Jorrit Bijl. [“Short-term accommodation rental in Amsterdam. An empirical investigation of statistical correlations between short-term rental, housing prices and quality of life index.”](#) *European Commission, Luxembourg* (2021).
- Ipsos European Public Affairs. [“Flash Eurobarometer 495. Short-term rentals in the EU.”](#) *European Commission, Luxembourg* (2021).
- Spark Legal Network and Valdani Vicari & Associati. [“Study on the Assessment of the Regulatory Aspects Affecting the Collaborative Economy in the Tourism Accommodation Sector in the 28 Member States.”](#) *European Commission, Luxembourg* (2018).

A series of external analytical papers contracted by the Commission shed light on issues related to market access requirements in the short-term accommodation rental segment:

- Duch-Brown, N. (Coord.), The Short-Term Accommodation Rentals market in the EU, JRC Digital Economy Working Paper 2021-09
- Ratin Legis. “[Impulse Paper on the Business Authorisation/Licensing Requirements Imposed Both on Peer-Providers and Platforms. Barcelona, Berlin and Amsterdam.](#)” (2016)
- Guido Smorto. “[Impulse Paper 2 on the Business Authorisation/Licensing Requirements Imposed Both on Peer-Providers and Platforms in Paris, Rome, Milan and London](#)” (2016)
- Sofia Ranchordás et al. “[Impulse Paper on Home-Sharing in the Digital Economy: The Cases of Brussels, Stockholm and Budapest.](#)” (2016)

The Commission (DG GROW) signed a [landmark agreement](#) with Airbnb, Booking, Expedia Group and Tripadvisor, which began collaboration between these platforms and Eurostat, to publish [data](#) on short-term accommodation rentals offered via these platforms across the EU.

DG GROW conducted dedicated workshops with all stakeholders:

- [Developing a fair single market for short-term rental services](#), 10 December 2021.
- [Enhancing transparency on short-term rentals in the EU](#), 22 October 2021.
- SIMFO Workshop 2021 – The holiday and other short-term accommodation sector in Dublin, 10-11 February 2021¹⁸⁹
- [SIMFO Workshop 2021 - The holiday and other short-term accommodation sector in Lisbon](#), 28-29 January 2021
- [SIMFO Workshop 2021 - The holiday and other short-term accommodation sector in Valencia](#), 3-4 December 2020

DG GROW carried out a literature review, based on the references listed in Annex 10.

¹⁸⁹ Report saved under [Ares\(2021\)7518319](#).

ANNEX 2: STAKEHOLDER CONSULTATION

Consultation strategy

The objectives were to collect feedback and data on the identified problems and drivers, as well as on the possible solutions. The activities included a public consultation of all stakeholders, a roadmap, workshops and bilateral meetings with relevant stakeholders. The main communication channel has been the Commission's [Have Your Say](#) portal, a [dedicated webpage](#), and [twitter](#). Consulted stakeholders include hosts and online platforms (and their organisations), public authorities (national, regional and local level), service providers such as management companies, hotels, citizens and local associations.

71 feedbacks were received on the inception impact assessment, during a consultation from 16 September to 14 October 2021. Hosts stressed the need to increase the responsibility of online platforms in ensuring that only legal listings are displayed. They warned against the multiplication of restrictive rules for hosts at local level. Property managers (mainly SMEs) suggested that simple registration procedures should be in place for STRs and that a national database should be available to map STR operators. For online platforms, data sharing requests should be proportionate and in compliance with EU law, notably GDPR. Smaller platforms called for data minimisation and the 'once only' principle for data sharing. They stressed that new data sharing obligation should build on existing obligations (e.g. under DAC7 and the DSA) and fill remaining gaps. The hospitality sector (mainly hotels) supports registration schemes for hosts and increasing data sharing by online platforms. It calls for a level playing field between STRs and traditional accommodation providers. The majority of stakeholders supports STR rules that differentiates between different types of hosts (no one-size fits all).

Bilateral meetings with the stakeholders and five workshops took place.¹⁹⁰ A public consultation was open from 27 September to 13 December 2021, available in 23 EU languages. In addition, two targeted surveys were launched to public authorities on the one hand, and to platforms on the other hand, in April 2022. The results are presented in Annex 2a and Annex 2b respectively.

Public consultation

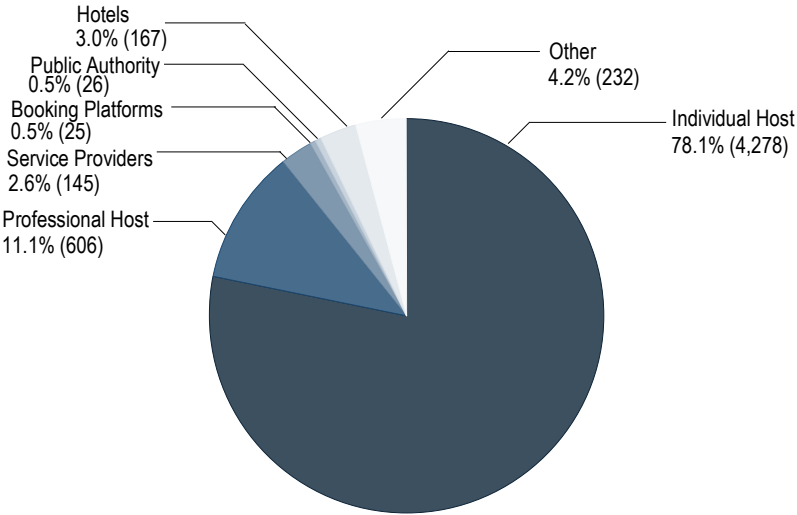
Stakeholders group. Respondents were asked to self-identify themselves under one of the 7 categories of respondents that match the composition of the STR ecosystem: hotels and similar, online platforms and their associations (traditional STR platforms, booking platforms, online travel agencies, and their associations), other service providers (e.g. property management companies, maintenance and cleaning services), individual and professional hosts, public authorities (local, regional and national) and other (e.g. academia, host associations, housing and tenant associations, trade associations). The results are presented based on these specific categories of STR stakeholders, rather than on the standard categories of respondents of EU survey.¹⁹¹ The affiliation with a certain respondent category is based on the self-declaration of the

¹⁹⁰ Minutes saved in ARES. Operative conclusions for the workshops available [here](#).

¹⁹¹ For a preview of results based on the standard categories of respondents, see [here](#).

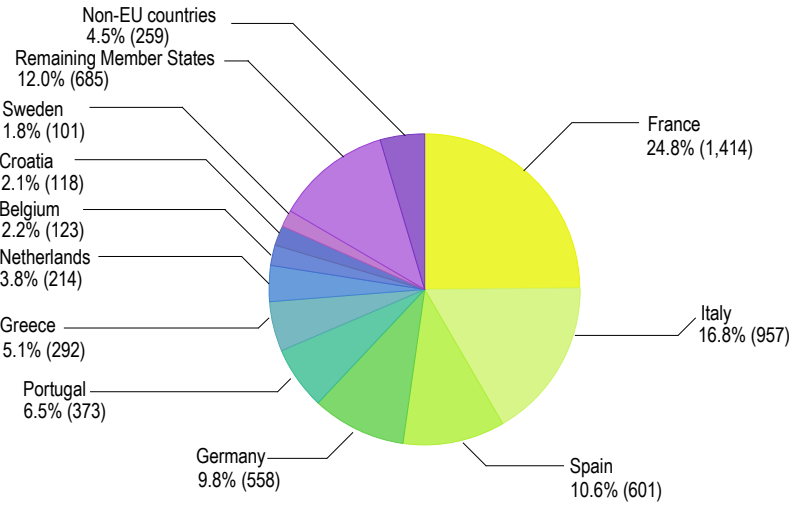
respondent. Thus, it should be borne in mind that there may be errors with regard to the affiliation chosen by the respondent. The following graph shows the responses per respondent category:

Figure 1. Responses by stakeholder group



Total respondents: 5,479.

Figure 2. Responses by country of respondent



Total respondents: 5,695.

The graphs above show the number of responses per stakeholder category. The majority of responses were submitted by individual (78.1% - 4,278) and professional (11.1% - 606) hosts. Most of the replies were submitted from France (24.8% - 1,414), Italy (16.8% - 957), Spain (10.6% - 601) and Germany (9.8% - 558).

Methodology and tools to process the data. For all seven groups, we received 5696 responses. One reply was disregarded at the request of the respondent. We identified 216 respondents who wrongly self-identified as online booking platforms. We do not include those respondents in the disaggregate analysis, but we include their answers at aggregate level. Therefore, at disaggregate level we only consider 5.479 respondents. As the survey aims to measure the perception and possible issues related to STR, frequency analysis was carried out. Data was categorised into one of seven stakeholder groups, defined above.

The survey is composed of closed and open questions. Closed questions were assessed based on a proportion analysis, measuring the responses across different stakeholder groups. Proportions are displayed individually in each of the questions. For open questions, a qualitative analysis was performed to measure the responses proportions. Filters by stakeholders and responses were applied in both cases if necessary for the study purposes.

Campaigns. A possible campaign by online platforms to alter some of the answers was considered. The periods from 28 October to 3 November 2021 and 25 to 29 November 2021 were analysed. The analysis consisted of the identification of duplicate answers across stakeholders. Duplicates were identified among responses from individual hosts but with a 1% frequency in the first period and a 0.3% in the second one. The analysis does not suggest any possible campaign and any possible alteration is discarded.

Contributions received outside the formal consultation process. 11 contributions were received by email, for either confidentiality or technical reasons, and have been taken into account in the results below.

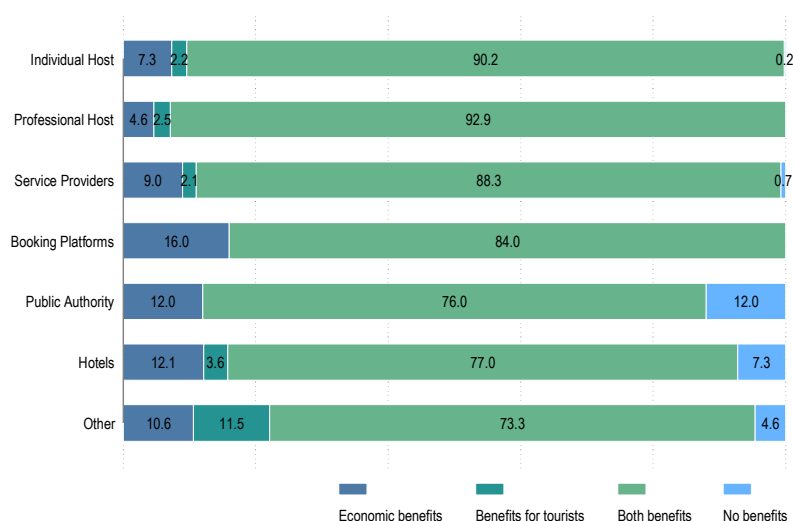
Results

1. General market information

Definition of STR. For respondents, STR include the provision of accommodation, typically on a daily or weekly basis principally for short stays by visitors (95.9% - 5,462 out of 5695) of the respondents strongly or somewhat agree); 67.4% (3,838 out of 5695) also strongly or somewhat believe it includes stays on a monthly basis. 94.8% (5,399 out of 5695) of the respondents believe it includes furnished rooms or entire apartments or houses, and 50.1% (2,853 out of 5695) agree that it excludes furnished short-stay accommodation with daily cleaning, bed-making, food and beverage services.

Benefits generated by STRs. For all respondents, STRs generate economic and tourist benefits. Most of the hosts (97.5% - 4,762 out of 4884) agree with that statement. Online platforms, public authorities and hotels usually give greater importance to the economic impacts rather than tourist benefits. Nevertheless, both benefits are significant.

Figure 3. Benefits generated by STRs by Stakeholders group



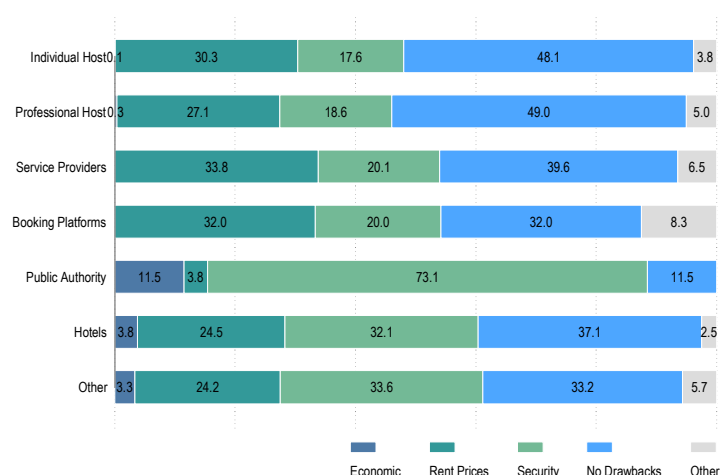
Total respondents: 5, 479.

Economic benefits group the options: *It is an additional source of income for citizens; It creates employment; It attracts visitors; It encourages investment in local services (e.g. housing, tourism, transport).*

Benefits for tourists group the options: *It caters to unfulfilled tourism needs (e.g. low-income tourists, (large) families); It is an alternative to more traditional accommodation offers.*

Negative impact of STRs. 48.2% (2,355 out of 4884) of the hosts report no drawbacks. However, 47.6% (2326 out of 4884) of them is aware of housing affordability and availability issues that STRs could create. Public authorities reported security issues (73.1% - 19 out of 26). 32% (8 out of 24) of online platforms consider the rental pricing issue relevant and 32% (8 out of 25) report no drawbacks.

Figure 4. Negative impacts generated by STRs by Stakeholders group



Total respondents: 5, 479.

Economic: *It has a negative economic impact on traditional accommodation providers.*

Rent Price: *It increases the price of renting or buying housing in cities; it decreases the availability of housing for rent or sale in cities.*

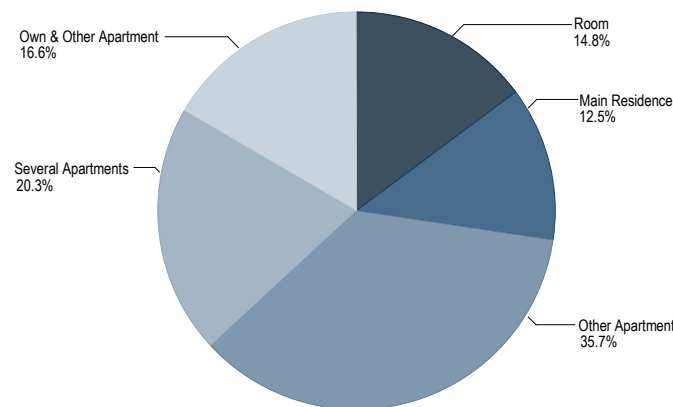
Security: *It raises security issues; it increases nuisance for local residents.*

No Drawbacks: *There are no drawbacks.*

Hosts activity

The next graphs show the type of accommodation rented out by both individual and professional hosts and their location (urban, rural area or both).

Figure 5. Type of accommodation offered by hosts



Total respondents: 4884.

Room: *Room(s) in my main residence (apartment or house)*

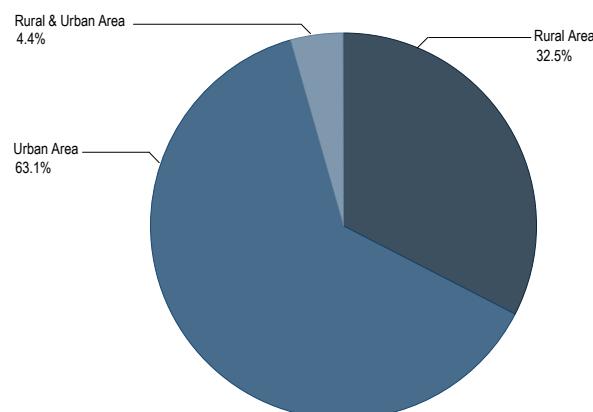
Main Residence: *The entirety of my main residence (apartment or house)*

Own & Other Apartment: *An apartment or house other than my main residence*

Several Apartments: *Several apartments or houses other than my main residence*

Other Apartment: *Among the "other" type of accommodation, the following were mostly listed: (a) mostly apartments built next to the main residence; (b) other atypical rental spaces (e.g., boat, bungalow, yurt, tent).*

Figure 6. Locations where accommodations are offered by hosts

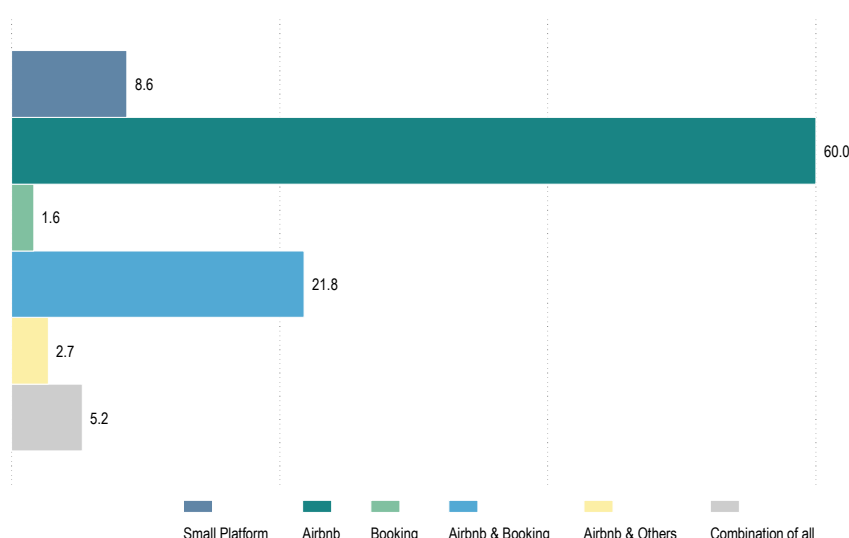


Total respondents: 4884.

Means used to offer STR services. Hosts mainly use online platforms to advertise their STR services. In addition, 19% (928 out of 4884) of hosts consider word mouth as an important means to offer their services.

Online platforms used to offer STR services. Hosts use mainly large platforms to offer their STR services, while only 8.6% (420 out of 4884) of hosts use small platforms only. The most popular large platforms cited were Airbnb, Booking, Vrbo (Expedia) and TripAdvisor. Airbnb consolidates as the most used one (~85% for individual hosts¹⁹² and ~72% for professional hosts¹⁹³). Some examples of small platforms used by individual hosts included Leboncoin, Rentalia, Homeaway (8.4% - 359 out of 4278), and those used by professional hosts included Gîtes de France, PAP vacances, Agoda and other local platforms (32.67% - 198).

Figure 7. Main online platforms used by hosts



Total respondents: 4884.

Cross-border activity

Hosts and online platforms were asked whether they offer their services only in their country of residence (and in how many cities), or whether they also offer their services cross-border. While platforms did not provide an answer to these questions, it can be assumed that almost all online platforms operate cross-border. At the same time, while most hosts provide their services in their country of residence (89.4% - 4,366 out of 4884) some hosts declared to offer their services in more than 1 city (13.6% - 664 out of 4884) and some even cross-border (16.3% - 796 out of 4884).

¹⁹² Airbnb is used by: People using only Airbnb (63.6%); People using A. & booking (20.1%); People using A. & others (2.6%). ~85% of people use Airbnb, as using one platform does not imply not using others and multiple listings are possible.

¹⁹³ Airbnb is used by: Hosts using only Airbnb (35%); Host using A. & booking (33.8%); Hosts using A. & others (3.8%). ~72% of hosts use Airbnb, as using one platform does not imply not using others and multiple listings are possible.

The main reasons put forward by hosts for not operating cross-border were: not interested in operating cross-border (55.2% - 2,696 out of 4884) too costly to do so (21.8% - 1,065 out of 4884), don't know what rules apply (27.6% - 1,348 out of 4884), too many rules apply (11.7% - 571 out of 4884).

Hosts indicated that significant¹⁹⁴ expenses arise to comply with obligations in different Member States. Respondents report cleaning and maintenance costs and taxes. Hosts point out commission fees from platforms.

Ancillary service providers

39.2% (1913 out of 4884) of hosts declared that they collaborate with providers of other services (ancillary services, e.g. property management, cleaning, maintenance...) or are considering doing so. 60% (15 out of 25) of online platforms declared they help arrange such services. 83.4% (121 out of 145) of ancillary services providers declared that they gain a significant part of their customers/revenue from services requested by hosts and/or by referrals from online platforms.

Impact of COVID

When asked about the impact of COVID on the STR sector, public authorities indicated that the STR sector suffered similar setbacks as other industries related to tourism. However, the STR sector shows greater resilience and recovered volumes faster than other types of accommodation. The lockdown period has – reportedly – heavily affected STRs. However, most respondents point out a current recovery to pre-pandemic levels. Hosts, in turn, described the impact of COVID to be significant. On the first year of the pandemic losses range from 20% to 100%. The lockdown implied a drop in international tourists arrivals, sharply reducing STRs revenues. No respondent who identified as a platform replied to specific questions on this issue.

2. Transparency

Data needed to design STR rules

Public authorities indicated that they need non-personal (73.1% - 19 out of 26) and personal data (26.9% - 7 out of 26) to design STR rules. The following data was mentioned most: number of available STRs, property information (location), number of nights rented, information on the hosts.

Data needed to enforce STR rules

For enforcement purposes, 53.8% (14 out of 26) public authorities indicated they need non-personal data, and 61.5% (16 out 26) public authorities indicated they need personal data. The following data were mentioned most: Number of nights the property is rented, host identification and property information (location).

¹⁹⁴ Different respondents from different Member States reported examples of possible expenses they were referring to. Ranges and specific items described vary depending on the Member State and locality.

Access to data by public authorities

26.9% (7 out of 26) of public authorities indicated that they have access to non-personal, aggregated data on the number of STR and of nights rented out and 11.5% (3 out of 26) personal data on who rents what and how often. Public authorities get access to both personal and non-personal data mostly by using publicly available data or private/commercial data. Among those who declared a lack or limited access to personal (88.46% - 23 out of 26) and non-personal data (73.07% - 19 out of 26), the main reasons behind were a lack of appropriate legal framework for data-sharing (for personal 78.26% (18 out of 23) and non-personal 63.15% (12 out of 19)) and lack of response from online platforms to requests by public authorities (56.5% (13) and 52.63% (10) respectively). Ten public authorities declare to receive data either from online platforms (5 out of 26) or using publicly available and commercial data (5 out of 26). Some of those public authorities declare to receive the data on a yearly basis or even on a timely (daily) basis. Among all public authorities, a low percentage (23.07% - 6 out of 26) require a particular delivery format.

Public authorities also receive data directly from hosts (57.7% - 15 out of 26). Those who receive data from hosts do so via online platforms, register procedures and tax payments. Those who do not receive data from hosts declared the following reasons: lack of legislation, lack of cooperation from hosts, and privacy concerns.

Finally, fifteen public authorities declared to receive data from hotels. They particularly have access to licenses, tourist tax information and official statistics data.

Data sharing by hosts

82.9% (4,049 out of 4884) of hosts declared to share information on STRs with local public authorities. In particular, 79.4% (3,878 out of 4884) of hosts declared that they have to register with local authorities and provide information in that context. 83.2% (4,063 out of 4884) of hosts declared that they share information when complying with tax obligations. Some hosts declared to share other type of information, such as the identity of hosts (Spain, Greece, Portugal, Italy). Other: information on income, duration of stay (Greece), monthly statistics to city council on occupation rate (Germany).

Data sharing by platforms

76% (19 out of 25) of platforms respondents declared to share data with public authorities from at least one Member State. 20% (5) declared to share data only in certain Member States (but not all in which they operate). Platforms that do not share data with public authorities (24% - 6 out of 25) declared the following reasons for not doing so: four have not received requests; one has received requests, but they believe they are not subject to the jurisdiction of the relevant Member State; one cannot legally share the data.

With regards to public authorities that request data, platforms identified: National and local tax authorities, tourism authorities and tourism information offices, policy authorities and statistical institutes. When they share data with public authorities, it is often on a mandatory basis (44% - 11 out of 25), less so on a voluntary basis (12% - 3 out of 25), and sometimes on both/it depends on the data (12% - 3 out of 25). One

platform explained that they usually create reports on voluntary basis since they want to be open and transparent.

Platforms that share data with public authorities share non-personal data (60% - 15 out of 25), personal data (32% - 8 out of 25) or sometimes other types of data such as income details or tourist information. They share the data mostly on a yearly basis (28% - 7 out of 25), but sometimes also every six months (20% - 5 out of 25) upon requests of public authorities (44% - 11 out of 25) or on a timely basis through e.g. APIs (12% - 3 out of 25). With regards to the level of diversity of the data requests from public authorities, 12% (3 out of 25) declared that the difference is high, while 8% (2 out of 25) declared that there is low or no difference at all.

Platforms declare that data requests continue to pose legal challenges and costs, as they are often fragmented, inconsistent (often duplicate). Platforms identify costs according to (i) legal costs due to challenges with local public authorities and (ii) operational costs linked to the internal product development required to support local data-sharing compliance schemes (and lack of solutions at scale). Platforms report that data-sharing requirements can be unclear, complex and much more costly to build compliance schemes around.

Cooperation of platforms in enforcing STR rules

72% (18 out of 25) of platforms declared that they are subject to obligations to cooperate with public authorities to enforce existing STR rules (e.g. obligation to display registration numbers, delist listings without a registration number).

Platforms specified that the following obligations could apply (non-exhaustive listing) depending on the market:

- Delisting non-compliant listings when ad hoc notices are received from public authorities,
- Displaying registration numbers,
- Identifying whether a listing needs a registration number or not,
- Enforce nightly stay caps restrictions,
- City tax collection and remittance on behalf of home owners.

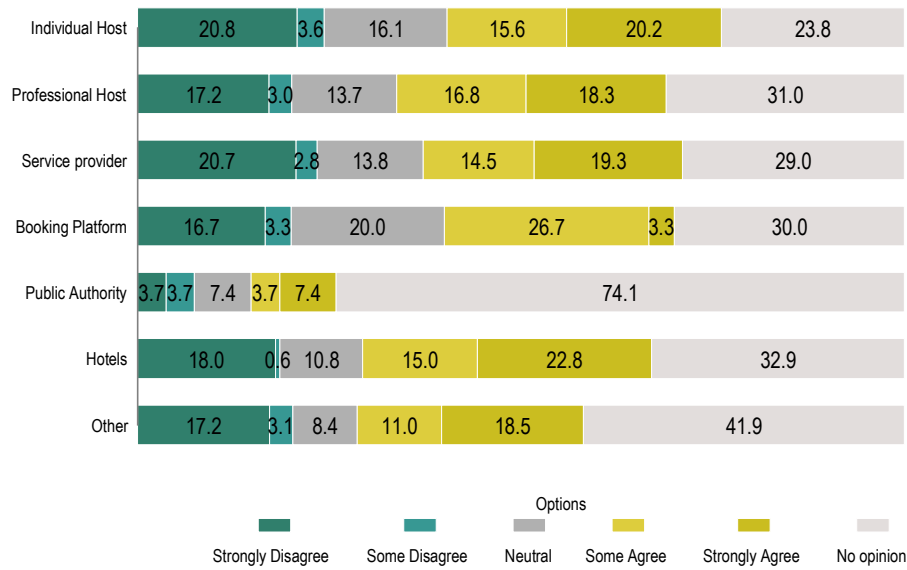
In terms of costs to comply with such obligations, platforms indicated that: enforcement actions are staff intensive and very costly, there are high administrative costs, and the lack of transparency favours the non-compliance with the rules. Platforms reports that the time needed vary depending on the underlying regulation, information requested, reporting cadence, and adherence to EU law – it can take one week to several months.

How should public authorities get access to data. The graph below shows the perception by respondents as to whether and how public authorities should get access to data on STR to design and enforce policies:

Figure 8. How should public authorities get access to data?

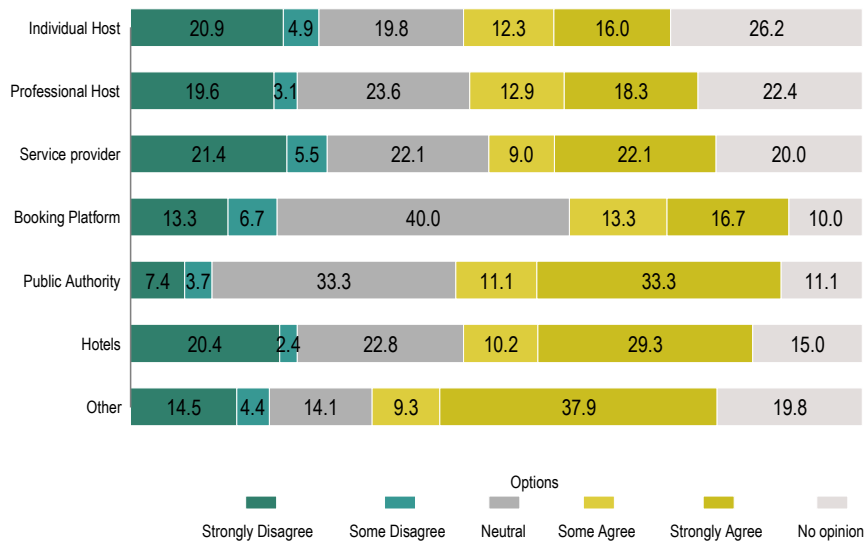
The tables below show the perception of the respondents with regards to the different means public authorities should use to get access to data (and as to whether they should get access to data at all).

a. They should not get access to such data



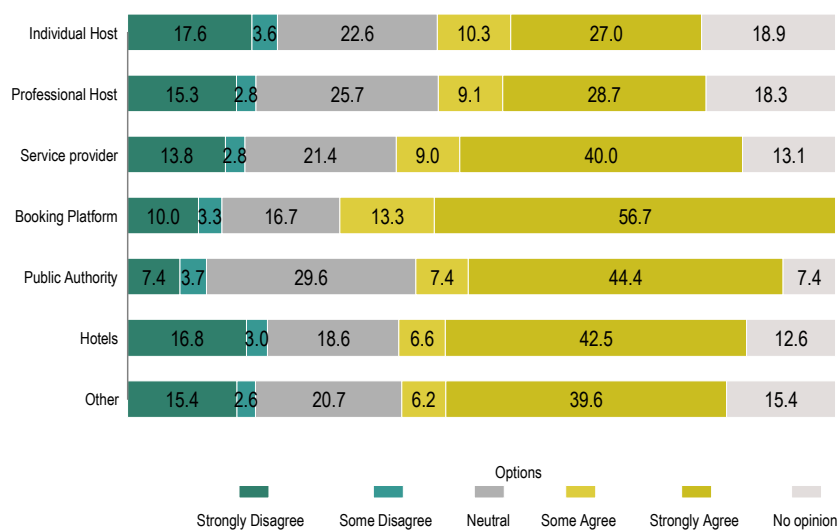
Total respondents: 5695.

b. They should carry out checks and enforcement actions directly on the ground



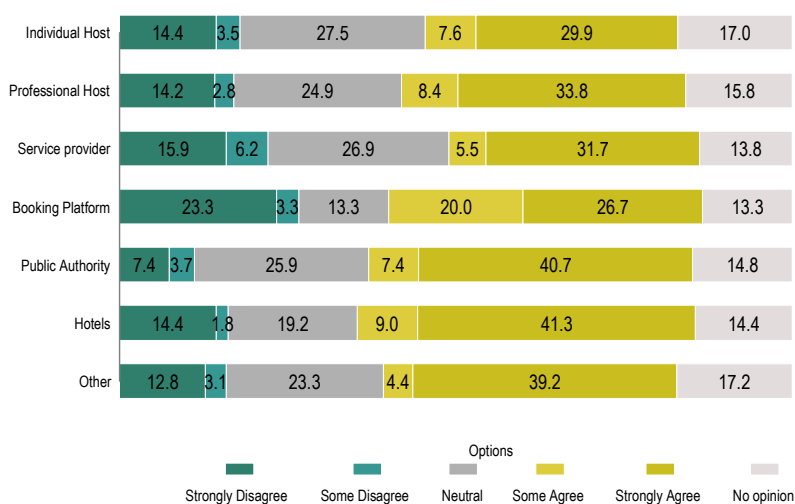
Total respondents: 5695.

c. They should obtain it directly from the (registered) hosts



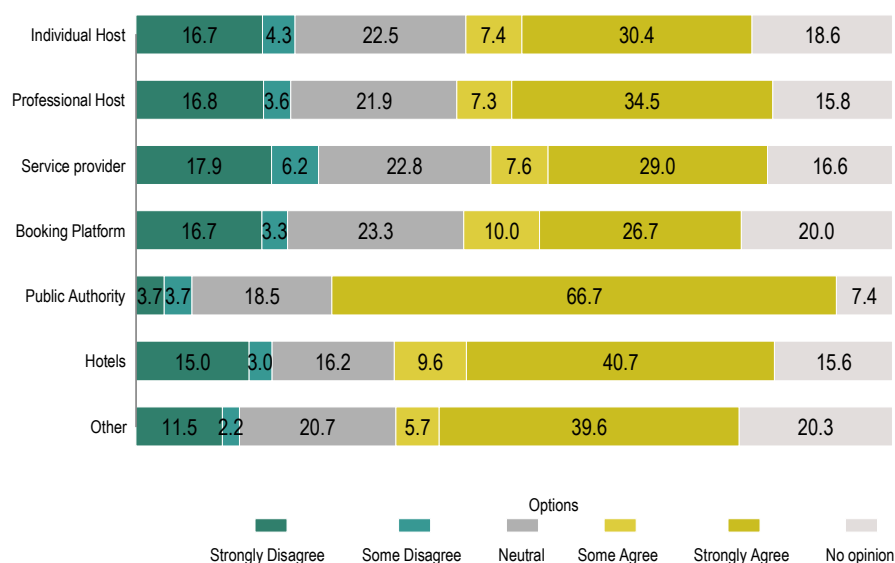
Total respondents: 5695.

d. They should get it from the online booking platforms, upon request



Total respondents: 5695.

e. They should get it from the online booking platforms, periodically

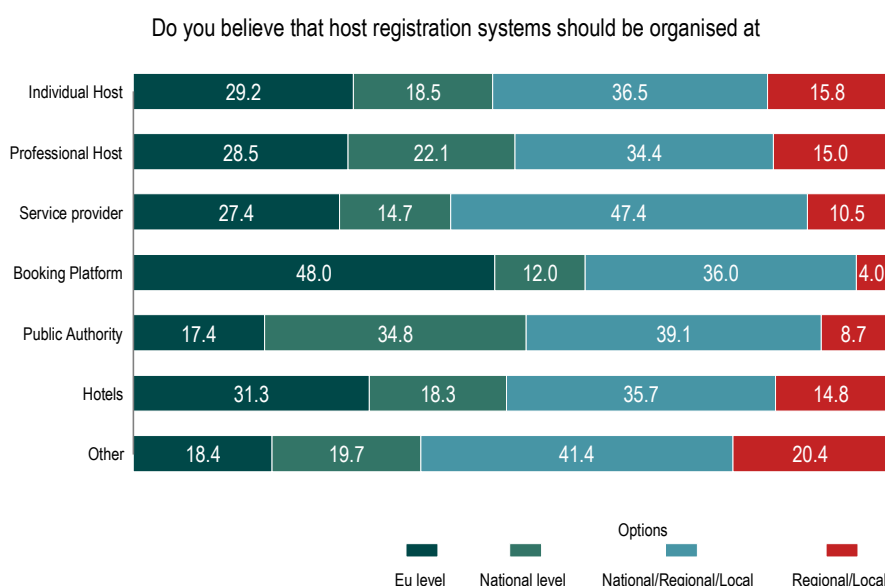


Total respondents: 5695.

Registration obligation for hosts

56.6% (3,224 out of 5695) of total respondents see merit in a registration obligation for hosts as a tool to increase transparency on STRs. Figure 9 explains at which level the registration scheme should be introduced according to the respondents. The majority of the respondents believe that the registrations scheme should be managed at national or at national/regional/local level.

Figure 9. At which level a host registration scheme for STRs should be organised?

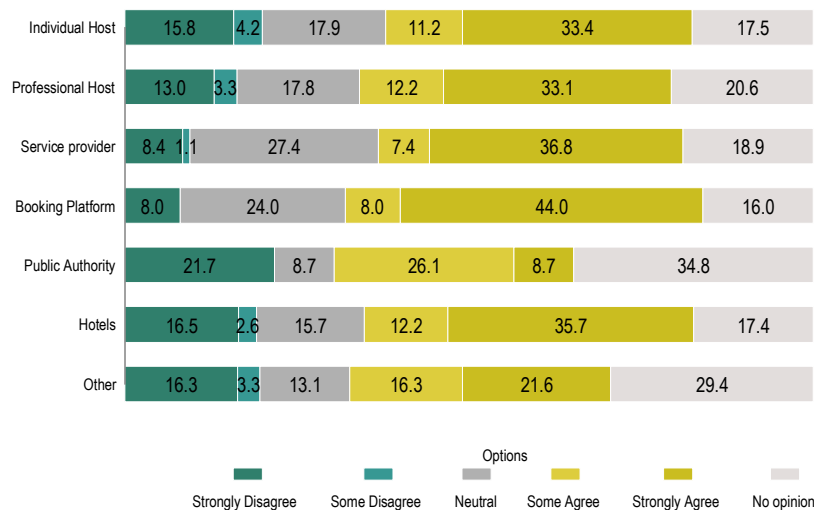


Total respondents: 3225.

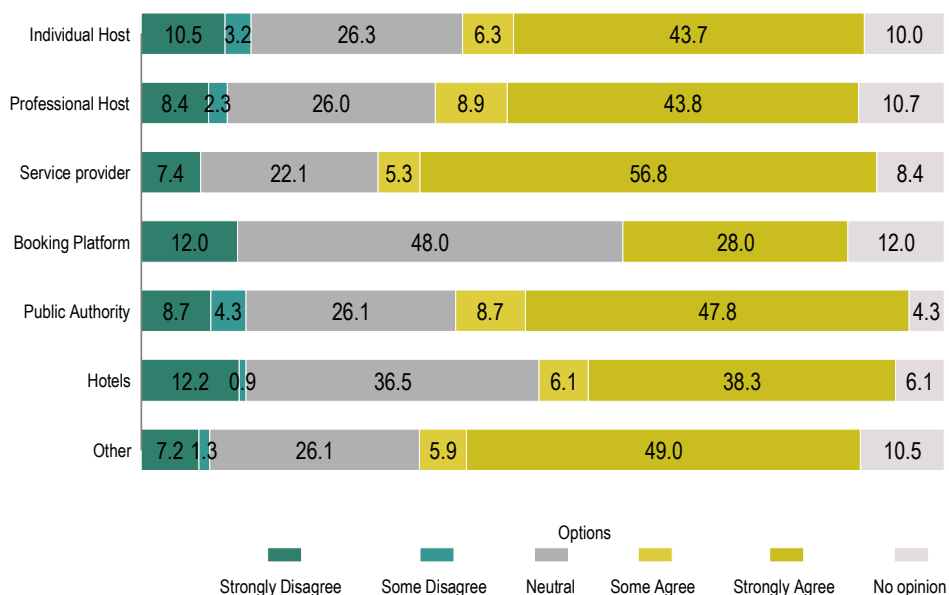
As shown by the figures below, there is undoubtedly big support for a more harmonised approach to host registration schemes within the EU. Most respondents see merit in having national/local registration schemes aligned with an EU template.

