COMMISSION STAFF WORKING DOCUMENT

Geo-blocking practices in e-commerce

Issues paper presenting initial findings of the e-commerce sector inquiry conducted by the Directorate-General for Competition

Brussels, 18.3.2016
SWD(2016) 70 final
Geo-blocking practices in e-commerce

Issues paper presenting initial findings of the e-commerce sector inquiry conducted by the Directorate-General for Competition
EXECUTIVE SUMMARY

On 6 May 2015, the European Commission ("Commission") launched a sector inquiry into e-commerce of goods and digital content in the European Union ("EU").

The aim of the sector inquiry is to gather data on the functioning of e-commerce markets in the EU and to identify possible restrictions or distortions of competition, in particular in relation to cross-border e-commerce.

The sector inquiry forms part of the Commission's Digital Single Market Strategy, one of the main pillars of which is to ensure better access for consumers and businesses to goods and services online across Europe. Cross-border e-commerce has the potential of contributing to the integration of the EU's single market as users may find it easier to purchase products from another Member State online rather than crossing the border and buying products in brick and mortar shops.

Commercial geo-blocking practices that prevent European users from shopping online cross-border or accessing digital content online across the EU may run counter, however, to the objective of a single market in the EU.

This issues paper presents initial findings of the e-commerce sector inquiry on the existence of such geo-blocking practices, based on the replies of more than 1,400 companies. A more detailed analysis of the findings of the e-commerce sector inquiry will be presented in the Preliminary Report that will be published in mid-2016 and followed by a public consultation as well as in the Final Report scheduled for early 2017.

Geo-blocking is widely used in e-commerce across the EU.

With regard to consumer goods, more than a third of online retailers participating in the inquiry collect information on the location of users for geo-blocking purposes. Geo-blocking mainly takes the form of a refusal to deliver abroad. Refusals to accept payment, and, to a lesser extent, re-routing and website access blocks are also used. While a majority of such geo-blocking results from unilateral business decisions of retailers, geo-blocking may also stem from contractual restrictions in agreements between retailers and suppliers. More than one out of ten retailers reports contractual restrictions to sell across borders.

With regard to online digital content, the vast majority of providers participating in the inquiry geo-blocked access to their services to users located in other Member States, mainly through an outright denial of access to the service based on IP address verification. 59 per cent of respondents state that they are contractually required by right holders to geo-block. While licensing agreements on films, TV series and sports events are most likely to include such restrictions, there appear to be large differences in both the extent to which geo-blocking takes place in different Member States, and the extent to which different types of operators implement geo-blocking in relation to different categories of digital content. These initial findings of the sector inquiry suggest that there is a degree of variation in the extent to which geo-blocking is required in licensing agreements with right holders. Geo-blocking might not be systematically required to the same extent by all right holders.
TABLE OF CONTENTS

INTRODUCTION..................................................................................................................................................... 6

CHAPTER I – THE E-COMMERCE SECTOR INQUIRY .......................................................................................... 10
1. THE PURPOSE OF THE SECTOR INQUIRY ................................................................................................. 10
2. SCOPE AND METHOD OF THE FACT-FINDING............................................................................................ 10
   2.1 Consumer goods .................................................................................................................................. 11
   2.2 Digital content ................................................................................................................................... 13
   2.3 Representativeness ............................................................................................................................... 15

CHAPTER II – GEO-BLOCKING PRACTICES ....................................................................................................... 17
1. DEFINITION OF GEO-BLOCKING AND GEO-FILTERING ............................................................................. 17
2. GEO-BLOCKING, POSSIBLE COMPETITION CONCERNS AND THE SINGLE MARKET ........................... 18

CHAPTER III – INITIAL FINDINGS ON GEO-BLOCKING: CONSUMER GOODS ........................................... 21
1. GEO-BLOCKING IN ONLINE SALES OF CONSUMER GOODS .................................................................. 21
   1.1 Cross-border e-commerce .................................................................................................................... 21
   1.2 The role of online marketplaces and price comparison tools for cross-border e-commerce .................. 27
2. GEO-BLOCKING PRACTICES BY DIFFERENT OPERATORS ......................................................................... 28
   2.1 Geo-blocking by retailers .................................................................................................................... 29
   2.2 Geo-blocking by marketplaces ............................................................................................................ 32
   2.3 Geo-blocking by price comparison tools .............................................................................................. 32
3. GEO-BLOCKING AND ONLINE PAYMENTS ................................................................................................. 34
4. GEO-FILTERING AND CROSS-BORDER PRICE AND OFFER DIFFERENCES ......................................... 34
5. INDICATIONS OF CONTRACTUAL CROSS-BORDER SALES RESTRICTIONS ........................................ 37
   5.1 Agreements between manufacturers/suppliers and retailers restricting cross-border online sales ....... 38
   5.2 Unilateral decisions not to sell cross-border and reasons for not doing so ......................................... 43

CHAPTER IV – INITIAL FINDINGS ON GEO-BLOCKING: DIGITAL CONTENT ............................................ 45
1. GEO-BLOCKING IN ONLINE SALES OF DIGITAL CONTENT ..................................................................... 46
   1.1 Existence of geo-blocking .................................................................................................................... 46
   1.2 Extent of geo-blocking ......................................................................................................................... 48
   1.3 Technical implementation of geo-blocking .......................................................................................... 52
2. INDICATIONS OF CONTRACTUAL RESTRICTIONS .................................................................................. 54
3. CROSS-BORDER AVAILABILITY OF DIGITAL CONTENT SERVICES ......................................................... 60
   3.1 Reasons for non-availability ................................................................................................................. 60
   3.2 Catalogue differences .......................................................................................................................... 64
4. ACCESS TO AND PORTABILITY OF DIGITAL CONTENT SERVICES .................................................. 66
5. USE OF VPN AND IP ROUTING SERVICES ............................................................................... 67

CONCLUSIONS .......................................................................................................................... 69

1. CONSUMER GOODS .................................................................................................................. 69
2. DIGITAL CONTENT .................................................................................................................... 71

ANNEX I – SELECTION AND CHARACTERISTICS OF ADDRESSEES .......................................... 73

1. CONSUMER GOODS ................................................................................................................. 73
   1.1 Selection and characteristics of retailers ................................................................................ 73
   1.2 Selection and characteristics of marketplaces, price comparison tools and payment service providers .................................................................................................................. 77
2. DIGITAL CONTENT .................................................................................................................... 79
INTRODUCTION

(1) On 6 May 2015, the European Commission ("Commission") decided on the basis of Article 17 of Council Regulation (EC) No 1/2003\(^1\) to launch a sector inquiry into e-commerce of goods and digital content in the European Union ("EU").\(^2\)

(2) The sector inquiry forms part of the Commission's Digital Single Market Strategy\(^3\), one of the main pillars of which is to ensure better access for consumers and businesses to goods and services online across Europe. The aim of the sector inquiry is to gather data on the functioning of e-commerce markets in the EU and to identify possible restrictions or distortions of competition, in particular in relation to cross-border e-commerce.