Figure 10. Do you see merit in a more harmonised approach to host registration schemes within the EU?

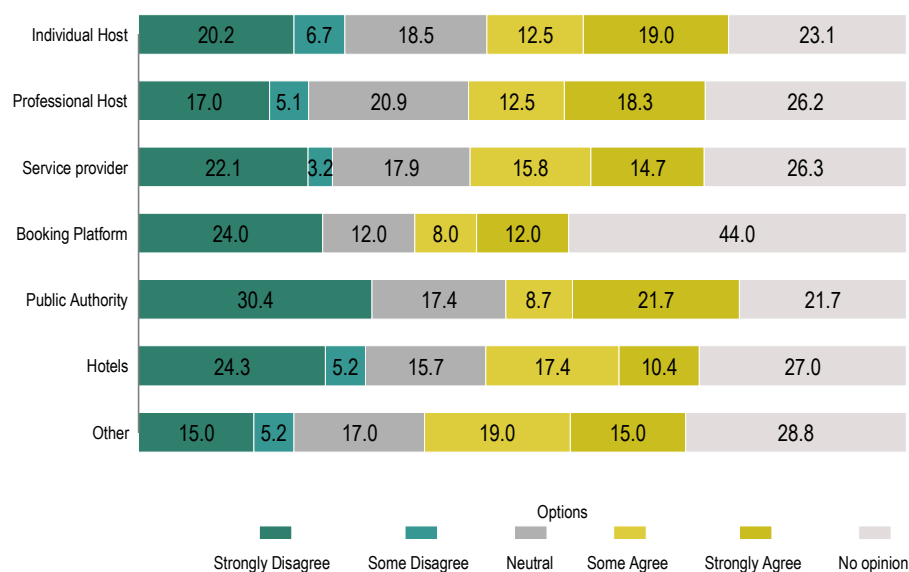
- I see merit in having one single registration scheme at EU level, but it should replace existing local/national registration schemes



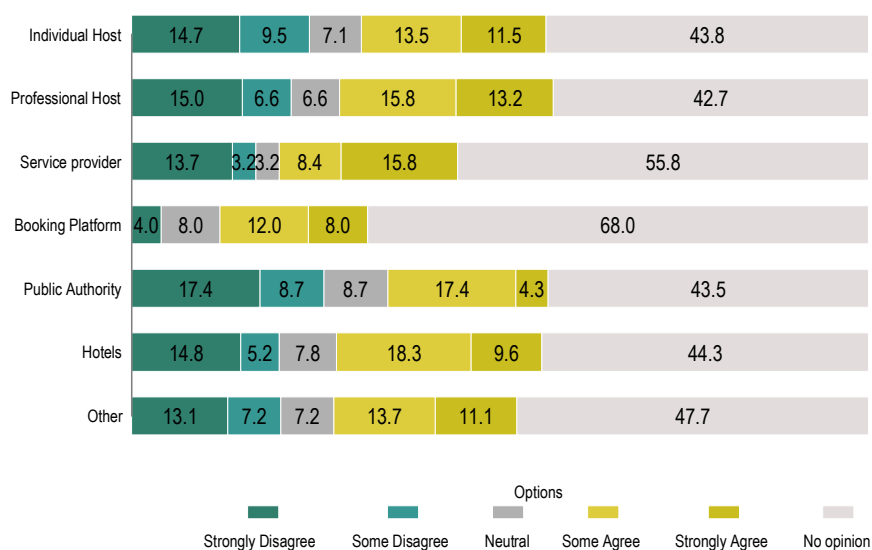
- I see merit in having national/local registration schemes aligned to an EU standard



- I see merit in having an optional EU standard for national/local registration schemes



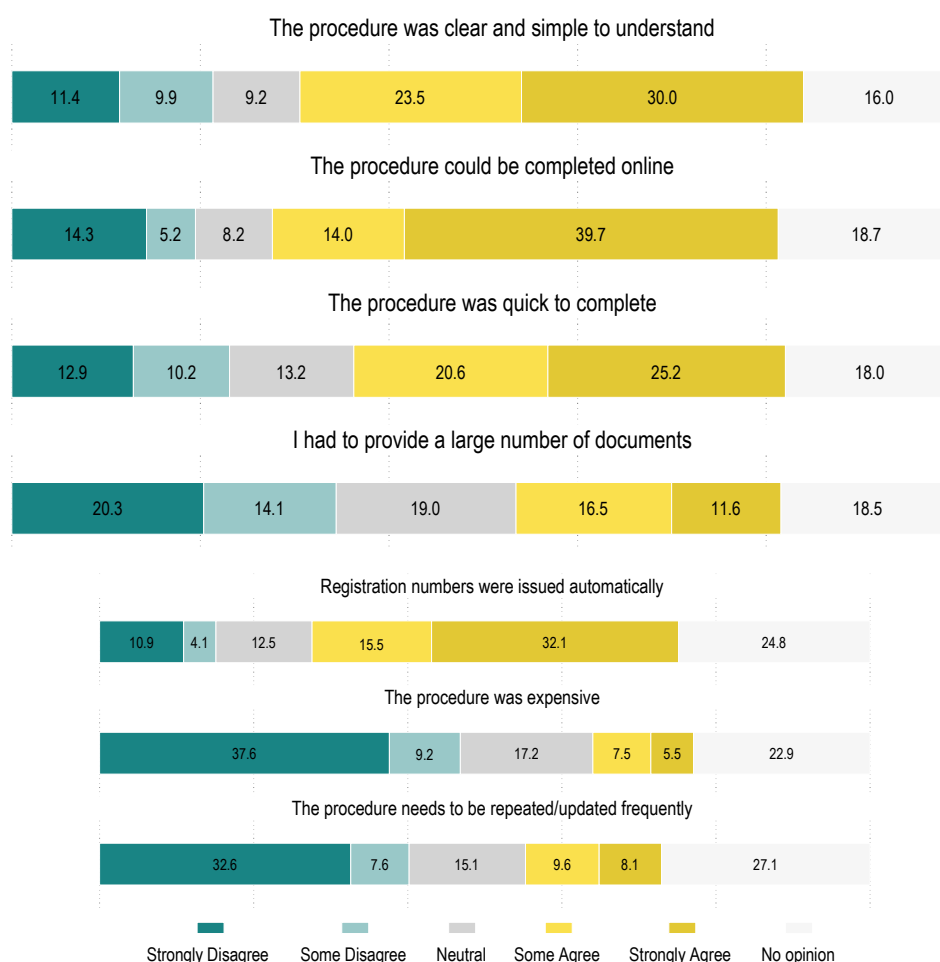
- I see no merit in having a harmonised approach at EU level



Total respondents: 5695.

Figure 11 shows hosts' experience with registration schemes.

Figure 11. Hosts' experience with registration schemes



Total respondents: 4884.

Data sharing by platforms

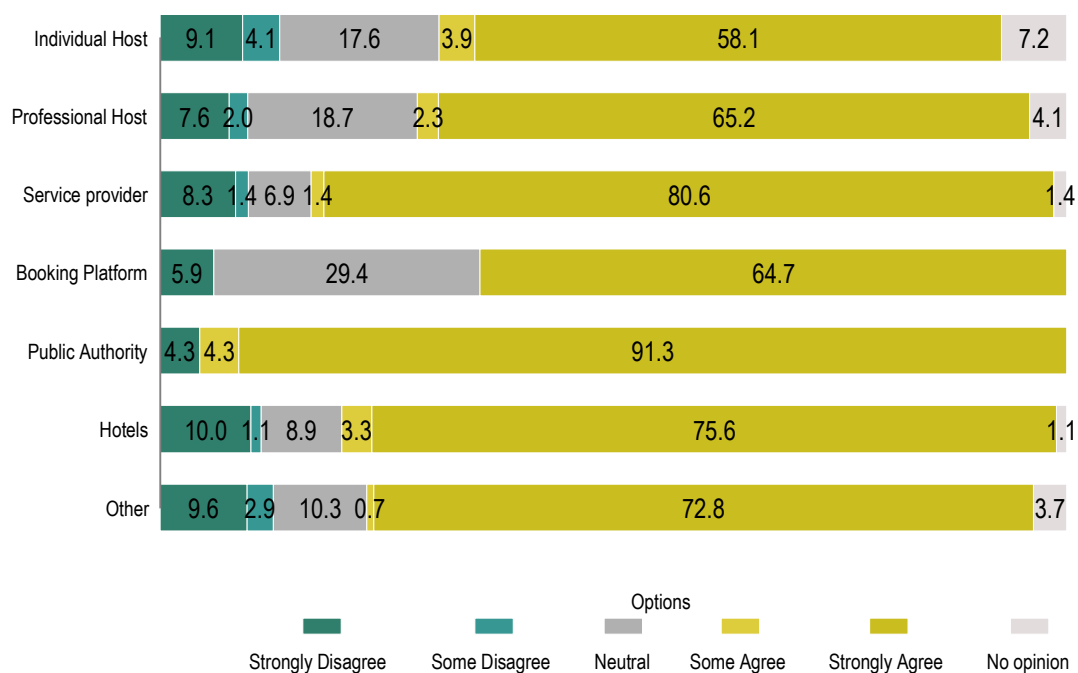
51.4% (2,927 out of 5695) of respondents are in favour of requiring online platforms to share data on STRs with public authorities to increase transparency and facilitate public policy and enforcement activities. Respondents indicated: they expect positive impact on legal STRs operation (and fight against illegal STRs), less burden on hosts, a higher transparency and better knowledge of the market, better data quality with a facilitated cross-checking and validation of data, better control including on paying taxes, improved quality standards for customers. 85.6% (4,875 out of 5695) of total respondents also believed that such requirements should be put in place/facilitated at EU level.

To facilitate the sharing of data by online platforms with public authorities, respondents are very much in favour of obliging hosts and booking platforms to display registration

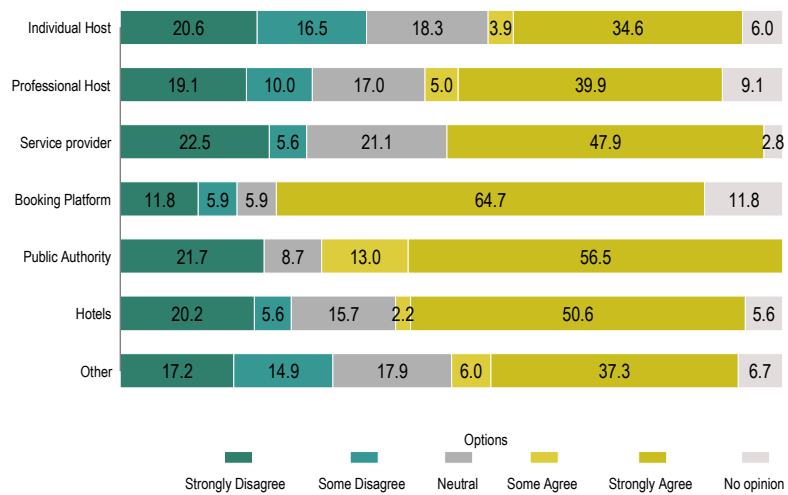
numbers when advertising a property, but also to develop technical tools for data sharing at EU level, or a more harmonised format and frequency for data sharing.

Figure 12. What would be the better way to facilitate the sharing of data by online booking platforms with authorities?

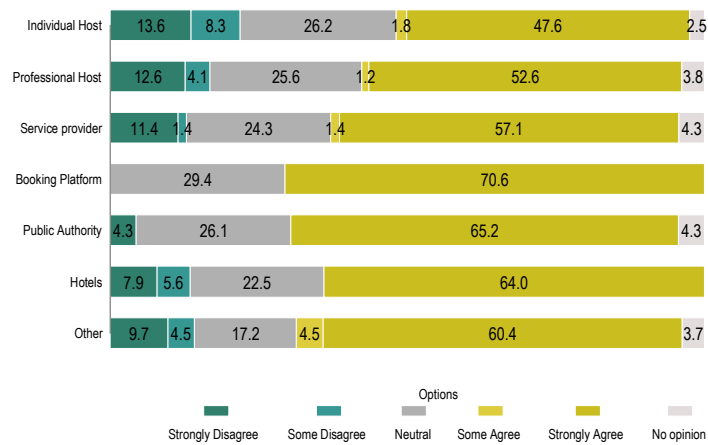
Obligation for hosts and booking platforms to display the registration number when advertising a property



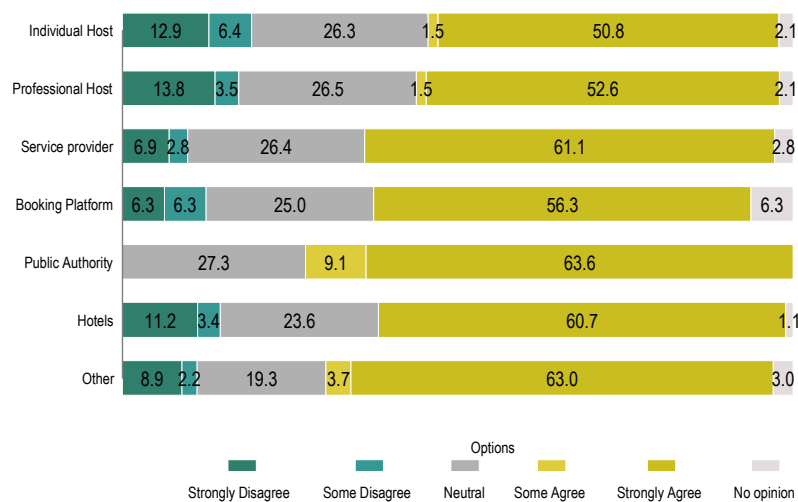
Development of technical tools at EU level (such as application programming interfaces, ‘APIs’)



Development of a standard format to share data



Development of harmonised rules for sharing such data (type of data, frequency)



Total respondents: 5695.

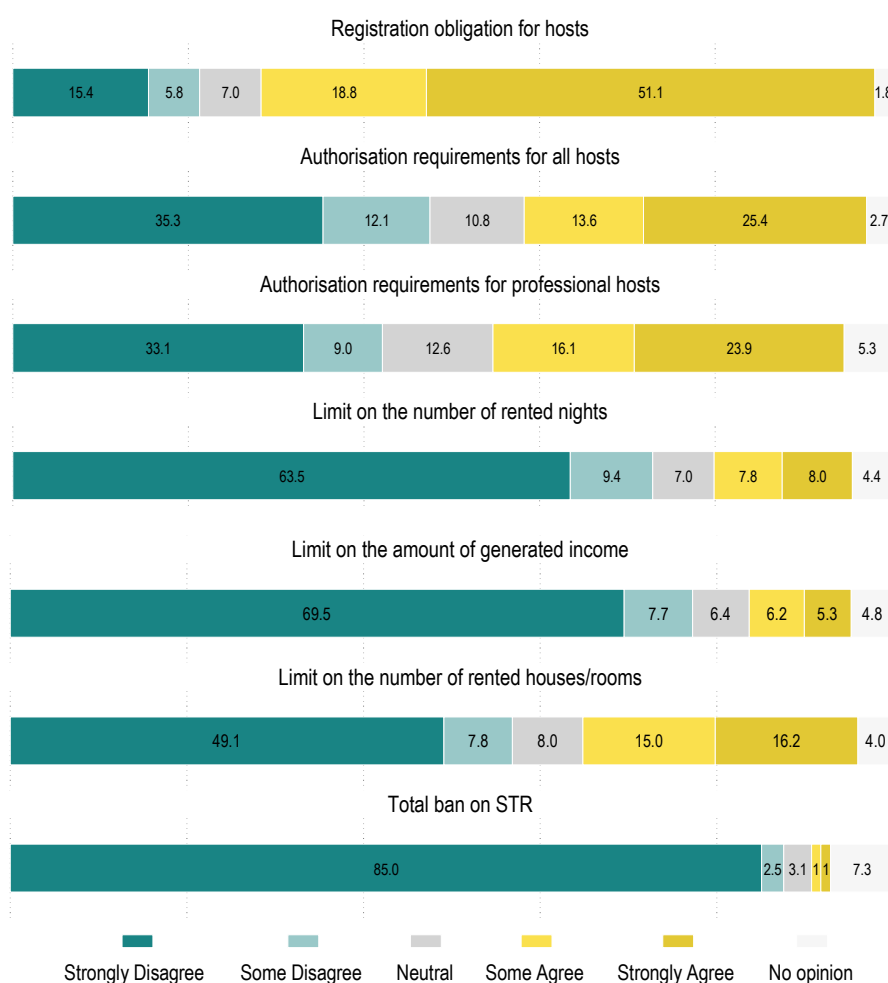
22.5% (1,281 out of 5695) of respondents also indicated that if data sharing rules were adopted, they consider that some online platforms should benefit from an exemption (e.g. start-ups, platforms with low revenues, etc.) More specifically, respondents identified the following types of platforms: emerging or small platforms, with low revenues or turn-over, local platforms with little scope, platforms that facilitate individual hosting.

3. Market access requirements

Requirements for STR

The graph bellow shows the perception by respondent as to which rules and requirements could be acceptable and if registration schemes, authorization requirements or limits should be imposed. The results show a great divergence of opinion regarding market access requirements, which could be explained by the local dimension of market access requirements (subsidiarity).

Figure 13. What type of rules and requirements for STR could be acceptable?

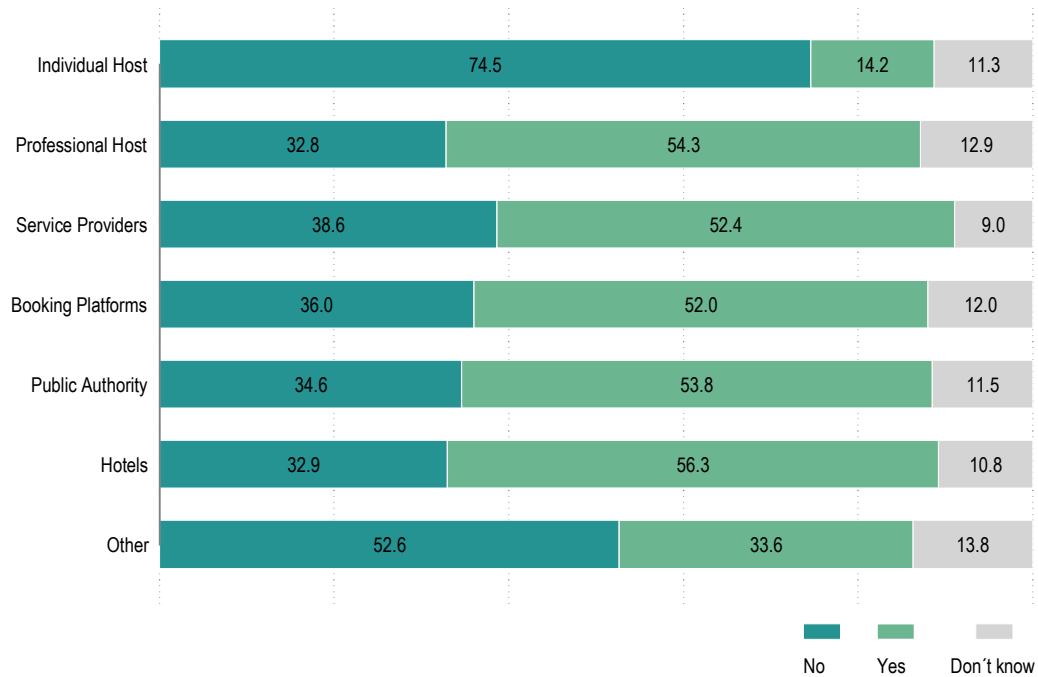


Total respondents: 5695.

Standardization of rules and requirements

The graph below shows the perception of respondents as to whether “peers” (individual hosts) and professional hosts should be subject to the same rules. The results also show that there is no agreement on this question and opinions diverge among respondent groups, which indicates that there is no EU wide support for a standardization of STR rules and requirements, in particular the distinction between peers and professionals.

Figure 14. Should 'peers' be subject to the same rules as professionals?



Total respondents: 5.479.

Requirements on hotels. To start their activity, hotels must get authorisations (e.g. planning permission/building permits). They must meet requirements related to company registration, fiscal registration, compliance with necessary health and safety requirements (e.g. fire protection and food safety), public liability insurance etc. In order to exercise their activity, hotels must elaborate a number of procedures and risk assessments and deal with customer complaints, luggage handling, processing of payments, dealing with emergencies. They must also comply with public order requirements (e.g. registration of guests), privacy regulations, consumer protection law, copyright law, contract law, social and employment law and many other legal requirements.

ANNEX 2A: RESULTS OF THE ADDITIONAL TARGETED SURVEY TO PUBLIC AUTHORITIES

The targeted survey to public authorities complemented the results of the public consultation and gathered additional information on their data needs, the purpose for which such data is needed, how and how often public authorities currently collect data and the level of cooperation they have achieved with online platforms. The targeted survey to public authorities was open from 8 April to 2 May 2022 and it was communicated via a targeted email campaign. 80 responses were received from all levels of public authorities (national, regional, province/municipal). The results of the survey are presented below, following the order of the questions.

1. Identification of respondents

Public authorities were asked to identify themselves according to the territorial level they represent. The majority of the public authorities responding to the targeted survey (61.25% - 49) carry out their activity at a province/municipal level. 18.75% (15) of the public authorities have competences at national level and 16.25% (13) at regional level. 3.75% (3) of the respondents declared to be tourism offices.

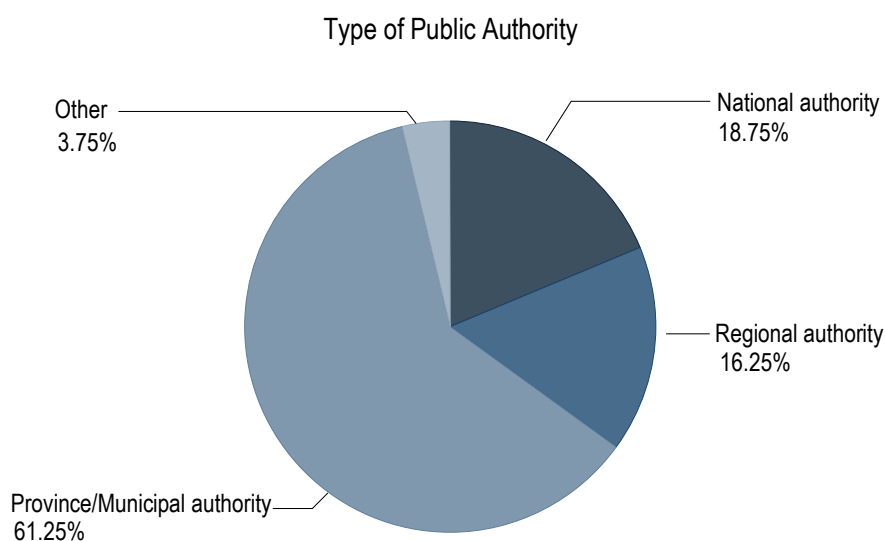


Figure 1. Number of respondents: 80

2. Data needs for public authorities

Type of data needed on to short-term accommodation rental activities

Public authorities indicated that they need identification data of the host/owner, of the real estate unit and activity data.

Identification data of the host/owner

The table 1 shows the type of identification data of the host/owner that is needed by public authorities at all level. Most public authorities need identification data of the host, and some need the hosts' tax identification number.

Identification data of the host/owner (multiple replies possible):	% by category of repliers			
	National authority	Regional authority	Province/Municipal authority	Other
Name, address and contact details (telephone and/or email) of the host	80%	85%	86%	33%
Name, address and contact details (telephone and/or email) of the owner (if different from the host); Social Security number of host)	20%	0%	14%	0%
Tax identification number of host	60%	69%	37%	33%
Other	33%	8%	10%	0%
I do not need this data	7%	8%	4%	33%
Over a total of respondents	15	13	49	3

Table 1. Number of respondents: 80

Identification data of the real estate unit

The table 2 shows the data needs of public authorities with regards to the real estate unit (i.e. the accommodation). The address, the type of accommodation and the capacity are among the most selected data types.

Identification data of the real estate unit (multiple replies possible):	% by category of repliers			
	National authority	Regional authority	Province/Municipal authority	Other
Address of the real estate unit rented	80%	92%	96%	33%
Cadastral information or its equivalent under the national law of the Member State where the property is located	60%	62%	35%	33%
Type of real estate unit rented (e.g. room, apartment, house...)	93%	92%	88%	33%
Capacity of real estate unit rented (e.g. number of beds)	93%	92%	82%	33%
Whether the real estate unit is a primary residence, secondary residence, or other	47%	38%	55%	0%
Other	67%	54%	55%	0%
I do not need this data	0%	8%	0%	67%
Over a total of respondents	15	13	49	3

Table 2. Number of respondents: 80

Activity data

Table 3 shows the type of activity data needed by public authorities. Public authorities need mostly the number of nights rented out and the number of guests hosted.

Activity data (multiple replies possible)	% by category of repliers			
	National authority	Regional authority	Province/Municipal authority	Other
Number of nights the real estate unit has been rented	87%	92%	88%	67%
Number of guests hosted	80%	77%	71%	67%
Reason of the booking (for leisure/for business/other purposes of stay)	53%	46%	47%	67%
Revenues generated by the short-term rental activity	67%	46%	41%	33%
Other	67%	54%	55%	67%
I do not need this data	0%	8%	6%	33%
Over a total of respondents	15	13	49	3

Table 3. Number of respondents: 80

Frequency of identification data needs

The frequency at which public authorities need identification data on the host/owner varies greatly, depending on the level of public authorities, as shown by the figure 2 below.

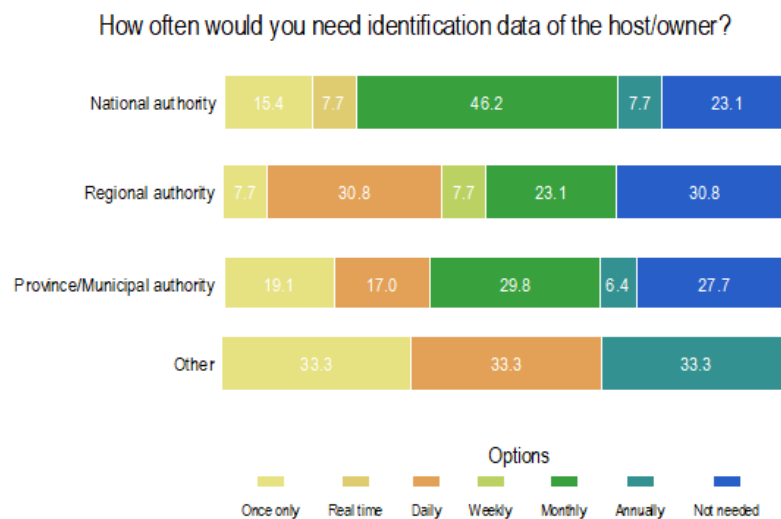


Figure 2. Number of respondents: 76

With regards to identification data of the real estate unit, the frequency at which the data is needed also varied depending on the level of public authority, as shown by figure 3 below.

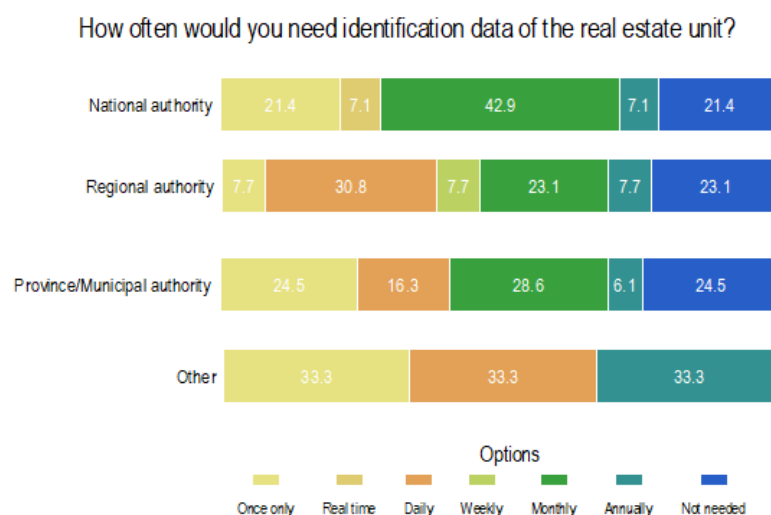


Figure 3. Number of respondents: 79

Finally, with regards to activity data, public authorities declare to need it mainly on a daily basis, but with important differences depending on the level of public authority.

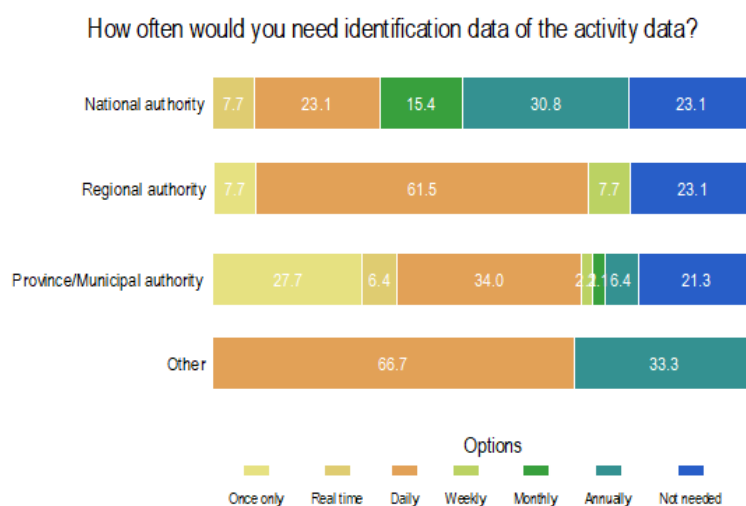


Figure 4. Number of respondents: 76

For which purposes is data needed

Most of the public authorities require the information about hosts, owners and activity to enforce rules. On the other hand, less than a half of the respondents indicate they need the data to design and justify rules.

Identification data – hosts/owner	Identification data – real estate unit	Activity data
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Enforcing rules	75%	74%	62%
Designing and justifying rules	42%	49%	40%
Other	10%	15%	22%
<i>Over a total of respondents</i>	73	76	69

Table 4.

Could you specify for the design and justifying of which rules you would like to collect identification data on the hosts/owner?

26% (9) need identification data on hosts/owner to manage tourism flows and design housing market regulation policies. For the same policies, 33% (12) and 30% (11) of authorities indicate they need identification data of real estate units. Finally, 25% (8) would collect activity data for the same purpose. Real estate unit information would be required by 27% (10) of the authorities in order to design better health and safety policies.

Could you specify for the design and justifying of which rules you would like to collect identification data on:			
	hosts/owner	real estate unit	activity data
Taxation	22%	25%	20%
Security	19%	22%	17%
Health and safety requirements	19%	27%	16%
Tourism flows management	26%	33%	25%
Local housing market regulation	26%	30%	26%
Other	10%	7%	7%
<i>Over a total of respondents</i>	34	37	32

Table 5.

Could you specify for the enforcement of which rules you would like to collect identification data on the hosts/owner?

Authorities need data mainly to enforce rules on local housing market. 44% (27) need data on host/owner and real estate unit information for this purpose. 40% (24) of the authorities consider that host/owner information is also important for taxation enforcement rules. Around 40% (23) of authorities also consider important information of real estate units for security and health rules.

Could you specify for the enforcement of which rules you would like to collect:			
	hosts/owner	real estate unit	activity data
Taxation	40%	36%	33%
Security	37%	39%	30%

Health and safety requirements	36%	41%	25%
Tourism flows management	36%	36%	37%
Local housing market regulation	44%	48%	37%
Other	11%	9%	9%
Over a total of respondents	61	59	50

Table 6.

3. Current collection of identification data by public authorities

Current collection of data on hosts and real estate units

A considerable percentage of authorities operating at national level collect data from hosts via a registration process (40% - 6), whereas a lower number of them use other methods as contacting platforms or using alternative tools. 85% (11) of the regional authorities collect the data through a mandatory registration process. They also consider the other methods. 23% (3) require the data directly to the platform, use an ex-post framework or use alternative tools. Province and municipal authorities mostly collect the data through the registration process (39% - 19) or via alternative tools (47% - 23).

	National authority	Regional authority	Province/Municipal authority	Other
I require hosts to register, as a pre-condition for providing STR services	40%	85%	39%	33%
I get data directly from platforms	20%	23%	27%	33%
I require hosts to report their activity ex-post (at least once a year)	13%	23%	22%	0%
I collect this data through independent/ alternative tools	27%	23%	47%	33%
Other	40%	15%	20%	0%
I do not use any tool to collect data	7%	8%	14%	33%
Over a total of respondents	15	13	49	3

Table 7. Number of respondents: 80

Type of identification data currently collected

92% (12) of the regional authorities currently collect identification data on hosts, while only 32% (4) are collected identification data on owners. Some province and municipal authorities collect identification data both on hosts and owners (53% - 26 and 58% - 28 respectively). The address of the real estate unit is also considered as crucial information by regional authorities. The type and capacity of the unit rented would be also asked by all public authorities. On the contrary, social security number would be rarely requested by the authorities at any territorial level.

National	Regional	Province/Municipal	Other
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	authority	authority	authority	
Name, address and contact details (telephone and/or email) of the host	60%	92%	59%	67%
Name, address and contact details (telephone and/or email) of the owner	27%	31%	53%	67%
Social Security number of host	7%	8%	10%	0%
Tax identification number of host	33%	54%	22%	67%
Address of the real estate unit rented	53%	92%	78%	67%
Cadastral information or its equivalent under the national law of the Member State where the property is located	20%	38%	16%	33%
Type of real estate unit rented (e.g. room, apartment, house...)	53%	69%	55%	67%
Capacity of real estate unit rented	53%	77%	49%	67%
Whether the real estate unit is a primary residence, secondary residence, or other	13%	15%	33%	33%
Other	47%	46%	37%	33%
I do not collect data about hosts and real estate units rented on a short-term	20%	8%	20%	33%
Over a total of respondents	15	13	49	3

Table 2 Number of respondents: 80

Frequency of collection of identification data

Most of the authorities collect identification data of the host/owner on a short-time basis. 53.8% (7) of the regional authorities collect this data every year. On the other hand, 27.3 % (3) of national authorities collect it every week and 36.4% (4) every year. A considerable percentage of province/municipal authorities (25.6% - 11) collect this information once.

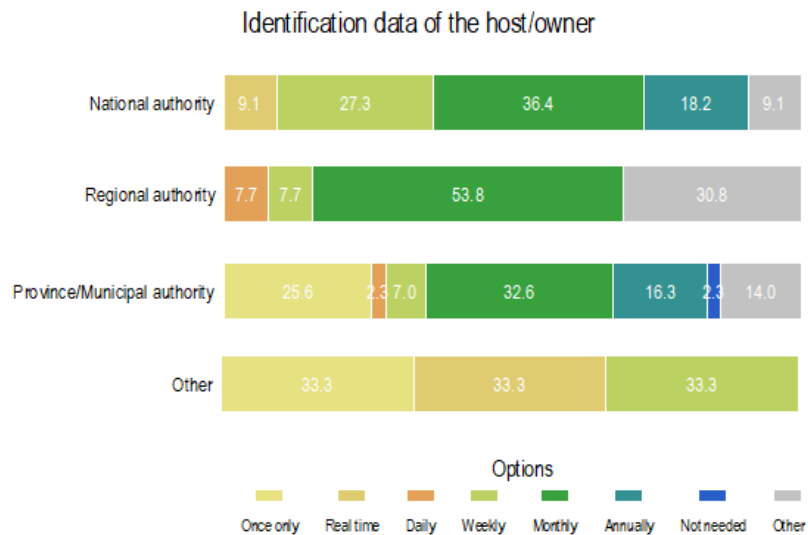


Figure 5 Number of respondents: 70

Similar findings apply to the collection of identification data of the real estate unit.

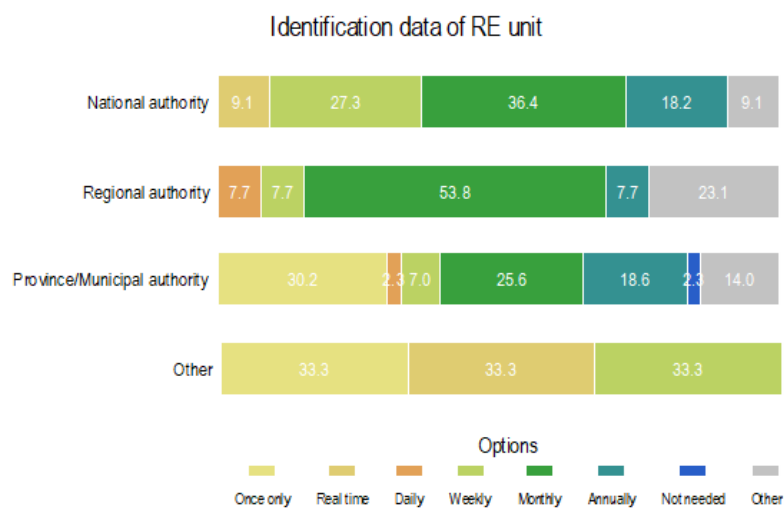


Figure 6. Number of respondents: 70

4. Current collection of activity data by public authorities

Type of activity data collected and from whom

Number of nights

	National authority	Regional authority	Province/Municipal authority	Other
I do not collect this data	19%	69%	39%	33%
Hosts	40%	17%	34%	33%
Platforms	20%	0%	20%	33%

Other	25%	17%	7%	0%
Over a total of respondents	15	13	49	3

Table 9 Number of respondents: 80

Number of guests

	National authority	Regional authority	Province/Municipal authority	Other
I do not collect this data	27%	75%	45%	33%
Hosts	40%	25%	38%	33%
Platforms	13%	0%	9%	33%
Other	20%	0%	8%	0%
Over a total of respondents	15	13	49	3

Table 10. Number of respondents: 80

Reason of the booking

	National authority	Regional authority	Province/Municipal authority	Other
I do not collect this data	80%	100%	80%	67%
Hosts	7%	0%	8%	33%
Platforms	7%	0%	4%	0%
Other	7%	0%	8%	0%
Over a total of respondents	15	13	49	3

Table 11. Number of respondents: 80

Revenues generated

	National authority	Regional authority	Province/Municipal authority	Other
I do not collect this data	44%	83%	80%	67%
Hosts	13%	8%	12%	33%
Platforms	26%	0%	4%	0%
Other	19%	8%	4%	0%
Over a total of respondents	15	13	49	3

Table 12. Number of respondents: 80

Frequency of data collected from hosts

The frequency of activity data collection varies greatly among public authorities. National authorities mostly collect data every day (36.4 – 5) or on a weekly basis (18.2% - 3). Similarly, province/municipal authorities collect their data on a daily (35.7% -17) or weekly (16.7 – 8) basis. Moreover, 19% (9) province/municipal

authorities collect this data only once. On the other hand, regional authorities usually access to this data on a daily basis (66.7% - 9).