(3) E-commerce has grown steadily over the past years in the EU. The estimated average annual growth rate in the online sales of goods was approximately 22 per cent between 2000 and 2014 (see Figure 1 below).

**Figure 1 – Evolution of total and online retail sales in goods, 2000-2014 (EUR billion)**

\[\text{Source: Duch-Brown and Martens}\(^4\)\]

---


However, cross-border e-commerce remains limited. In 2015, more than 50 per cent of the EU population shopped online,\(^5\) but only 16 per cent shopped online from a seller based in another EU Member State.\(^6\) There are also significant differences between Member States when it comes to the number of individuals that engage in online cross-border shopping. While more than 68 per cent of Luxembourgers engage in online cross-border shopping, only 2 per cent of Romanians do the same.

Figure 2 – Domestic and cross-border online shopping in percentage points, EU-28, 2008-2014

5 Approximately 53 per cent of the EU population shops online. See Eurostat data available at the following address: http://ec.europa.eu/Eurostat/documents/2995521/7103356/4-11122015-AP-EN.pdf/276b6a7c-69a6-45ce-b6bf-488e975a8f5d

6 Eurostat, Digital Single Market: promoting e-commerce for individuals. Available at the following address: http://ec.europa.eu/Eurostat/data/database?node_code=isoc_bdek_smi

Figure 3 – Cross-border internet purchases by individuals (percentage of total individuals) – 2015

![Cross-border internet purchases by individuals (percentage of total individuals) – 2015](image)

Source: Eurostat

(5) The online delivery of digital content, such as films, TV series, broadcasts of sport events and music, is one of the biggest e-commerce sectors in the EU. It accounts for 33 per cent of online trade by individuals. 38 per cent of individuals reported that they use the internet to access media online in 2014, up from 21 per cent in 2007, and 16 per cent that they purchase online, up from 9 per cent.

(6) A Eurobarometer report indicates that in 2014, 48 per cent of EU citizens accessed audio-visual content online. However only a third of them could find the audio-visual content they wanted. While a minority of users is reported to try to access online digital content cross-border (8 per cent), this proportion is substantially higher for people aged 15-24 (17 per cent). Users look cross-border

---

8 Eurostat, Digital Single Market: promoting e-commerce for individuals. See above.
9 European Commission, Digital Agenda Scoreboard. The figure refers to the percentage of all individuals buying online that purchased digital content in 2014 in the EU-27. The data includes online games. Available at the following address:
https://digital-agenda-data.eu/charts/see-the-evolution-of-an-indicator-and-compare-countries#chart=1_%22indicator-group%22%22any%22,%22indicator%22%22bgoodo%22%22breakdown%22%22IND_TOTAL%22%22unit-measure%22%22PC_IND_BLT12%22%22ref-area%22%22EU27%22]
10 Eurostat data on internet usage in the EU-28 (includes online games). Available at the following address:
http://ec.europa.eu/eurostat
11 European Commission, Cross-border access to online content, Flash Eurobarometer 411, August 2015. Available at the following address:
for digital content that is unavailable in their Member State of residence or for a wider range of digital content.

(7) A number of reasons may explain the limited growth of cross-border e-commerce in the EU from a business perspective, such as language differences, higher logistics and distribution costs for cross-border sales of goods as well as compliance costs with different legal frameworks in Member States, for instance, due to differences in consumer contract law. From the perspective of users, a preference for buying online domestically (the so-called "home bias") is mostly linked to concerns about delivery, redress and key consumer rights.

(8) However, there are also indications that companies establish barriers to cross-border online trade through contractual provisions or concerted practices that limit the ability of retailers or service providers to serve online users located in another Member State.

(9) The purpose of this issues paper is to present initial findings based on the information received so far in the e-commerce sector inquiry on geo-blocking and geo-filtering practices. It will, in particular, analyse to what extent such practices may be linked to contractual cross-border sales restrictions.

---

See also, European Commission, Flash Eurobarometer 413, Companies engaged in online activities, May 2015. Available at the following address: http://ec.europa.eu/public_opinion/flash/fl_413_en.pdf

13 While 61% of users feel confident about buying online in their own Member State, only 38% are confident about purchasing goods or services via the internet from retailers or providers in other Member States, 2015 Consumer Conditions Scoreboard. Available at the following address: http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/11Edition/docs/ccs2015scoreboard_en.pdf

CHAPTER I – THE E-COMMERCE SECTOR INQUIRY

1. The Purpose of the Sector Inquiry

(10) Sector inquiries are investigations that the Commission decides to carry out into sectors of the economy or into types of agreements when there are indications that competition may be restricted or distorted. A sector inquiry is a systematic investigatory tool under EU competition law used to obtain a better understanding of the functioning of a given sector and the type of agreements used in this sector. Sector inquiries do not target specific companies. However, the sector inquiry may bring to light certain practices and the Commission may – following a sector inquiry – decide to open case-specific investigations regarding these practices to ensure the respect of EU competition rules.

(11) The e-commerce sector inquiry is in particular carried out on the basis of requests for information pursuant to Article 17 of Regulation 1/2003. Requests for information were sent to a variety of different actors in e-commerce markets in the EU both in relation to the online sales of consumer goods as well as in relation to digital content. The responses provided by market participants to these requests constitute the main source of information for the sector inquiry.

(12) This issues paper focuses exclusively on geo-blocking and geo-filtering practices based on the responses received so far. A more comprehensive analysis of the input received will be presented in the Preliminary Report that will be published in mid-2016 and be followed by a public consultation. The final step of the sector inquiry will be the publication of the Final Report in early 2017.