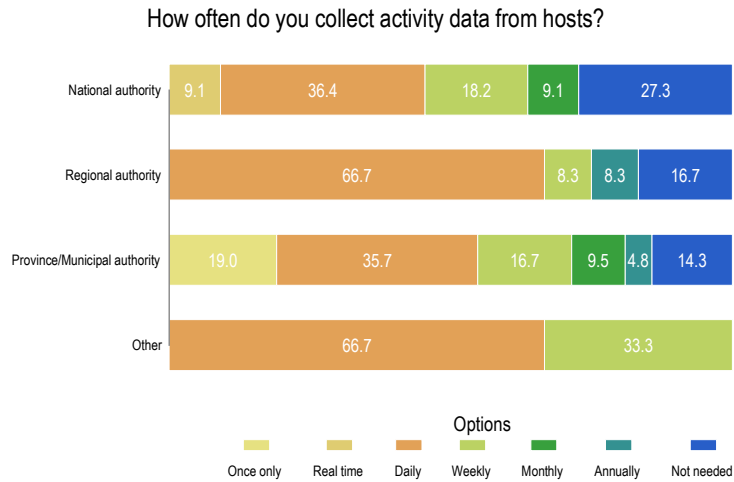


Figure 7. Number of respondents: 70

Frequency of data collected from platforms

Most of the authorities collect activity data from platforms on a daily basis. However, provincial/municipal authorities also collect this data only once (25% - 12), on a weekly basis (13.6 – 7), or every month (13.6 – 7).

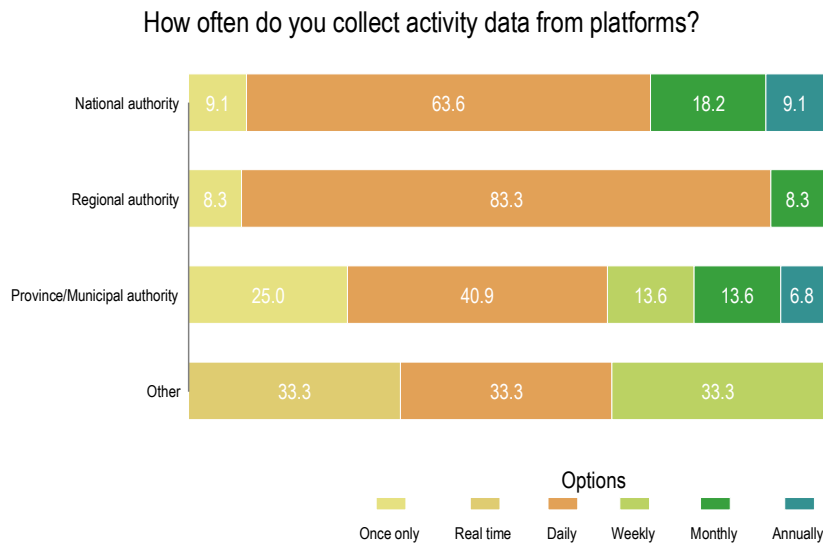


Figure 8. Number of respondents: 70

5. Current level of co-operation with platforms

Existence of a legal basis to request data from platforms

A legal basis to request data from platforms seems to currently exist in half of the cases, as shown by figure 9 below.

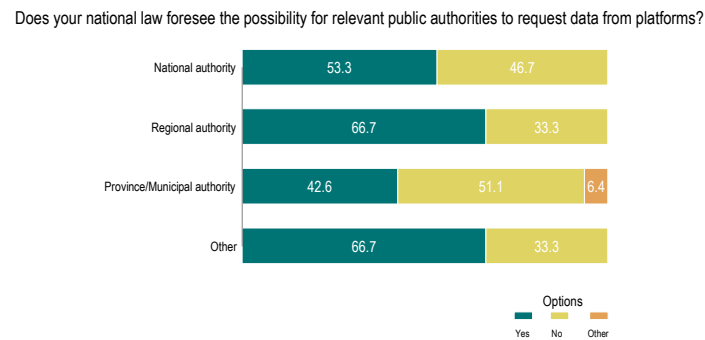


Figure 9. Number of respondents: 77

Existence of voluntary agreements with online platforms for data sharing

The vast majority of public authorities do not currently have voluntary agreements with online platforms in place.

Do you have voluntary agreements in place with platforms that include a commitment from platforms to share data?

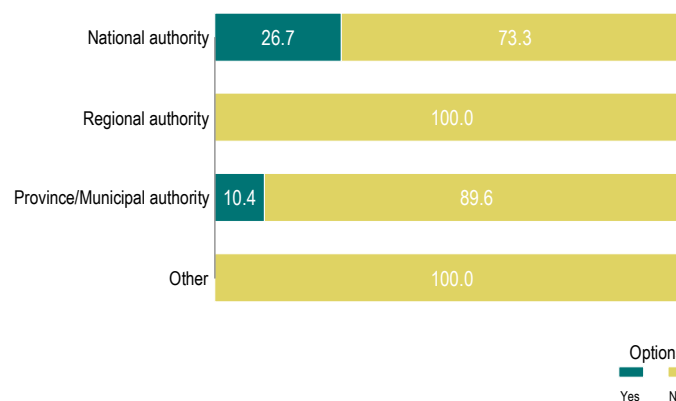


Figure 10. Number of respondents: 78

Among the small number of voluntary agreements, public authorities declare to have agreements with Airbnb (38.1% - 8), Expedia (19.05% - 4) and Booking (14.29% - 3) in place.

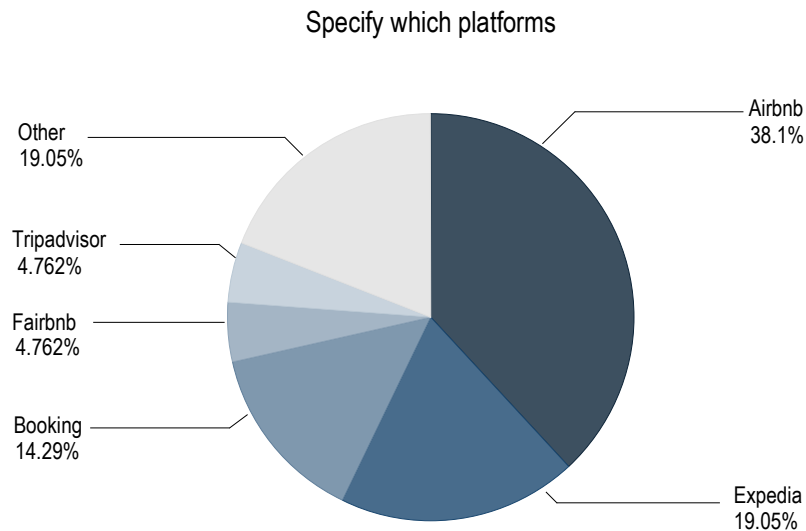


Figure 11. Number of respondents: 9. Number of total agreements: 21

Experience with data requests to platforms

Even though most public authorities declare not to have requests data to platforms ever, it appear that public authorities at all level have already requests data to public authorities, and different types of data (identification data, on hosts, on the real estate unit, and activity data) showing the great diversity of data requests.

	National authority	Regional authority	Province/Municipal authority	Other
No, I have never requested data to platforms	73%	50%	53%	100%
Identification data on the host	7%	33%	30%	0%
Identification data on the real estate unit	7%	25%	30%	0%
Activity data	20%	17%	26%	0%
Other	13%	8%	7%	0%
Over a total of respondents	15	12	43	3

Table 14 Number of respondents: 73

If you have already requested data from (at least) a platform, please specify from which one (multiple replies possible):

Among those that have already requested data from booking platforms, a 31.94% (23) of the requests were done to Airbnb, a 18.06% (13) to Booking and a 16.67% (12) to Expedia.

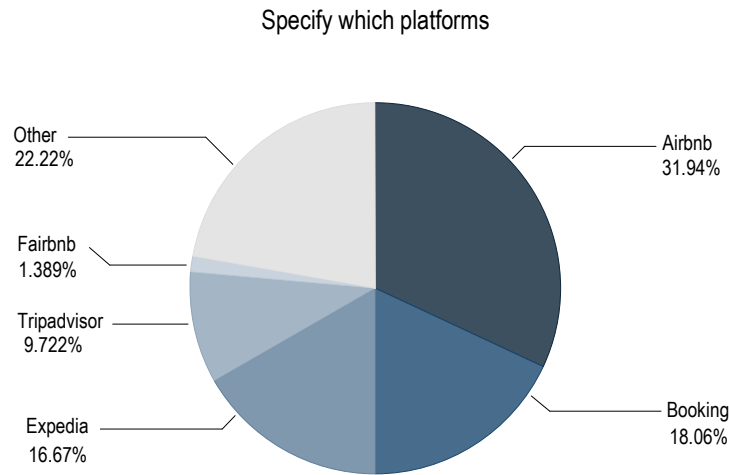


Figure 12. Number of respondents: 27. Number of total requests: 72

Public authorities declare that their data requests are not always answered by platforms, showing the difficulty of public authorities in accessing the data on STRs. In the next plot we can observe the evolution of data request by public authorities (17) over the years compared to the number of requests addressed by platforms.

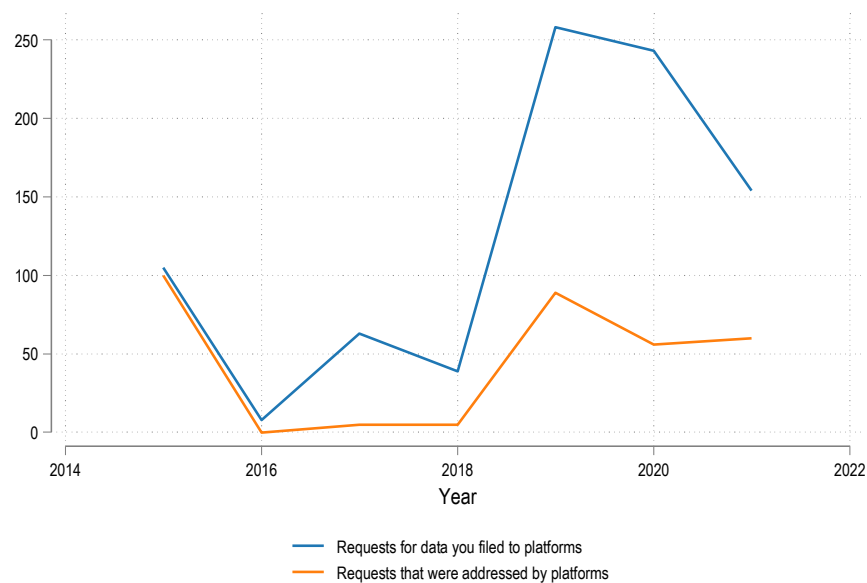


Figure 133. Number of respondents: 17

Format of data requests (e.g. based on registration numbers)

Authorities' requests are mostly based on the name, address and contact details of the host. However, a considerable percentage of regional authorities also base their data

requests on the local or national registration number (80% - 4). This shows the great diversity in the format of data requests overall.

	National authority	Regional authority	Province/Municipal authority	Other
Local or National registration number	40%	80%	29%	-
Name, address, and contact details of the host	80%	80%	59%	-
Social Security number	0%	0%	0%	-
Other	40%	60%	41%	-
<i>Over a total of respondents</i>	5	5	17	-

Table 15 Number of respondents: 27

Requests rejected by online platforms and reasons

A small number of authorities agree in that platforms always collaborate in the data sharing process. On the other hand, among the respondents, a 60% of the national and regional authorities (3) and a 89% (16) of the municipal authorities report that booking platforms refused to share data, mainly due to legal reasons. This again stresses the difficulties faced by public authorities in accessing STR data.

	National authority	Regional authority	Province/Municipal authority	Other
No, platforms were always collaborative	20%	20%	6%	-
They claim not to have the data	20%	20%	22%	-
Legal reasons (e.g. no legal basis for providing the data, possible violation of GDPR)	60%	60%	89%	-
Technical difficulties (e.g. resource or time intensive exercise for platforms)	0%	0%	28%	-
They claim they have already shared the same or similar data with another Public Authority in the Member State	0%	0%	6%	-
Other	60%	40%	17%	-
<i>Over a total of respondents</i>	5	5	18	-

Table 16 Number of respondents: 28

6. Activity data on other tourism businesses

Activity data on other tourism businesses (e.g. hotels)

All the authorities collect information from other businesses in the tourism sector, in particular hotels and hostels. 67% (10) of national authorities collect data from both type of business.

	National authority	Regional authority	Province/Municipal authority	Other
No, I do not collect data from other tourism businesses	27%	42%	45%	67%
Hotels	67%	50%	59%	33%
Hostels	67%	33%	43%	33%
Other furnished short-stay accommodation with daily cleaning, bed-making, food and beverage services	33%	17%	32%	33%
Other	73%	92%	84%	100%
Over a total of respondents	15	12	44	3

Table 16 Number of respondents: 74

Frequency on data requests to other tourism businesses

Public authorities mainly collect this data on a monthly basis.

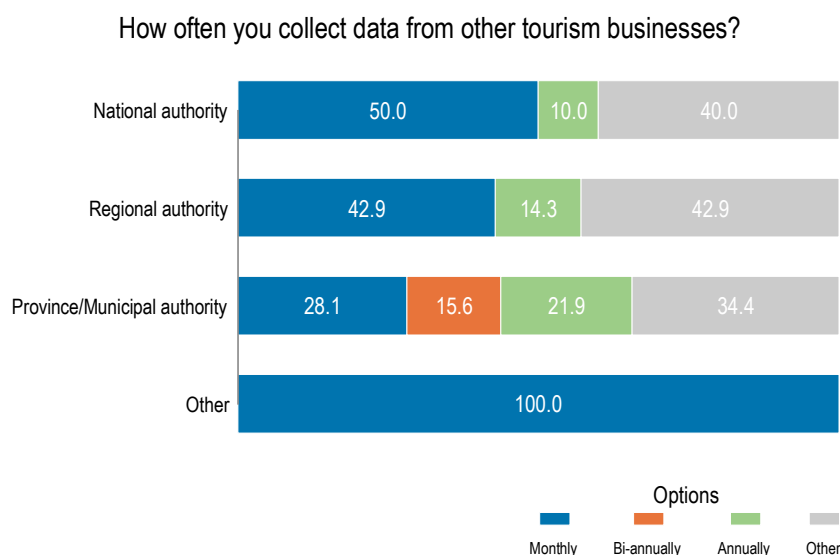


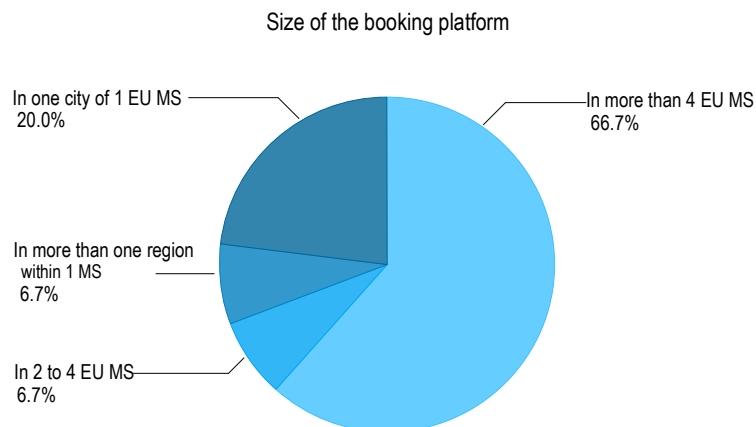
Figure 15. Number of respondents: 50

ANNEX 2B: RESULTS OF THE ADDITIONAL TARGETED SURVEY TO PLATFORMS

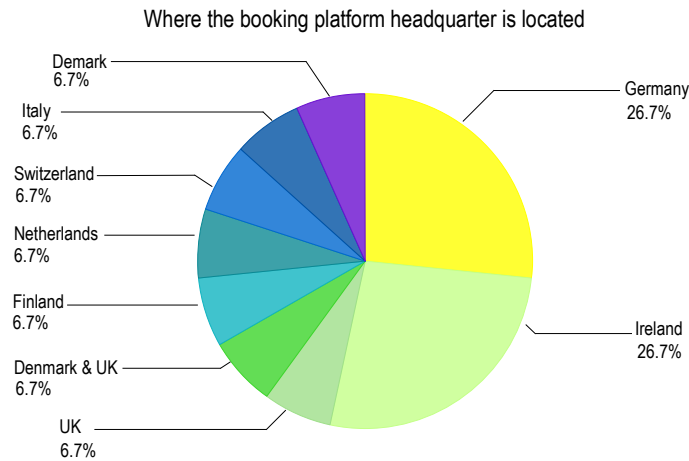
The targeted survey to platforms complemented the results of the public consultation and gathered additional information on the data sharing requests received by online booking platforms from public authorities. The survey investigated the modalities of such requests (timing and frequency), the tools used to share data and the purposes for which such data is requested. The targeted survey to platforms was open from 13 April to 13 May 2022 and it was communicated via a targeted email campaign. 15 responses were received from online booking platforms of all sizes (from one city in 1 EU Member State to more than 4 EU Member States). The results are presented both in an aggregated manner (for the 15 platforms) and also based on the size of the respondent.

1. Identification of Respondents

Online booking platforms were asked to identify themselves based on the number of Member States in which they operate. 10 platforms operate in more than 4 Member States. One platform operates in 2 to 4 Member States. 4 platforms operate in one Member State only. Among those platforms, one operates in more than one region (6.7%) and three operate in one city of the Member State (20%).



Respondents were also asked to confirm where their headquarter is located. A large number of the main platforms are located in Germany (26.7% - 4) and Ireland (26.7% - 4). The rest of platforms locate their headquarters in different European member states (UK, Finland, Netherlands, Switzerland, Italy and Denmark). Moreover, one of them (6.7%) locate their headquarter in two locations, UK and Denmark.



2. Data sharing requests filled by public authorities

Most of the booking platforms indicate that they have ever received a data request from a public authority (80% - 12).

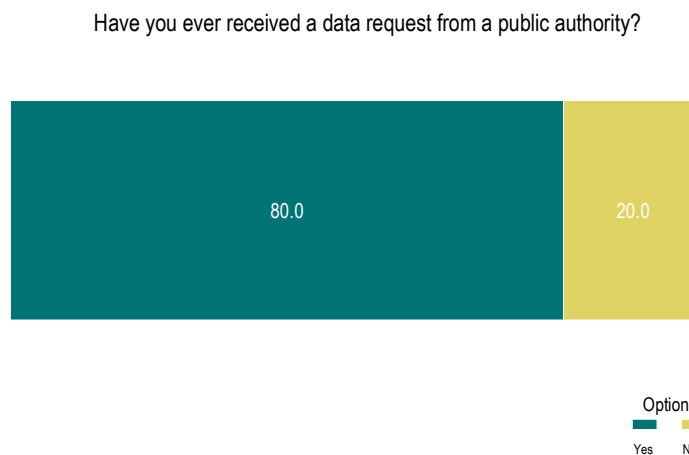
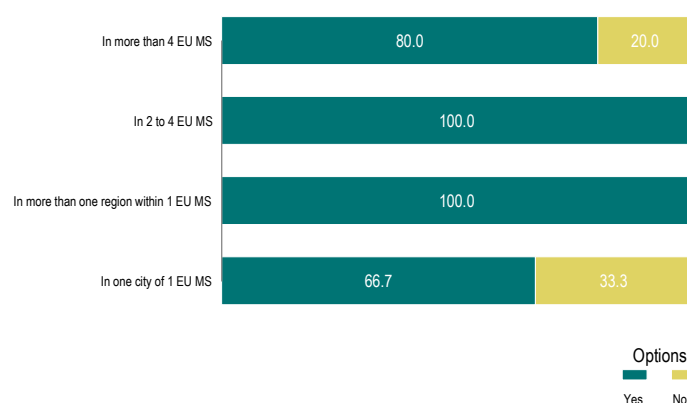


Figure 4. Number of respondents: 15

The three platforms who have never received a data request from a public authority are one that operates in more than 4 EU Member States, and 2 who operate in one city only.

Have you ever received a data request from a public authority?



Type of data requested

Identification data

The table 1 below shows the type of identification data of the host/owner that was requested by public authorities.

Identification data of the host/owner (multiple replies possible):	Number of replies	Percentage
Name, address and contact details (telephone and/or email) of the host	9	75%
Name, address and contact details (telephone and/or email) of the owner (if different from the host); Address of the real estate unit rented	2	16.7%
Social Security number of host	2	16.7%
Tax identification number of host	5	41.7%
Address of the real estate unit rented	8	66.7%
Cadastral information of the real estate unit rented	1	8.3%
Type of real estate unit rented (e.g. room,	4	33.3%
Capacity of real estate unit rented (e.g. number of beds)	1	8.3%
Whether the real estate unit is a primary residence	3	25%
Other	8	66.7%
Total replies	12	12

Table 2. Number of respondents: 12

The table below shows the breakdown of the type of data requested to platforms of different sizes. This shows the great variety of the type of data requested to different types of platforms across the EU.

	In more than 4 EU MS	In 2 to 4 EU MS	In more than one region within 1 EU MS	In one city of 1 EU MS	Other
Name, address and contact details (telephone and/or email) of the host	87.5%	0%	100%	33.3%	0%
Name, address and contact details	50%	0%	100%	0%	0%

(telephone and/or email) of the owner (if different from the host)					
Social Security number of host	25%	0%	0%	0%	0%
Tax identification number of host	50%	0%	0%	33.3%	0%
Address of the real estate unit rented	87.5%	0%	100%	0%	0%
Cadastral information of the real estate unit rented	13%	0%	0%	0%	0%
Type of real estate unit rented (e.g. room, Capacity of real estate unit rented (e.g. number of beds)	38%	0%	100%	0%	0%
Whether the real estate unit is a primary residence	12.5%	0%	0%	0%	0%
Other	37.5%	0%	0%	0%	0%
Other	50%	100%	100%	0%	0%
Total replies by respondent	8	1	1	3	0

Activity data

Online platforms have been requested to share different types of activity data with public authorities, and mainly the number of nights that the real estate unit has been rented out (75% - 9) and the revenues generated by the STR activity (75% - 9). However, other types of activity data have also been requested to online platforms which shows the great variety of data requests.

Activity data (multiple replies possible):	Number of replies	Percentage
Number of nights the real estate unit has been rented	9	75%
Number of guests hosted	4	33.3%
Reason of the booking of the guest (leisure/business/other)	3	25%
Revenues generated by the short-term rental activity	9	75%
Other [please specify]	5	41.7%
Total replies	12	12

Table 3. Number of respondents: 12

The table below gives additional information, with a breakdown by size of online platform.

	In more than 4 EU MS	In 2 to 4 EU MS	In more than one region within 1 EU MS	In one city of 1 EU MS	Other
Number of nights the real estate unit has been rented	100%	100%	0%	0%	0%
Number of guests hosted	25%	100%	0%	0%	0%
Reason of the booking of the guest (leisure/business/other)	13%	0%	0%	0%	0%
Revenues generated by the short-term rental	63%	100%	0%	0%	0%

activity					
Other [please specify]	13%	0%	0%	0%	0%
Total replies by respondent	8	1	1	1	2

Origin of the request

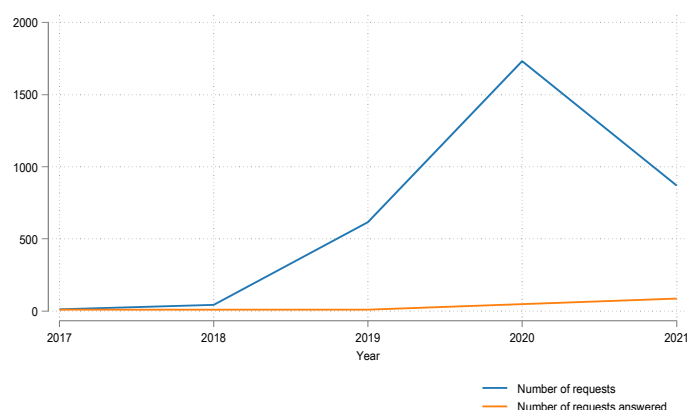
The table below shows the origin of data requests. It shows that data requests come from almost all Member States and all levels of government, stressing the high fragmentation with regards to data sharing on STR data in the EU.

Member State	National	Regional	Local
Austria	1	4	4
Belgium	1	2	2
Croatia	1	1	1
Czech Republic	0	2	3
Denmark	3	0	0
Estonia	1	0	0
France	4	3	5
Germany	1	3	7
Greece	2	0	0
Hungary	1	0	0
Ireland	4	0	1
Italy	2	1	1
Netherlands	1	1	2
Poland	1	1	1
Portugal	2	0	0
Romania	0	1	1
Slovakia	0	0	1
Slovenia	0	1	1
Spain	3	4	3
Sweden	1	0	0

Total	29	24	33
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Estimation of the number of requests received and answered

The graph below shows that the number of requests has increased over the years, with a slight decrease in 2021 which can be explained by the COVID crisis. The number of data requests answered, in turn, has remained very low over the years.



Frequency of data requests

While most platforms declare to receive annual requests, the frequency of data requests still varies greatly, and respondents also indicate that the frequency even varied depending on the public authorities issuing the request.

Ad hoc requests	Number of replies	Percentage
Weekly	1	8%
Monthly	1	8%
Annually	9	75%
The frequency varies depending on the public authority	3	25%
Other	2	17%
Total replies	12	12

Table 4. Number of respondents: 12

The table below offers a further breakdown based on the size of the online platform.

	In more than 4 EU Member States	In 2 to 4 EU Member States	In more than one region within 1 EU Member State	In one city of 1 EU Member States
Weekly	13%	0%	0%	0%
Monthly	13%	0%	0%	0%
Annually	88%	100%	0%	50%
The frequency varies	38%	0%	0%	0%

depending on the public authority				
Other	13%	0%	0%	50%
Over a total of respondents	8	1	0	2

Divergence and similarities of data requests

Figure 2 shows the degree of divergence with regards to the type of data requests, the format, the frequency, and the technical means used to transfer the data. Overall, online platforms have very different experiences with regards to these four aspects, while some have experiences similarities among data requests, and other have experienced very divergent requests.

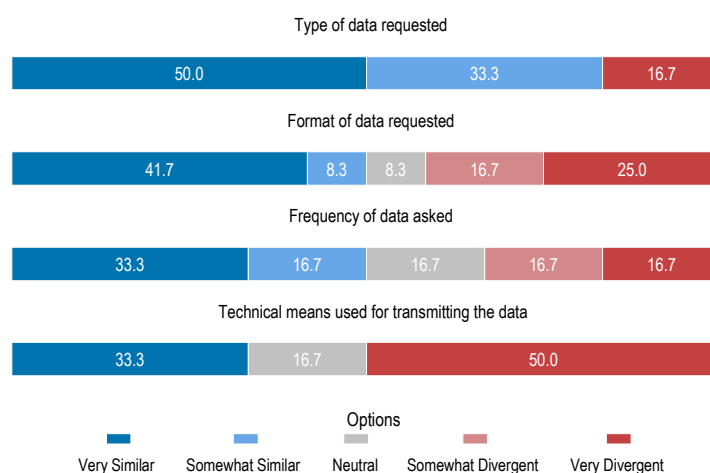
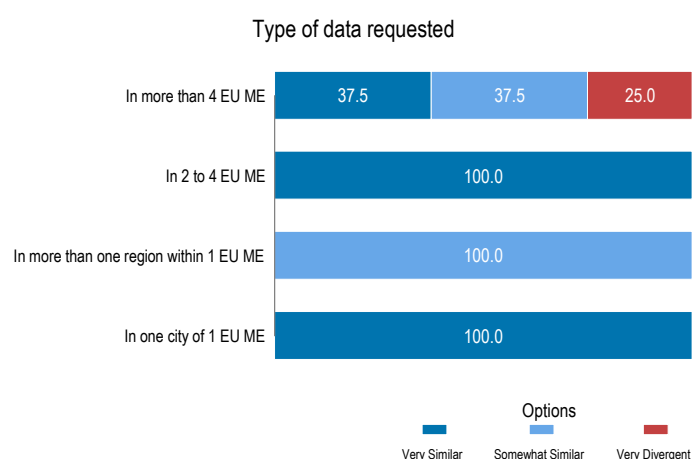
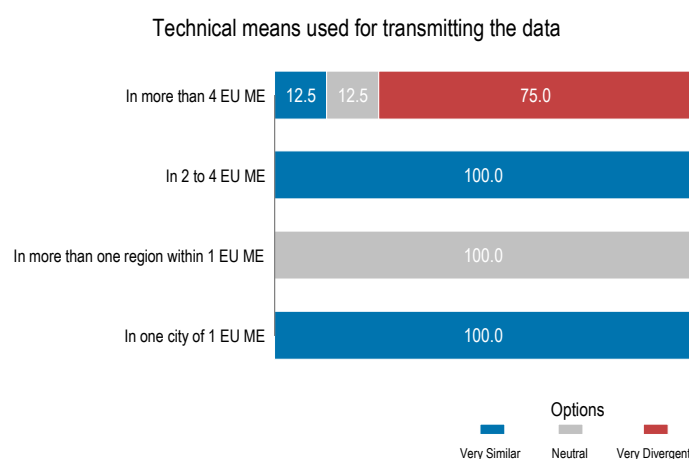
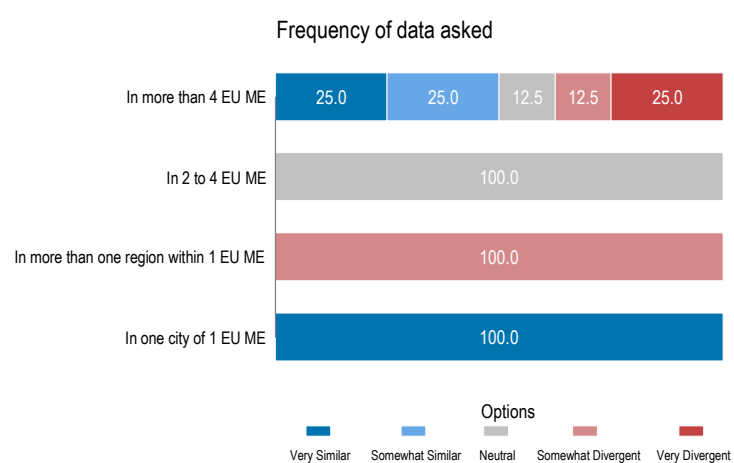
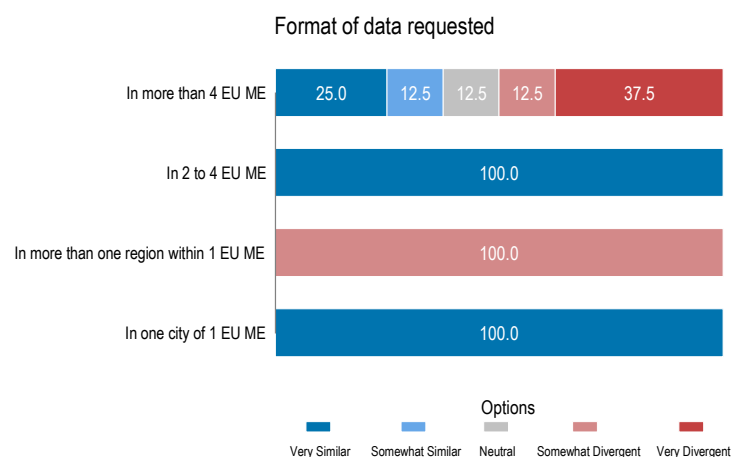


Figure 5. Number of respondents: 12

The figures below offer an additional breakdown based on the size of the online platform for each category.





Harmonizing data sharing at EU level: what impact in terms of costs

Most online platforms believe that a harmonization of data sharing requirements at EU level will have a positive impact in terms of cost reduction.

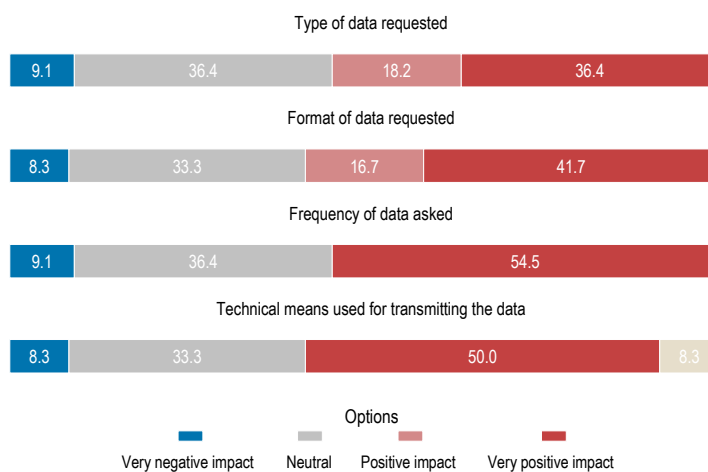
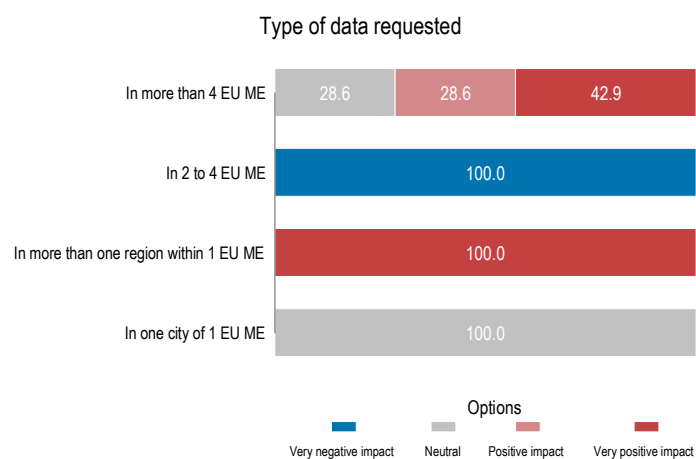
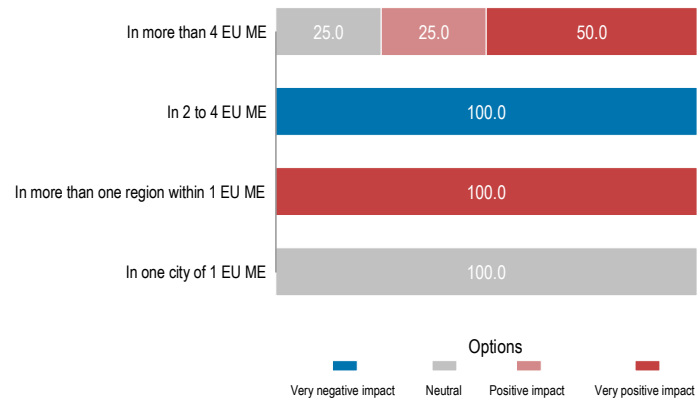


Figure 6. Number of respondents: 12

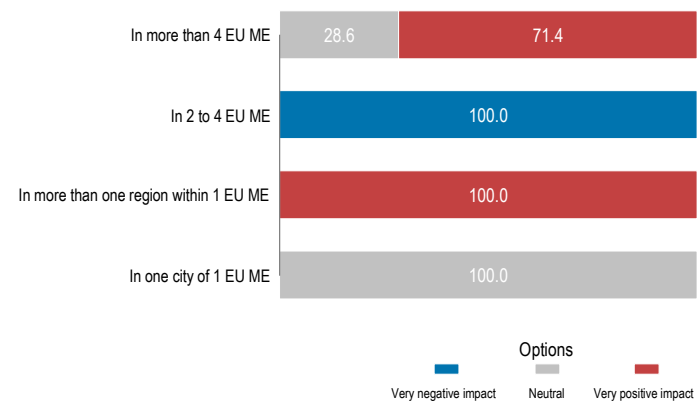
The figures below offer an additional breakdown based on the size of the online platform for each category.



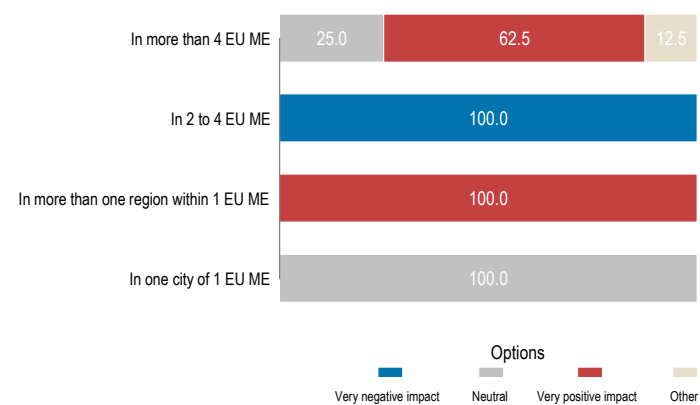
Format of data requested



Frequency of data asked



Technical means used for transmitting the data

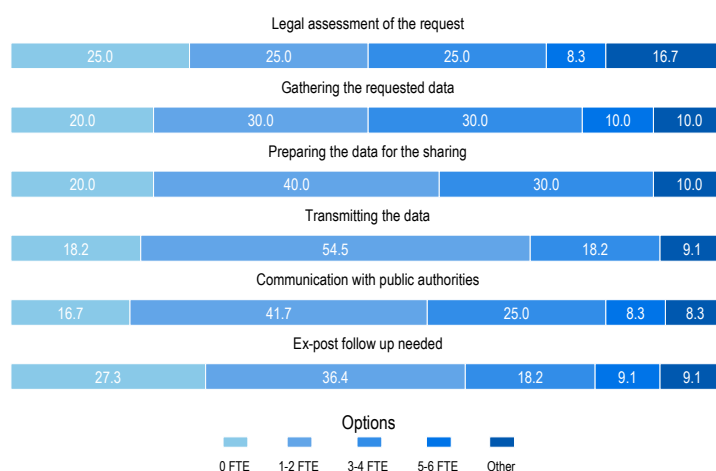


Costs related to data requests (in FTEs)

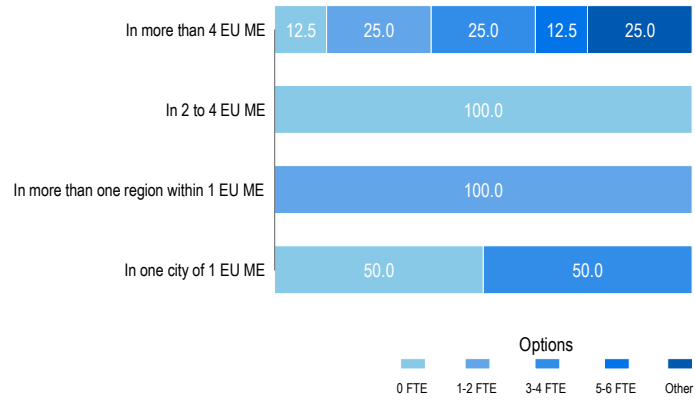
The table below shows the costs declared by online platforms for each step of data sharing requests. Overall, this table shows that answering data sharing requests is a costly procedure, and therefore the costs for online platforms are expected to increase without a streamlining of data sharing procedures at EU level.