2. Scope and Method of the Fact-Finding

(13) The e-commerce sector inquiry covers the online sale of consumer goods as well as digital content. The inquiry is being conducted in two phases. In phase one the retail level of the distribution chain was targeted and in phase two manufactures/suppliers and right holders are questioned. This issues paper is

15 See Article 17 of Regulation 1/2003.
16 The Commission is currently conducting an investigation into cross-border provision of pay-TV services. See press release at the following address:
In order not to duplicate the investigation, the sector inquiry does not target the provision of pay-TV services in relation to film content. No conclusion can therefore be drawn from the present issues paper as regards the Commission's ongoing investigation into cross-border provision of pay-TV services.
mainly based on replies from retailers and providers of digital content services that were received before late November 2015. The Preliminary Report will cover the replies also from manufactures/suppliers and right holders.

(14) The section below sets out the scope and method for the fact-finding with regard to consumer goods on the one hand and digital content on the other. More details on the selection and characteristics of respondents can be found in Annex I.

2.1 Consumer goods

(15) Different requests for information ("questionnaires") were sent to online retailers, online marketplace providers, price comparison tool providers as well as payment service providers.

(16) Questionnaires to retailers, marketplace providers and price comparison tool providers had to be filled out on a per website basis, which means that some companies have received and responded to several questionnaires for each website they operate (in one or more Member States). These are counted separately as respondents. Questionnaires were sent out to companies in all Member States.

(17) Table 1 shows the number of respondents to the retailer questionnaire per Member State as well as the number of respondents to the questionnaires sent to other market participants.

17 Not all respondents provided information and data in relation to all questions of the various questionnaires. The reasons are, mainly, the lack of relevance/applicability of a given question to a particular respondent, technical difficulties or internal data reporting that made it impossible to provide the requested data with the required detail.

18 Information received by individual respondents after late-November 2015 and after the expiration of the relevant deadlines has not been taken into consideration for this issues paper.

19 For example, if a company operates a website targeting Germany with a top-level domain ".de" and a website targeting France with a top-level domain ".fr", it was required to fill in two questionnaires the responses to which were allocated to the respective Member State.
Table 1 – Respondents to the sector inquiry in relation to consumer goods

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>28</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>13</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>13</td>
</tr>
<tr>
<td>Denmark</td>
<td>32</td>
</tr>
<tr>
<td>Germany</td>
<td>338</td>
</tr>
<tr>
<td>Estonia</td>
<td>11</td>
</tr>
<tr>
<td>Ireland</td>
<td>9</td>
</tr>
<tr>
<td>Greece</td>
<td>13</td>
</tr>
<tr>
<td>Spain</td>
<td>37</td>
</tr>
<tr>
<td>France</td>
<td>48</td>
</tr>
<tr>
<td>Croatia</td>
<td>6</td>
</tr>
<tr>
<td>Italy</td>
<td>80</td>
</tr>
<tr>
<td>Cyprus</td>
<td>15</td>
</tr>
<tr>
<td>Latvia</td>
<td>11</td>
</tr>
<tr>
<td>Lithuania</td>
<td>16</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>5</td>
</tr>
<tr>
<td>Hungary</td>
<td>19</td>
</tr>
<tr>
<td>Malta</td>
<td>12</td>
</tr>
<tr>
<td>Netherlands</td>
<td>46</td>
</tr>
<tr>
<td>Austria</td>
<td>24</td>
</tr>
<tr>
<td>Poland</td>
<td>30</td>
</tr>
<tr>
<td>Portugal</td>
<td>11</td>
</tr>
<tr>
<td>Romania</td>
<td>14</td>
</tr>
<tr>
<td>Slovenia</td>
<td>18</td>
</tr>
<tr>
<td>Slovakia</td>
<td>9</td>
</tr>
<tr>
<td>Finland</td>
<td>14</td>
</tr>
<tr>
<td>Sweden</td>
<td>36</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retailers</th>
<th>1038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketplaces</td>
<td>37</td>
</tr>
<tr>
<td>Price Comparison</td>
<td>88</td>
</tr>
<tr>
<td>Payment Systems</td>
<td>17</td>
</tr>
</tbody>
</table>

(18) The list of addressees of the retailer questionnaire was put together with the aim of covering a broad range of companies active in online retail in terms of size and product categories and in different Member States.

(19) Questionnaires were mainly sent to retailers, marketplace providers and price comparison tool providers selling or advertising consumer goods in the following product categories:

- Clothing, shoes and accessories;
- Consumer electronics (including computer hardware);
- Electrical household appliances;
- Computer games and software;
- Toys and childcare articles;
- Media: books (including e-books), CDs, DVDs and Blu-ray discs;
- Cosmetic and healthcare products;
- Sports and outdoor equipment (excluding clothing and shoes); and
- House and garden.

(20) As can be seen from Figure 4, most retailers that participated in the sector inquiry sell clothing, shoes and accessories, followed by house and garden products and
consumer electronics. On average, these retailers sell consumer goods in 2.8 different product categories.

![Figure 4 – Number of retailers selling in each product category](image)

2.2 Digital content

(21) The online distribution of digital content complements existing transmission technologies (i.e. terrestrial, cable and satellite), thus providing both incumbents and new entrants with new business opportunities. At the same time it can be disruptive because of comparably lower transmission costs on a per user basis.

(22) The online distribution of digital content can also contribute to lowering barriers to entry into content retailing. From this perspective, online distribution can contribute effectively to competition in media markets. This is witnessed by the increase in the number of operators and business models that are now active across the EU.

(23) This issues paper focusses exclusively on geo-blocking at the retail level of the online distribution of digital content.

(24) The respondents include the most important market operators, potential new entrants and a number of local players. Due to the characteristics of national media markets, respondents comprise a relatively limited number of operators in each Member State that serve the vast majority of the users. These operators are referred to as **online digital content providers**.
(25) Questionnaires were also sent to operators that are already active in more than four Member States (large groups) and to companies that do not necessarily provide online digital content services themselves, but merely "host" digital content on behalf of such service providers through the use of online portals, dedicated software or specific hardware devices (hosting operators). Finally, questionnaires were sent to providers of VPN ("virtual private network") and IP routing services.

(26) The online digital content services provided by the companies contacted did not need to be their exclusive or even main activity. However the questionnaires only referred to online digital content services and did not touch on any other aspect of the companies' activities.