	Legal assessment of the request	Gathering the requested data	Preparing the data for the sharing	Transmitting the data	Communication with public authorities	Ex-post follow up needed	Other
0 FTE	30%	20%	18%	20%	18%	30%	100%
1-2 FTE	30%	30%	36%	60%	45%	40%	0%
3-4 FTE	30%	30%	27%	20%	27%	20%	0%
5-6 FTE	10%	10%	9%	0%	0%	0%	0%
over 6 FTE	0%	10%	9%	0%	9%	10%	0%
Total number of replies	10	10	11	10	11	10	2

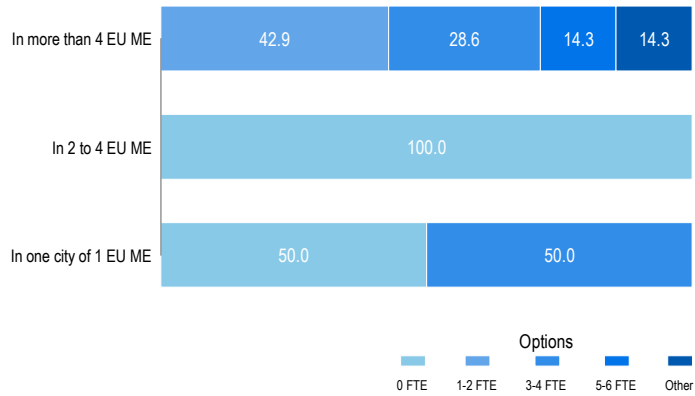
The figures below offer an additional breakdown based on the size of the online platform for each category.



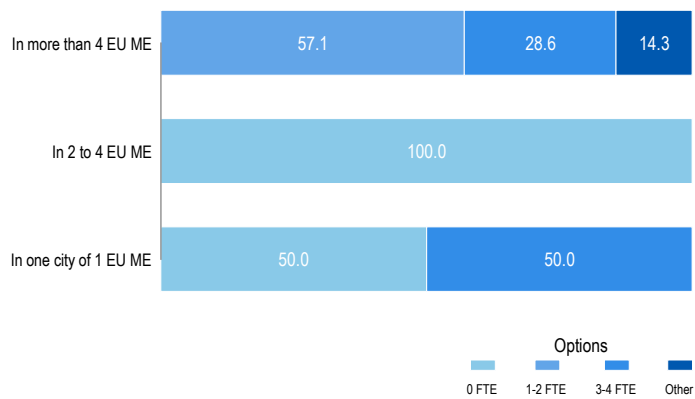
Legal assessment of the request



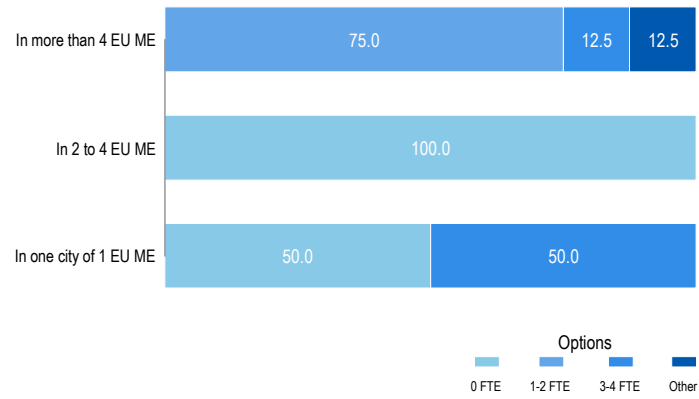
Gathering the requested data



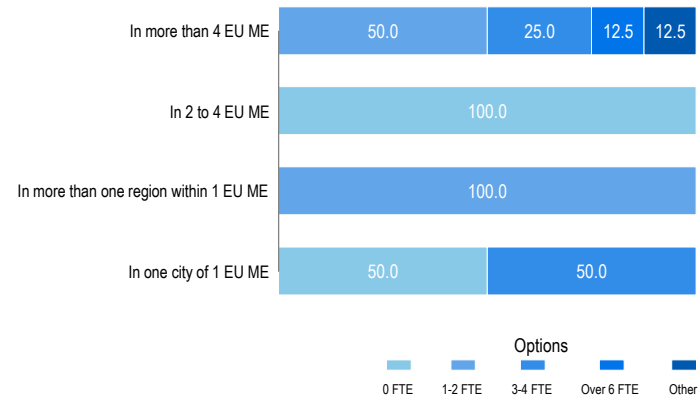
Preparing the data for the sharing



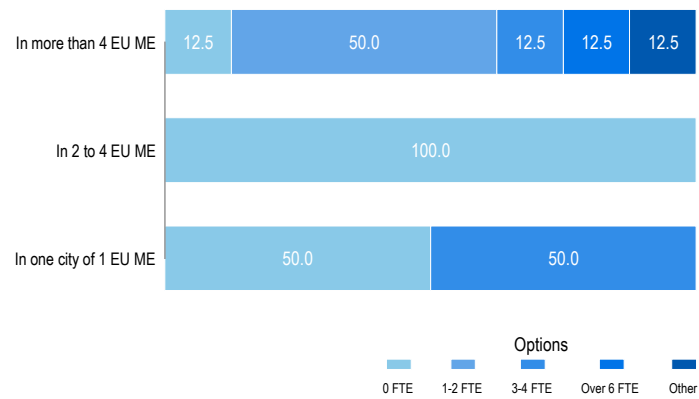
Transmitting the data



Communication with public authorities



Ex-post follow up needed



Data requests leading to the substantial changes of online platforms’ websites (in order to request additional data to hosts or guests)

Data requests by public authorities could affect booking platforms altering their interface or working methods. Concretely, 41.7% (5) of the platforms confirm that they have changed their website multiple times. 1 platform changed it once following a data requests. 3 platforms did not alter their product or change their website.

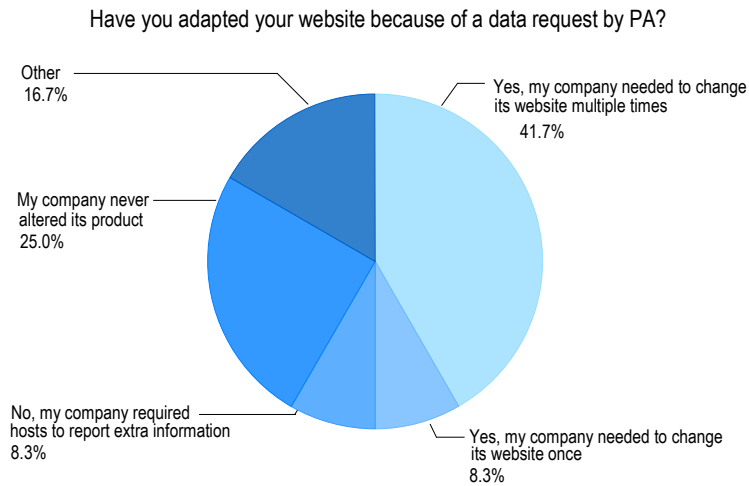
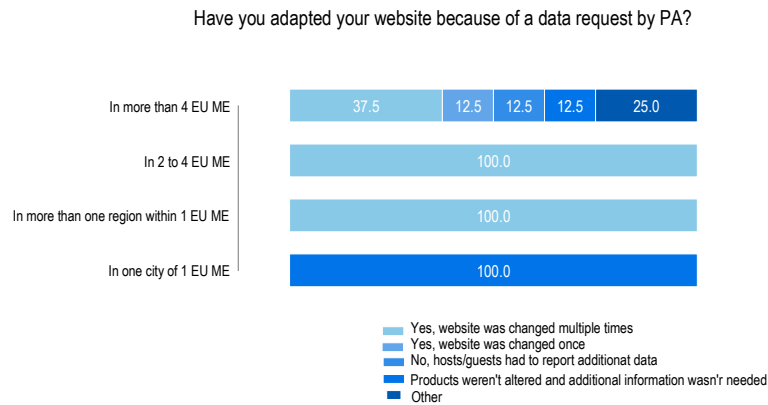


Figure 7. Number of respondents: 12

The figure below offers an additional breakdown based on the size of the online platform for each category.



If yes, how costly was it? Please provide evidence of such costs, if available, as an attachment at the end of this survey.

Among the platforms that altered their website due to the data requests from public authorities, one (16.7%) consider the impact as very costly for their business and other 2 (33.3%) consider that the changes created some impact on them, assuming certain costs.

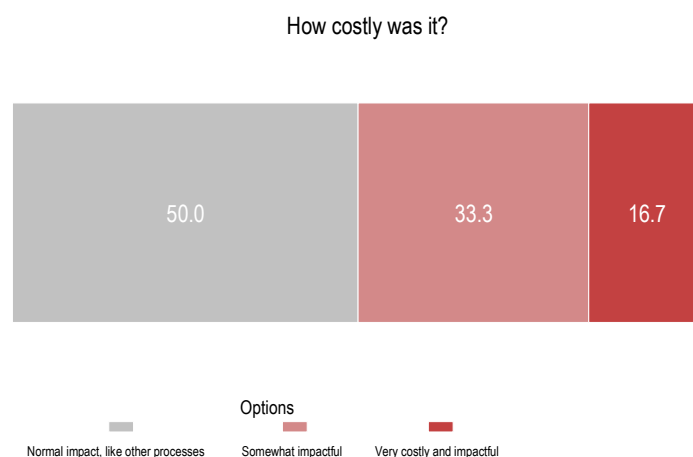
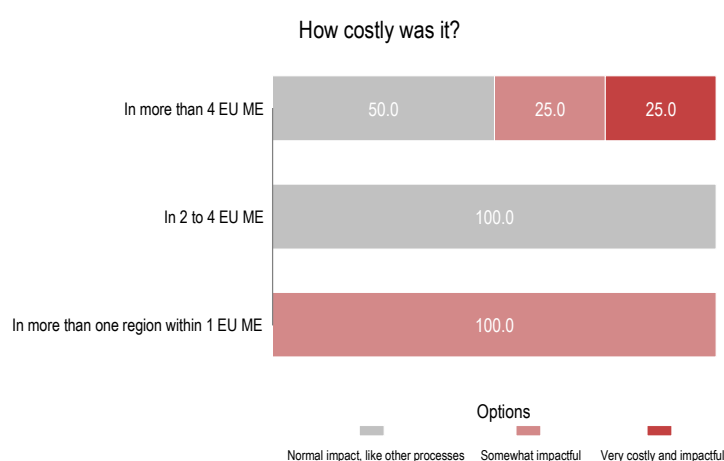


Figure 8. Number of respondents: 6

Among those that change their website due to data requests, only two operating in more than 4 countries (50% - 2) and one operating in more than one region within one member state (100% - 1) consider that the adaptation has a considerable impact.



Purposes of data requests

The table below shows the wide variety of reasons put forward by public authorities when requesting data to online platforms: taxation purposes (declared by 91.7% - 11 online platforms), local housing market regulation (83.3% - 10), or health and safety requirements (41.7% - 5).

Answers	Number of replies	Percentage
Taxation	11	91.7%
Security	3	25%
Health and safety requirements	5	41.7%

<i>Tourism flows management</i>	3	25%
<i>Local housing market regulation</i>	10	83.3%
<i>Statistics</i>	5	41.7%
<i>Reason was not disclosed</i>	3	25%
<i>Other</i>	0	0%
<i>Total replies</i>	12	12

Table 5. Number of respondents: 12

The table below offers an additional breakdown based on the size of the online platform for each purpose.

	In more than 4 EU Member States	in 2 to 4 EU Member States	In more than one region within 1 EU Member State	In one city of 1 EU Member States
Taxation	100%	100%	100%	50%
Security	37.5%	0%	0%	0%
Health and safety requirements	50%	100%	0%	0%
Tourism flows management	37.5%	0%	0%	0%
Local housing market regulation	87.5%	100%	100%	50%
Statistics	62.5%	0%	0%	0%
Reason was not disclosed	37.5%	0%	0%	0%
Other	0%	0%	0%	0%
<i>Total replies by respondent</i>	8	1	1	2

3. Current level of cooperation with public authorities

Voluntary agreements for data sharing

Four (26.7%) booking platforms already have a voluntary agreement in place with public authorities for data sharing. These are mainly platforms who operate in more than 4 Member State, and those that operate only in one city. Respondents indicate that they have such agreement in place for instance with Eurostat, the Greek authorities or the Irish authorities. Most of the platforms (73.3% - 11) have no agreement in place.

Do you have voluntary agreements in place with public authorities to share data on STRs?

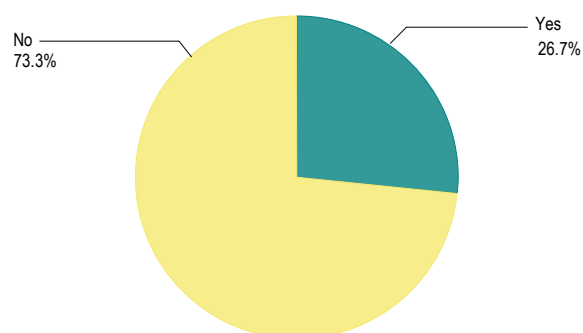


Figure 9. Number of respondents: 15

Do you have voluntary agreements in place with public authorities to share data on STRs?



Format of the data requests (e.g. registration number, or other personal data)

Online platforms report a great fragmentation in terms of format of data requests. 40% (6) platforms indicate that some data requests are based on registration numbers. 20% (3) specify that the vast majority of the requests are based on registration numbers while the remaining platforms indicate that these requests are based on other data from the host.

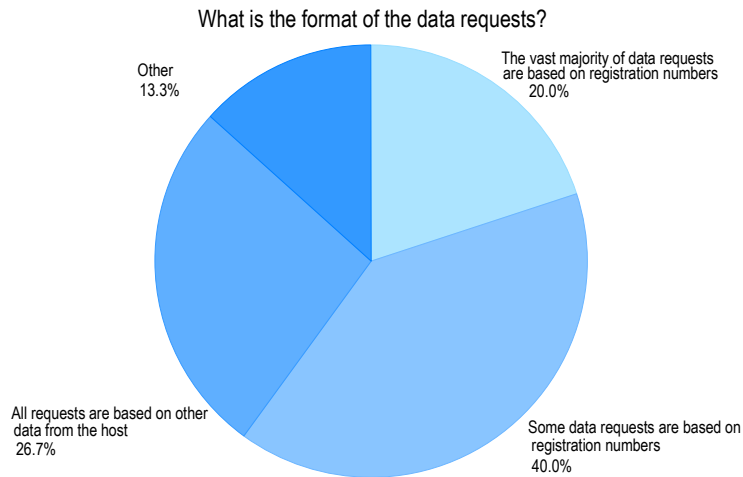
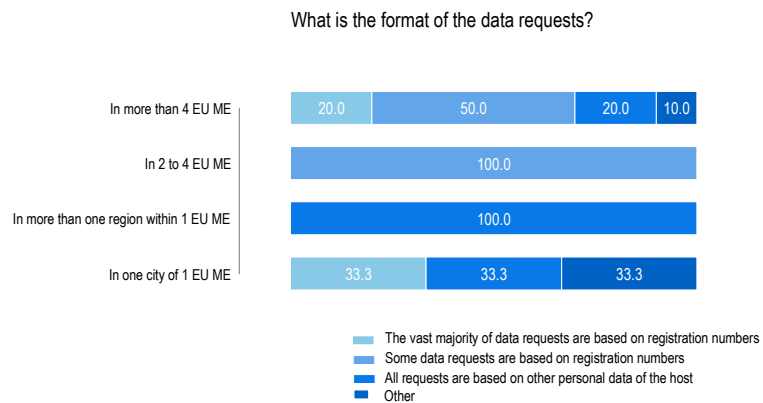


Figure 10. Number of respondents: 15

The figure below offers an additional breakdown based on the size of the online platform.



Obligation to display registration numbers

Most platforms declare that they are currently required to display registration number (73.3% - 11).

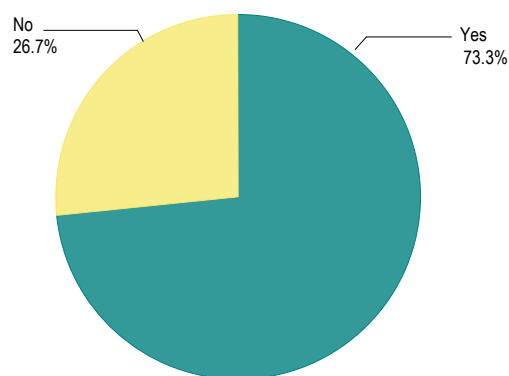


Figure 11. Number of respondents: 15

The figure below offers an additional breakdown based on the size of the online platform.



Denial of data requests

Almost half of the platforms declare that they have already denied an access to data request.

Has your company ever rejected/denied a data request from a public authority?

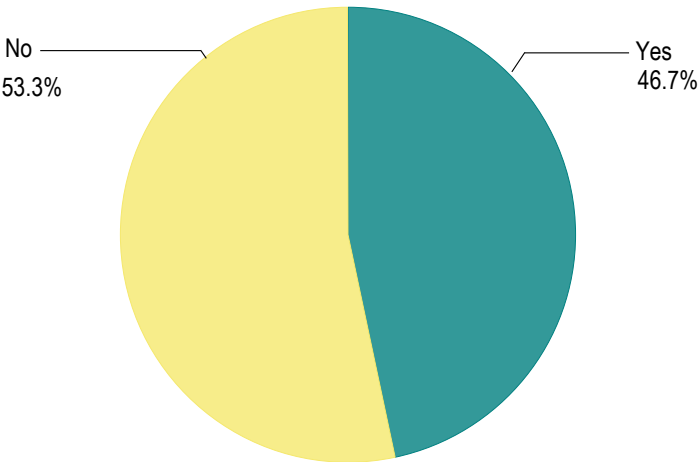
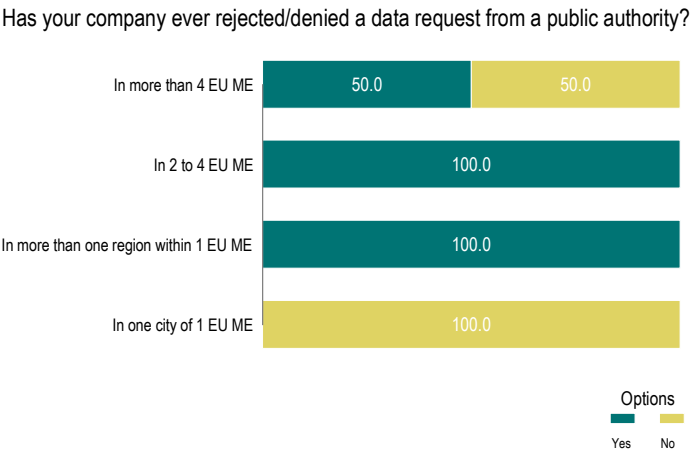


Figure 12. Number of respondents: 15

The figure below offers an additional breakdown based on the size of the online platform.



Reasons for denying data requests

Online platforms put forward a number of reasons to justify such denial. 33% (4) of them allege that they do not have the needed data and 42% (5) state that they do not share it due to legal reasons. Two platforms allege they do not share the date due to technical difficulties and only one attribute it to the cost.

Answers	Number of replies	Percentage
Your company did not have the data	4	33%
Legal reasons (e.g. no legal basis for providing the data)	5	42%
Technical difficulties (e.g. absence of efficient technical means to share the data)	2	17%
Costs (e.g. lack of resources)	1	8%
Other	0	0%
<i>Total replies</i>	12	12

The table below offers an additional breakdown based on the size of the online platform for each reason.

	In more than 4 EU Member States	In 2 to 4 EU Member States	In more than one region within 1 EU Member State	In one city of 1 EU Member States
Your company did not have the data	33%	0%	50%	0%
Legal reasons	44%	100%	0%	0%
Technical difficulties	22%	0%	0%	0%
Costs	0%	0%	50%	0%
Other	0%	0%	0%	0%
<i>Over a total of respondents</i>	9	1	2	0

Challenging data requests in court

26.7% (4) of online platforms even declare to have challenged data requests in courts. These challenges were initiated exclusively by platforms operating in more than 4 EU Member States (larger platforms).

Have you ever challenged a data request in court?

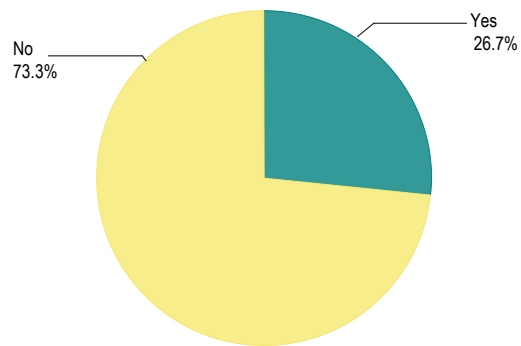
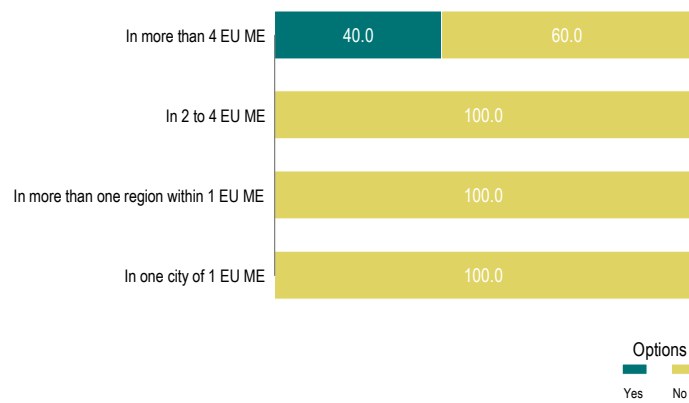


Figure 13. Number of respondents: 15

Have you ever challenged a data request in court?



ANNEX 3: WHO IS AFFECTED AND HOW?

1. Practical implications of the initiative

The initiative will concern mainly online platforms and public authorities.

Public authorities: under the preferred option 2, public authorities will be able to opt in in the data-sharing framework and have transparency over the STR segment's services in their area. Local public authorities will need to adjust existing registration schemes (or create new one if needed). National public authorities will be responsible to set up a single point of contact (single digital entry point) for the interactions with online platforms, allowing them to have efficient data-sharing processes. With this initiative, public authorities will receive solid and timely data on the STR segment facilitating their STR-related activities (e.g. reallocation of resources made available by a facilitated enforcement of STR rules).

Online platforms, under the preferred option, will have to report activity data and develop automated connections with public authorities (only the biggest ones). They will share data through a single digital entry point, ensuring timely and reliable data sharing operations. Micro platforms will still be allowed to report through a manual option in the relevant national single digital entry point.

Hosts

Without the initiative, platforms will face a growing pressure from public authorities to share data. The initiative will ensure legal certainty and optimise data sharing processes across Europe.

In sum, the legislative initiative under the preferred option includes the following:

- Obligation on local public authorities to maintain a registration system for hosts
- Obligation on national public authorities to maintain a single point of contact with online platforms for information and data sharing
- Obligation on platforms to ensure the display of registration numbers
- Obligation on platforms to share activity data

2. Summary of costs and benefits

A synopsis of the cost-benefit of the different policy options based on the considerations and the data in Annex 4 is reported in the two tables below. In particular, section 4.4 of Annex 4 can be summarised as follows, in absolute and relative values, with respect to the baseline.

Table 1 - Overview of Benefits (total for all provisions) – Preferred Option

I. Overview of Benefits (total for all provisions) – Preferred Option		
Description	Amount	Comments
Direct benefits		
Easier and faster registration scheme for hosts (Economic benefits)	<p>Savings for hosts of more than EUR 1480 million (monetisation of time saved in the registration process) for the new hosts that will be starting their activities (hence need to register in those areas) in the first 5 years after implementation (based on baseline number of 2019 and growth rate estimations.</p> <p>Based on the assumption that 87% of the hosts are peers¹⁹⁵ and 13% professional hosts, the cumulative cost savings for citizens over five are estimated at around EUR 1287.6 million.</p>	Adapting/Creating local registration schemes based on a defined EU template will reduce the minimum time (and hence costs) associated with registration for hosts where registration is required.
Streamlined data-sharing framework for platforms across Europe (Economic benefits)	Savings for online platforms over a period of 5 years will amount to between EUR 54 million (based on 800 requests per year) and EUR 115 million (based on 1700 requests per year)	The data-sharing infrastructure will help online platforms to share data, avoiding uncoordinated requests from Public authorities
Reliable data-sharing framework for public authorities with appetite for data across Europe (Economic, Social and Environmental benefits)	Less litigations with platforms to obtain data and knowledge to better address STR activities (Not quantifiable)	The data-sharing infrastructure will secure public authorities with the legal basis and technical tools to request and obtain data from platforms
Indirect benefits		

¹⁹⁵ Hosts having max 2 listings.

Predictability of the volumes of tourists for other operators in the tourism ecosystem	(Not quantifiable)	Better transparency will translate in better knowledge and predictability of the segment for touristic operators, which will be more equipped to adapt their offers
Administrative cost savings related to the ‘one in, one out’ approach*		
Structured data sharing process for platforms across Europe (Economic benefits)	Savings for online platforms over a period of 5 years will amount to between EUR 54 million (based on 800 requests per year) and EUR 115 million (based on 1700 requests per year)	The data-sharing infrastructure will help Platforms to share data, avoiding uncoordinated requests from Public authorities
Easier and faster registration scheme for hosts (Economic benefits)	<p>Savings for hosts of more than EUR 1480 million (monetisation of time saved in the registration process) for the new hosts that will be starting their activities (hence need to register in those areas) in the first 5 years after implementation (based on baseline number of 2019 and growth rate estimations.</p> <p>Based on the assumption that 87% of the hosts are peers¹⁹⁶ and 13% professional hosts, the cumulative cost savings for citizens over five are estimated at around EUR 1287.6 million.</p>	

Table 2 - Overview of costs – Preferred option

II. Overview of costs – Preferred option			
	Citizens (hosts peers)	Business (platforms and professional hosts)_	Public Administrations (national and local)

¹⁹⁶ Hosts having max 2 listings.

		One-off	Recurrent (yearly)	One-off	Recurrent (yearly)	One-off	Recurrent (yearly)
Data-sharing infrastructure	Direct adjustment costs			€			
	Direct administrative costs	EUR 97.44 ¹⁹⁷ million (registration of current hosts)	EUR 5.96 million (registration costs for new hosts) ¹⁹⁸	EUR 8.2 million for online platform for API connections	EUR 2 million for large platforms for hosting and maintenance EUR 1.6 million for small and micro platforms that would qualify for more lenient reporting obligations EUR 3.87 for new professional hosts for registration	EUR 3 million for national authorities to setup the infrastructure for the registration schemes and develop the national single digital entry point EUR 3.6 million for local authorities for IT infrastructure	EUR 2.4 million hosting and maintenance for national authorities EUR 4.2 million hosting and maintenance for local authorities
	Direct regulatory fees and charges						

¹⁹⁷ 87% of hosts are peers (citizens). One-off costs for all hosts estimated at EUR 112,4 million

¹⁹⁸ Average annual cost of the cumulative administrative costs for citizens over five are estimated at around EUR 149 million.

	Direct enforcement costs						
	Indirect costs						
Costs related to the 'one in, one out' approach							
Total	Direct adjustment costs						
	Indirect adjustment costs						
	Administrative costs (for offsetting)	EUR 97.44 ¹⁹⁹ million (registration of current hosts)	EUR 5.96 million (registration costs for new hosts) ²⁰⁰	EUR 8.2 million for online platform for API connections	EUR 7.47 ²⁰¹ million (cumulative for all type of business stakeholders impacted)	n/a	n/a

3. Relevant sustainable development goals

Table 3 - Overview of relevant Sustainable Development Goals – Preferred Option(s)

III. Overview of relevant Sustainable Development Goals – Preferred Option(s)							
Relevant SDG				Expected progress towards the Goal		Comments	
SDG	no.	11	–	Increase in access to data to allow public		This initiative will not regulate STR	

¹⁹⁹ 87% of hosts are peers (citizens). One-off costs for all hosts estimated at EUR 112,4 million

²⁰⁰ This costs will be offset by savings for hosts due to shorter registration estimated at EUR 257.52 million

²⁰¹ This cost will be offset by annual costs savings for platforms due to streamlined data requested estimated at EUR 10.8-20.3 million

sustainable cities and communities	authorities to design proportionate STR policies, e.g. in order to ensure availability of affordable housing, protect the urban environment and redirect tourism flows from urban to pre-urban and rural areas.	on substance but only give tools and a clear legal framework enhance transparency in the STR segment. The impact of this initiative on the SDGs is hence indirect, as it will depend on the regulatory actions of public authorities.
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ANNEX 4: ANALYTICAL METHODS & SME TEST

DISCLAIMER: Data and calculations presented in this Annex and used in the body text of the Impact Assessment are made based on estimation, projections and proxies. No exact data are available on the STR segment, core problem assessed by this initiative itself. Therefore, specific hypothesis are made in order to build the below reasoning. When possible, quantification is made in ranges. Please refer to the reasoning below taking it into account.

4.1 STR MARKET PLAYERS: HOSTS AND MAIN PLATFORMS

The number of hosts is expected to almost double in 2025 with respect data of 2019 and grow by 185% by 2030.²⁰²

Table 1 – Number of hosts and platforms

²⁰² Estimations on unique hosts in EU made by JRC based on listings registered in 2019 (AIRDNA data) and growth rate based on the evolution of the market and historical data.

Country	Number of registered STR hosts per country			Online Platforms & Property managers
	2019 Reference year	2025 (Forecasts)	2030 (Forecasts)	Platforms operating in each MS
Austria	21,414	43,741	62,990	117
Belgium	21,011	40,656	57,172	123
Bulgaria	9,221	20,307	30,033	89
Croatia	49,459	95,905	136,072	89
Czech Republic	15,254	29,440	41,743	92
Cyprus	--	--	--	--
Denmark	42,375	78,667	109,679	101
Estonia	3,997	8,486	12,430	--
Finland	10,712	23,022	33,583	84
France	410,061	826,409	1,182,120	134
Germany	117,353	224,490	318,767	140
Greece	66,680	140,632	206,618	106
Hungary	12,380	24,204	34,430	107
Ireland	21,444	43,184	62,210	110
Italy	226,227	445,174	635,181	125
Latvia	3,094	6,355	9,211	--
Lithuania	3,643	7,583	11,047	--
Luxembourg	1,086	2,091	2,996	--
Malta	5,102	9,876	14,146	--
Netherlands	47,702	89,994	125,789	134
Poland	22,554	47,273	69,455	125
Portugal	45,029	88,500	125,767	93
Romania	15,413	35,338	52,894	114
Slovakia	3,736	8,459	12,623	89
Slovenia	4,206	9,472	13,906	--
Spain	158,975	315,489	449,464	124
Sweden	28,203	57,074	81,854	111
Total	1,366,332	2,721,820	3,892,181	Tot # Interm.s 142
<i>Growth %</i>		<i>99%</i>	<i>185%</i>	

The table above also indicates the number of online platforms and property managers in 2019. In the data, we observe 142 platforms that represent 80% of total internet traffic to STR sites. Assuming a Pareto rule (80-20 proportion) these platforms represent 20% of all platforms operating in the STR segment. This means that the number of platforms representing the missing 80% of operators covering the remaining 20% of traffic is equal to 568. This makes a total number of platforms to be 710. In the cost calculations, under Policy Options 2 and 3, it is assumed that 30 companies will need to connect to single digital entry points and 680 would qualify for more lenient reporting obligations. Unfortunately, detailed information is not available for all countries. However, the countries for which data is missing are those that have the lowest number of listing across the EU. This has been taken into consideration in the assessment of the costs of the impact of the initiative by taking the most conservative value of costs estimation.

4.2 COSTS LINKED WITH STR ACTIVITY IN THE BASELINE SCENARIO

Under the status quo scenario, the STR activity across the EU is characterised by many different types of costs for stakeholders. Below a cost model for hosts' registration and data-sharing requests for platforms has been identified. Modelling other costs linked with high number of litigations, poor law enforcement or delay in policy making is not possible.

Registration for hosts

In order to determine the costs associated with registration of hosts, the total sum of hosts identified in 20 Member States²⁰³ during a survey conducted in 2021 by DG GROW is taken into account. Of the total hosts identified in these 20 MS, we consider that 40% (conservative approach) are in areas where some identification process is in place (registration scheme or other).

Table 2 – Costs for Hosts’ registration in the baseline scenario

Costs for Hosts' registration		
<i>Hosts</i>		
<i>Registration costs</i>		
# of Hosts 1y (considering 20 MSs)		508,041
Δ of Hosts 5y		504,009
Δ of Hosts 10y		435,173
AVG # days for completing registration*		15
AVG salary/h**	€	25.7
Total cost	€	3,084
Total cost registration sustained	€	1,566,796,903
Expected savings on registration by 2025	€	1,482,479,592

* adjusted average estimated (w/o extreme values)

** salary/h taken as reference from OIOO tool

Estimation of hosts’ growth has been taken into consideration for 2025 and 2030. To identify the average number of days needed to complete registrations across the EU, the study by Oxford Research has been used.²⁰⁴ In the study, the average number of days needed to complete registration is 28 days.²⁰⁵ However, this calculation takes into account extreme values (as those imposed by the system of Berlin, reaching 70+ days for completion). For the purpose of this exercise, an adjusted average without the outliers has been estimated, equal to ~15 days. Computing this data with the average hourly salary indicated in the One In – One Out (OIOO) tool, the single host registration turns out to cost between 2.500 EUR and 4.000 EUR. Given the hosts already in the market in those countries, it is estimated that hosts have already faced a total cost around 1.5bln EUR. The same range of cost is expected to be spent by the new hosts entering in the market by 2025.

Requests for data sharing for platforms

²⁰³ AT, BE, BG, HR, CZ, DK, DE, FR, HU, GR, IE, IT, LV, LT, MT, NL, PL, PT, SK, ES. These Member States replied to have in place a system (at national or regional level) for hosts’ registration. Please note that France and Romania did not reply to the Questionnaire, while data on Cyprus is missing. However, it is known that France has local registration scheme and some STR market access requirements are present on the territory. Therefore, we are including France in this set of countries and excluding Cyprus. “Questionnaire II on the collaborative economy - Registration schemes”, DG GROW 2021.

²⁰⁴ Oxford Research. “Study on national regulatory approaches to short-term accommodation services” - European Commission, Luxembourg (2021) (upcoming).

²⁰⁵ Ibid.

Usually, for each request sent by public administration to platforms (online platforms or property managers), an assessment needs to be performed. This includes legal assessment as well as administrative assessment of the request. Non-IT specialised employees can perform this task. Data processing has to be performed by an IT-specialised employee.²⁰⁶ Data processing include data collection through the IT systems and data preparation before it is sent out. Finally, there is the activity of Data Communication to the requester and internal reporting to the company. Again, a non-IT specialised employee might take this task in charge. Here below a model of the cost function.

$$\text{Costs per data sharing request} = \sum_{i=1}^n \left(((RA_i + DC_i) * AW * \frac{\delta}{2}) + (DP_i * 2\delta * SW) \right), \text{ with } \delta = [1,10], n = [1, \infty[$$

where RA = Request Assessment (Legal + Administrative)
 DP = Data Processing (Collecting + Preparing)
 δ = multiplier for the size of the area interested
 DC = Data Communication
 AW = average wage (corporate)
 SW = average specialised wage (IT developer)
 n = number of requests received

In the model, a variation for the extension of the area is taken into consideration through the factor δ . Factor δ can take values from 1 to 10 – at the highest level it represents communities of 2 million inhabitants or above, like large cities or capitals. For computational purposes, we assume an average value of δ of 5.2.

Table 6 – Average δ factor of cities size distribution

Average δ factor of cities size distribution			
distribution requests on cities' size		δ	AVG δ
20%	Big cities/capitals	10	5.2
40%	Medium cities	6	
40%	Small cities	2	

During stakeholder consultations, some platforms²⁰⁷ referred that each request on average would cost not less than 10.000 EUR and would take from one to three months to be processed and dispatched. In the calculation below, what was reported has been taken into consideration and an average δ factor has been therefore factored in. Calculations result in an average cost per request of around 13.500 EUR. A projection of future requests have been modelled based on the growth rate of host by 2025 and 2030. Additionally, in order to compute the total costs associated with data

²⁰⁶ Average Salary per hour of IT-specialised FTE identified at 75 EUR, based on consulting made within DG GROW and private sector IT specialists.

²⁰⁷ Consultations with online platforms – players in the top 20% in Europe per volumes.

sharing requests for all platforms, it has been considered that only the top 60% of the biggest ones (30 companies) will be reached by data-sharing requests, assuming that smaller platforms will not be asked to share data. At the same time is assumed that each online platform will receive requests only from 40% of the total 150 local public authorities identified. Under these assumptions, it has been calculated that already more than EUR 1.6 million are spent yearly on average by a platform on data sharing requests, and it is estimated that around EUR 146 million will be spent by all companies cumulatively in the next 5 years.

Table 7 - Costs for Platforms data-sharing requests in the baseline scenario

Costs for data-sharing requests		
Online Platforms		
<u>Processing requests from PAs</u>		
Request Assessment/h		8.00
Data Communication/h		8.00
Data Processing/h		32.00
AVG non specialised salary/h	€	25.70
AVG specialised salary/h	€	75.00
AVG δ =multiplier size area inte.d		5.20
Total cost for each request	€	13,549
# localities requesting data		150
Cost for single online platform yearly	€	1,625,894
Online platforms potentially impacted (60% of the biggest ones)*		18
Estimation tot cost sustained by year 5	€	146,330,496
Estimation tot savings expected by 2025	€	146,330,496

* conservative hypothesis

Other unquantifiable costs

Unfortunately, not all costs could be modelled and estimated. It is difficult to create a robust quantification of the costs that stakeholders in this market are incurring due to ongoing **litigations**. It is known that there has been a significant amount of litigation between public authorities and platforms (and some legal complaints are still ongoing) over data-sharing requests, as well as numerous cases between public authorities and hosts on the justification of market access requirements imposed in some areas.²⁰⁸

²⁰⁸ See Annex 7 for some examples.

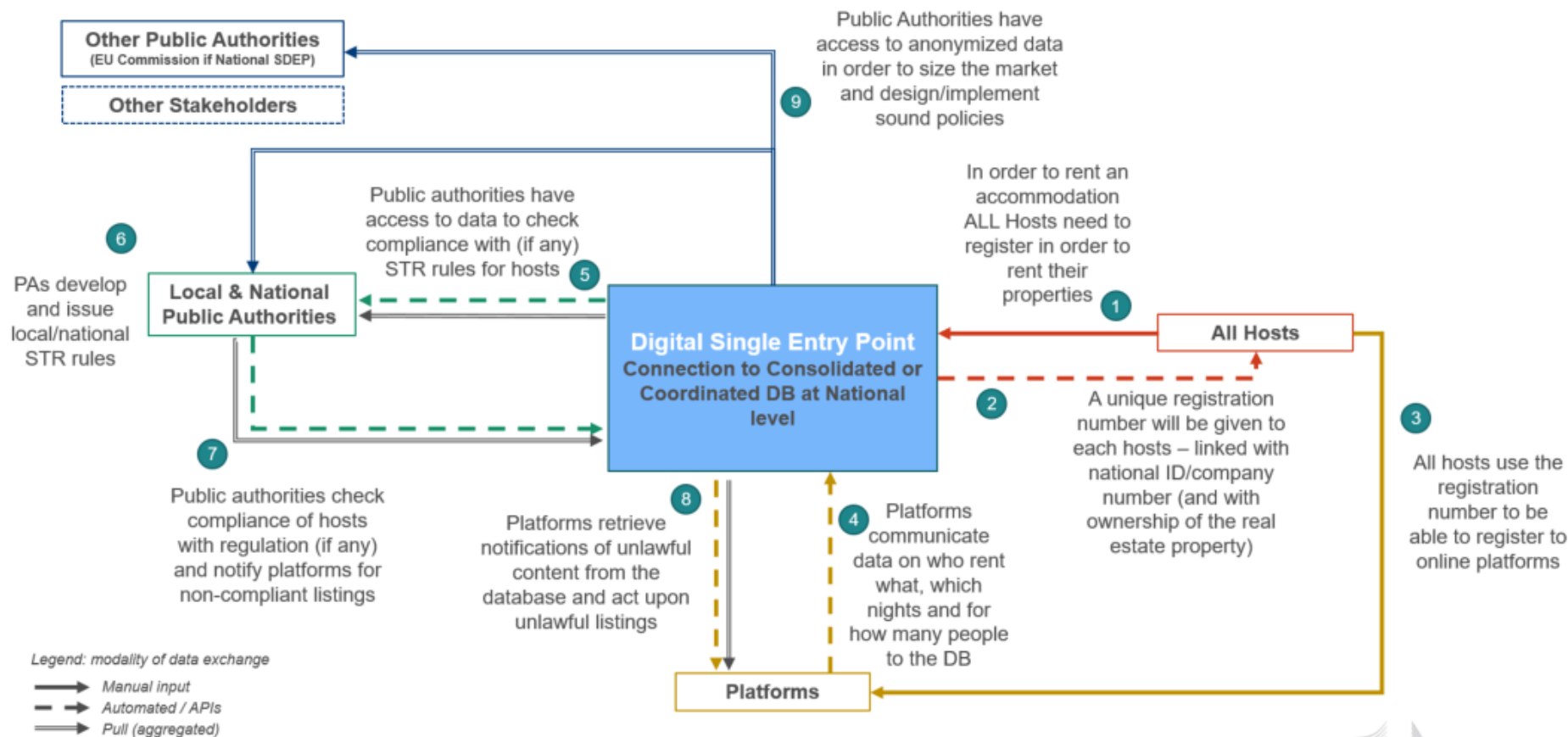
Additionally, it is difficult to quantify the **delay in enforcement** of STR rules by public authorities. As previously mentioned, lack of data in this market is a key issue for knowledge and policy making; therefore, the need to tackle this problem with this initiative.

4.3 INFORMATION FLOW BETWEEN STAKEHOLDERS AND IT INFRASTRUCTURE

The graph below explains what should be the process and the information flow that this proposal would like to achieve.²⁰⁹ In the graph, it is possible to identify each stakeholder and the actions linked to them in the blueprint of the process. It is also possible to identify the type of tool requested for each data sharing operation. Different degrees of realisation of this framework are associated with different combinations of options and sub options of this proposal. If we refer to sub option 1 (under option 2 or 3) the framework will only apply to Member States who will develop such scheme. This blueprint should stay valid also under option 1, limited to the voluntary registration scheme at national level and the data sharing agreement with platforms dependent of the voluntary adherence to the Code of Conduct.

Figure 1 - Information flow between stakeholders and IT infrastructure

Data exchange in opted-in areas



Below a description of the costs identified for stakeholders in this initiative and subsequently a description of the computations for total costs for each of the options (and sub options) identified in this proposal is presented.

4.4 COSTS LINKED WITH THE INITIATIVE

Costs associated with adaptation of registration scheme (creation of a new national one or coordination of existing decentralised ones)

Here below the breakdown of the cost associated with the adaptation of registration scheme(s).²¹⁰ For the purpose of the IA exercise, the costs associated to the creation of a new national registration system are modelled. To model the average costs associated with the optimisation of existing ones, the cost of a new creation are taken as a base and a 30% saving is applied. Costs associated with optimisation of decentralised registration schemes are estimated to be marginal and negligible, as already existing. Costs associated with the creation of the connection between decentralised registration schemes with a central national infrastructure (single digital entry point) are estimated below and considered in the overall cost calculation.

The creation of a new general registration scheme will require the consideration of three sets of costs: (1) Database setting up and APIs development, (2) Data storage and accessibility, (3) Maintenance.

1. *Database setting up and APIs development*: these costs should be considered as fixed and very marginally impacted by the volume of data of the Database.
2. *Data storage and accessibility*: these costs should be considered variables with respect the volume of data that are meant to be stored – so the estimation will differ if the Database has to be national and elective or national and to be applied to all-hosts in the national territory (as described respectively in option 2 and option 3).
3. *Maintenance*: these costs should be considered as fixed and very marginally impacted by the volume of data of the Database.

Breakdown takes into consideration costs associated with the setting up (valid for the first year of functioning of the IT infrastructure) and maintenance costs – e.g. recurring costs as from the second year linked with maintenance and hosting.

A possible variance of +/- 35% of total cost for the setting up of the infrastructure has been identified. Being conservative, a +25% has been added to the cost function. Costs have been identified for setting up the IT infrastructure, for setting up the APIs connectors and for hosting and maintenance.²¹¹ Under these hypotheses, the cost for setting up an IT infrastructure including API connection is set in between EUR 150 000 and EUR 190 000 EUR. Yearly costs for hosting and maintenance has been identified respectively to around EUR ~60 000 and EUR ~35 000, for a total of roughly EUR 100 000.

²¹⁰ Estimations were made based on consultations with IT unit internal to DG GROW, as well as benchmarking the data with estimations made by experts in the private sector.

²¹¹ Please note that hosting and maintenance costs have not been parametrised with the size of the database.

Table 8 - Costs estimations (ROM) for Registration Scheme and SINGLE DIGITAL ENTRY POINT for MSs

Cost estimations (Rough Order of Magnitude-ROM) for Registrartion Scheme and SDEP for MSs				
Breakdown		# unit		
Infrastructure				
Definition of the architecture		10 days		
Definition of the tables		5 days		
Set-up of the DB		10 days		
Documentation		5 days		
Development				
Registration of the hosts		20 days		
Documentation		3 days		
Incoming data API for platforms (check existence of host, adding rental for hosts)		20 days		
Documentation		3 days		
Pull Reporting data for platform		20 days		
Documentation		3 days		
Pull data for National Systems (only for EU PAs under so/3)		40 days		
Documentation		3 days		
Total days Infrastructure setting		53 days		
Total days Infrastructure setting + APIs development		99 days		
Total days Infrastructure setting + APIs development (EU SDEP)		142 days		
Project Management		30 days		
Total days Infrastructure setting + PM		83 days		
Total days Infrastructure setting + APIs development + PM		129 days		
Average cost of 600€/day for IT specialised consultancy*		€	600	eur/day
Total cost Infrastructure setting + PM		Ex-novo	€	49,800 eur
Total cost Infrastructure setting + APIs development + PM		Ex-novo	€	77,400 eur
Total cost Infrastructure setting + APIs development + PM (EU SDEP)		Ex-novo	€	103,200 eur
Hosting costs (hardware, storage capacity, sizing per country):				
Minimal investment for listings below 10M, considering two servers and no licenses.**		€	30,000	eur/year
Increment for listings above 10M and below 50M		€	30,000	eur/year
Increment for listings above 50M listings		€	40,000	eur/year
Total cost Hosting - average for listings [10M and 50M]		€	60,000	avg eur/y
Maintenance per year		60 days		
Total Cost for Maintenance per year		€	36,000	eur/year
Total cost Infrastructure first year (adjustment costs)		Ex-novo	€	109,800 eur
Total cost Infrastructure first year with APIs (adjustment costs)		Ex-novo	€	137,400 eur
Variability on estimations		Variation	+/- ~35%	
Total cost Infrastructure first year (adjustment costs)		+ 25%	€	137,250 eur
Total cost Infrastructure first year with APIs (adjustment costs)		+ 25%	€	171,750 eur
Hosting + maintenance as from second year (administrative costs)		from 2y	€	96,000 eur

* Please note that estimation diverge from what is suggested in the OIOO tool - IT specialised average wage is estimated around 75€/hour

** We consider that each country already has a Digital infrastructure and services to host these two servers.

NOTE: Licenses are not included, as we do not know which solution will be retained

Costs associated with the creation of an API System

The reasoning behind the cost estimation for the creation of an automated data-sharing infrastructure is explained below. It considers systems' connection through APIs that entails two nodes: (a) between platforms towards public authorities (and vice versa) and (b) public authorities towards public authorities (and vice versa).²¹² In the first node, connection will be established by an online platform to share data with public authorities, while in the node a local public authorities will

²¹² Estimations were made based on consultations with stakeholders, as well as benchmarking the data with estimations made by experts in the private sector outside the STR segment.

connect to the national single digital entry point through automated connection to obtain data timely (daily).

The cost breakdown includes the cost for setting up “push” data APIs (needed by online platforms to share activity data with public authorities) and “pull” data APIs (needed by local authorities to receive data or by platforms to receive notifications on illegal content by public authorities. Considering a possible variation of +/- 25% in the cost function, an additional +20% has been added in order to be conservative. Under these hypotheses, the cost of one connection is around EUR 30 000.

Table 9 - Costs estimations (ROM) for APIs (data push and pull)

Cost estimations (Rough Order of Magnitude-ROM) for APIs (data push and pull)			
Breakdown		# unit	
Development and Project Management			
Push data API for platforms (check existence of host, adding rental for hosts)		18 days	
Documentation		2 days	
Pull Notification data from PAs		18 days	
Documentation		2 days	
Total days Infrastructure setting + APIs development per country		40 days	
<i>Incremental marginal costs for additional country to connect APIs</i>		20% <i>cost increase</i>	
Number of countries with SDEP		27 countries	
Total days Infrastructure setting + APIs development for all countries		256 days	
Average cost of 600€/day for IT specialised consultancy*		€ 600	eur/day
Maintenance per year		60 days	
Total Cost for Maintenance per year		€ 36,000	eur/year
Total cost Infrastructure for 1 Database (EU / 1 MS)		<i>Ex-novo</i>	€ 24,000 eur
Total cost Infrastructure for 27 Databases (so/2)		<i>Ex-novo</i>	€ 153,600 eur
Variability on estimations		<i>Variation</i>	+/- ~25%
Total cost Infrastructure for 1 Database (EU / 1 MS)		+ 20%	€ 30,000 eur
Total cost Infrastructure for 27 Databases (so/2)		+ 20%	€ 192,000 eur

* Please note that estimation diverge from what is suggested in the OIOO tool - IT specialised average wage is estimated around 75€/hour

In the computation of the costs, the complexity linked with the number of connections to establish has been taken into consideration. An intermediary that operates in more than one country will need to connect to each national dataset to share the relative data with public authorities. Once the first connection has been developed, a 20% extra cost should be considered for each marginal connection. In the most expensive scenario foreseen in option 3, the cost to connect to 27 different national systems is therefore set between EUR 150 000 and EUR 250 000.

Additionally, in the breakdown of the costs, costs for maintenance have been identified with one third of FTE for each year. Considering an hourly IT specialised salary of 75 EUR, the computation for yearly maintenance is for EUR ~36 000 per year.

In the assessment, two additional adjustments to the cost function have been modelled. The first one is an adjustment of the above setting for larger players. It is expected that bigger players with a more complex IT structure and higher volume will need more resources to implement the connections to national datasets (they might have more teams involved in the technological implementation, as well as possibly more volume of data to be shared). Therefore a multiplier of 5x for the 5 bigger players which together represent between 64% and 65% of the total market volume

is foreseen.²¹³ The second adjustment is modelled for online platforms that might find expensive to develop automated connections respect the volumes of data they would need to report. They will be able to report manually (upload of data file) directly in the system²¹⁴ once every three months, in a cheaper and user-friendly way. The cost is estimated to be around EUR 600 for each reporting activity, translating in a total yearly cost of around EUR 2.400 per online platform. Limitation to the size of the file to be uploaded will be imposed (based on estimation of volumes of data to be reported) and this will ensure that players with higher and relevant volumes will develop the data-sharing infrastructure. For the purpose of this exercise, the assumption that every company that owns less than 0.45% of the total EU market will be entitled to use this simplified reporting system. This translates in 680 companies.

Table 10 - Cost estimations reporting for SMEs - Option for more lenient reporting obligations

Cost estimations reporting for Micro and SMEs - Fall back option		
Breakdown	# unit	
IT specialised FTEs	1 FTE	
Average cost of 600€/day for IT specialised consultancy*	€	75.00 eur
Total cost for fall back reporting	€	600 eur

Costs associated with Hosts' registration

The costs associated with hosts' registration has been calculated starting from the study made by Oxford Research.²¹⁵ In the study, a survey to hosts has been submitted, identifying the time needed to complete the registration in different systems. Additionally, the breakdown of the time needed has been identified. In line with what should be the national registration scheme under the framework foreseen by this initiative (fast, free and user-friendly), the schemes of Portugal and Greece have been identified as benchmark. In these two systems, the minimum time needed for registration is 2 days. Since any check is supposed to happen only ex-post, guaranteeing the immediate entrance into the market to new hosts, the number of days has been adjusted subtracting the possible delays (by third parties and personal) identified in the study. Therefore, it has been estimated that the needed time for registration is between 1.4 and 1.7 day. Under these assumptions, the cost associated with the registration for hosts under the characteristics required in this initiative²¹⁶ is set between EUR 300 and EUR 340.

²¹³ This data translate in having 137 companies sharing 15% of the EU market and other 500+ companies sharing the marginal 20% of the market volume. This estimation is in line with consultations with main stakeholders within on-line platforms.

²¹⁴ The idea is to develop a "drag and drop" option, with the possibility to upload files with maximum of 5 Megabyte.

²¹⁵ Oxford Research. "Study on national regulatory approaches to short-term accommodation services" - European Commission, Luxembourg (2021) (upcoming).

²¹⁶ Registration scheme has to be free, quick, user-friendly and respect the one-stop-shop principle.

Table 11 - Cost estimation for Registration for Hosts

Cost estimations for Registration for Hosts	
Breakdown	unit
To familiarize with the instructions on webpage	0.60 days
To complete the application form	0.52 days
To collect any supporting evidence or documents	0.44 days
Delays in the reg procedure due to you	0.30 days
Delays in the reg procedure due to someone else	0.16 days
Total number of days needed (based on GR & PT schemes)	2.02 days
Adjusted total number of days needed*	1.56 days
Average wage/hour - OIOO	€ 25.70 eur
Total cost for each new host registration	€ 320.74 eur

** Adjusted total number of days needed computed w/o third parties delay*

4.5 ASSESSMENT OF THE COST (AND SAVINGS) ASSOCIATED TO EACH OPTION

4.1.1 Option 1

Costs. Under this option, it is expected that at least sixteen countries²¹⁷ would implement provisions on a voluntary basis. It is assumed also that these countries will exploit (at least partially) the IT infrastructure already developed, resulting in 30% saving with respect the cost estimated for the development of a new infrastructure. Under Option 1, the data-sharing agreements with STR platforms is not obligatory and will be defined by the Code of Conduct that will be developed. Therefore, in the costs estimations, the development of APIs connections cannot be properly modelled. The total adjustment costs for national public authorities under this option are estimated to be between EUR 1 500 000 and EUR 1 600 000.

²¹⁷ Ibid 228.

Table 8 – Costs for National Public Administrations for infrastructure, option 1

<i>National Public Administrations</i>		
<i>National infrastructure (sdep)</i>		
Setting up cost (w/o APIs)	€	137,250
Saving for existing IT infrastructure*		30%
Adj Setting up cost (w/o APIs)	€	96,075
Admin costs: Hosting + Main.ce/y (>2y)	€	96,000
<i>MSs expected to implement</i>		16
Total adjustment costs	€	1,537,200
Admin costs: Hosting + Maint.ce / year	€	1,536,000

* Existing infrastructure to be re-used (30% of the total cost)

For local public authorities, the working hypothesis for the purpose of this exercise is that local authorities that have already in place a system in place for monitoring STR activity – a registration scheme – will voluntarily implement the provisions in the recommendations. It is possible to assume, being conservative, that around 100 cities/areas in the 16 Member States mentioned above will want to implement the provisions and will need to adapt their systems. It is expected that these cities have already in place a system (of any sort). Therefore, on average, it is possible to expect that costs of adapting their systems will be only 20% of the costs estimated to create a new system. This will result in a cumulated adjustment cost of EUR 600 000 and a recursive yearly maintenance cost of about EUR 720 000.

Table 9 – Costs for Local Public Administrations for infrastructure, option 1

<i>Local Public Administrations</i>		
<i>APIs to connect Nat.al System</i>		
Setting up cost (w/ APIs)	€	30,000
Hosting + Main.ce/y (>2y)	€	36,000
Saving for existing IT infrastructure*		80%
Local Public DBs		100
Total adjustment costs	€	600,000
Admin costs: Hosting + Maint.ce / year	€	720,000

* Existing infrastructure to be re-used (80% of the total cost)

Hosts in the abovementioned cities/areas (100, estimated) will be possibly requested by competent local authorities to eventually adapt their registration information with the EU dataset template suggested in the recommendation. Using the assumption that data already used in the active systems will be re-used, it is possible to assume that any adaptation will not cost more than ~30% of a new registration for each host. Taking into account that “big” cities (more than 250 000 inhabitant) in Europe are around 130 over a total of 800, it is possible to assume that 40% of the hosts would be concentrated in highly dense areas more impacted by tourism, while the other 60% could be spread around the rest of the territories. Accordingly with the number of cities that would opt-in into the system, it is possible to estimate that at least 50% of these hosts will be impacted by the provisions and be subject to a request to ratify their data in present registration schemes. Estimations for number of hosts affected in the table below follow this logic. A rough estimation brings a total adjustment cost for hosts of around EUR 15 million and EUR 16 million. Additionally, new hosts that will register after the implementation of provisions should be granted a more slim registration form, at least to start offering their accommodation services, resulting in some savings. It is imperative to remind that these costs are fictitious as a rough quantification of the time hosts will need to use for modifying the data (if needed). Registration scheme should be always be free of charge.

Table 10 – Costs for Hosts for new/adjustment registration under option 1

<i>Hosts</i>		
<i>Registration</i>		
# of Hosts 2019 (considering 16 MSs)		165,385
Δ of Hosts in 2025		158,618
Δ of Hosts in 2030		137,179
Cost for new registration*	€	320.0
Discount for existing host's file		70%
Cost if already registered*	€	96.0
Total adjustment costs: registration	€	15,876,950

** Costs have to be intended as monetisation of time needed to register (free of charge)*

Savings. Considering the assumption of sixteen Member States implementing the recommendations, it could be foreseen a total cost for new hosts' registrations are estimated to around EUR 490 million in the first 5 years of implementation. This estimation is computed taking account the average number of days needed to complete registration²¹⁸ (15 days, as specified above) and the average hourly salary available in the OIOO tool. Under these assumptions, each new host registration would cost around 3.000 EUR.

²¹⁸ Oxford Research. “Study on national regulatory approaches to short-term accommodation services” - European Commission, Luxembourg (2021) (upcoming).

It is therefore possible to assume that in the first 5 years of implementation of the initiative (under option 1) an expected saving for hosts of about EUR 438 million could be reached cumulatively for all hosts.

Table 11 – Savings for Hosts under option 1

<i>Hosts</i>		
<i>Registration costs</i>		
# of Hosts 1y (considering 16 MSs)		165,385
Δ of Hosts 5y		158,618
AVG # days for completing registration*		15
AVG salary/h**	€	25.7
Total cost	€	3,084
<i>Total cost registration expected next 5 years</i>	€	489,176,643
<i>Expected savings on registration by year 5</i>	€	438,419,015

* adjusted average estimated (w/o extreme values)

** salary/h taken as reference from OIOO tool

Savings for companies in this scenario cannot be properly estimated as there will be not an obligation for public authorities to follow data requests procedures included in the recommendations.

4.1.2 Option 2

Costs. Cities and areas that will like to receive data from platforms will be obliged to introduce a registration scheme and develop (together with national authorities) an infrastructure to be able to receive activity data from online platforms. If anywhere in the national territory there is a local authority having appetite for data on STR activity under its authority, national authorities will be indeed required to coordinate existing schemes, assess the IT infrastructures already in place and develop the IT system single digital entry point that will connect online platforms and local authorities. Therefore, under option 2, it expected that (at least) twenty-five European Member States²¹⁹ would need to comply with the provisions and coordinate local registration schemes or create a new one. This number is computed taking into account that in all 25 MSs some kind of registration scheme is present – at least in one locality in their territory. Therefore, assuming that those local authorities will still have appetite for data, national authorities will need to adapt their systems. Based on dialogues with member states, it is clear that only two member states have no interest in data with respect STR activity.

It is assumed also that these countries will exploit (at least partially) the IT infrastructure that have already developed, resulting in 30% saving with respect the cost estimated. In the cost structure,

²¹⁹ AT, BE, BG, HR, CZ, CY, FR, DE, GR, HU, IE, IT, LU, MT, NL, PL, PT, RO, SK, ES, SE. Data for Cyprus is not available. Listing based on Airbnb mapping on existing registration schemes present at national, regional and urban level.

development of APIs connections has been included. Member States are expected to spend at around EUR 3 million to coordinate and link existing registration schemes, and develop the national single digital entry point. Additionally, a yearly cost for hosting and maintenance is calculated to be around EUR 96 000 for each Member State, for a cumulative cost of EUR 2.4 million per year.

Table 12 – Costs for National Public Administrations for coordination under option 2

<i>National Public Administrations</i>		
<i>Registration scheme</i>		
Setting up cost (w/ APIs)	€	171,750
Saving for existing IT infrastructure*		30%
Adj Setting up cost (w/ APIs)	€	120,225
Admin costs: Hosting + Maint.ce/y (>2y)	€	96,000
MSs		25
Total adjustment costs	€	3,005,625
Admin costs: Hosting + Maint.ce / year	€	2,400,000

It is expected that local authorities will connect their systems to the national one in order to retrieve data from online platforms. The assumption is that (at least) local authorities with already a system in place will develop such connections. In 2020 online platforms received more than 1700 requests for data. In 2021 they received more than 800. Considering that one area might have been asking data to more than one platforms (and considering that 10+ platforms replied to the dedicated survey), it can be assumed that at least 200²²⁰ local authorities within the 25 MSs will develop a new system or adapt an old one. In line with Option 1, it is possible to assume that 100 of the urban/local areas opting in in the system have already a system in place and therefore will save ~80% of the costs estimated for the creation of a new system. The other 50% of the urban/local areas will face the whole cost of setting up (of around 30.000 EUR for APIs development). It is possible to foresee a cumulative adjustment cost for local public authorities of around 3.6 million. Additionally, a cumulative yearly cost for hosting and maintenance is calculated to be around EUR 4.3 million.

Table 13 – Costs for Local Public Administrations under option 2

²²⁰ Inference based on the Airbnb mapping mentioned in the previous note.

<i>Local Public Administrations</i>		
<i>APIs to connect Nat.al Systems</i>		
Setting up cost (w/ APIs)	€	30,000
Hosting + Maint.ce/y (>2y)	€	36,000
Saving for existing IT infrastructure*		80%
% of local authorities developing new systems		50%
Local Public DBs		200
Total adjustment costs	€	3,600,000
Admin costs: Hosting + Maint.ce / year	€	4,320,000

Costs linked with the registration and the reporting of hosts have the same structure as in Option 1. Therefore, 40% of the hosts will need to (eventually) adjust the info they already provided and the other 50% will need to register ex novo. Considering the hosts in the above-mentioned 25 MSs, it is expected adjustment costs of around EUR 112.4 million for them.²²¹

Table 14 – Costs for Hosts for new/adjusted registration under option 2

<i>Hosts</i>		
<i>Registration</i>		
# of impacted Hosts (in 25 MSs)		540,649
Δ of Hosts 5y		535,476
Cost of new registration*	€	320
Discount for existing file		70%
% of hosts subject to new registration		50%
Adjusted cost if already registered*	€	96
Total adjustment costs	€	112,454,959
Total admin costs in +5y	€	171,352,304

** Costs have to be intended as monetisation of time needed to register (free of charge)*

For platforms' cost estimation, the assumption made is that the majority of the platforms (112 medium companies and 568 fringe companies identified) would likely qualify as small and micro-enterprises and would use the option with more lenient reporting obligations for reporting to public authorities. The reason behind this is to safeguard medium and fringe companies from extra burden while the vast majority of bookings for STRs are made through bigger platforms (30, each of them with average monthly active hosts equal or higher to 1000). Nonetheless, it is important to include these smaller players and hosts in the system of reporting to not create loopholes in the reporting system or create disincentives for hosts to use services of bigger platforms (creating potential distortion in the market). Under these hypotheses, the adjustment cost for platforms are estimated to

²²¹ This estimation is conservative and could exceed the real impact the initiative will have, especially if public administration will be able to retrieve data already shared by hosts.

around EUR 8.2 million for the first year of enforcement, while yearly maintenance (administrative) costs are expected to be around EUR 2 million for the biggest 30 companies. For small and micro-enterprises with average monthly active hosts equal or lower to 1000 , there is only a yearly cumulative reporting cost of around EUR 4 million.

Table 15 – Costs for Platforms for data-sharing under option 2

<i>Online Platforms</i>		
<i>Development APIs-datasharing</i>		
Setting up cost for APIs w/ 25 MSs	€	149,760
Maintenance/year	€	36,000
<i>Online Platforms impacted (in 25 MSs)</i>		30
Big players multiplier		5
Numer of big players across Europe		5
Total adjustment costs	€	8,236,800
Admin costs: Hosting + Maint.ce / year	€	1,980,000
<i>SMEs online platforms</i>		
<i>Fall back option for manual reporting</i>		
Cost for alternative reporting*	€	1,011
Online Platforms impacted		680
Reporting per year		6
Total adjustment costs		--
Admin costs: manual reporting / year	€	4,125,696

** Costs are to be intended processing costs, no infrastructure development required*

Savings. Under option 2, two areas of savings could be identified: savings for hosts on the registration schemes and for platforms on the data sharing requests. Taking into consideration that only 25 Member States will be adopting the data sharing framework and for the cost considerations made above, it could be possible to save more than EUR 5 million for the new hosts that will be starting their activities (hence need to register in those areas) by 2025. Additionally, another ~46 million EUR could be saved for platforms by 2025 if the more efficient data-sharing system will be in place. This estimation is made again based on a conservative reasoning, which consider that only 40% of the platforms will be reached by a data-sharing request from public authorities of localities with STR market access restriction.

Table 16 – Savings for Hosts under option 2

<i>Hosts</i>		
<i>Registration costs</i>		
# of Hosts 1y (considering 25 MSs)		540,649
Δ of Hosts 5y		535,476
AVG # days for completing registration*		15
AVG salary/h**	€	25.7
Total cost	€	3,084
<i>Total cost registration expected next 5 years</i>	€	1,651,407,833
<i>Expected savings on registration by year 5</i>	€	794,646,311

* *adjusted average estimated (w/o extreme values)*

** *salary/h taken as reference from OIOO tool*

Under option 2, savings for online platforms are expected to be substantial. In 2020, online platforms reported to have received more than 1700 requests for data sharing. In 2021 requests lowered to 800. It is important to factor in the impact that the COVID pandemic had on tourism flows and therefore on the need of local public authorities to check STR activity. Until 2020, data requests have been growing exponentially. However, if no growth is assumed and data on requests received in 2020 are taken as baseline, in the next 5 years it is expected a cumulative costs for online platforms of more than EUR 115 million. If, otherwise, data on requests of 2021 are taken as baseline and no grow of requests is considered, in the next 5 years it is expected a cumulative costs for online platforms of more than EUR 54 million. Calculations are made assuming a cost for each company to process singular request estimated at EUR 13 549, as discussed above in section Annex 4.1. A streamlined data-sharing framework will enable online platforms to eliminate the costs for legal assessment and put in place an automated way to process incoming data requests from public authorities, thus making the cost to process a single request very limited and negligible (therefore reducing the cost to process single requests from EUR 13 549 to EUR 0). On this basis, it is estimated that savings for online platforms over a period of 5 years will amount between around EUR 35.8 million and EUR 96.8 million (baseline costs minus adjustment costs of around EUR 18.2 million as presented in table 14 above).

4.1.3 Option 3

Costs. Costs for option 3 follow the same structure of option 2, with the difference that under this option, all hosts in the European Single Market will need to register before offering STR services. With respect option 2, under Option 3 all 27 Member States have to be develop the needed IT infrastructure to coordinate existing local registration schemes or create one national ex-novo and to facilitate the exchange of data between public authorities and online platforms through the single digital entry point. Cost savings will apply only to those Member States that already had in place some form of IT infrastructure. Therefore, for the setting up of the systems in the 27 Member States, a total adjustment cost of between EUR 3.5 million and EUR 3.6 million is expected to set up the

data-sharing infrastructure at national level. Additionally, a yearly administrative cost for hosting and maintenance is calculated at around EUR ~100.000 for each Member State.

Table 17 – Costs for National Public Administrations for coordination under option 3

<i>National Public Administrations</i>		
<i>Registration scheme</i>		
Setting up cost (w/ APIs)	€	171,750
Saving for existing IT infrastructure*		30%
Adj Setting up cost (w/ APIs)	€	120,225
Admin costs: Hosting + Main.ce/y (>2y)	€	96,000
MSs		27
Total adjustment costs	€	3,606,750
Admin costs: Hosting + Maint.ce / year	€	2,592,000

It is expected that more local authorities would like to create connections to the national system to retrieve data from online platforms. It can be assumed that at least 220²²² local authorities within the 27 MSs will develop a new system or adapt an old one. In line with Option 1 and 2, it is possible to assume that 100 (45% of the 220) of the urban/local areas opting in in the system have already a system in place and therefore will save ~80% of the costs estimated for the creation of a new system. The other 120 (55% of the 220) of the urban/local areas will face the whole cost of setting up (of around 30 000 EUR for APIs development). It is possible to foresee a cumulative adjustment cost for local public authorities at around EUR 4.3 million. Additionally, a yearly cost for hosting and maintenance is calculated to be around EUR 5.2 million.

Table 18 – Costs for Local Public Administrations under option 3

²²² Inference based on the Airbnb mapping mentioned in the previous note.

<i>Local Public Administrations</i>		
<u><i>APIs to connect Nat.al Systems</i></u>		
Setting up cost (w/ APIs)	€	30,000
Hosting + Maint.ce/y (>2y)	€	36,000
Saving for existing IT infrastructure*		80%
% of local authorities developing new systems		55%
Local Public DBs		220
Total adjustment costs	€	4,356,000
Admin costs: Hosting + Maint.ce / year	€	5,227,200

Costs associated with hosts follows the same reasoning of option 2. Under option 3, however, all hosts will be subject to the same obligation to register. Hosts in Europe that had not be subject to any kind of registration before will incur full cost of registration estimated (i.e. 320 EUR). The total one-off costs for hosts will be at around EUR 376.6 million. This estimation takes into account the total number of hosts in the EU and that the majority of the hosts will need to perform a new registration (i.e. all hosts in 2 MSs and 80% of all hosts in the remaining 25 MSs) as well as the hosts who would need to adapt their actual registration to the new template (20% of hosts in 25 MSs already subject to some form of registration). This means that compared to Option 2, as the registration is obligatory across all 27 Member States, around 825 683 additional hosts would need to register under Option 3, with an estimated one-off cost of EUR 264.2 million. Additional yearly administrative costs for the next 5 years after the implementation of the provisions foreseen by option 3 are estimated to be around EUR 438.4 million for new hosts entering the market.

Table 19 – Costs for Hosts for new/adjusted registration under option 3

Hosts		
<u>Registration for hosts who already registered</u>		
		25
# of Hosts (in 25 MSs)		1,351,622
Δ of Hosts 5y		1,338,690
Cost of registration*	€	320
Discount for existing file		70%
% of hosts subject to new registration		80%
Adjusted cost if already registered*	€	96
<u>Registration for hosts in MS w/o registration</u>		
		2
# of Hosts (in 2 MSs)		14,710
Δ of Hosts 5y		31,508
Cost of registration*	€	320
<u>Registration for hosts not subject to any registration under Option 2</u>		
		27
# of Hosts (in 27 MSs)		1,366,331
# of Hosts not subject to any registration (in 27 MSs)		825,683
Cost of registration*	€	320
Total adjustment costs	€	376,673,488
Additional one-off costs compared to Option 2	€	264,218,529
Admin costs / year	€	438,463,307

* Costs have to be intended as monetisation of time needed to register (free of charge)

For what concerns online platforms, cost structure will follow exactly what has been discussed in the previous section of Option 2. It is estimated that the adjustment cost associated with data reporting for platforms is around EUR 8.2 million, while administrative costs cumulative for the next 5 years after the implementation of the provisions foreseen by option 3 would be around 9.5 million.

Table 20 – Costs for online platforms under option 3

<i>Online Platforms</i>		
<i>Development APIs-datasharing</i>		
Setting up cost for APIs w/ 27 MSs	€	149,760
Maintenance/year	€	36,000
<i>Intermediaries impacted (in 27 MSs)</i>		30
Big players multiplier		5
Numer of big players across Europe		5
Total adjustment costs	€	8,236,800
Admin costs: Hosting + Maint.ce / year	€	1,980,000
<i>SMEs online platforms</i>		
<i>Fall back option for manual reporting</i>		
Cost for alternative reporting*	€	600
Intermediaries impacted		680
Reporting per year		4
Total adjustment costs		--
Admin costs: manual reporting / year	€	1,632,000

** Costs are to be intended processing costs, no infrastructure development required*

Benefits. Areas of savings could be identified for hosts and online platforms. For hosts, option 3 will not translate in direct saving in the short terms (as more hosts will be required to register). However savings in the medium terms could come by other means. Therefore, compared with option 2, saving for hosts will be positive but reduced to EUR 794 million in the first 5 years of implementation of the initiative. Additionally, more than 45 million EUR would be saved for platforms by 2025 if the more efficient data-sharing system will be in place. Also this time this estimation is made based on a conservative reasoning, which consider that only 40% of the platforms will be reached by a data-sharing request from Public authorities of localities with STR market access restriction.

4.6 SME TEST

(1) Preliminary assessment of businesses likely to be affected	
<p><i>Preferred Option – Option 2</i></p> <p><i>Directly affected: SMEs in the Platforms stakeholders' groups:</i></p> <p>The preferred Option foresees an obligation for public authorities who want data on STR to set up registration schemes for hosts. All platforms will need to comply with the data sharing framework, display registration numbers and share data with the single digital entry point set up at national level.</p> <p>With an increased legal certainty on data sharing and appropriate communication channels, market barriers are reduced giving higher chances to SME online platforms who operate cross-border or wish to expand their geographical reach to more than one Member State to do so.. Nevertheless, it is important to stress that data reporting and display requirements will have the same cost impact on companies, without differentiating between <u>small and medium</u> enterprises or larger players – resulting in a more substantial negative impact on the former.</p> <p>Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361/EC. This definition refers to companies that operate in traditional markets and have adopted classic business models. In the past years, thanks to digital technologies, a new type of companies – i.e., online platforms – have emerged which base their business model on the value of intermediation between different groups of stakeholders, by leveraging their capacity to use algorithms and data to provide matching services. Online platforms operate in digital markets, where indirect network effects are a crucial element of market structure and competition. Hence, the classic definition of SMEs cannot be applied to platforms, and there is no equivalent definition yet for this type of companies operating in the digital domain.</p> <p>However, the preferred option foresees a lighter reporting regime for platforms that qualify as small and <u>micro-enterprises</u> within the meaning of Recommendation 2003/361/EC (i.e., enterprises with staff headcount of, respectively, <50 and < 10 and turnover or balance sheet of, respectively, ≤ 10 € m ≤ € 2 m), provided that they do not reach a number of average monthly active recipients in the EU equal to or higher than a monthly average of 1000 active</p>	<p><i>Where in the impact assessment</i></p> <p>See Chapters 2 and 6 as well as Annex 4</p>

<p>hosts. The assumption is that companies below such thresholds would likely qualify as small and micro-enterprises.</p> <p><i>Indirectly affected:</i> SMEs in the ancillary services in the STR ecosystems: Relatively speaking, auxiliary services offering activities linked directly with the STRs (such as laundry, cleaning, concierge, etc.) offered by local SMEs will have an advantage from this measure. They will not incur in any direct costs and, at the same time, they will have a more stable market. Should public authorities decide to make the data that they received from platforms available at aggregate level, these SMEs will also have the possibility to have better insights on market projections and plan their business accordingly.</p>	
<p>(2) Consultation with SMEs representatives</p>	
<p><i>Bilateral with SMEs:</i> Meeting were held between the Commission and SME companies from various stakeholder groups: platforms, property managers and hosts.</p> <p><i>Participation of SMEs in Workshops:</i> Two workshops on the topic of 'Developing a responsible, fair and trusted single market for short-term rental services' were organised on 22 October and 10 December 2021, each attracting around 150 participants across all stakeholder categories.</p> <p><i>OPC and SMEs replies:</i> SMEs took part in the consultation process through submitting their feedback on the Inception Impact Assessment from 16 September to 14 October 2021 and replying to the Open Public Consultation, which was conducted from 27 September to 13 December 2021.</p> <p><i>Targeted survey:</i> SMEs took part in the targeted survey to platforms.</p>	<p>Annex 2 (Stakeholder consultation)</p>
<p>(3) Measurement of the impact on SMEs</p>	
<p>It is estimated that 680 platforms would qualify for the more lenient reporting requirements. These will take advantage of data reporting possibility through the functionality for more lenient reporting obligations. The administrative costs of manual reporting for these platforms will amount to around 1.6 million EUR per year (EUR 2 400 per platform per year).</p>	<p>See Annex 4.</p>
<p>4) Assess alternative options and mitigating measures</p>	

<p><i>Alternative options:</i> The option of a full exemption for certain SMEs online platforms from reporting obligations, based on the volume of STR activity intermediated (number of bookings) was assessed and discarded at an early stage.</p> <p>For the purpose of this assessment, it has been identified that 680 companies could fall into the reporting derogation. There would be a direct positive effect for online platforms which would be able to save “costs” deriving from the data sharing obligations: the implementation of this variant will translate in around EUR 1.6 million savings per year for all EU companies falling into this reporting derogation. However, other considerations (below) need to be taken into account.</p> <p>In the first place, under (preferred) Option 2 these companies would be anyhow under a very light regime of data reporting obligation, not being asked to develop any IT system to guarantee automated data reporting. Therefore, the saved costs will be merely linked to monetisation of the time needed to prepare and upload (manually) the data every three months in the national IT systems (single digital entry points to be ensured by each Member State, where relevant). Even if this can be considered a tangible benefit as cost saving, it will be a “monetisation” of the time needed by companies to comply with the reporting, as they do not need to develop any additional infrastructure.</p> <p>Secondly, exempting some companies from the reporting obligation would create a loophole in the stream of information public authorities will be able to receive. This will lower the completeness and reliability of information at disposal of public authorities to tackle positive and negative externalities linked with STR activity. Consequently, the enforceability of STR rules in place will be jeopardised: the exemption will create loopholes in the monitoring system, incentivising hosts to escape monitoring of their activity by using exempted small platforms for listings. This will eventually lower the quality standards of data and weaken the efficacy of the tool set offered to public authorities by this initiative.</p> <p>A third point, linked with the previous one, is represented by the distorted incentive for hosts to use smaller platforms to list their rental units due to lower probability to be monitored. If there could be an initial benefit for SMEs online platforms – concretely, hosts will divert some of their intermediation needs toward smaller platforms at expenses for the bigger ones –, this will not represent a consistent incentive prolonged in time. As soon as a small online platforms will reach the minimum volume of transactions, the company will need to report data.</p>	<p>See chapter 5; see Annex 2 for the stakeholder consultations</p>
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<p>Therefore hosts will be incentivised to shift again to other smaller platforms in order to keep their activity unmonitored.</p> <p>Finally, all SMEs stakeholders and their representatives involved in discussions explicitly stressed that total exemptions for SMEs are not perceived as a positive tool to help small companies develop. The reason behind this is a possible cumulative effect resulting from the sum of multiple exemptions for SMEs: this could create an artificial barrier to scale up as reaching a certain volume of business will trigger multiple obligations all together. SMEs experts suggest that smaller companies should always be involved in provisions, adapted to their possibility and eventually limiting costs as much as possible. In this way, companies will incorporate obligations set by legislations gradually in their processes avoiding disruptions during their scale up process.</p> <p><i>Mitigating measures:</i> In order to safeguard certain smaller platforms from extra burden with regard to the reporting obligation, small and micro-enterprises which do not reach a number of average monthly active recipients in the EU equal to a monthly average of 1 000 active hosts can use the option for more lenient reporting obligations for reporting data. The reason for introducing this option was to include these smaller players in the system of reporting, while the vast majority of bookings for STRs are being made through bigger platforms (or property manager websites). This avenue will prevent the creation of loopholes in the reporting system and/or of disincentives for hosts to use services of bigger platforms.</p>	
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ANNEX 5: DESCRIPTION OF THE SECTOR²²³

In the first part of this Annex, the main players are described, while in the second part a more detailed and quantitative analysis is assessed on their presence in the European economy. This overview will focus on the STR intermediary platforms. For more detailed information about the STR ancillary services segment, please refer to Duch-Brown (2021).