(27) A total of 284 respondents from the above mentioned categories replied, including 9 companies offering VPN and IP routing services. Table 2 provides the number of respondents by Member State and by category.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium 10</td>
<td>Lithuania 2</td>
</tr>
<tr>
<td>Bulgaria 5</td>
<td>Luxembourg 1</td>
</tr>
<tr>
<td>Czech Republic 8</td>
<td>Hungary 4</td>
</tr>
<tr>
<td>Denmark 7</td>
<td>Malta 1</td>
</tr>
<tr>
<td>Germany 35</td>
<td>Netherlands 10</td>
</tr>
<tr>
<td>Estonia 3</td>
<td>Austria 20</td>
</tr>
<tr>
<td>Ireland 2</td>
<td>Poland 6</td>
</tr>
<tr>
<td>Greece 5</td>
<td>Portugal 7</td>
</tr>
<tr>
<td>Spain 17</td>
<td>Romania 6</td>
</tr>
<tr>
<td>France 27</td>
<td>Slovenia 2</td>
</tr>
<tr>
<td>Croatia 2</td>
<td>Slovakia 5</td>
</tr>
<tr>
<td>Italy 13</td>
<td>Finland 5</td>
</tr>
<tr>
<td>Cyprus 1</td>
<td>Sweden 13</td>
</tr>
<tr>
<td>Latvia 2</td>
<td>United Kingdom 24</td>
</tr>
</tbody>
</table>

Table 2 - Respondents to the sector inquiry in relation to digital content

Content Providers 243
VPN and IP Routing 9
Large Groups 12
Hosting Operators 20

20 A more detailed description of these categories can be found in Annex I.
21 Internet Protocol, or IP, addresses are unique identifiers of a user's connection to the internet and can be used, among other things, to determine its geographic location, which in turn may be used by online digital content providers to determine whether the user is allowed to access their service. VPN and IP routing services can be used to circumvent IP address identification and to access geo-blocked online digital content services. See Annex I for more information.
For the purposes of assessing and reporting the results, the 275 digital content service providers were classified on the basis of their main activity of operations ("type of operator") and of the main business model used in that activity ("business model"). The descriptions are provided in Table 3 and Table 4 together with the respective sample proportions for each type. The delineation between these activities is however not always clear-cut.

Table 3 – Classification and sample proportion of different types of operator

<table>
<thead>
<tr>
<th>Type of Operator</th>
<th>Description</th>
<th>Proportion in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial broadcaster</td>
<td>Free to air broadcaster predominantly advertising-funded</td>
<td>28%</td>
</tr>
<tr>
<td>Public service broadcaster</td>
<td>National broadcaster having public service remit</td>
<td>20%</td>
</tr>
<tr>
<td>Online audiovisual operator</td>
<td>Any other type of audiovisual operator only or partly offering online services</td>
<td>18%</td>
</tr>
<tr>
<td>Portal/Web TV</td>
<td>Internet portal or online channel</td>
<td>8%</td>
</tr>
<tr>
<td>Fixed line PSTN operator</td>
<td>Electronic communications operator using telephone network</td>
<td>7%</td>
</tr>
<tr>
<td>Fixed line cable operator</td>
<td>Electronic communications operator using cable network</td>
<td>6%</td>
</tr>
<tr>
<td>Mobile operator</td>
<td>Electronic communications operator using mobile network</td>
<td>6%</td>
</tr>
<tr>
<td>Publisher</td>
<td>Operator traditionally involved in the print media sector</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>Any other type of operator</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4 – Classification and sample proportion of different business models

<table>
<thead>
<tr>
<th>Type of Business Model</th>
<th>Description</th>
<th>Proportion in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription-based</td>
<td>Receives most of its revenues from subscription fees</td>
<td>28%</td>
</tr>
<tr>
<td>Advertising-funded</td>
<td>Receives most of its revenues from selling advertising space/time</td>
<td>27%</td>
</tr>
<tr>
<td>Publicly funded</td>
<td>Receives most of its revenues from funds provided by public authorities</td>
<td>18%</td>
</tr>
<tr>
<td>Packager of own content</td>
<td>Receives most of its revenues from licensing channels to retailers/third parties</td>
<td>13%</td>
</tr>
<tr>
<td>Transaction-based</td>
<td>Receives most of its revenues from payments to access individual events/items</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>Any other business model</td>
<td>3%</td>
</tr>
<tr>
<td>Hosting online operator</td>
<td>Receives most of its revenues from the sale/use of apps/hosting environments</td>
<td>2%</td>
</tr>
<tr>
<td>Hosting device</td>
<td>Receives most of its revenues from the sale/use of hardware devices</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

2.3 Representativeness

In designing and selecting the sample of respondents, the Commission aimed at ensuring broad representativeness across the entire spectrum of companies and business models active in e-commerce. For both consumer goods and digital content, the sample of respondents strove to include a fairly wide cross-section of businesses across Member States. The figures presented in this issues paper on the proportions per Member States are nevertheless affected by the absolute number of responses the Commission received per Member State.
While the Commission believes that the responses provide valuable information for the purposes of the sector inquiry, the results should not be viewed as statistically representative of EU e-commerce markets.

It is important to note that the main aim of the sector inquiry is to inform the Commission’s competition policy with regard to this important sector of the economy on the basis of the qualitative information obtained from the responses.
1. **Definition of Geo-Blocking and Geo-Filtering**

(32) For the purposes of this issues paper, geo-blocking refers to commercial practices whereby online providers prevent users from accessing and purchasing consumer goods/digital content services offered on their website based on the location of the user in a Member State different from that of the provider.

(33) Geo-blocking can be distinguished from geo-filtering, which refers to commercial practices whereby online providers allow users to access and purchase consumer goods/digital content services cross-border, but offer different terms and/or conditions depending on the location of the user in a Member State different from that of the provider.

(34) Geo-blocking and geo-filtering can occur at various stages of an online purchase. This can be illustrated by the following examples.