1.1 STR SECTOR: DESCRIPTION OF THE PLAYERS

The structure of the STR sector is complex and involves the participation of many different players and activities.

1) STR Intermediary Platforms.

Each of the STR Intermediary Platforms have different business models:

- Airbnb: global platform. Entire or shared properties are advertised which may be hosted by peers (individual hosts) or managed by property managers.
- Vrbo (Expedia Group): global platform. Only entire properties are advertised (a part of the property is never shared with strangers) which may be hosted by peers (individual hosts) or managed by property managers. Have other brands in DE (FeWo-Direkt.de) and FR (Arbitrel.fr).
- Booking.com: global platform. Only entire properties are advertised (a part of the property is never shared with strangers) which may be hosted by peers (individual hosts) or managed by property managers.
- Marriott Home and Villas (Marriott International): global platform. Advertises only premium and luxury STRs (which comply with Marriott's standards) which are managed by professional home management companies only. Due to the recognition of the brand name, gives an access to Marriott's loyal members' base.
- Tripadvisor Rentals (FlipKey, Holiday Lettings, Niumba, Vacation rentals and HouseTrip): global platform. Entire or shared properties are advertised which may be hosted by peers (individual hosts) or managed by property managers.
- Leboncoin Group: France only. Only entire properties are advertised (a part of the property is never shared with strangers) which may be managed by peers (individual hosts) or property managers/OTAs (for example, locasun)
- Traum-FerienWohnungen (part of OYO Vacation rentals): global, Germany based. Entire and shared properties are advertised which may be hosted by peers (individual hosts) or managed by property managers. Also lists holiday homes to sell or buy.

Meta Search Platforms. They could be also considered intermediary platforms while do not vertically in serving the STR segment.

²²³ This annex is based on the following publication: Duch-Brown, N. (Coord.), The Short-Term Accommodation Rentals market in the EU, JRC Digital Economy Working Paper 2021-09.

- Hometogo: based in Germany. list offers from thousands of providers, including: Booking.com, Tripadvisor, Vrbo (Expedia Group), Airbnb, Vacationrentals.com, HouseTrip, Flipkey (Tripadvisor), perfectplaces.com, homestay.com, onlyapartments.com, Interhome, BedyCasa, Novasol, Homeescape.com
- Holidu: based in Germany. Scans hundreds of websites to let you choose from more than 14 million vacation homes offered by the following vacation rental partners: Interchalet, TUI, Novasol, Booking.com, E-Domizil, Housetrip, Tripadvisor and other.
- Google in March 2019 added a Vacation Rental filter (you can search for vacation rentals directly on Google Travel). There was an issue with vacation rental properties being not instantly bookable (TBC if it was solved). The company has partnered with Expedia Group, Tripadvisor (not all STR intermediary platforms opted in) and channel managers (Property Management Tech) like Rentals United, Kigo and others.

2) Hosts

Individual hosts. Individual hosts can rent their entire properties or rent only a part of it (shared properties). Entire properties and shared properties can be rented out occasionally (usually these are primary residences, but can be second homes too) or year-around (usually second homes).

Majority of them rent their properties via STR Intermediary Platforms directly (with an exception of Marriott Home and Villas (Marriot International) as they allow advertisements of STRs managed by professional home management companies only.

If individual hosts do not want the burden of the entire short-term rental process (advertising, getting a booking, keeping contact with a guest, accommodating, cleaning and other), they are very likely to turn to a professional property manager (they can turn to Property Management companies and/or Branded Home Managers and/or Traditional Holiday Home Managers). These professionals come in different shapes and sizes.

Property Portfolio Owners/Property Managers (Entrepreneurs). Property Portfolio Owners/Property Managers (Entrepreneurs) are hosts who have more than their primary residence and/or second home to rent for short-term. They like renting out the properties they own already and have more properties to rent out (built out their properties portfolio). These are entrepreneurs. Entire properties and shared properties can be rented out occasionally or year-around.

As in the case of Individual Hosts, they can rent their properties via STR Intermediary Platforms directly (with an exception of Marriott Home and Villas (Marriot International) as they allow advertisements of STRs managed by professional home management companies only (as they may not qualify yet).

Property Portfolio Owners/Property Managers (Entrepreneurs) handle their own guest stays but can turn to other professional property managers (they can turn to Branded Home Managers and/or Traditional Holiday Home Managers) for a support in marketing and distribution. These entrepreneurs come in different shapes and sizes.

3) Ancillary services providers

STR Ancillary Services support Property Portfolio Owners/Property Managers (Entrepreneurs) depending on how big their property portfolio is and what is the willingness and resources to take up STR Ancillary Services.

Real Estate Agents/Property Developers/Property Management companies. Real Estate Agents can use services provided by Branded Home Managers which enable owners and landlords to fill the voids in their portfolio and earn additional income while waiting for the right sale or long-term let.

Property developers with new units coming on-stream, or professional property managers with vacant homes, can benefit from additional revenue generated while finding the right tenants or buyers. They can also turn to Branded Home Managers for the support.

Branded Home Managers. Branded home managers offer an end-to-end service for both homeowners and guests, on average charging between 40% and 50% of the total booking value. They only work with homes that meet their brand standards. They are also more involved with the interaction with guests, generally meeting the guest to hand-over the keys and do ID checks, as well as provide maid or butler services to increase brand engagement.

Branded home managers clearly state they are managing a STR advertisement. Besides listing on all the STR Intermediary platforms, they often have their own website with its own booking engine to enhance the brand identity and association with guests.

They are also more likely to work with Marriott Home and Villas, corporate booking platforms (Bridgestreet), traditional travel agents, and realtors.

Some of the Branded Home Managers are: Onefinestay (owned by Accor Hotels), Altido, Under the doormat, Sonder, Oasis, Thirdhome Rentals (focuses on second luxury homes), Yonder (focuses on nature-rich STRs) and others.

There is some convergence happening between Traditional Holiday Home Managers and Branded Home Managers, but there tends to be one major difference between these players. While Traditional Holiday Home Managers tend to focus on entire second homes in holiday destinations, Branded Home Managers predominantly focus on first and second homes in urban areas (with an exception of Thirdhome Rentals and Yonder).

Traditional Holiday Home Managers. These companies count many years in helping owners of second homes in holiday destinations to manage their properties throughout a year (majority of them are 40+ years old). Traditional Holiday Home Managers continue to adapt to changes in the market, they are increasingly converging with other property managers, particularly the Branded Home Management companies.

Traditional Holiday Home Managers are full-service businesses which take care of the whole renting process for homeowners. From getting bookings to key handling, cleaning services and taking care of check-outs. Homeowners and guests can reach out to companies' international customer contact teams, that is familiar with all vacation rentals, when any help is needed.

Traditional Holiday Home Managers:

Belvilla (with focus on Benelux region) and Dancenter (Europe) (OYO VH)

Novasol, cottages.com, Hoseasons, James Villa Holidays, Landal Green Parks (Awaze)

Interhome Holiday Home Division (Interhome, Interchalet)

The STR Ancillary Services landscape in the STR segment is by far the fastest growing area when considering new entrants entering the market. The Property Management technology area is especially fragmented, with different players offering property management systems, channel management, customer relationship management, digital marketing solutions, website builders, revenue management systems, and guest-facing tech like messaging, app builders, digital guidebooks, chatbots, and voice assistants.

While the short-term rental sector has grown strongly, the number of STR Ancillary Services providers has too. The fragmented nature of the sector means there are still many small property managers who will not have significant funds to purchase software, instead trusting their own local knowledge and experience to manage processes, market their listings and set prices.

It is still hard for STR Ancillary Services providers to scale Europe-wide or internationally and become dominant players (nearly all of them are SMEs). Most players instead focuses on a few tools or systems, based on the demand in their initial core market. Vertical expansion usually follows growing demand amongst the client base, rather than seeing a true gap in the market.

Some Ancillary services are:

- **Property operations** – STR Ancillary Services which offer hotel-standard cleaning and linens are seeing their business grow as more and more property managers are outsourcing cleaning and linens to professional providers using the latest work order management systems, rather than retaining this function in-house.
- **Property hardware** - As the Internet of Things (IoT) enters the home, where devices and appliances are connected to the internet and can be controlled and tracked remotely, short-term rental property managers and homeowners can have more control over their rental while not physically present. From smart locks which can be accessed with unique codes provided to guests, to thermostats which can be accessed remotely, to noise monitors to identify potentially noisy and disruptive guests.
- **Guest-facing tech** – As guests staying at short-term rentals expect a tech-enhanced personalized service there is a growing group of STR Ancillary Services providers which offer in-property tablets or mobile enabled apps or websites to offer a personalized service to guests.
- **Other Support Services** – These are platforms which facilitate local networks of key exchanges and luggage storage in shops or safe boxes, as well as insurance providers, mortgage providers, and legal support.

1.2 STR SECTOR: ANALYTICS AND DATA ON PLAYERS

Following Eurostat's classification, accommodation industries are divided in three main categories: i) Hotels and similar accommodation; ii) Holiday and other short-stay accommodation; and iii) Camping grounds, recreational vehicle parks and trailer parks. The

number of nights spent in tourist accommodation in the EU grew in 2019 by 2.5 %, reaching almost 2.9 billion nights. Holiday and other short-stay accommodation -such as rented apartments- almost reached one quarter (23 %). In 2010, the share of holiday and other short-stay accommodation in total night spent was 20% (Table 1).

Table 1 - Evolution of nights spent at tourist accommodation establishments 2010-2019

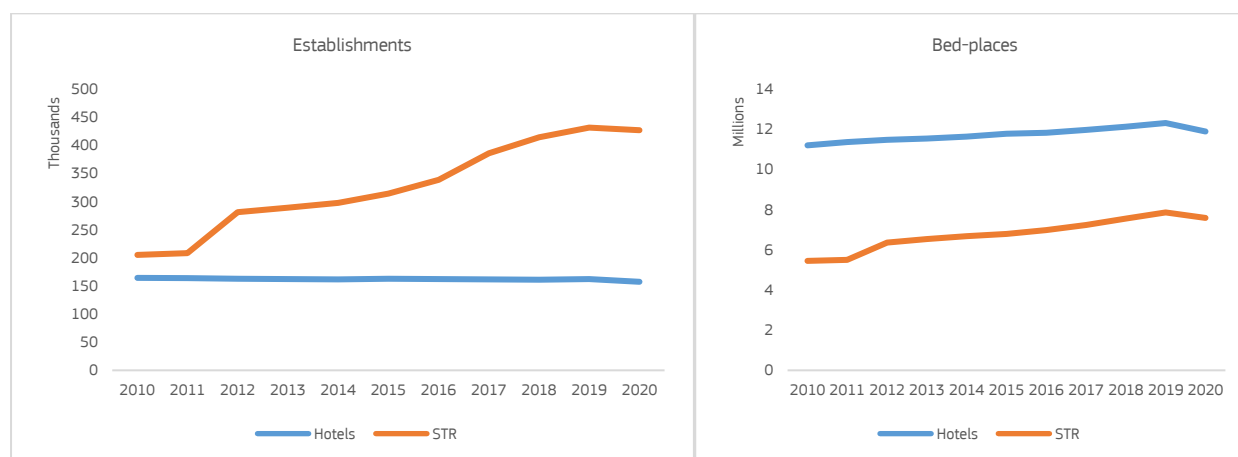
	Total	Hotels¹	STR²
	Billion nights	%	%
2010	2.2	65.4	20.1
2011	2.2	66.2	19.7
2012	2.3	65.5	21.2
2013	2.3	65.5	21.3
2014	2.4	65.4	21.5
2015	2.5	65.2	21.9
2016	2.6	65.3	22.0
2017	2.7	64.9	22.4
2018	2.8	64.9	22.5
2019	2.9	64.5	22.9

1: Hotels and similar accommodation; 2: Holiday and other short-stay accommodation

Source: Eurostat (TOUR_OCC_NINAT)

The increasing relevance of STR in the recent years can also be confirmed looking at the evolution in the number of establishments and bed-places, as shown in Figure 2. As the graph shows, the number of STR establishments grew at an average yearly rate of 8.6% over the period 2010-2019, from little more than 200 thousand to 431 thousand. Despite the fact that the number of STR bed-places grew by 4.2% per year in the period 2010-2019 and those of hotels only grew at 1.1% per year in the same period, the share of STR bed-places only reached 27%, up from 22% in 2010.

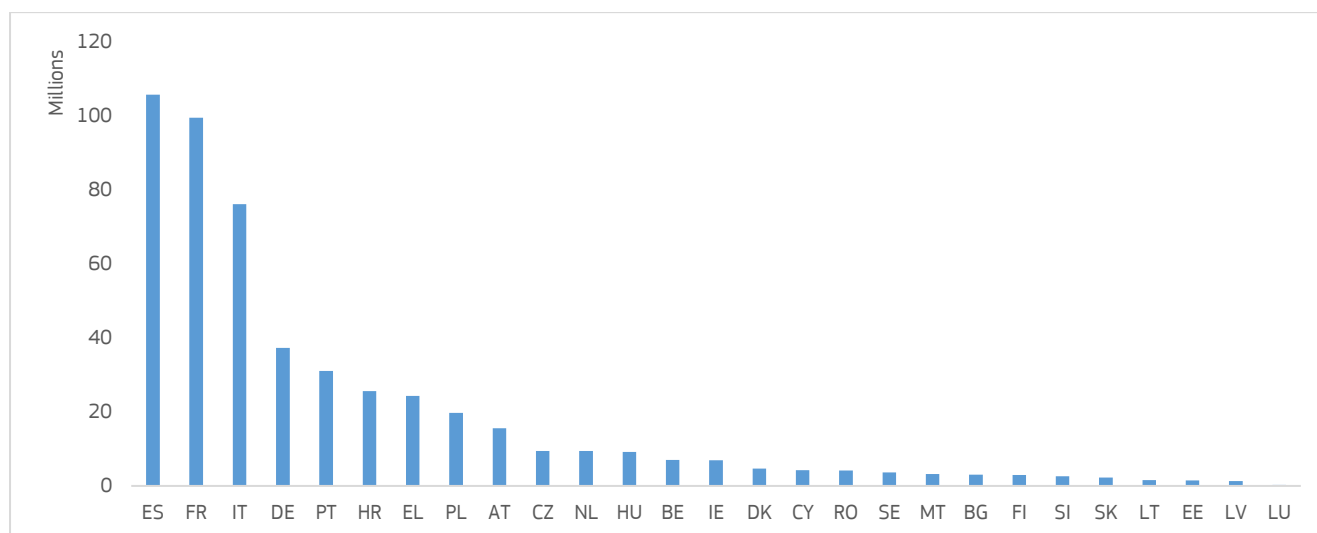
Figure 2 - Evolution of establishments and bed-places in hotels and STR, 2010-2020



Source: Eurostat (TOUR_CAP_NAT)

The collaborative economy had a significant impact on the tourist accommodation market in the decade. In 2019, more than 512 million guest nights²²⁴ spent in the EU were booked via one of four platforms (Airbnb, Booking, Expedia Group and Tripadvisor). Figure 3 shows that one in five guest nights was spent in Spain (106 million guest nights), followed by France (99 million). Italy (76 million guest nights), Germany (37 million) and Portugal (31 million) complete the top five.

Figure 3 - Guest nights spent at short-term accommodation offered via collaborative economy platforms, 2019 (in million)



Source: Eurostat (Experimental statistics)

During the COVID crisis, the STR segment has proven to be particularly resilient. While the number of nights spent in EU tourist accommodation in the first semester of 2020 dropped by 60% compared to the same period in 2019 (from 1.2 billion in 2019 to less than 0.5 billion in 2020), the number of STR bookings during the summers 2020 and 2021 were above 2018 levels during the same period in certain EU regions. The results below (Figure 4) cover virtually all Airbnb listings in all 27 EU Member States. Reviews are quite timely, and allow for assessing short-term rental tourism activity with a time lag of ca. 14 days and analyse the evolution of reviews and the expected bookings derived from those reviews, controlling for the season.

Web Traffic and the Short-Term Rental sector in Europe

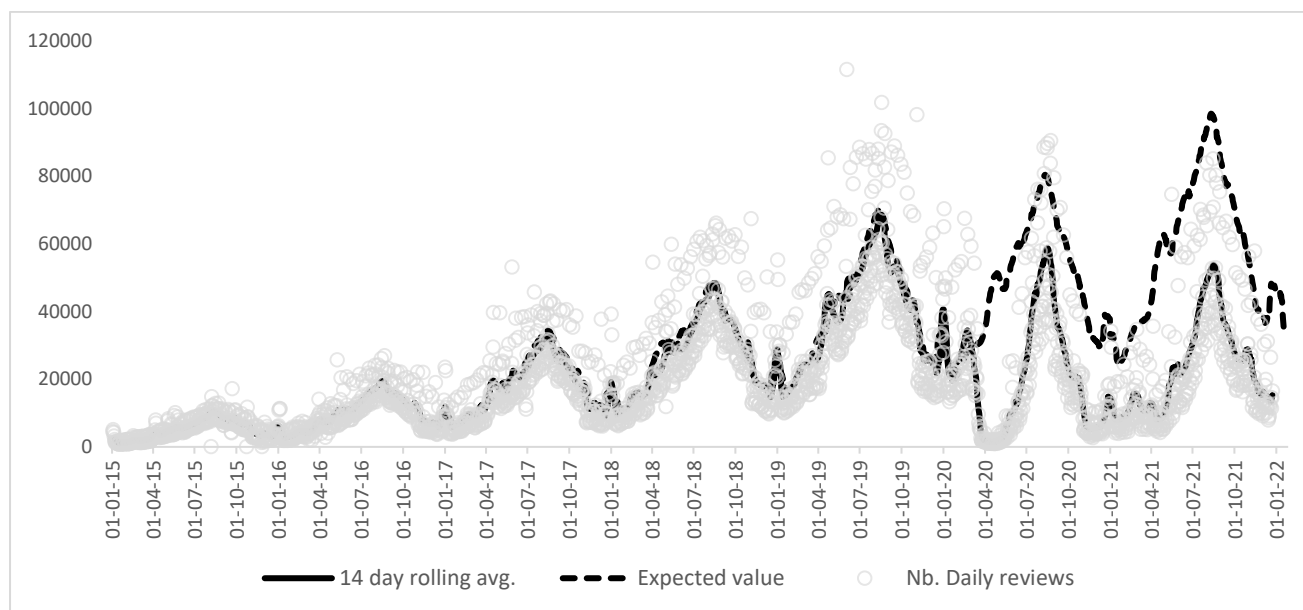
In this section we provide an overview of the STR segment by focusing on traffic to the main platforms in 20 EU countries.²²⁵ We start by identifying the main players in the STR segment in the 20 EU countries under study. In order to do that, we considered the full list of domains from the

²²⁴ The number of guest nights takes into account the number of nights spent during a stay and the number of tourists in the travel party. The concept is similar to the "nights spent at tourist accommodation establishments" generally used in official tourism statistics.

²²⁵ The analysis is based on the web analytics data provided by [Similarweb](#). We focused on the category "Accommodation and Hotels" traffic data and identified the main STR platforms on that basis. Similarweb covers 20 EU Member States, namely: Austria, Belgium, Bulgaria, Czech Republic, Germany, Denmark, Spain, Finland, France, Greece, Croatia, Hungary, Ireland, Italy, Nederland, Poland, Portugal, Romania, Sweden, and Slovakia. These countries represent 98.17% of the EU GDP and 97.7% of the EU population in 2019 (Eurostat).

“Accommodation and Hotels” category, ranked by traffic share in each country. The identification of the STR sites was performed manually. The procedure has covered at least 80% of the traffic in each of the countries or it has stopped once at least 10 STR platforms were identified. The *definition of STR* adopted in classifying the domains has taken a consumer centric perspective. In other words, we considered the choices of a consumer interested in holiday or short-term accommodation that it is not a canonical hotel, residence or inn. The classification procedure itself produced a first important insight: *STR websites are characterised by a wide variety of business models*.

Figure 4 - Evolution of Airbnb reviews



Source: ECFIN (<http://b1scrap2.westeurope.cloudapp.azure.com/airbnb/>)

Most people probably have in mind the Airbnb business model when thinking of STRs. In reality, most platforms have different design features that make them extremely heterogeneous. For example, a first issue is what share of private home is necessary to consider a platform belonging to the STR segment. For the purpose of this report, Booking.com has been considered an Online Travel Agency (OTA) platform. Indeed, despite it also supplies STR, that is not its core business.²²⁶ At the same time, in some countries under study (e.g., Croatia, Slovakia) some of the main STR platforms also list small independent hotels and inns. Moreover, Airbnb and other platforms charge a percentage fee per completed transaction. Other websites have a listing annual fee. Sites also vary on whether hosts, guests, or both are charged. Another dimension of heterogeneity is the approval of the listings: some platforms inspect all the listed properties and, in some case, there is a sort of affiliation to a network (e.g., for luxury villas and apartments). In other cases, the platform is a sort of notice board where anyone can post a listing without any moderation. Finally, certain domains appear to be provided by local tourism authorities to promote the supply of rooms and apartments to visiting tourists. In other cases, cooperatives with different aims are involved, as for example the

²²⁶ This choice is backed by evidence in Annex B.B in Duch-Brown (Coord.) 2021., showing a relatively limited percentage of traffic for STR on the Booking.com domain.

case of [Fairbnb](#), which tries to promote sustainable tourism by linking listings of STRs to experiences of the local territory.²²⁷

Table 2 presents the *indicators of concentration* for the 20 EU countries and some selected members, reporting the most and least concentrated countries according to the web traffic HHI and the EU average of the 80th percentile of the traffic. The average web traffic HHI in the 20 countries is 136. Slovakia, Greece and France have a substantially higher concentration, ranging from 256 and 290. Romania, Bulgaria and Hungary's traffic is more spread between the 80th percentile websites and the HHI ranges between 15 and 57. These features are also reflected in the 80th percentile traffic share (column 2). On average, the 80th percentile websites account for 23% of the traffic shares in the category "Accommodation and Hotels" in Similarweb.

Column 4 highlights the differences in the less popular between the STRs in the 80th percentile. On average, that STR attracts 0.86% of the traffic "Accommodation and Hotels" category, but values range from as little as 0.15% in France and the Netherlands to 4.26% in Bulgaria.

Table 2 - Concentration by country - Top 80 percentile domains

Country	80 th percentile total share	80 th percentile sites HHI ²²⁸	80 th percentile STR share	80 th percentile number of STR
Slovakia	30%	290	0.95%	5
Greece	22%	270	0.28%	7
France	39%	256	0.15%	26
EU 20	23%	136	0.86%	13.6
Nederland	23%	57	0.15%	20
Bulgaria	4%	18	4.26%	1
Hungary	4%	15	3.91%	1

Source: own calculations with Similarweb data.

Although similar information can be obtained by looking at the top 10 platforms, from a methodological perspective we will focus the ensuing analysis on the Top 80th percentile websites, but for countries with only a very limited number of STRs we will consider at least the Top 3 domains.

From a conceptual viewpoint, the measures of traffic concentration suggest that the 20 EU countries under study are rather heterogeneous in terms of concentration of traffic to the STR segment. This may indicate that the STR segment has different levels of development and popularity across countries, which is also reflected in the market structure and the resulting web traffic. ***The STR segment is heterogeneous in terms of web traffic concentration between countries and across domains.*** The traffic heterogeneity to STR platforms identified may suggest that the market in the EU is not particularly integrated and it has local specificities.

²²⁷ More details on Fairbnb are provided in Eco&Eco (2021).

We can go more in depth in trying to grasp the size and development of the sector by studying the cumulative share of traffic to the STR segment in comparison to the Hotel traffic and the Online Travel Agencies segment's traffic of the "Accommodation and Hotels" category.

Table 3, panel (a), counts the domain types in the Top 80 percent of traffic. On average in the EU20 countries studied there are more STR websites than OTAs: the proportion is 2.65 STR per OTA. Countries like Denmark, Austria and Poland have more than three times STRs than hotel websites, whereas Czech Republic, Romania and Greece have less STR sites than OTAs. A similar picture emerges from panel (b). On average, there are more STR domains than hotels or hotel chains, 2.94 in the EU20. This may be because many small chains and independent hotels do not command a substantial share of clicks and, hence, may not feature in the top 80 percent of traffic. Italy, Denmark, and Bulgaria have more than three STR per hotel website, whereas Sweden, Slovakia and Ireland have relatively more hotel domains. To conclude, *the STR segment attracts comparable traffic shares as the OTA sector in many EU countries and appears to be an established and important accommodation option in the EU.*

Table 3 - Domain types in the Top 80 percent traffic

(a) STR vs. OTA				(b) STR vs. Hotels			
Country	OTA	STR	STR/OTA	Country	HOT	STR	STR/HOT
Denmark	3	11	3.67	Italy	4	15	3.75
Austria	7	22	3.14	Denmark	3	11	3.67
Poland	2	6	3.00	Bulgaria	1	3	3.00
EU 20	36	82	2.65	EU 20	37	113	2.94
Czech Republic	9	7	0.78	Sweden	12	11	0.92
Romania	5	3	0.60	Slovakia	4	3	0.75
Greece	9	5	0.56	Ireland	50	22	0.44

The domains identified so far are often found in several countries and it is interesting to analyse unique websites. Indeed, from the 20 EU Member States for which Similarweb collects data, some relevant info is the following. First, 122 unique websites are identified when looking at the Top 10 per country (out of 200 –10 websites per 20 countries). Second, we also identify 194 unique websites when looking at the top 80% of the traffic per country. From the combination of both lists, 208 unique websites are identified.

The dominance of Airbnb, with its subdomains, it is clear from Table 4, listing the websites that appear in most countries. The site Vrbo.com also enjoys popularity throughout the EU 20 countries under study. *Airbnb is the main player in most countries. Multiple sub-domains of the platform figure in the Top10 of several countries.*

Table 4 - STR websites present in most countries

Website	Number of countries	
	Top 10	Top 80%
Airbnb.com	19	19
Vrbo.com	14	13
Airbnb.co.uk	10	5

Next, the websites can be grouped by country of origin. Table 5 reports the distribution that is obtained:

Table 5 - Countries with most STR websites

Country	Number of websites	
	Top 10	Top 80%
Germany	22	38
United States	20	20
France	10	19
Denmark	7	11
Nederland	6	14
Poland	6	4
Czech Republic	6	7

It is perhaps not surprising that large countries like Germany, the US, and France have the highest number of STR websites in the Top 10 or Top 80 percent of traffic. The US, one of the World leading countries in the digital domain, is the only non-EU country whose websites are browsed also in EU countries. Interestingly, a number of websites from smaller countries as Denmark, Poland and the Czech Republic are present in several countries in the EU. **This evidence may suggest that even medium-sized STR platforms enjoy sufficient network effects and scale/scope economies that allow them to be active and relatively popular in more than one country.**

If grouping is applied at a higher level, i.e., of macro-region, the picture in Table 6 emerges. Indeed, as it is probably natural EU websites are the vast majority, with 93 websites in the Top 10 and 142 in the Top 80 percent. The United States, again, play an important role in the sector, with 20 websites according to both selection criteria.

Table 6 - STR websites in the EU 20 grouped by region of origin

Region	Number of websites in the EU 20	
	Top 10	Top 80%
European Union	93	142
United States	20	20
United Kingdom	3	9
Rest of the World	3	5

Finally, we can group the websites by *platform*. In fact, many platforms adopt a country specific domain strategy. Table 7 reports the results of such aggregation:

Table 7 - Main platforms by number of domains

Platform	Country of HQ	Number of domains
Airbnb	US	24
Hometogo	DE	11
Holidu	DE	10
Novasol	DK	8

The table shows the relevance of one US platform, Airbnb, in the sector. This platform is present with more country specific domains than the number of countries covered by the data. Two German platforms follow with less than half the country specific domains as Airbnb. Novasol, a Danish platform, is present with a third of the domains that Airbnb has.

Given the prominence of Airbnb in the sector, we compute its traffic share in the “Accommodation and hotels” category in each country. The percentage of traffic captured by Airbnb as a platform, with all its sub-domains, is on average 16% of the whole category. The share varies by country, ranging from more than 40% in countries as Czech Republic, Germany, and Bulgaria, to 5% or less in countries as Hungary, Romania, and Poland.

Table 8 is going one step further, and looks at the share of traffic of Airbnb as a platform between all the STRs that feature within the 80 percent of traffic in each country. On average, the traffic

share generated by Airbnb is 55%. Whereas certain countries have very concentrated traffic and only Airbnb features in the Top 80% of traffic, even in other countries the traffic share is quite high and never less than a quarter of the total STR traffic (within the Top 80 percent).

Table 8 - Airbnb traffic share within STRs in the Top 80 percent of traffic

Country	Airbnb share in STR Top 80pc
BG	100%
HU	100%
GR	94%
EU 20	55%

As a final piece of evidence, we focus on the traffic share of platforms in the whole EU20 countries, based on monthly data of web traffic between September 2018 and September 2021. This information allows us to identify the Top 20 STR platforms by share of visits, as reported in Table 9. Column 2 reports the share of visits to the platform domains, whereas column 3 presents the share of unique users. Column 4 lists the country in which the Headquarters of the platform are located and, finally, column 5 counts the number of EU country domains that the platform has, a very rough proxy of where the platform is active. Airbnb comes across as the major player in the sector, as it is the only platform attracting a share of traffic in the double digits (column 2). Only one more platform, the German Hometogo, has more than a 5% share of the EU20 traffic. Only the first seven platforms have a share of visits higher than 2%.

From the data collected, we have identified 142 STR platforms operating in the major EU markets. Assuming that these companies cover 80% of the traffic to STR sites and that the size distribution is highly skewed (Pareto), as show in figure 5, these providers should represent 20% of STR platforms operating in the EU market. The size distribution shows a high concentration. As indicated in table 10, the top 15 already cover more than 60% of traffic, while Airbnb alone represents more than one third (37%), and its traffic share is six time higher than that of the second highest platform.

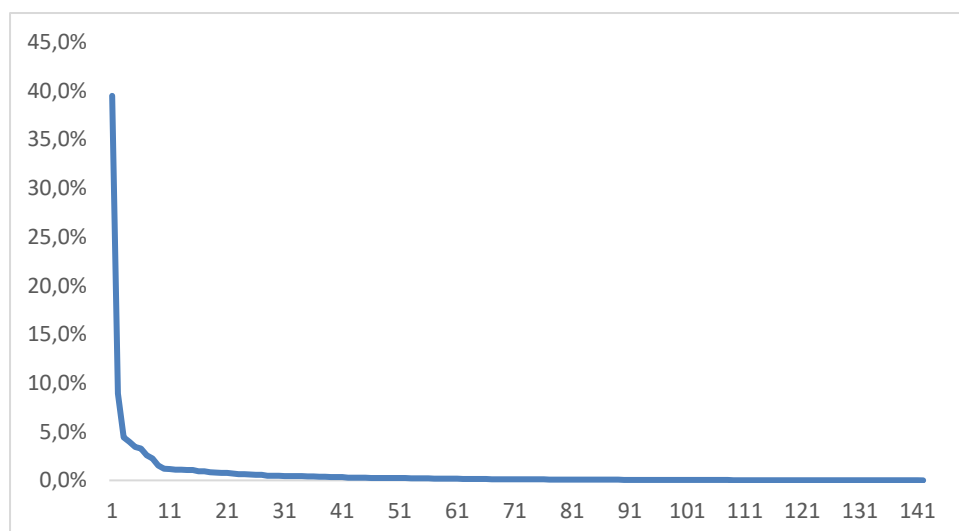
Hence, we assume that there should be around 568 additional small platforms operating in the EU and covering the remaining 20% of the traffic. Given the size of the smallest observed platform (Alkatravel, with a maximum of around 1000 unique users in the summer of 2019), these operators are expected to be SMEs, mostly operating in localised and niche markets.

Table 9 - The top 20 STR platforms by visits share

Platform	EU20 visits share	EU20 unique users share	Country of HQ	# of EU20 country domains
Airbnb	45.69%	39.50%	US	17
Hometogo	7.61%	8.92%	DE	9

Fewo-direkt	3.89%	3.97%	DE	1
Abritel	3.60%	3.44%	FR	1
Holidu	3.36%	4.44%	DE	10
Gites	2.98%	3.27%	FR	1
Traum- ferienwohnungen	2.88%	2.57%	DE	2
Vrbo	1.99%	2.27%	US	0
Novasol	1.54%	1.52%	DK	7
Couchsurfing	1.24%	0.94%	US	0
Gites-de-france	1.16%	1.21%	FR	1
Papvacances	1.04%	0.80%	FR	1
Casevacanza	1.04%	1.17%	IT	1
Belvilla	1.02%	1.08%	NL	2
Chambres-hotes	0.90%	1.09%	FR	1
Locasun	0.86%	0.94%	FR	1
Bed-and-breakfast	0.85%	1.06%	IT	1
Wimdu	0.75%	1.08%	DE	3
Natuurhuisje	0.72%	0.79%	NL	2
Rentalia	0.64%	0.76%	ES	0

Figure 5 - Size distribution of the 142 identified platforms



While the top platforms are multinational companies operating in many countries, little is known about the cross-border operations of smaller platforms. From the list of 142 identified platforms, a random selection of 20 of the 42 smaller platforms was extracted to check manually whether they were operating in several MS or not and, for those that are not, whether they operate in several jurisdictions within a single country. In the manual check, we also record the number and list of countries (or regions when possible) for which listings were detected. The results of this exercise are shown in Table 10.

Table 10 Cross-border and cross-region operations in a sample of small STR platforms

Platform sampled	EU share		Cross border	Cross region	Countries with listings (#)
	Users	Visits			
Croatialuxuryrent	0.040%	0.035%	0	1	1
Revngo	0.038%	0.032%	1	na	7
Stugsommar	0.032%	0.032%	1	na	4
Gitesdewallonie	0.031%	0.028%	0	0	1
Topgeres	0.032%	0.025%	0	0	1
Stugsidan	0.023%	0.025%	1	na	47
1-2-3-ubytovanie	0.031%	0.022%	0	1	1
Ardennen-online	0.026%	0.022%	0	0	1
Mediahols	0.022%	0.021%	1	na	83
E-chalupy	0.014%	0.020%	1	na	2
Hotelsline	0.026%	0.016%	0	1	1
Hdd	0.013%	0.015%	1	na	15
Ubytujsa	0.020%	0.015%	0	1	1
Ubytovaniivchorvatsku	0.012%	0.011%	0	1	1
Sardinien	0.012%	0.010%	0	0	1
Apartmentman	0.012%	0.009%	0	1	1
dreamireland.com	0.011%	0.009%	0	1	1
Checkvienna	0.009%	0.009%	0	0	1

Levneubytovani	0.004%	0.004%	1	na	6
Alkatravel	0.001%	0.001%	1	na	2

The table indicates that around 40% of smaller platforms have cross-border operations and that the number of countries in which they operate can be substantial in some cases. Although some of these platforms could be subsidiaries of larger companies that have not been able to attract large volumes of users, others may simply be smaller players trying to enlarge their market scope. On the other hand, the table also shows that from the remaining platforms, 35% have operations in multiple jurisdictions of a single country.

Assuming that all large platforms also have cross-border operations, a simple extrapolation of the results would suggest that 50% of platforms operate cross-border, while another 30% operate in multiple regions or localities within their host country. Only 20% of the STR platforms identified operate locally.

Two major players in the EU “Accommodation and Hotel” sector are the Online Travel Agent platforms Booking.com and Expedia. Besides hotels, both platforms also list STR apartments and vacation homes. Given their prominence in the sector, one may wonder what role they play in the STR segment. Our data allow studying traffic to the Booking.com and Expedia subdomains dedicated to STR. Based on those data, Booking.com STR would rank 27th for visits in the EU20 countries, whereas the traffic to Expedia is of several orders of magnitude smaller and, in many countries and months, almost negligible.