- If a user located in Paris, wants to buy a certain product via a German website and is prevented from accessing the German website because it has been blocked on the basis of the French IP address (as the website is not accessible for users located outside of Germany), this would be a form of geo-blocking.
- If the user located in Paris is not blocked from accessing the German website, but – based on its location – directly re-routed to the company’s French website without the possibility to revert to its initial choice, this would also amount to geo-blocking.
- Should the user located in Paris be able to access the German website, but should the payment be refused because the credit card used for payment is linked to an address in France, or the delivery to France be denied based on the user's location, this would also amount to a form of geo-blocking.
- Finally, if the same user located in Paris is able to buy the product it wants to buy on the German website, but has to pay a higher price than a user located in Germany, this would be amount to geo-filtering.

(35) The notion of geo-blocking for the purposes of this issues paper therefore includes:

(a) Blocking access to websites of users located in another Member State;

(b) Automatic re-routing of users to another website of the same or a different service provider (possibly with a different price); and
(c) Delivery and/or payment refusals based on the location/place of residence of
the user.

(36) It does not, however, include geo-filtering.

(37) Geo-blocking practices can be put in place as a result of a unilateral independent
business decision of a retailer that does not want to sell cross-border.

(38) It is also possible that a retailer may have to implement geo-blocking practices as
a result of a contractual obligation that does not allow it to sell cross-border to
users outside of an allocated territory or as a result of commercial pressure (for
instance, through emails, phone calls, etc.).

(39) Similarly, as regards digital content services, providers of such services may use
measures that prevent users from other Member States to access their websites
and/or to download or stream the content offered on those websites. A Belgian
user may be blocked from accessing the website of, for example, a French
provider of video-on-demand services, on the basis of the user's Belgian IP
address (and the website may then display a message saying that the website is
only accessible to French residents). Geo-blocking practices may also be used to
prevent users from accessing online digital content services to which they have
subscribed in one Member State from other Member States, or to play digital
content that was previously downloaded in one Member State when the user
travels to other Member States.

2. GEO-BLOCKING, POSSIBLE COMPETITION CONCERNS AND THE SINGLE MARKET

(40) Cross-border e-commerce has the potential of contributing to the integration of the
EU's single market as users may find it easier to purchase products from another
Member State online rather than crossing the border and buying products in brick
and mortar shops.

(41) Geo-blocking practices that limit the ability of European users to shop online
across borders may run counter to the objective of establishing a single market.

(42) The purpose of this paper is not to provide guidance on the self-assessment to be
conducted by undertakings in relation to the legality of certain geo-blocking
practices under EU competition law.

(43) The following key concepts are, however, worth recalling.

(44) First, agreements or concerted practices that are aimed at partitioning national
markets according to national borders or which make the interpenetration of
national markets more difficult, in particular those which are aimed at preventing
or restricting parallel exports, have as their object the restriction of competition
pursuant to Article 101(1) of the Treaty on the Functioning of the European Union ("TFEU"). Such agreements or concerted practices tend to restore the divisions between national markets and are, thus, liable to frustrate the Treaty’s objective of achieving the integration of those markets through the establishment of a single market.

(45) Second, unilateral conduct limiting sales to certain territories or customer groups falls outside the scope of Article 101 TFEU.

(46) Third, a contractual restriction that de jure or de facto prohibits the internet as a method of marketing amounts to a restriction by object within the meaning of Article 101(1) TFEU and a hardcore restriction within the meaning of Article 4(c) of Commission Regulation (EU) No 330/2010 (the "Vertical Block Exemption Regulation" or "VBER").

(47) Fourth, a contractual restriction of the territory into which, or the customers to whom, a distributor may sell the contract goods or services amounts – subject to a number of limited exceptions – to a hardcore restriction within the meaning of Article 4(b) VBER.

---


24 Such unilateral conduct may, however, be caught by Article 102 TFEU and/or by Article 20(2) of Directive 2006/123/EC on services in the internal market, which provides that "Member States shall ensure that the general conditions of access to a service, which are made available to the public at large by the provider, do not contain discriminatory provisions relating to the nationality or place of residence of the recipient, but without precluding the possibility of providing for differences in the conditions of access where those differences are directly justified by objective criteria".


27 A hardcore restriction leads to the exclusion of the whole agreement from the application of the VBER. The Vertical Guidelines (Guidelines on Vertical Restraints, OJ C 130, 19.5.2010, p. 1) provide examples of other restrictions that the Commission considers constitute hardcore restrictions and thus unable to benefit from the exemption provided in the VBER. These include, for example, restrictions that require a distributor to apply different geo-blocking practices (such as blocking access to its website to customers located in another Member State or re-routing customers to an alternative website).

28 In particular, Article 4(b)(i) VBER provides that a manufacturer/supplier can restrict active sales into the exclusive territory or to an exclusive customer group reserved to the manufacturer/supplier or exclusively
Fifth, an agreement that directly or indirectly restricts active or passive sales to end users by members of a selective distribution system amounts to a hardcore restriction within the meaning of Article 4(c) VBER.

Sixth, where a licence agreement is designed to prohibit or limit the cross-border provision of broadcasting services, it is deemed to have as its object the restriction of competition, unless other circumstances falling within its economic and legal context justify the finding that such an agreement is not liable to impair competition.29

allocated by the manufacturer/supplier to another distributor. For a definition of active and passive sales, see Vertical Guidelines, paragraph 51.

29 Judgment in Football Association Premier League and Others, C-403/08 and C-429/08, EU:C:2011:631, paragraph 140.
CHAPTER III – INITIAL FINDINGS ON GEO-BLOCKING: CONSUMER GOODS

(50) As described earlier, geo-blocking describes commercial practices that limit the ability of users to buy products online from a seller established in another Member State. Geo-blocking will, therefore, typically be triggered by the location of the user which can be determined by the different pieces of information (e.g. the IP address used, the postal or delivery address, credit or debit card details).

(51) The Commission has questioned retailers and other market players about their cross-border sales activities, the data they collect and the purposes they use it for in order to be able to analyse to which extent geo-blocking is applied. Retailers were also asked whether they face contractual territorial restrictions in their supply agreements that effectively prevent them from selling cross-border.

1. GEO-BLOCKING IN ONLINE SALES OF CONSUMER GOODS

1.1 Cross-border e-commerce

1.1.1 Respondents not selling cross-border

(52) 36 per cent of retailers reported they do not sell cross-border for at least one of the relevant product categories. Across 28 EU Member States the median proportion of the retailers that reported that they do not sell cross-border for at least one of the relevant product categories is 47 per cent, which means that for half of the Member States this proportion is below 47 per cent and that for the other half it is above 47 per cent.

(53) At Member State level, amongst the respondents active in the largest online markets, such as France and Germany, the percentage of those that do not sell cross-border is mostly below the 36 per cent, while those that are active in smaller markets, such as Latvia and Estonia, reported to focus mainly on national sales. Figure 5 below provides an overview of the proportion of respondents that reported that they do not sell cross-border in at least one product category in each Member State.

30 This proportion is calculated out of all 905 respondents to the relevant question.
31 Proportions are calculated out of all respondents that replied to the relevant question and are established in a given EU Member State. The proportions per Member States are affected by the absolute number of responses the Commission received per Member State.
32 These observations are in line with the findings of a recent Commission consumer survey on "Obstacles to the Digital Single Market" (2015). According to the survey, one of the main elements decisive for the direction of the flow of cross-border sales was the size of the Member State/population. Cross-border flows
Figure 5 – Respondents that do not sell cross-border in at least one product category for each of the Member States

The decision of a respondent not to sell cross-border does not appear to be related to the product category sold. As can be seen from the Figure below, with the exception of "clothing and shoes" where the proportion is below 40 per cent, in each of the remaining product categories more than half of the respondents that replied to the relevant question in relation to the respective product category reported that they do not sell cross-border.

It should be noted that the proportions for each product category are calculated out of all respondents that replied to the relevant question for a given product category. A single respondent can be active in several product categories and was therefore able to provide a separate reply for each of the product categories in which it is active. It follows that, as the basis for the calculation is different, these proportions are not directly comparable to the proportion of respondents (i.e. 36 per cent) that reported not selling cross-border in at least one product category.

of goods and services tend to originate from larger Member States towards smaller Member States. GfK for the European Commission, Consumer survey identifying the main cross-border obstacles to the DSM and where they matter most, September 2015. Available at the following address:
Figure 6 – Respondents that do not sell cross-border for each product category

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Games</td>
<td>64%</td>
</tr>
<tr>
<td>Household appliances</td>
<td>57%</td>
</tr>
<tr>
<td>Media</td>
<td>57%</td>
</tr>
<tr>
<td>Consumer electronics</td>
<td>56%</td>
</tr>
<tr>
<td>Toys and childcare</td>
<td>53%</td>
</tr>
<tr>
<td>Cosmetics and Healthcare</td>
<td>52%</td>
</tr>
<tr>
<td>Sports and Outdoor</td>
<td>52%</td>
</tr>
<tr>
<td>House and Garden</td>
<td>51%</td>
</tr>
<tr>
<td>Others</td>
<td>47%</td>
</tr>
<tr>
<td>Clothing and shoes</td>
<td>36%</td>
</tr>
</tbody>
</table>

Figure 7 – Respondents that do not sell cross-border in at least one product category for each 2014 turnover category

<table>
<thead>
<tr>
<th>Turnover Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>€100.000 - €500.000</td>
<td>29%</td>
</tr>
<tr>
<td>€500.000 - €2m</td>
<td>34%</td>
</tr>
<tr>
<td>€2m - €10m</td>
<td>42%</td>
</tr>
<tr>
<td>€10m - €50m</td>
<td>45%</td>
</tr>
<tr>
<td>€50m - €100m</td>
<td>37%</td>
</tr>
<tr>
<td>Above €100m</td>
<td></td>
</tr>
</tbody>
</table>

(56) The proportion of retailers not selling cross-border in at least one product category appears to be slightly higher in the higher turnover categories. More than a third

33 Proportions are calculated out of all respondents in a given turnover category that replied to the relevant question.
of respondents in the turnover categories above EUR 2 million indicated that they do not sell cross-border in at least one product category. In this regard it must be noted that, based on the information received, larger retailers active in several Member States often decide not to sell cross-border from a given website, but rather to establish/buy a new country-specific website in order to target users in another Member State.

1.1.2 Cross-border visits and transactions

(57) In order to assess the extent of cross-border business activity amongst retailers, both in terms of cross-border visits and transactions, retailers were asked to provide information about the number of visits to their websites and the number of purchases that were made in 2014 from users located in each Member State.

(58) Altogether the average proportion of visits coming from other Member States compared to domestic visits (visits from the Member State the website targets) is approximately 20 per cent in the EU across all respondents that provided the relevant information.  

(59) At Member State level, the proportion of visits from abroad varies greatly, as can be seen from the Figure below. This is also due to the fact that the number of visits is to a certain extent influenced by size of the population. Therefore, even in traditionally larger e-commerce markets such as Germany and the UK, the proportion of visits from abroad is relatively modest compared to the proportion of domestic visits. A high proportion of cross-border visits were reported for some of the Nordic countries as well as Spain and Portugal.  

34 739 respondents provided data on the number of visits that occurred in 2014.

35 Please note that the percentages in individual Member States may be influenced by the existence of large retailers (some of which operate a single website to serve users in multiple Member States) driving the Member State average.
Figure 8 – Proportions of domestic and EU cross-border visits in 2014 per Member State

(60) Looking at actual purchases, 55 per cent of respondents reported that all their users were located in one Member State, while 12 per cent sold to users located in 26 or more Member States. On average, the proportion of EU cross-border purchases reported by respondents is the same as the proportion of EU cross-border visits, namely 20 per cent. Also in the case of purchases, the size of the

---

36 Proportions are calculated out of all respondents (733) that provided data on the number of purchases that occurred in 2014.
population of a Member State is one of the elements that may influence the relationship between domestic and cross-border purchases.37

Figure 9 – Proportions of domestic and EU cross-border purchases out of all purchases in 2014 per Member State

37 Please note again that the percentages in individual Member States may be influenced by the existence of large retailers (some of which operate a single website to serve users in multiple Member States) driving the Member State average.
1.2 The role of online marketplaces and price comparison tools for cross-border e-commerce

1.2.1 Marketplaces

(61) Approximately a third of the respondents to the retailer questionnaire indicated that they use online marketplaces to sell their products. Marketplaces are websites/apps where independent sellers can offer products for sale and on which users can purchase those products.