Column 4 of table 9 suggests that 17 out of the 20 top STR platforms have their headquarters in the EU. Three US platforms complete the picture, but these are very relevant in terms of traffic share, as Airbnb and Vrbo jointly attract slightly less than 50% of the total clicks. Column 5 indicates that most websites have at most one or two country-specific domains. Some, like Couchsurfing or Vrbo only use non-country related domains, as for example “.com”. On the other hand, there are only two platforms (Airbnb and Holidu) with more than 10 country domains.

Country domains are only a proxy of activity and listings by hosts in countries. However, manual checks suggest that there is a clear division between many transnational platforms, that have listings all over the EU20 countries analysed, and more localised platforms, operating only in one (e.g., many platforms only have listings in France or Italy) or in a limited subset of countries.

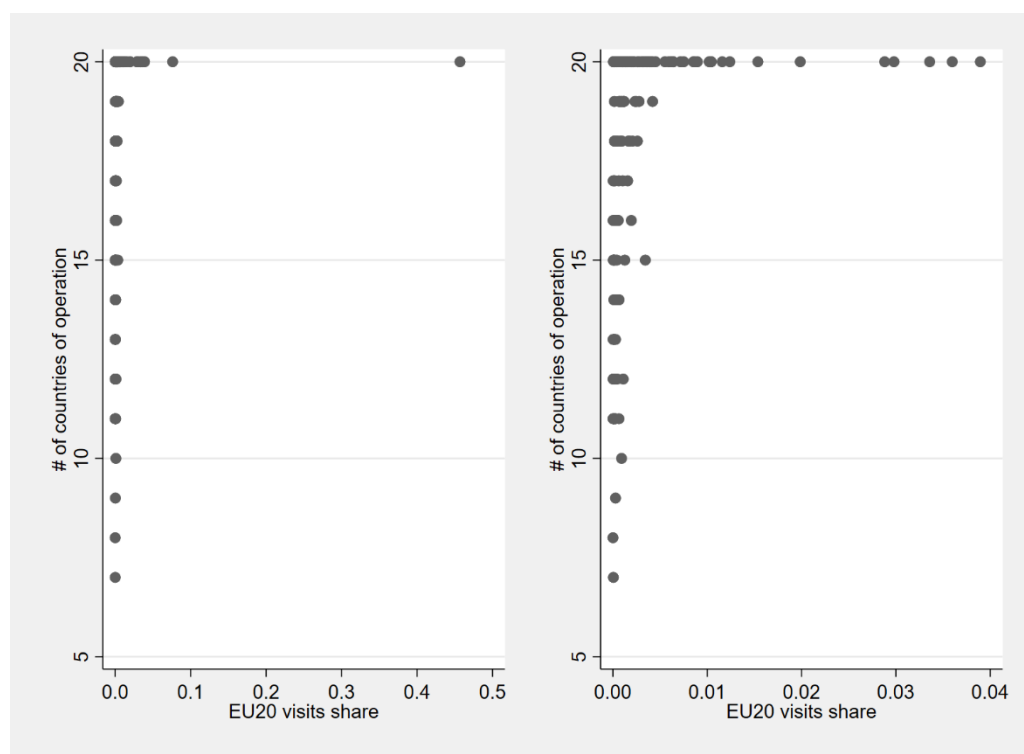
Finally, all top 20 platforms receive traffic from all the considered EU countries. Our measure requires at least one click in the last 24 months. Still, Figure 6 suggests that STR platforms outside of the Top 20 are not necessarily attracting clicks from all the EU20 countries analysed. Indeed, the left panel shows a correlation between the traffic share and the number of countries in which the STR has visitors. The left panel zooms into the same data, by visualising only platforms that have less than 5% traffic. The correlation emerges even more clearly. To conclude: ***On the basis of web traffic, Airbnb and US websites and platforms are important players in the EU STR segment. EU STR platforms represent the majority of firms present in the Top 10 per country, the Top 80 percent accommodation traffic, and in the EU20 traffic as a whole. However, they are all medium-small in terms of web traffic (and unique users) attracted. Websites and platforms from the Rest of the World play a marginal role.***

Figure 7 summarises the dynamics of monthly visits to STR websites between September 2018 and September 2021. A number of interesting insights come up. First, as expected, there is a pronounced

seasonality in the visits, with peaks during the European summer and holiday seasons. Second, the vertical dashed line indicates the start of the COVID pandemics and a sharp drop in visits is immediately apparent. At the same time, at the end of the first and long lockdown in many EU countries and with start of the summer a ponderous bounce back is also clearly visible. Overall, COVID appears to have increased the volatility of traffic. For this reason, we will be performing the analysis by excluding COVID lockdown completely and running it for the only full year before COVID available in our data (from September 2018 to September 2019).

In order to make the dynamic analysis intelligible, we mostly focus on the top and bottom two decile platforms. The deciles are defined in terms of EU20 visits overall. The first two deciles comprise 11 of the Top 20. As a first exercise, we plot the actual visits data and a fitted linear trend for a full year before COVID.

Figure 6 - Number of countries with incoming traffic and traffic share per platform



Left panel: all platforms – right panel: platforms with a traffic share of less than 5%

Figure 7 - Monthly visits to STR platforms in the EU20 countries

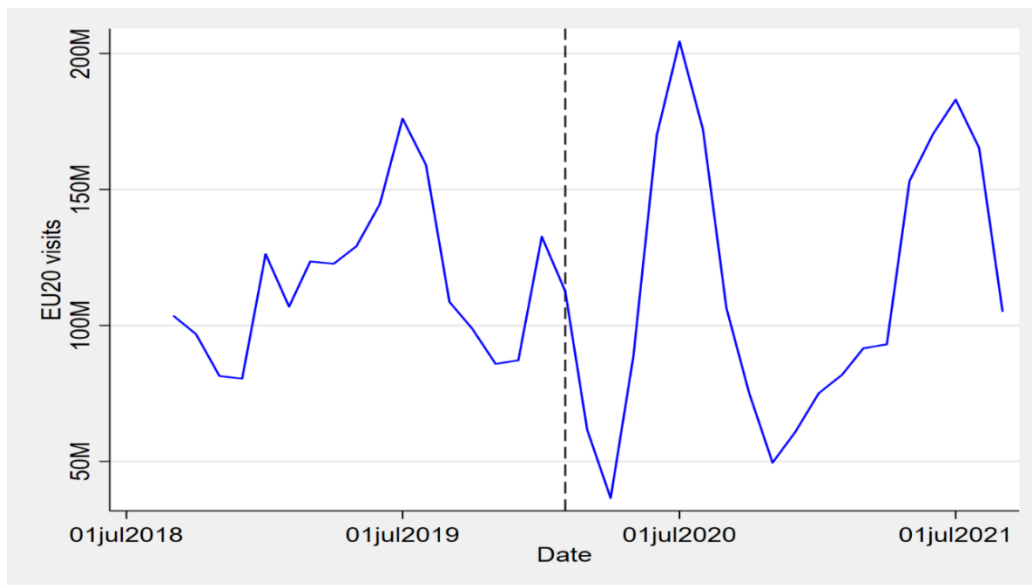
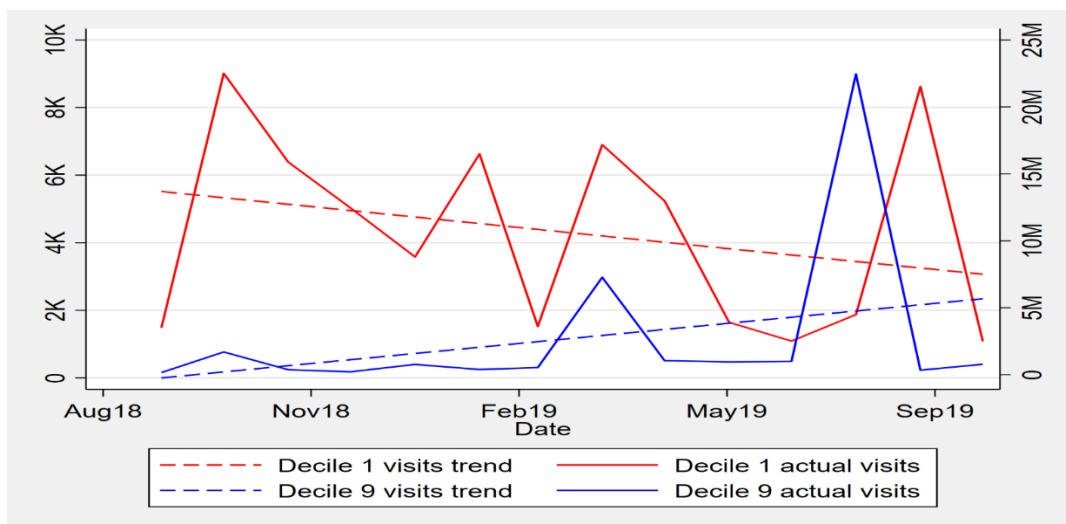


Figure 8 - Monthly visits to STR platforms and trends –top and bottom deciles



First, we can note the massive difference in the number of visits for the top and bottom platforms: the left vertical axis in Figure 8 refers to the bottom decile and features only a few thousands monthly clicks, whereas the right vertical axis is in the order of the million monthly visits. Second, the graphs refer to a full year of data pre-COVID. Despite that, Figure 8 registers a declining trend in users of the bottom decile platforms throughout the period (red line). At the same time, the top decile platforms display a clearly increasing trend (blue line). This pattern may have been driven by a summer boom, which has particularly benefited the top STR platforms. There was no equivalent pattern in the case of the smallest companies as, indeed, they lost visitors²²⁹.

STR web traffic is highly seasonal and the COVID pandemics has exacerbated the volatility of monthly visits to STR websites. Platforms from the Top deciles are characterised by a mostly

²²⁹ Results using the second from top and bottom deciles are similar, but the differences are less pronounced.

positive trends of visits, both in number of visitors and growth rates, but the latter are not higher than those of the Bottom deciles platforms.

Composition of platforms: the case of Airbnb

With the goal to provide evidence on the hosts that use STR platforms and operate in the sector in the EU, we exploit a rich dataset from [Airdna](#) covering the whole EU providing detailed information on both Airbnb listings and hosts. Table 11 provides an overview of number of listings per host²³⁰. Following Xie et al. (2021), professional hosts can be defined as those that list more than one property per year through Airbnb. This definition is also in line with Gunter and Önder (2018) or Li et al. (2017). A first striking figure is that **72% of Airbnb active hosts in the EU27 had only one listing**. About 15% of the hosts have two listings and a further 5% have three. On aggregate, 97% of Airbnb active hosts in the EU27 had five listings or less, whereas only 3% of active Airbnb hosts had more than five listings. If we define as “peers” hosts with only 1 or 2 listings and “professionals” the rest, the vast majority of hosts are “peers” (71.9 to 87.4% depending on the chosen definition) and a more limited share in terms of listings is “professional”.

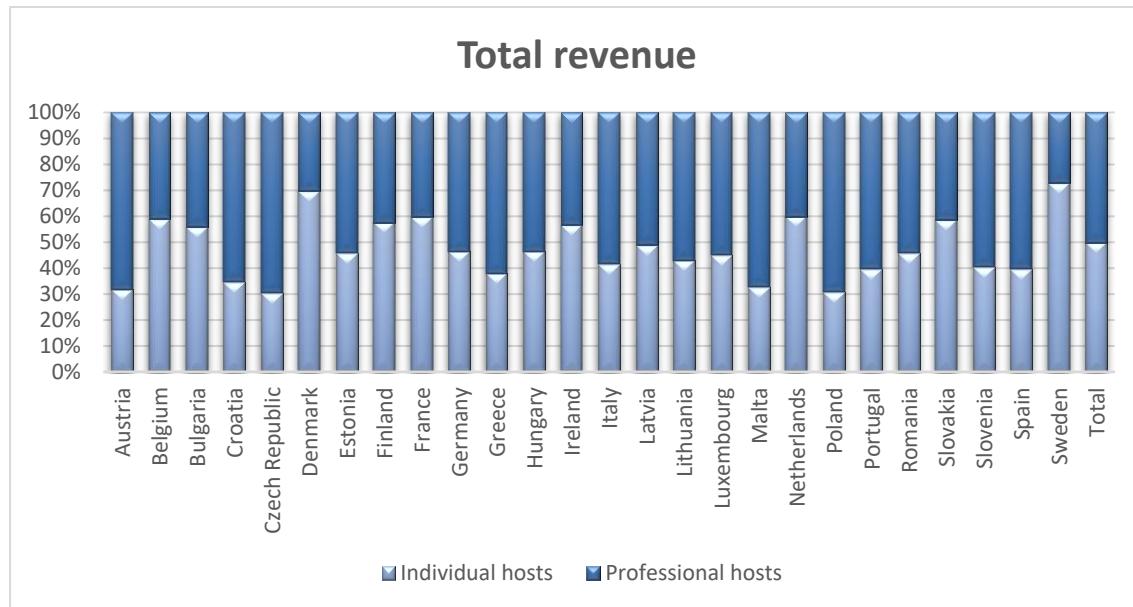
Table 11 - Number of listings per Airbnb hosts

N. of listings	N. of hosts	Share
1	2,174,101	71.9
2	469,406	15.5
3	170,374	5.6
4	78,026	2.6
5	41,162	1.4
More than 5	89,302	3.0
Total	3,022,371	100.0

Figure 9 details the share of the total revenue that is earned by each type of hosts; i.e., the sum of all revenues generated during the period under study. For the period 2014-2020, the total revenue generated by the platform is 538,710,284\$. On average, 50% of this is earned by individual hosts and 50% by professional. However, as the figure shows, there is substantial variation across countries.

²³⁰ For a detailed overview of the number of professional and peer hosts by country, see Duch-Brown (2021).

Figure 9 - Proportion of total revenue by type of host and country



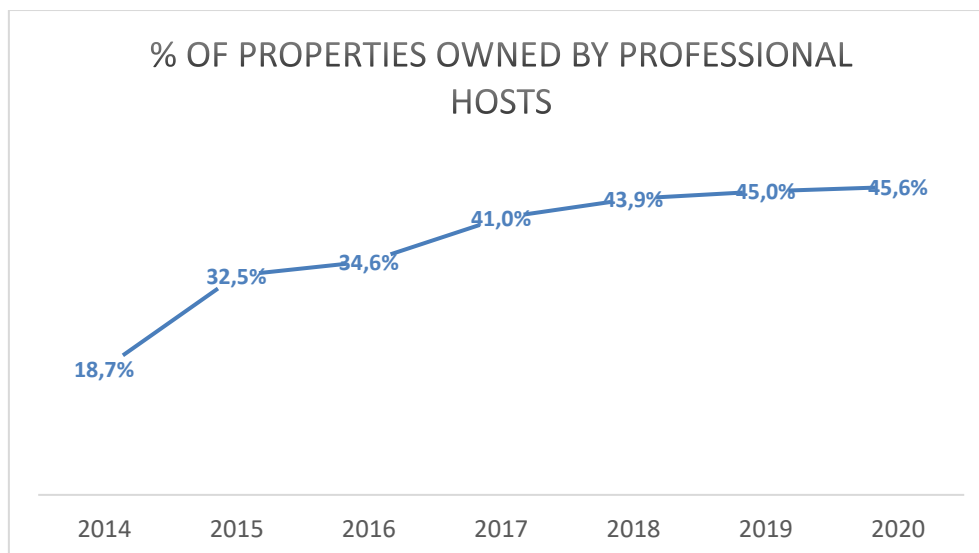
With respect to the type of listing by hosts, Table 12 shows that professional hosts own a lower number of properties in absolute terms than individual hosts, whereas the number of private and shared rooms is higher. Overall, entire homes represent 75.1% of the sample, whereas the proportion of shared rooms is only 1.1%.

Table 12 - Number and proportion of listing by host type

Listing Type	Individual	%	Professional	%	Total
Entire home/apartment	3,062,768	53.1%	2,705,399	46.9%	5,768,167
Private room	907,182	49.5%	924,053	50.5%	1,831,235
Shared room	35,746	43.9%	45,701	56.1%	81,447

Figure 10 presents the evolution of properties belonging to professional hosts over time. Notably, the share of professional hosts has more than doubled in the last five years, going from 18.7% in 2014 to 45.6% in 2020.

Figure 10 - Evolution of professional hosts over time



Another relevant characteristic is the presence and evolution of hosts that have multiple properties in more than one country (henceforth, cross-border hosts). We define a cross-border host as a host who has at least one property in a country different from his origin country²³¹. As Table 13 shows, only 2.5% of the hosts have properties in a foreign country. Those properties represent 18% of the total, and generate 17% of the total revenue in the platform.

Table 13 - Presence of cross-border hosts

	National host	Cross-border host	Total	% cross-border
Number of hosts	3,841,588	98,757	3,940,345	2.51%

²³¹ Unfortunately, the sample does not include the origin country of the host. Hence, in this section we assume that the origin country for a given host is the country in which he owns more properties.

Number of properties	7,728,479	1,196,525	6,531,954	18.32%
Total revenue	300,742,279.28	62,244,913.73	362,987,193.01	17.15%

Table 14 reports the top 5 origin countries with a higher number of cross-border hosts, along with the total revenue that these hosts earn in the platform, the share that the revenue represent over the total, and the number of properties they own. Spain is the leader of the ranking, with a revenue that represents 3.2% of the total. Is followed by France, Italy and United Kingdom, which present a similar proportion of revenue.

Table 14 - Top 20 countries with cross-border hosts by revenue

Rank	Country of origin of the host	Total revenue	% revenue over total in the platform	Number of properties
1	Spain	585,711,345	3.2%	206,406
2	France	468,682,623	2.6%	160,001
3	Italy	428,097,104	2.4%	171,195
4	United Kingdom	396,523,875	2.2%	102,733
5	Croatia	196,283,498	1.1%	167,626

Table 15 shows the evolution of cross-border hosts over time. As it can be seen, the number of properties and the average revenue generated by year have increased over time²³². Prices and ratings have remained more or less stable during the whole period.

Table 15 - Evolution of cross-border hosts over time

Year	Number of properties	Mean annual revenue	ADR	Ratings
2014	37,122	2,376.3	188.4	4.49
2015	78,627	1,734.8	183.4	4.49
2016	140,508	1,582.5	197.6	4.51
2017	243,131	1,659.1	166.2	4.49
2018	230,275	2,220.3	185.6	4.51
2019	236,254	3,407.0	183.8	4.51
2020	130,109	5,284.0	194.4	4.53

When looking at the distribution of reserved days per listing, i.e., how many days per year a listing was reserved, Table 16 reports the distribution of days reserved per year for the all EU27 countries and the whole period of study (2014-2020). The majority of the listings on the platform, 59%, were reserved for more than 270 days each year. There is an 18% share of listings that had reservations for less than 30 days, and almost 28% for less than 60 days.

Table 16 - Range of days and available listings

Range of days	% of listings
1-30	18.0
31-60	9.8
61-90	5.9
91-120	3.3
121-150	1.8
151-180	1.1
181-210	0.7
211-240	0.4
241-270	0.2

²³² Note that 2020 is not a representative year due to Covid-19 pandemic.

270+ 58.9

Table 17 presents the yearly evolution of the range of days reserved. The share of listings that were reserved for more than 270 days each year has declined through the period of study: a peak of 78% was reached in 2015, whereas in 2019 only 55% of listings were reserved for more than 270 days. There is a 18% share of listings that had reservations for less than 30 days, and almost 28% for less than 60 days. The share of listings reserved for less than 30 days increased from 12.5% in 2014 to 20% in 2019, whereas the share reserved for less than 60 days increased from about 19% to more than 30% throughout the same period.

Table 17 - Evolution of range of reservation days

Range of reservation days										
Year	1-30	31-60	61-90	91-120	121-150	151-180	181-210	211-240	241-270	270+
2014	12.5	6.3	3.5	1.8	1.1	0.6	0.4	0.2	0.1	73.7
2015	10.7	5.4	2.8	1.6	0.8	0.5	0.3	0.2	0.1	77.7
2016	10.9	6.3	3.8	2.1	1.1	0.7	0.4	0.2	0.1	74.5
2017	12.0	7.0	4.2	2.3	1.3	0.7	0.4	0.3	0.1	71.8
2018	15.0	8.3	5.0	2.7	1.5	0.9	0.5	0.3	0.2	65.6
2019	19.9	10.6	6.4	3.5	2.0	1.2	0.7	0.4	0.3	55.0

Table 18 illustrates the range of days reserved by country throughout the whole 2014-2020 period. Interestingly, Croatia and Greece have the highest share of listings that are reserved for less than 30 days (29 and 27 percent, respectively) and less than 60 (40 and 39 percent, respectively). On the other side of the spectrum, Denmark and the Netherlands have the highest share of listings reserved for more than 270 days (73 and 69 percent, respectively). It is also worthwhile noting that in all countries there is a relatively limited share of properties that have an intermediate range of days reserved (between 91 and 270 days).

Table 18 - Range of reservation days by country

1-	31-	61-	91-	121-	151-	181-	211-	241-	270
----	-----	-----	-----	------	------	------	------	------	-----

	30	60	90	120	150	180	210	240	270	+
Austria	16. 9	10.2	6.8	3.8	2.0	1.0	0.4	0.3	0.1	58.5
Belgium	14. 4	7.1	4.9	3.6	2.6	2.1	1.5	1.2	0.9	61.6
Bulgaria	22. 9	7.0	3.1	1.7	0.9	0.6	0.4	0.2	0.1	63.1
Croatia	28. 8	11.1	4.4	1.5	0.5	0.2	0.1	0.0	0.0	53.4
Czech Republic	16. 7	7.4	5.2	3.0	1.7	0.8	0.5	0.2	0.1	64.2
Denmark	14. 3	5.3	3.1	1.8	1.0	0.6	0.3	0.2	0.1	73.2
Estonia	20. 1	8.1	5.3	2.9	1.7	1.0	0.6	0.4	0.1	59.8
Finland	14. 4	6.2	4.2	2.8	1.9	1.2	0.8	0.5	0.3	67.6
France	13. 8	9.8	7.0	4.2	2.5	1.6	1.0	0.6	0.4	59.1
Germany	12. 8	6.3	4.8	4.1	3.0	2.0	1.1	0.6	0.3	65.1
Greece	26. 6	12.4	5.4	2.3	1.0	0.5	0.3	0.1	0.1	51.3
Hungary	20. 3	9.3	4.7	2.5	1.3	0.8	0.4	0.2	0.1	60.3
Ireland	14. 5	7.9	6.5	4.2	2.5	1.3	0.7	0.4	0.2	61.8
Italy	22. 4	11.3	6.1	2.8	1.2	0.5	0.3	0.1	0.1	55.3
Latvia	20. 1	9.5	5.6	2.8	1.3	1.1	0.5	0.3	0.2	58.6
Lithuania	17. 9	8.3	5.9	3.7	2.2	1.2	0.7	0.4	0.2	59.6
Luxembourg	16. 6	8.1	5.2	3.9	2.1	1.4	1.3	0.8	0.3	60.3
Malta	18. 8	9.5	5.4	2.8	1.5	0.8	0.5	0.2	0.2	60.5
Netherlands	12. 2	5.5	3.9	3.0	2.3	1.7	1.2	0.9	0.6	68.7

Poland	16. 3	8.8	6.2	4.4	2.9	2.0	1.2	0.8	0.4	57.0
Portugal	20. 7	13.1	8.0	4.1	2.2	1.2	0.6	0.4	0.2	49.5
Romania	20. 2	6.5	3.6	2.4	1.5	1.1	0.6	0.3	0.1	63.6
Slovakia	19. 3	10.2	6.5	3.8	2.2	1.5	0.8	0.4	0.2	55.1
Slovenia	21. 3	14.1	10.5	4.8	2.1	1.1	0.3	0.1	0.1	45.7
Spain	18. 3	10.5	5.7	2.8	1.4	0.7	0.4	0.3	0.1	59.8
Sweden	15. 4	8.3	4.7	2.4	1.3	0.7	0.4	0.2	0.1	66.4

ANNEX 6: LIST OF EXISTING AND PLANNED INSTRUMENTS

6.1 EXISTING LEGISLATION

6.1.1 Directive 2000/31/EC of the European Parliament and of the Council on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (the ‘e-Commerce Directive’)

The e-Commerce Directive applies to information society services. These cover ‘any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services’.²³³ **Online platforms are providers of information society services.**

The e-Commerce Directive contains provisions regulating the cross-border provision of information society services. It provides that **Member States must not restrict the freedom to provide information society services from another Member State, unless where necessary for public policy objectives, public security, the protection of public health, or the protection of consumers**, including investors, and provided that:

- **any such restriction is proportionate** to those objectives; and
- before taking the measures in question the Member State concerned asked the Member State where the provider of the information society service is established to take measures and the latter did not take such measures, or they were inadequate and notified the Commission and the Member State concerned of its intention to take such measures.

In addition, it provides that online platforms, as providers of information society intermediary services, are under certain conditions exempted from liability for the information they store.²³⁴ Finally, under the e-Commerce directive Member States cannot impose on collaborative platforms, to the extent that they provide hosting services, a **general obligation to monitor or to actively seek facts or circumstances indicating illegal activity (prohibition of general monitoring obligation)**²³⁵.

The regulatory framework established by the e-Commerce Directive is updated by the DSA, which clarifies the responsibilities of online platforms. The DSA maintains and reinforces the fundamental principle of the e-Commerce Directive, such as the conditional liability exemptions for online intermediaries (see below for more information on the DSA).

²³³ See Article 1(1)(b) of Directive 2015/1535.

²³⁴ Article 14 of the e-Commerce Directive.

²³⁵ Article 15(1) of the e-Commerce Directive

6.1.2 Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market (the ‘Services Directive’)

The Services Directive applies to services supplied by providers established in a Member State²³⁶ that are not specifically excluded from its scope²³⁷. As clarified by the CJEU²³⁸, short-term rental services are ‘services’ within the meaning of the Services Directive and are therefore covered by its scope.

The Services Directive applies to those requirements affecting the access to, or the exercise of, a service activity.²³⁹ The concept of requirement covers any obligation, prohibition, condition or any other limitation imposed on service providers (or recipients of services), such as an obligation to obtain an authorisation or to make a declaration to competent authorities, whether they are provided for in law, regulation or administrative provision and whether they are provided for at national, regional or local level. For example, requirements contained in municipal zoning plans²⁴⁰ or in regulations adopted by a city council²⁴¹ are covered by the Services Directive. ‘Authorisation schemes’ include any procedure under which a provider or a recipient is in effect required to obtain from a competent authority a formal decision, or an implied decision, concerning access to a service activity, or the exercise thereof.²⁴²

Accordingly, **the Services Directive requires that service providers are not to be subject to market access or other requirements, such as authorisations, unless they are non-discriminatory (i.e. not directly or indirectly discriminatory with regard to nationality or place of establishment), justified by an overriding reason relating to the public interest and proportionate (i.e. suitable to achieve the objective pursued, not going beyond what is necessary to attain the objective and not replaceable by less restrictive means to attain the same objective).**²⁴³

Ensuring availability and affordability of housing, the protection of the urban environment, public security, the protection of consumers and tax compliance have been recognised by the Court of Justice as relevant overriding reasons relating to the public

²³⁶ Under Article 4(1) of Directive 2006/123 the concept of ‘service’ means any self-employed economic activity, normally provided for remuneration.

²³⁷ Services that are excluded from the scope of the Services Directive include, in relevant part, social services relating to social housing, childcare and support of families and persons permanently or temporarily in need. See Article 2(2)j. See Article 2(2) for the full list of exclusions from the Services Directive.

²³⁸ Judgment of the Court (Grand Chamber) of 22 September 2020, C-724/18, *Cali Apartments SCI and HX v Procureur général près la cour d’appel de Paris and Ville de Paris*, ECLI:EU:C:2020:743.

²³⁹ Article 4(7) of the Services Directive.

²⁴⁰ Judgement of 30 January 2018, *Visser*, case C-360/15.

²⁴¹ Judgement of 1 October 2015, *Trijber*, case C-340/14.

²⁴² See the definition of “authorisation scheme” in Article 4(6).

²⁴³ See Articles 9, 15 and 16 of the Services Directive. Articles 9 and 15 (establishment) allow Member States to justify the introduction of new requirements with any of the overriding reasons related to the public interest which have recognised by the Court of Justice (e.g. consumer protection, protection of the urban environment and adequate housing). However, according to Article 16 (free movement of services) Member States may only justify new restrictions with public policy, public security, public health or the protection of the environment.

interest.²⁴⁴ At the same time, the Court has held that purely economic objectives, such as the protection of competitors or ensuring the economic basis of specific categories of providers, do not constitute an overriding reason relating to the public interest²⁴⁵. With respect to proportionality, the Court of Justice has ruled that, when taking these measures, Member State cannot rely on a general presumption of an objective being put at risk²⁴⁶ and that they must present precise evidence enabling their arguments to be substantiated²⁴⁷.

The Services Directive contains a list of requirements that are explicitly prohibited²⁴⁸, and a list of requirements that can be imposed, provided that they are non-discriminatory, necessary and proportionate²⁴⁹. With respect to authorisations, the Services Directive requires that **authorisation schemes be non-discriminatory, justified and proportionate**²⁵⁰ and that their conditions be non-discriminatory, justified, proportionate, clear and unambiguous, objective, made public in advance and transparent²⁵¹. Authorisations must, in principle, not be granted for a limited period²⁵² and the procedures and formalities must be clear, made public in advance and allow for an objective and impartial assessment of the application²⁵³.

The Services Directive also requires Member States to ensure that **procedures and formalities applicable to access to a service activity are sufficiently simple**, and that may be easily completed, at a distance and by electronic means through the relevant point of single contact and with the relevant authorities²⁵⁴. These provisions are relevant to registration schemes, which should not be burdensome and unduly restrict access to the market.

²⁴⁴ A non-exhaustive list of overriding reasons of general interest is provided in Article 4(8) and Recital 40 of the Services Directive. For the effectiveness of fiscal supervision see Case C-233/09, *Dijkman* paras. 54, 58; Case C-254/97, *Baxter and Others*, para 18; Case C-478/98, *Commission v Belgium*, para. 39. For housing policy objectives see Case C-567/07 *Woningstichting Sint Servatius*, para. 30, Case C-302/97, *Konle*, para. 40; for combating the long-term rental housing shortage see Joint Cases C-724/18 and C-727/18, *Cali Apartments*, paras. 65 and 66.

²⁴⁵ With regard to the TFEU, see Case C-400/08, *Commission v Spain*, para 74; Case C-338/09, *Yellow Cab. Verkehrsbetrieb*, para 51.

²⁴⁶ See Case C-577/10, *Commission v Belgium*, para 53.

²⁴⁷ See Case C-161/07, *Commission v Austria*, para 36.

²⁴⁸ See Article 14 of the Services Directive. Prohibited requirements include economic needs tests; however, this prohibition does not concern planning requirements which do not pursue economic aims but serve overriding reasons relating to the public interest.

²⁴⁹ See Article 15 of the Services Directive. Requirements subject to evaluation include quantitative or territorial restrictions.

²⁵⁰ See Article 9 of the Services Directive.

²⁵¹ See Article 10 of the Services Directive.

²⁵² See exceptions under Article 11(1) and 12 of the Services Directive.

²⁵³ See Article 13 of the Services Directive.

²⁵⁴ See Articles 5 and 8 of the Services Directive.

6.1.3 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation - GDPR)²⁵⁵ and Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC

The GDPR applies to processing, including the collection, generation and sharing of personal data, provided that they fall within the material and territorial scope defined in Articles 2 and 3 GDPR – in particular when online booking platforms, which hold the personal data, provide access to the Member States public authorities to those data, when the host provide their personal data via the registration form and the Member States authorities process those data. All processing of personal data providing personal data to the Member State authorities about short-term rentals requires the existence of a legislation (legal basis) to process this data, in compliance with the requirements laid down in the GDPR. Therefore, EU legislation, as well as Member States legislation, have to respect the requirements of the GDPR. Under the GDPR, personal data can be processed if one of the six legal bases applies, e.g. if the processing is necessary for compliance with a legal obligation or if the processing is necessary for a task carried out in the public interest.²⁵⁶ According to the principles of purpose limitation and data minimisation, only those personal data must be collected and shared which are necessary and proportionate for achieving the purpose of the processing. Any such legislation will have to specify clearly which personal data would be transmitted for which purpose to which public authority.

Any technical tool developed and managed by the EU institutions would have to respect also the corresponding requirements of Regulation (EU) 2018/1725 with regard to the processing of personal data by the Union institutions, bodies, offices and agencies.

6.1.4 Regulation (EU) 2019/1150 on promoting fairness and transparency for business users of online intermediation services (the ‘P2B Regulation’)

The P2B Regulation contains a set of rules to ensure a fair, predictable, sustainable and trusted online business environment, granting business users of online intermediation services appropriate transparency, as well as effective redress possibilities.

These rules create **an obligation for online platforms, to *inter alia* and in accordance with Article 9, update their terms and conditions to provide information to business users about whether they are granted access to the data generated through their use of the online platform and whether data is shared with third**

²⁵⁵ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC, OJ L 119, 4.5.2016, p. 1–88.

²⁵⁶ See Article 6 of the GDPR.

parties. Online platforms shall need to update their terms and conditions to refer to the data that could be shared with public authorities and give business users prior notice of this change, before it becomes effective.

In addition, **the Regulation imposes a reporting obligation on larger online platforms, which requires them to make easily available public information on the functioning and effectiveness of their internal complaint-handling system on an annual basis**, which could be more frequent if significant changes are needed. **Therefore, any reporting obligations imposed by the STR initiative would be in addition to those already required by the P2B Regulation.**

Article 4 of the P2B Regulation requires notice to be provided prior to the restriction, suspension or termination of a business users' account. Any notice and takedown obligation would need to respect the time periods, notice periods and requirements to provide a reason and be listed as a possible grounds for removal of an offer in the terms and conditions in respect of providers of STR who are business users (Article 3(1)(c)). Such business users would have the possibility to lodge a complaint in accordance with the procedures for complaint handling set out in Article 11 and also, potentially the subject of mediation under Article 12.

Article 15 of the P2B requires Member States to ensure adequate and effective enforcement of the Regulation. Some Member States have taken steps to implement this provision and have appointed authorities to be responsible for the enforcement. It is possible that such authorities could take on the limited additional responsibility for the enforcement of the obligations on online platforms to share data.

6.1.5 Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services (the 'Single Digital Gateway Regulation')

The Single Digital Gateway was established to facilitate online access to the information, key administrative procedures for cross-border users, as well as on available assistance services for citizens and businesses encountering problems when exercising the internal market rights while living in or doing business in another EU Member State.

In particular, the Single Digital Gateway establishes a single online point of access to information, procedures and assistance, guiding users to information on national and EU rules, rights and procedures, as well as to the websites where they can carry out these procedures online and direct users towards assistance and problem-solving services. The gateway includes a common user interface integrated into the existing 'Your Europe' portal. In practical terms, a search function on the 'Your Europe' portal will give access to the information, procedures and assistance sought.

The regulation establishing the gateway also includes provisions for digitalising administrations. In relevant part, it requires that the key administrative procedures be

available online to both users in their own country as well as to cross-border users.²⁵⁷ In addition, the ‘once-only principle’ (i.e. users should not have to submit to authorities documents or data already held by other authorities) will be applied to cross-border exchanges of evidence for a range of procedures. For these procedures, users will be given the option to request the direct exchange of evidence between authorities in different EU countries.

The new gateway will integrate several networks and services that have been established at national and EU level to assist citizens and businesses in their cross-border activities. The functioning of the gateway will be supported by technical tools developed by the Commission in cooperation with national administrations. The regulation shall be fully implemented by all national, regional and local administrations by end of 2023.

The Single Digital Gateway does not have the purpose to streamline / coordinate national systems or policies towards a common European approach. It also does not aim at aligning national processes to one single uniformed and comprehensive EU process. However, the Single Digital Gateway will help EU citizens to identify the relevant national (or EU) Single Digital Entry Points interface, which would be relevant for an STR initiative.

6.1.6 Council Directive (EU) 2021/514 of 22 March 2021 amending Directive 2011/16/EU on administrative cooperation in the field of taxation (s.c. ‘DAC7’)

Council Directive (EU) 2021/514 has amended Directive 2011/16/EU on administrative cooperation in the field of taxation extending the EU framework on the automatic exchange of information in the field of taxation. Member States have to transpose this Directive by 31 January 2022 and apply the new provisions from 1 January 2023.

The purpose of this amendment was to (i) address the potential loss of tax revenue caused by unreported income earned through the sale of goods and services via online intermediating platforms and (ii) ensure a level playing field between operators active on platforms and traditional businesses.

To this end, the new rules create **an obligation for platforms to report the income earned** by sellers and for the Member State where reporting takes place, to exchange this information automatically. They introduce due diligence procedures and **an annual reporting obligation on platforms** located both inside and outside the EU concerning information on sellers that use the platforms to earn **income**. This includes, among other activities, **the rental of immovable property, including on a short-term basis**.

Platforms must collect the following information and assess its reliability using all information and documents available in their records, including their electronically searchable records:

²⁵⁷ By end of 2023 at the latest, a list of 21 important administrative procedures will be fully available online in all EU countries, covering situations that are relevant for doing business, working, studying or moving from one location to another.

- the first and last name of the host²⁵⁸ who is an individual, or its legal name if the host is an entity;
- the primary address;
- the tax identification number (TIN) of the host, including each Member State of issuance, or, in the absence of a TIN, the place of birth of the host who is an individual;
- the business registration number of the host that is an entity;
- the VAT identification number of the host, where available;
- the date of birth of the host who is an individual;
- the address of each property listing and, where issued, respective land registration number or its equivalent under the national law of the Member State where it is located, where available.

Platforms must report the following information to the relevant Member State:

- details of the platform (name, registered office address, TIN, as well as the business name(s) of the platform(s) in respect of which the Reporting Platform Operator is reporting)²⁵⁹;
- the information collected and listed above;
- the Financial Account Identifier (where the financial account to which the consideration is paid is different from the name of the seller, the name of the account holder is required along with any other financial information available to the Reporting Platform Operator with regard to this account holder); ;
- Member State(s) of residence of the host;
- the revenue received during each quarter and the number of relevant activities provided with respect to each property listing;
- any fees, commissions or taxes withheld or charged by the platform during each quarter;
- where available, the number of days each property listing was rented and the type of each property listing.

The Member State where reporting takes place will then share the relevant information with the **competent tax authorities** of the other relevant Member State(s).

²⁵⁸ Under DAC7 the host would be identified with the “reportable seller”.

²⁵⁹ The Reporting Platform Operator may be reporting on behalf of other members of the Group.

DAC7 requires Platform Operators to report certain information with the competent authorities of Member States. A significant part of this information is relevant for the enforcement of STR rules. However, according to GDPR rules, a legal basis would have to be introduced in national or European law in order to allow the transfer of this data from the competent tax authorities of Member States to their public authorities enforcing STR rules. In addition, as the reporting takes place annually, local public authorities would not obtain up-to-date information on providers of STR services that would allow them to undertake effective and timely law-enforcement action. What they would obtain under DAC7, is an annual dataset that they could use to check, *ex post*, the correctness and completeness of the data in the registration scheme that could be established under the present STR initiative.