(62) The initial findings of the sector inquiry indicate that retailers that sell (also) via marketplaces are more likely to sell cross-border compared to those which only sell via their own website. Approximately 42 per cent of retailers that sold only via their own website did not sell cross-border (in any product category), whereas approximately only 17 per cent of retailers that sold only or also on marketplaces did not sell cross-border.\(^{38}\)

(63) The vast majority of marketplaces (84 per cent)\(^{39}\) reported that it is possible for retailers to choose whether they want to deliver abroad. This choice was available either in general, that is for all products offered by a retailer, or on a product-by-product basis. Furthermore, marketplaces reported that on average in 2014 approximately 28 per cent of sellers chose to make their goods available for delivery to at least 21 Member States while 51 per cent chose to have their goods delivered to one Member State only.\(^{40}\)

(64) The Commission also asked retailers to provide information on the number of purchases completed via marketplaces by users located in each Member State. 45 per cent of retailers that provided this information reported that they sold products to users in two or more Member States.\(^{41}\) 7 per cent reported sales to 26 or more Member States. The majority of retailers indicated sales to users in one Member State only.

---

38 The proportions are calculated on the basis of 849 respondents that replied to all relevant questions.
39 The proportions are calculated on the basis of 32 respondents that replied to the relevant question.
40 The proportions are calculated on the basis of 25 respondents that replied to the relevant question.
41 The proportions are calculated on the basis of 215 respondents that supplied the relevant information.
1.2.2 Price comparison tools

Another way for retailers to make users aware of their online offering both domestically and abroad is by using price comparison tools. These are websites/apps which allow users to search for products and compare their prices across the offers of several sellers, and provide links that lead directly or indirectly to the websites of the sellers. It appears that price comparison tools have adopted a business model that supports retailers' visibility also outside the Member State where the price comparison tool is established.

56 per cent of the price comparison tools that responded to the relevant question state that they provide product listings from other EU Member States. Almost two thirds of those price comparison tools that list products from retailers based in other Member States also inform their users upfront of the location of the seller.

2. GEO-BLOCKING PRACTICES BY DIFFERENT OPERATORS

Geo-blocking may not only be applied by retailers operating an online shop, but also by other operators of websites including marketplaces and price comparison

---

42 215 respondents provided sales information on purchases that occurred via marketplaces.
tools. The Commission has questioned the different operators in order to analyse the extent geo-blocking is applied, how it is implemented and what data is collected for this purpose.

2.1 Geo-blocking by retailers

(68) As outlined in Chapter II, for the purposes of this issues paper geo-blocking is defined as (i) preventing the user from accessing the website, (ii) automatically re-routing the user to a website targeted at another Member State, (iii) refusing payment or (iv) refusing delivery. Each of these measures may be implemented by a retailer either unilaterally or as a consequence of an agreement with its supplier(s).

(69) Retailers usually collect some type of information about the location of users. They do so for a variety of reasons, including, delivering goods or verifying that orders are legitimate. Retailers were asked whether they gather any location related information from users (e.g. IP address, credit/debit card details) for geo-blocking purposes as defined above.

(70) The proportion of respondents at EU level that collects such data for geo-blocking purposes is 38 per cent.43

(71) The figure below provides an overview of the proportion of respondents that use information about users' geographic location for geo-blocking purposes.

43 The proportions are calculated out of all 1038 respondents that replied to the retailer questionnaire.
(72) To implement geo-blocking, retailers collect various types of information on the location of the user. The type of information that respondents most commonly collect for geo-blocking purposes is the postal address of the user, followed by the user’s credit/debit card details or country of residence.

(73) The figures below show the proportion of respondents that gather location information for geo-blocking purposes per type of information and per 2014 turnover category of the respondents, respectively.\(^{45}\)

\(^{44}\) Note that a single respondent was able to select multiple types of purposes for which it gathers location information.

\(^{45}\) Note that a single respondent was able to select multiple types of location information which it gathers.
Figure 12 – Respondents that gather location information for geo-blocking purposes, per type of information – EU 28

- IP address: 16%
- Credit/debit card details: 19%
- Postal address: 29%
- Country of residence: 19%
- Choice of language: 7%
- Phone number: 11%
- Other information: 6%

Figure 13 – Respondents that gather location information for geo-blocking purposes for each 2014 turnover category

- Below €100,000: 17%
- €100,000 - €500,000: 10%
- €500,000 - €2,000,000: 16%
- €2,000,000 - €10,000,000: 27%
- €10,000,000 - €50,000,000: 46%
- €50,000,000 - €100,000,000: 51%
- Above €100,000,000: 67%

Proportions are calculated out of all respondents that replied to the retailer questionnaire in a given turnover category.
It appears that there is a positive correlation between the total turnover and the proportion of respondents that gather location information for geo-blocking purposes. With the exception of the lowest turnover bracket, the higher the turnover is, the higher the proportion of retailers that gathers information for geo-blocking purposes. The reason for this may partly be that respondents in the higher turnover categories are more likely to have visits by users located in another Member State.

2.2 Geo-blocking by marketplaces

Marketplaces collect information on the location of users. They do so for a variety of reasons. The most common ones are showing relevant offers, delivering goods or verifying that orders are legitimate.

43 per cent of respondents to the marketplaces questionnaire reported that they also collect information for geo-blocking purposes. In particular, over a third of respondents reported that they refuse delivery on the basis of user location data while almost 30 per cent of respondents prevent access to their website.

Similarly to retailers, also marketplaces were asked what type of data they collect for geo-blocking purposes. The users' IP address is the type of information most commonly collected, immediately followed by the postal address of the users and the payment information.

2.3 Geo-blocking by price comparison tools

Price comparison tools, like retailers and marketplaces, collect information on users. Such information is used for a variety of purposes including geo-blocking. More than a third of the respondents to the price comparison questionnaire either used user information to prevent access to their website or to automatically re-route the users to a website targeting another EU Member State.47

---

47 Respondents could provide more than one purpose for which they collected information.
The IP address of the user is by far the most commonly used type of information by price comparison for geo-blocking purposes.

Figure 15 – Price comparison tools that gather location information for geo-blocking purposes, per type of information – EU 28

- IP address: 62%
- Country of residence: 22%
- Choice of language: 16%
3. GEO-BLOCKING AND ONLINE PAYMENTS

(80) Retailers use payment service providers to help them in accepting a variety of online payment methods and to protect retailers from fraudulent activity.48

(81) Retailers may also use payment service providers to geo-localise their users. Payment service providers reported that certain location data49 are taken into consideration to analyse and potentially block transactions. The parameters payment service providers take into account to analyse/block an online payment are in the majority of cases chosen by the retailer.50 However, the decision is often based on advice or strong recommendation by the payment service provider.