6.1.7 Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax²⁶⁰ (s.c. ‘VAT Directive’)

Article 242a of the VAT Directive is part of the e-commerce package, which came into effect in July of 2021. The e-commerce package introduced a set of new rules designed to make cross border e-commerce simpler and fairer. Under this package, **online sellers of goods and services (including marketplaces and platforms) to private consumers (B2C) are only required to register in one Member State from which they can discharge their VAT obligations in other Member States via the one-stop-shop (OSS)**. There is a threshold of EUR 10,000 below which supplies of telecoms, broadcasting and e-services, and distance sales of goods within the EU are accounted for on the domestic VAT return of the supplier.

The rules also introduce ‘deemed supplier’ provisions for certain supplies of goods – i.e. where a marketplace/platform facilitates the supply of B2C goods from a supplier outside the EU. Article 242a (and the linked Articles 54b and 54c(2) of the VAT Implementing Regulation²⁶¹) **obliges platforms to keep records of the B2C supplies of goods and services that it facilitates and make these available electronically on request to Member States**. The definition of ‘sufficient detail’ is outlined in the Implementing Regulation – where the platform/marketplace isn’t the deemed supplier, this includes the name, address, email address/website of the supplier, any VAT number or national tax number the supplier might have, and details of the supply. This information should be made available electronically on request to the Member States concerned. Where the platform is the deemed supplier, the normal VAT accounting rules apply he has record-keeping obligations like any other supplier. In this respect, Article 54c(1) of the VAT Implementing Regulation clarifies that the deemed supplier shall keep the following records:

1. If he uses one of the special schemes provided for in Chapter 6 of Title XII of the VAT Directive: the records as set out in Article 63c of the VAT Implementing Regulation;

²⁶⁰ As last amended by Council Directive (EU) 2017/2455 of 5 December 2017 amending Directive 2006/112/EC and Directive 2009/132/EC as regards certain value added tax obligations for supplies of services and distance sales of goods

²⁶¹ Council Implementing Regulation (EU) No 282/2011 of 15 March 2011 laying down implementing measures for Directive 2006/112/EC on the common system of value added tax.

2. If he does not use any of these special schemes: the records as set out in Article 242 of the VAT Directive. In this situation, each national legislation sets out what are the records to be kept by taxable persons and in which form they should be kept.

Article 242a of the VAT Directive **requires platforms to retain certain information for inspection by Member States' authorities**, for example when there are concerns of fraud. A significant part of this information appears relevant for enforcement of STR rules too. However, **without an obligation to systematically report this information to Member States' authorities this framework is not sufficient to address the lack of transparency affecting the STR sector**. In addition, **as it is the case for DAC7, a legal base would have to be introduced in national or European law in order to allow the transfer of this data from the competent authorities of Member States to their public authorities enforcing STR rules**.

6.2 Proposals

6.2.1 The DSA

The DSA, updates and **clarifies the responsibilities for providers of intermediary services, and in particular online platforms**²⁶² The DSA will also establish a **common framework for the supervision of digital services providers** and enforcement through an EU-cooperation mechanism. The Commission will also be the main enforcer for very large online platforms (i.e. platforms having more than 45 million users in the EU). The DSA maintains the key principles of the e-Commerce Directive, in particular the country of origin principle, the provisions concerning the liability of intermediaries **and the prohibition of general monitoring obligation**. A political agreement between the Council and the European Parliament was reached in April 2022.

The proposed DSA is relevant for the STR initiative for the following reasons:

- **Removal of illegal STR listings:** According to Article 8 of the DSA, **platforms must inform the issuing authority on the effect given to the order to act against a specific item of illegal content, where such an order** is issued by a relevant national judicial or administrative authority on the basis of Union law or national law, and in compliance with the requirements set out in the DSA. The DSA does not address what is illegal content. Authorities would be able, for example, to order to a platform established in another EU Member State to **takedown individual illegal STR listings** (e.g. without a registration number). In addition, platforms must establish notice and action mechanisms to allow any individual or entity to inform them of the presence of information that

²⁶² Under the proposed DSA, online platforms (which are providers of hosting services) are exempted from liability for the illegal content they store if they do not have actual knowledge of the illegal activity or content or if they act expeditiously to remove or disable access to such content upon obtaining such knowledge. The DSA does not address what is illegal but it establishes mechanisms to enable Member States to enforce the law by sending orders to service providers established elsewhere in the single market.

constitutes illegal content on their websites²⁶³. Once a sufficiently precise and adequately substantiated notice is received it shall be processed by the platform without undue delay. A privileged channel is foreseen for entities that have demonstrated particular expertise and competence (“trusted flaggers”) to report illegal content to which platforms will have to react with priority.

- **Requests for information:** the DSA also regulates orders to provide information in cross-border situations. According to Article 9, online platforms shall, upon receipt of an order to provide specific information about one or more specific individual recipients of the service, issued by the relevant national judicial or administrative authorities on the basis of the applicable Union or national law, in compliance with Union law, inform without undue delay the authority of issuing the order or any other authority specified in the order of its receipt, of the effect given to the order, specifying if and when the order was applied. For example, platforms can be required by an authority from a different jurisdiction than the one where they are established to provide specific **information about an apartment owner, but not entire groups or populations**.
- **Due diligence requirements:** the DSA introduces such requirements for all intermediaries and more specifically for online platforms to make sure that online platforms behave more responsibly and transparently. Due diligence requirements include, among others, transparency reporting obligations regarding content moderation activities conducted by intermediaries, a requirement to include on their terms and conditions information on any restriction that they impose in relation to the use of their service and a complaint-handling system for users of online platforms.

In addition, the DSA includes specific due diligence obligations for online marketplaces to:

- **Ensure traceability of traders through an obligation to:**
 - **collect information on traders** including the name, address, telephone number and electronic mail address of the trader; a copy of the identification document of the trader or any other electronic identification²⁶⁴; the bank payment account details of the trader; the trade register and registration number of the trader, where applicable; and a self-certification by the trader committing to only offer products or services that comply with the applicable rules of Union law;
 - make best efforts to **assess the information** provided by traders;

²⁶³ These notices are considered to give rise to “actual knowledge” triggering liability.

²⁶⁴ In line with Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

- **make the information concerning the identity and contact details of the trader, the trade register and registration number (where applicable) and the self-certification available** to the recipients of the service, at least on the product listing, in a clear, easily accessible and comprehensible manner²⁶⁵;
- **Ensure ‘compliance by design’ through an obligation to design and organise their online interface** in a way that enables traders to comply with their obligations regarding pre-contractual information and product safety information under applicable Union law, including the information necessary for the clear and unambiguous identification of the products or the services promoted or offered to consumers.²⁶⁶ This is relevant in case a registration number has to be displayed by services providers.

With respect to the STR initiative, the DSA shows the following limitations:

- Due diligence requirements for online marketplaces only apply with respect to listings published by ‘traders’. These are any natural or legal person *“acting...for purposes relating to his or her trade, business, craft or profession”*.²⁶⁷ STR service providers (i.e., hosts) are often private individuals offering assets or services on an occasional peer-to-peer basis. A case-by-case assessment would be required to understand if in any given case such providers would qualify as traders for due diligence provisions to apply;
- The DSA will give public authorities a tool to facilitate the enforcement of orders to provide specific information about individual users, and thus to investigate in more detail individual providers of STR services that authorities suspect act in a fraudulent manner. However, its provisions to do not extend to an obligation to collect and share data that applies to all hosts²⁶⁸.

6.2.2 The DMA

The DMA proposal was adopted by the Commission on 15 December 2020²⁶⁹ and is a key component of the European digital strategy to make Europe fit for the digital age aiming to ensure contestable and fair markets in the digital sectors across the Union. The DMA is part of the ambitious reform of the digital space together with the Digital Services Act, aiming at ensuring a safe and accountable online environment. On 24 March 2022, the European Parliament and the Council reached a political agreement on the DMA that is now subject to formal approval by the two co-legislators. Once

²⁶⁵ See Article 24c of the compromise text reached by the co-legislators.

²⁶⁶ See Article 24d of the compromise text reached by the co-legislators.

²⁶⁷ See Article 2(e) of the compromise text reached by the co-legislators.

²⁶⁸ See recital 32 of the compromise text reached by the co-legislators.

²⁶⁹ Proposal for a Regulation of the European Parliament and of the Council and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), COM/2020/842 final.

adopted, the DMA Regulation will be directly applicable across the EU and will apply six months after entry into force.

The DMA will apply to gatekeepers, companies which act as gateways between businesses and consumers, and sometimes even control entire ecosystems, made up of different core platform services such as online marketplaces, operating systems, cloud services or online search engines. These gatekeepers will be subject to a number of clearly defined obligations and prohibitions. The aim of the DMA is to tackle unfair practices, including practices that create or strengthen barriers for other companies, with the overall aim of ensuring the contestability of core platform services.

At the same time, the DMA will create an effective enforcement mechanism ensuring rapid compliance with the obligations and prohibitions.

The DMA aims to curb the gatekeeper power of gatekeepers and may apply to some platforms offering STR services should they be designated as gatekeepers according to the rules laid down in the DMA.

6.2.3 Revision of the eIDAS Regulation – European Digital Identity (Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 910/2014 as regards establishing a framework for a European Digital Identity)

The objective of the proposal submitted by the Commission on 3 June 2021, is to provide a future proof regulatory framework to support an EU-wide, simple, trusted and secure system to manage identities in the digital space, covering identification, authentication and the provision of attributes, credentials and attestations. The Proposal offers a harmonised approach to security, for citizens relying on a European digital identity representing them online, and for online service providers who will be able to fully rely on and accept digital identity solutions independently of where they have been issued. To that end, it currently requires EU Member States to issue a European Digital Identity Wallet that will enable all natural and legal persons in the EU to have secure, trusted and seamless access to cross-border public and private services.

The EU Digital Identity Wallet will enable users (i.e., natural and legal persons) to securely request and obtain, store, select, combine and share the necessary legal person identification data and electronic attestation of attributes to authenticate online and offline in order to use online public and private services and sign by means of qualified electronic signatures²⁷⁰.

The proposal includes provisions on the cross-border reliance on the European Digital Identity Wallet. The aim is to ensure that users can rely on the use of European Digital Identity Wallets to access online services provided by public sector bodies and by private service providers requiring the use of strong user authentication. In addition, where private parties are required by national or Union law to use ‘strong user

²⁷⁰ Article 6a of the proposal.

authentication’²⁷¹ for online identification, or where strong user authentication is required by contractual obligation, such parties are also required to accept the use of European Digital Identity Wallets issued in accordance with the requirements set forth in the proposal.

There could be added value for the STR sector: hosts could be obliged to only offer services under their digital identity and this would provide authorities with some valuable insights, as well as trusted data while strengthening traceability of hosts and enforceability of applicable rules. Moreover, there could be an automation of the registration of hosts if and when they can only sign up for a platform using their digital identity. The European Digital Identity Wallet it will make it easier to provide STR accommodation services cross-border.

6.2.4 The Data Act Proposal

The Data Act Proposal was adopted by the Commission on 23 February 2022²⁷² and is the second major legislative initiative implementing the European strategy for data and building on the Data Governance Act.

With the Data Act Proposal, the Commission wants to maximise the value of data for the economy and society, while respecting the legitimate interests of companies that invest in tools and technologies for generating the data.

The Data Act will ensure fairness in the digital environment, stimulate a competitive data market, open opportunities for data-driven innovation and make data more accessible for all. It will lead to new, innovative services and more competitive prices for aftermarket services and repairs of connected objects.

Pending the adoption of the proposal, it is expected that the Data Act will, among a range of other measures, introduce **new mechanisms for the reuse of commercially-held data by public sector bodies in exceptional ad-hoc situations. These mechanisms will cover both public emergencies and other exceptional situations where the data needs of public authorities cannot be met through available mechanisms or where a different way of collecting the data would lead to substantial reduction of administrative burden for companies, replacing existing reporting obligations.**

The Data Act Proposal, however, explicitly excludes obligations laid down in Union or national law for the purposes of reporting, complying with information requests or demonstrating or verifying compliance with legal obligations from its scope. It does not impose reporting obligations on online platforms. **The Data Act is therefore expected**

²⁷¹ Strong user authentication means “an authentication based on the use of two or more elements categorised as user knowledge, possession and inherence that are independent, in such a way that the breach of one does not compromise the reliability of the others, and is designed in such a way to protect the confidentiality of the authentication data”.

²⁷² Proposal for a Regulation of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act), COM/2022/68 final.

to not provide a solution for access to privately-held data by public sector bodies on a regular or reoccurring basis as it would be the case for the STR initiative.

6.2.5 The Tourism Data Space

The Data Governance Act sets the goal to create an EU-wide common, interoperable data spaces in strategic sectors aims at overcoming legal and technical barriers to data sharing. A key sector of the EU economy, averaging 11% of the GDP of the internal market, tourism will also benefit from a sectoral data space, which should address the wide fragmentation of data sources, holders and means of collection.

In practice, a common European data space for tourism would bring together in one digital ecosystem relevant, existing data sets in order to facilitate the voluntary pooling and sharing of information. This would allow the stakeholders to count on a larger pool of data sets than they would be able to reach on an individual/national basis, and it would encourage collaborations, synergies and public-private partnerships. **The data space for tourism does not aim** at being a market place (i.e., allowing bookings), and is not a tool for **data generation**: its objective is for data to help tourism businesses improve and expand their services and authorities/destinations manage tourism flows better.

The Work Programme 2021-2022 of the Digital Europe Programme earmarked 1mln EUR for a Coordination and Support Action aiming at providing the Commission with preparatory work for a data space in tourism. The project is expected to kick off in Q32022, for a duration of 12 months, and deliver recommendations for a governance of the tourism data space, as well as a roadmap for its creation.

ANNEX 7: EXAMPLES OF LITIGATION

1. On cooperation of platforms

Vienna: city authorities sent a list of illegal STRs located in municipal (social) housing to platforms, asking them to remove those listings. Airbnb refused to comply – in 2020 the city took the platform to court for failure to meet its obligation. The **Commercial Court of Vienna** (Handelsgericht) ruled in a first-instance decision that municipal (social) housing apartments may not be offered for rent through the platform. The Higher Court partly confirmed the judgment of the Commercial Court, insofar as Airbnb is obliged to cease to display listings for rentals or subletting of apartments belonging to the City of Vienna, of which the addresses are known to Airbnb. However, several additional claims of the City of Vienna were dismissed, namely: the obligation for the platform to display the name and address of the host on the website; the obligation for the platform to share with the City of Vienna any sales and profits generated from offers renting social housing; the obligation for the platform to hand over such profits to the City of Vienna.²⁷³ The judgment is not final. An appeal to the Supreme Court (OGH) against this judgment has been lodged by both parties to the proceedings.

Barcelona: at the national level, according to a change in national tax law (Real Decreto 1070/2017), as of 1/01/2019, STR platforms had to send Spanish tax authorities details of all their operations in Spain, including: identity of owner of STR unit, address, number of days of occupation, revenues collected. This obligation was cancelled by a **Supreme Court judgement of 23/07/2020** but will be reinstated again for the 2021 tax year through a new, duly approved, national law.²⁷⁴

Brussels: Regional ordinance of 2016 requires intermediaries (platforms) to communicate detailed data on individual operators and bookings to regional tax office. If they refuse a fine of €10,000 can apply. Airbnb received several fines for not transferring required data. The platform lodged a court case against the regional ordinance in front of the **Belgian Constitutional Court**, which turned to the CJEU in **November 2020** to ask whether regional law is compatible with the e-Commerce Directive.²⁷⁵ In its judgment issued on 27 April 2022, the CJEU confirmed that the relevant national provision imposing such information obligations for tax purposes is in line with the EU law.²⁷⁶

Paris: Lack of display of registration number on listings: €12,500 per listing (in February 2019 the Mayor of Paris lodged a court case in order to fine Airbnb €12.625 million for the publication of 1,010 listings that did not display a registration number).

²⁷³ Handelsgericht Wien – 43Cg 51/20b, OLG Wien 2R 95/21m.

²⁷⁴ C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. Platforms-based property rentals in European Cities: the policy debates*, op. cit.

²⁷⁵ Ibid, 76.

²⁷⁶ Judgment of the Court (Second Chamber) of 27 April 2022, *Airbnb Ireland UC v Région de Bruxelles-Capitale*, Case C-674/20.

Airbnb was fined €8 million for displaying listings without registration number by a ruling of the *tribunal judiciaire de Paris* of July 2021.²⁷⁷

Paris: failure to comply with data sharing obligation by Booking.com. The French law provides that until 31st December of the following year, cities where registration schemes are in place can request online platforms certain data on STR listings (number of nights rented out, host's name, address, registration number, main residence or not). This information can be asked once a year, and platforms have one month to send the data. Failure to comply with the request is punishable by a fine of up to €50,000 per illegal STR listing. On 6 January 2021²⁷⁸, the City of Paris sued Booking.com for failure to comply with this obligation. The Paris Judicial Court rendered its ruling on 18 October 2021. It ruled that the contested provisions are not a restriction to the freedom to provide information society services, and that Booking.com is a content editor and presumed to hold the data required by law. For the determination of the quantum of the fine, the judges observed that although Booking.com did not respect the timeframe set by the law for the transmission of the information it requires regarding more than 6,000 ads (the City of Paris only complained about 3,085), it did end up making efforts to transmit them in the required format. As a consequence, it sets the fine at €400 per illegal STR listing, amounting to a total fine of €1,234,000 (the City asked for €154,250,000).

2. On short-term rental rules

Barcelona: the Special Plan for Tourist Accommodation (PEUAT) was approved in January 2017. It applies to all types of tourist accommodation (hotels, hostels and STR) and is based on a principle of 'zero growth' of the existing total number of licenses for such forms of accommodation. C. Colomb finds that: "As of early 2020, nearly **100 legal cases** against the PEUAT had been lodged in front of the **High Court of Justice of Catalonia**. In August 2019, the Court published a decision that called for the cancellation of the PEUAT on the grounds of a lack of evaluation of the financial and economic impacts of its implementation. In other decisions, it only invalidated some parts of the PEUAT. The regional court, however, did not question the overall objective of the plan (i.e. the strict regulation of tourist accommodation in certain parts of the city for reasons of public interest), nor did it suggest it contravened the Spanish legislation translating the EU Services Directive (see Section 5.3). In November 2019, the city government of Barcelona appealed against the cancellation of the PEUAT in front of the Spanish Supreme Court, which has yet to issue its ruling. Meanwhile, the plan remains valid."²⁷⁹

Madrid: In March 2019, a special plan to regulate STR was approved (Plan Especial de usos del Hospedaje). It imposed "strict conditions for the granting of a license, requiring in particular a STR unit to have a separate entrance and lift from those used by the

²⁷⁷ [Airbnb condamnée à 8 millions d'euros d'amende à Paris pour des annonces sans numéro d'enregistrement \(lemonde.fr\)](https://www.lemonde.fr/airbnb/article/2021/07/01/airbnb-condamnee-a-8-millions-d-euros-d-amende-a-paris-pour-des-annonces-sans-numero-d-enregistrement_6061112_1802009.html)

²⁷⁸ Paris Judicial Court, 18th October 2021, City of Paris vs Booking.com

²⁷⁹ C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. Platforms-based property rentals in European Cities: the policy debates*, op. cit.

residents of the building. These rules apply in specific zones defined in the plan that cover the historic centre and surrounding neighbourhoods. These strict requirements de facto turned 95% of the existing STR offer in Madrid (approximately 10,000 flats) into illegal units.”²⁸⁰ The plan was challenged in Court. In February 2021, the **High Court of Justice of the Madrid Region** upheld the plan approved in March 2019, ruling that its objectives constitute acceptable ‘reasons of public interest’ to avoid the desertification and gentrification of specific neighbourhoods.

Amsterdam: the city government banned all vacation rentals from three city centre districts in the old town from 1 July 2020, responding to concerns about ‘overtourism’. The professional organisation representing STR operators (Amsterdam Gastvrij) challenged the ban, which was declared illegal by the **Court of Justice of Amsterdam on 12 March 2021**. The court argued that a system of permits cannot contain a total prohibition, which infringes on the right to property and the free movement of services.²⁸¹

Berlin: the relevant framework is the Law on the Prohibition of Misuse of Housing of 2013 (Zweckentfremdungsverbot) and the associated decree of 2014, which banned the use of apartments for purposes other than permanent residence. ‘Misuse’ includes commercial use, long-term vacancy and short-term letting. The law included a 2-year transition period for ‘misuses’ that were active before 1/05/2014, allowed until 1/05/2016. After that, STR was only allowed if a permit was obtained from district (Bezirk) authorities. The law was modified on 20/04/2018 (following court rulings) to allow the STR of a primary or secondary residence subject to condition.²⁸²

Paris: 420 cases pursued by the city of Paris against Airbnb hosts²⁸³; these hosts have not respected the obligation to register to start a STR activity and/or the nightly stay cap of 120 days per year for primary residences. These cases were put on hold until the ruling by the Court of Justice in the Cali Apartments case on 22 September 2020. The penalty incurred is 50.000 euros.

²⁸⁰ Ibid, 42.

²⁸¹ Ibid, 42.

²⁸² Ibid, 73.

²⁸³ [AIRBNB : Reprise des poursuites par la Ville de Paris - Romain Rossi-Landi \(rossi-landiavocat.fr\)](https://www.rossi-landiavocat.fr/en/airbnb-reprise-des-poursuites-par-la-ville-de-paris)

ANNEX 8: OVERVIEW OF REGISTRATION PROCEDURES AND REQUIREMENTS ON PLATFORMS CONCERNING STR IN EU MEMBER STATES

Based on the information gathered through consultations²⁸⁴, surveys, questionnaires and research²⁸⁵, there are overall 23 Member States with some type of registration procedures²⁸⁶ and/or requirements that would enable them to gather information from platforms. These Member States are the following:

Austria	Italy
Belgium	Latvia
Bulgaria	Lithuania
Croatia	Luxembourg
Cyprus	Malta
Czechia	The Netherlands
Denmark	Poland
France	Portugal
Germany	Slovakia
Greece	Slovenia
Hungary	Spain
Ireland	

In addition to the countries where these measures are in place, for one Member State (Romania) legislation is in preparation.

²⁸⁴ These include consultations with Member States and platforms.

²⁸⁵ See, in particular: C. Colomb, T. Moreira de Souza, *Regulating short-term rentals. Platforms-based property rentals in European Cities: the policy debates* (2021): https://www.propertyresearchtrust.org/short_term_rentals.html; and Oxford Research. “Study on national regulatory approaches to short-term accommodation services” - European Commission, Luxembourg (2021) (upcoming).

²⁸⁶ The term ‘registration procedure’ is used without prejudice as to whether such procedures consist in declaratory systems or authorisations.

Among Member States where registration systems are in place (22), these vary in scope, procedures (e.g., online or offline), requirements (e.g., information to be submitted by the hosts) and enforcement mechanisms, including the level of cooperation required by platforms. In some cases registration procedures are implemented at the national level (e.g., Greece), in other cases at the regional (e.g., Spain) or local level (e.g., France). However, it is worth noting that there also are commonalities as well. These cover, for example, some key information that is requested from the hosts.²⁸⁷

In an attempt to streamline the information gathered, the table below summarises their main features of national legislation:

Member State	Registration procedures	Cooperation of platforms
Austria	Registration procedures are regulated at regional level, and can be applied at regional or local level. ²⁸⁸	Depends on local requirements. In Vienna, platforms were requested to remove illegal STR identified by authorities and located in municipal (social) housing to platforms. In addition, in Vienna platforms are required to report details of all bookings (provider's name and addresses of rented units) each month to the City's tax authorities, or to collect and remit the tourist tax.
Belgium	Registration procedures are regulated at the regional level. There are procedures in place in Flanders and Wallonia and requirements in Brussels. ²⁸⁹	Depends on local regulations. In Brussels the registration number must be displayed by platforms on all listings.
Bulgaria	There is a procedure in place at national level.	n.a.
Croatia	Croatia has a registration procedure through the eVisitor system, which is mandatory for all commercial tourist service providers (for tax purposes). ²⁹⁰	n.a.

²⁸⁷ For an overview of the typologies of registration schemes in EU Member States, see Oxford Research “Study on national regulatory approaches to short-term accommodation services” - European Commission, Luxembourg (2021) (upcoming)

²⁸⁸ See, e.g., [Salzburg e-government process](#).

²⁸⁹ See registration procedure in: [Flanders](#), [Wallonia](#) and requirements applicable in [Brussels](#).

²⁹⁰ See <https://gov.hr/en/tourist-registration-and-deregistration/1432>.

Cyprus	There is a procedure in place at national level. ²⁹¹	n.a.
Czechia	The Trade Licensing Act sets certain requirements for the provision of STR services when this is a professional activity. The system is national but registration is conducted at the local registry office. ²⁹²	National law requires platforms to share host and booking data with municipal trade licensing office. Arrangements for the transfer of data have been concluded with Airbnb for the purpose of VAT and income tax collection.
Denmark	There is currently no registration procedure for hosts in Denmark. ²⁹³	A tax agreement is in place between platforms and the tax authority that facilitates sharing of information needed for tax reporting and compliance. ²⁹⁴
France	National law allows cities with a certain minimum population to put in place a registration scheme. ²⁹⁵	Where a registration scheme applies, platforms are required i.a. to inform hosts about their legal obligations, ensure that listings have a registration number and that hosts comply with the legal 120-night annual cap, when the listed accommodation is the primary residence of the host. In French cities where registration system is in place, all platforms must transmit to the city government information on units rented the previous year, the registration number, and the number of nights rented out (together with the income earned).
Germany	Registration procedures apply at Federal State level and local	Depends on local regulations (e.g., in Berlin platforms are required to publish

²⁹¹ See

https://www.tourism.gov.cy/tourism/tourism.nsf/application11_en/application11_en?OpenForm.

²⁹² See, in relevant part, the Trade Licensing Act 455/1991 Coll.: §17(4) and the [Business license registry](#). Act 189/2020 Coll. amending Act 159/1999 Coll., on the Performance of Certain Activities in the Field of Tourism requires platforms to share host and booking data with municipal trade licensing office. There have been proposals to update this legislation.

²⁹³ Instead, in Denmark there is an authorisation scheme for professionals only. See the Holiday Home Act (Sommerhusloven) <https://www.retsinformation.dk/eli/lt/2007/785>.

²⁹⁴ See the official notification of the Tax Agreement: <https://www.skm.dk/aktuelt/presse-nyheder/pressemeddelelser/historisk-aftale-med-airbnb-traeder-i-kraft-fra-1-juli-2019/>

²⁹⁵ See: the national decree on [registration](#); the National Tourism Code (relevant article on the registration number [here](#)); the Law 2016-1321 (République Numérique), which allows cities over 200,000 inhabitants to set up registration system for STR and require STR platforms to include registration number in listings; and Law 2018-1021 (ELAN Evolution du Logement, de l'Aménagement et du Numérique) which, together with Law 2019-1461 (Engagement et Proximité) require platforms to share list of individualized STR with city governments where registration system is in place (the system was clarified in Decree 2020-1479)

	level. National law requires short-term lettings to be declared to the Regional Trade Office. ²⁹⁶	registration number on every listing).
Greece	In Greece a national registration scheme applies. ²⁹⁷	National law requires that the registration number be displayed on the platform's website. In addition, a Memorandum of Understanding was concluded with three platforms setting a collaborative enforcement approach.
Hungary ²⁹⁸	A registration procedure is established at national level but is applied locally. Providers of accommodations must register and report their hosting activity through the National Tourism Data Centre (NTAK) operated by the Hungarian Tourism Agency. Additionally, hosts in Budapest have to notify local districts.	There is a planned obligation to display the registration number by platforms.
Ireland	National law requires hosts to register with their local authority. ²⁹⁹	No.
Italy	Registration procedures are regulated and implemented at regional and in one case at the local ³⁰⁰ level. In 2019, national legislation introduced a national database for the identification of tourist rentals. ³⁰¹	Regional Identification Code must be displayed on all listings (e.g., in Milan and Rome). In addition, national legislation required platforms to communicate data on non-professional hosts and their activities to national tax authorities, and to automatically deduct (and transmit) a 21% flat tax on the rental income generated. The legislation was challenged and the case has been referred to the CJEU. Agreements have been put in place in Milan and Rome with Airbnb for tax collection purposes.

²⁹⁶ See, e.g., registration scheme in [Hamburg](#).

²⁹⁷ See Law no. 4446/2016. See also link to [national registration website](#).

²⁹⁸ See [National Tourism Data Centre](#).

²⁹⁹ See regulations of [Dublin City Council](#).

³⁰⁰ The Autonomous Province of Trento.

³⁰¹ See i.a., Decree 50/2017, on the fiscal regimes for 'tourism rental' (allowing 21% flat tax); Decree 34/2019, on the establishment of a national database of accommodation facilities and STR; and Decree 161/2021, providing details on the content of the database and modalities of implementation.

Latvia	There is a registration procedure for tax purposes	No.
Lithuania	There is a registration procedure for tax purposes.	Agreement over automated tourist tax collection through Airbnb in Vilnius.
Luxembourg	There is a registration procedure established at national level. ³⁰²	n.a.
Malta	There is a registration procedure established at national level.	n.a.
The Netherlands	There is a national registration system with opt-in for municipalities. ³⁰³	Platforms are required to only advertise properties with a registration number.
Poland	There is a registration procedure at the municipal and regional level. A number of cities have introduced local/regional registration schemes. ³⁰⁴	No.
Portugal	There is a national registration procedure (also applicable to Madeira) implemented locally. A specific registration system applies for the Azores region. ³⁰⁵	Platforms are required to display registration numbers.
Romania	A proposal for the establishment of a national registration scheme appears to be in preparation.	n.a.
Slovakia	There is a national registration scheme (business licence registration procedure) which is implemented locally.	n.a.
Slovenia	There is a registration procedure for “subjects letting out rooms”	n.a.

³⁰² See administrative guide for registration: [Putting furnished residential property up for short-term rental — Citizens — Guichet.lu - Administrative Guide - Luxembourg \(public.lu\)](#).

³⁰³ See Housing Act 2014 (Huisvestingswet) and the Tourist Rental of Residential Space’ Act 2020 (Wet toeristische verhuur van woonruimte), amending Housing Act and Municipalities Act. At the municipal level see Amsterdam Housing Regulations 2020 (Huisvestingsverordening Amsterdam).

³⁰⁴ See e.g., Krakow registry: [Usługi \(Procedury\)- Biuletyn Informacji Publicznej Miasta Krakowa - BIP MK](#).

³⁰⁵ Relevant national law includes: Law 39/2008, modified by Law 128/2014; the Laws 62/2018, 71/2018 and 262/2020 modify these laws and provide more powers to local governments to control new establishments in designated so-called ‘containment areas’. The link to the registration procedure can be found [here](#).

	into the Business Register of Slovenia.	
Spain	Registration procedures are established at regional level, but may be implemented locally too.	Depends on local regulations. For example, in Barcelona platforms are required to inform hosts of local rules, to check that any proposed unit has a registration number before listing it and to publish this number on all listings. In addition, the city Government of Barcelona has concluded agreements with platforms for the removal of illegal listings. At a national level, legislation required STR platforms to send to tax authorities details of all their operations in Spain. In Madrid, Regional law does not explicitly make registration number compulsory on listings advertised by platforms

ANNEX 9: LITERATURE REVIEW

Aguilera, Thomas, Francesca Artioli, and Claire Colomb. "Explaining the diversity of policy responses to platform-mediated short-term rentals in European cities: A comparison of Barcelona, Paris and Milan." *Environment and Planning A: Economy and Space* 53.7 (2021): 1689-1712.

Anselmi, Guido, Letizia Chiappini, and Federico Prestileo. "The greedy unicorn: Airbnb and capital concentration in 12 European cities." *City, Culture and Society* (2021): 100412.

Ayouba, Kassoum, et al. "Does Airbnb disrupt the private rental market? An empirical analysis for French cities." *International Regional Science Review* 43.1-2 (2020): 76-104.

Barron, Kyle, Edward Kung, and Davide Proserpio. "The effect of home-sharing on house prices and rents: Evidence from Airbnb." *Marketing Science* 40.1 (2021): 23-47.

Bekkerman, Ron, et al. "The Effect of Short-Term Rentals on Residential Investment." *Available at SSRN* (2021).

Brezina, Vilim, Jan Polívka, and Martin Stark. "Conditions for the Introduction of Regulation for Short-Term Rentals." *Critical Housing Analysis* 8.1 (2021): 159-170.

Broocks, A., Duch-Brown, N. and Reggiani, C. (forthcoming) Assessing the impact of online travel agencies on hotels and travellers. JRC Digital Economy Working Paper
Casamatta, Georges, et al. "Host type and pricing on Airbnb: Seasonality and perceived market power." *Tourism Management* 88 (2022): 104433.

Chen, Yuanyuan, Yuxin Huang, and Chuan Hoo Tan. "Short-term rental and its regulations on the home-sharing platform." *Information & Management* 58.3 (2021): 103322.

Code of Conductola-Gant, Agustín, et al. "Corporate hosts: The rise of professional management in the short-term rental industry." *Tourism Management Perspectives* 40 (2021): 100879.

Code of Conductola-Gant, Agustin, et al. "Short-term rentals as a new urban frontier—evidence from European cities." *Environment and Planning A: Economy and Space* 53.7 (2021): 1601-1608.

Colomb, C. and Moreira de Souza, T. *Regulating short-term rentals. Platform-based property rentals in European cities: the policy debates*. London: Property Research Trust (2021) DOI: <https://doi.org/10.52915/KKKD3578>

Cox, Murray, and Kenneth Haar. "Platform Failures. How short-term rental platforms like Airbnb fail to cooperate with cities and the need for strong regulations to protect housing" (2020).

Cunha, António Manuel, and Júlio Lobão. "The effects of tourism on housing prices: applying a difference-in-differences methodology to the Portuguese market." *International Journal of Housing Markets and Analysis* (2021).

Demunter, Christophe. "Tourism statistics: early adopters of big data." *Luxembourg: EUROSTAT* (2017).

Dinatale, Sadie. "Assessing and Responding to Short-Term Rentals in Oregon: Enabling the Benefits of the Sharing Economy." (2017).

Duch-Brown, N. (Coord.), The Short-Term Accommodation Rentals market in the EU, JRC Digital Economy Working Paper 2021-09

Duch-Brown, N., Pogorzelska, K. and Rodriguez de las Heras Balell, T. (forthcoming), The cost of legal fragmentation among EU Member States in the implementation of the E-commerce directive. JRC Digital Economy Working Paper.

Farronato, Chiara, and Andrey Fradkin. *The welfare effects of peer entry in the accommodation market: The case of airbnb*. No. w24361. National Bureau of Economic Research, 2018.

Garcia-López, Miquel-Àngel, et al. "Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona." *Journal of Urban Economics* 119 (2020): 103278.

Garcia-López, Miquel-Àngel, Rosella Nicolini, and José Luis Roig Sabaté. "Urban Spatial Structure in Barcelona (1902–2011): Immigration, Spatial Segregation and New Centrality Governance." *Applied Spatial Analysis and Policy* 14.3 (2021): 591-629.

Giannoni, Sauveur, et al. "Multichannel distribution strategy of Airbnb hosts." *Annals of Tourism Research Empirical Insights* 2.1 (2021): 100017.

Hati, Sri Rahayu Hijrah, et al. "A decade of systematic literature review on Airbnb: the sharing economy from a multiple stakeholder perspective." *Heliyon* (2021): e08222.

Hausemer, Pierre, et al. "Exploratory Study of consumer issues in peer-to-peer platform markets." *European Commission, Luxembourg* (2017).

Heo, Cindy Yoonjoung, Inès Blal, and Miju Choi. "What is happening in Paris? Airbnb, hotels, and the Parisian market: A case study." *Tourism Management* 70 (2019): 78-88.

Horn, Keren, and Mark Merante. "Is home sharing driving up rents? Evidence from Airbnb in Boston." *Journal of Housing Economics* 38 (2017): 14-24.

Huang, Yuxin, Yuanyuan Chen, and Chuan Hoo Tan. "Regulating new digital market and its effects on the incumbent market: Investigation of online peer-to-peer short-term rental." *Information & Management* 58.8 (2021): 103544.

Katsinas, Philipp. "Professionalisation of short-term rentals and emergent tourism gentrification in post-crisis Thessaloniki." *Environment and Planning A: Economy and Space* (2021): 0308518X21988940.

Koster, Hans RA, Jos van Ommeren, and Nicolas Volkhausen. "Short-term rentals and the housing market: Quasi-experimental evidence from Airbnb in Los Angeles." *Journal of Urban Economics* 124 (2021): 103356.

Martinez, Yolanda (Marimón Avocados), Memorandum for UA EU C&CH 2021 "Regulatory Enforcement Difficulties In The Short-Term Rental Accommodation Sector Stemming From The European Legal Framework For Digital Services" to be published at URBACT <https://right2housing.eu>.

Powel, Dyfan, et al. "Research to Develop an Evidence Base on Second Homes." (2021).

Rossi, Michelangelo. "Competition and Reputation in a Congested Marketplace: Theory and Evidence from Airbnb." (2021).

Sanford, Will, Dillon DuBois. "COVID-19 impact on hotels and short-term rentals." *AIRDNA* (2020).

Stocker, Volker, et al. "Navigating the Landscape of the Sharing and Gig Economy Literature: A Systematic and Interdisciplinary Review." *Available at SSRN* (2021).

Tortelli, Alessandro, Gianfranco Lorenzo, Roberto Gambassi and Sandro Billi. "Recommendations and proposals for an in-depth analysis of tourism flows of an urban reality for a better governance of the destination." *Urban Agenda for the EU Partnership on Culture/Cultural Heritage* (2021).

Trouillard, Emmanuel. "Les Locations Saisonnières en Ile-De-France. Etat des Lieux d'Avant-Crise." *L'institut Paris Region* (2021).

Vaccari, L., Posada Sanchez, M., Boyd, M., Gattwinkel, D., Mavridis, D., Smith, R., Santoro, M., Nativi, S., Medjaoui, M., Reusa, I., Switzer, S. and Friis-Christensen, A., Application Programming Interfaces in Governments: Why, what and how, EUR 30227 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-18982-4 (online), 978-92-76-18981-7 (print), doi:10.2760/58129 (online), 10.2760/429805 (print), JRC120429.

Van Haaren, Jeroen, and Susan Vermeulen, Jeroen Klijs, Ko Koens, and Jorrit Bijl. "Short-term accommodation rental in Amsterdam. An empirical investigation of statistical correlations between short-term rental, housing prices and quality of life index." *European Commission, Luxembourg* (2021).

Wachsmuth, David, and Alexander Weisler. "Airbnb and the rent gap: Gentrification through the sharing economy." *Environment and Planning A: Economy and Space* 50.6 (2018): 1147-1170.

Zervas, Georgios, Davide Proserpio, and John W. Byers. "The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry." *Journal of marketing research* 54.5 (2017): 687-705.