(82) 23 per cent of the respondents to the retailer questionnaire stated that payment service providers technically implement the rejection of online payments based on user location data while 79 per cent of respondents to the payment service provider questionnaire explained that they take into consideration location data to analyse and potentially block transactions.

(83) Based on the information provided by retailers and payment service providers, it therefore seems technically possible for the retailers to use payment service providers as a tool to block or limit undesired sales to users located in Member States not targeted by the retailer’s website.

4. GEO-FILTERING AND CROSS-BORDER PRICE AND OFFER DIFFERENCES

(84) A motive behind companies’ geo-filtering (and geo-blocking) practices could be their interest to charge different prices in different Member States for the same product (reflecting differences in the willingness of users to pay for products).

(85) For that to be possible, users from the Member States where prices are higher for a specific product must be prevented from buying the product from the Member States where it is cheaper. Geo-filtering practices may serve to prevent such "arbitrage" opportunities.

---

48 Fraud protection is provided by blocking potentially fraudulent payments on the basis of a set of parameters (e.g. the number of transactions over a short period of time by the same user/with the same card, the (total) amount of the transaction(s), the number of cards used by the same user/with same e-mail or IP address, IP reputation, and black-lists of users/cards).

49 The location data that payment service providers mainly take into account are the IP address of the online buyer and credit/debit-card related data, namely the country of issuance of the credit/debit card and the country of the bank account (identified via IBAN/BIC data).

50 58 per cent of payment service providers that responded to the relevant question explained that the list of agreed parameters to take into account when considering blocking an online payment is fully based on the retailer's choice while 42 per cent of respondents stated that the list is only partially based on the retailer's choice. No payment service provider that replied to this question indicated that the list is fully decided by them.
(86) Consumer welfare is expected to decrease if, as a result of the price discrimination and geo-filtering, total output decreases or remains the same. In case total output would increase, the welfare effect of price discrimination along national borders is a priori ambiguous.\textsuperscript{51} In case the price discrimination allows the company to serve a market which would otherwise not be served, the effect on overall consumer welfare should normally be positive.

(87) In order to analyse the extent to which geo-filtering practices are applied, retailers were asked whether they charge different prices when they sell the same product cross-border to any Member State other than the one in which their website is established. Approximately, three quarters of respondents that sell cross-border indicated that they do not charge different prices when they do so whereas one quarter of respondents indicated that they charge different prices at least for some products.\textsuperscript{52}

(88) Figure 16 below shows the proportion of respondents that reported that they charge a different price when selling cross-border for each product category at EU level.\textsuperscript{53}

\textsuperscript{51}Whilst removing the possibility to price discriminate by means of geo-blocking or geo-filtering may increase overall consumer welfare, such an increase may, however, involve distribution effects across user groups - some may benefit from a price decrease, while others may experience a price increase.

\textsuperscript{52}The proportion of respondents is calculated out of all respondents that sold cross-border and that replied to the respective question (598 retailers). As retailers were asked to provide separate responses per operated website, the responses received do not provide information on price differences applied by retailers when selling products at different prices on different websites.

\textsuperscript{53}Each respondent can be active in several product categories and was therefore able to provide a reply for each product category in which it is active. The proportions below are calculated on the basis of all of the respondents that sell cross-border and that replied to this question for the given product category.
The product category in which the highest proportion of retailers charge different prices is clothing, shoes and accessories where 31 per cent of retailers reported that they charge different prices out of which 22 per cent charged different prices for the large majority of products offered.

Retailers that charge different prices when selling cross-border were questioned about the main reasons and their importance. They were requested to indicate the level of importance of a number of predefined reasons. The reasons that were considered most important were different tax regimes, costs and product demand as well as differing competitive pressure in other markets. Requests by suppliers were considered less relevant.
(91) It appears from the responses to the marketplaces' questionnaire that charging different prices for cross-border sales is not common when retailers sell their products via marketplaces. All 34 marketplaces that responded to the question reported that they did not observe price differences for the same product model sold by sellers on their platform cross-border to any Member State other than the one in which the professional seller is established.

(92) There appear to be several justifications for price differences when companies sell cross-border or when companies sell their products in different Member States via different websites. However, by contractually limiting cross-border access to certain product offerings, geo-blocking/geo-filtering practices based on agreements may lead to the partitioning of the single market along national borders.

5. **INDICATIONS OF CONTRACTUAL CROSS-BORDER SALES RESTRICTIONS**

(93) Geo-blocking by retailers may result from unilateral business decisions by retailers or be agreed with suppliers. This chapter examines to what extent cross-border sales restrictions agreed between undertakings lead online retailers to geo-block.
5.1 Agreements between manufacturers/suppliers and retailers restricting cross-border online sales

(94) To evaluate the existence of cross-border online sales restrictions, retailers were asked whether there are contractual\textsuperscript{54} restrictions to sell cross-border to users located in a Member State different from where the seller is established. In the 28 EU Member States, 12 per cent of respondents to the retailer questionnaire reported that they face such contractual cross-border sales restrictions in at least one product category.

(95) It is important to note that, since this percentage only indicates the proportion of retailers that have contractual cross-border sales restrictions in at least one product category, it does not allow to draw any conclusions as to how many of their agreements include such restrictions and how many products within a certain product category are affected by such restrictions. While some respondents may only be restricted in relation to one product by one supplier, others may face territorial restrictions from multiple suppliers and for multiple products.

(96) As regards the relationship between the respondents' size and the presence of contractual territorial restrictions, a higher proportion of retailers with 2014 turnover above EUR 500 000 had contractual cross-border sales restrictions in at least one product category than of retailers with 2014 turnover below EUR 500 000 (see Figure 19). This can inter alia be explained by the fact that larger retailers frequently sell more products and have more suppliers. Suppliers may also consider the likelihood of cross-border online sales higher for larger retailers than for smaller retailers.

(97) As can be seen from Figure 20, the proportion of retailers that face contractual cross-border sales restrictions in at least one product category for each of the Member States varies significantly. Across the 28 EU Member States the median proportion of the respondents that face contractual restrictions to sell cross-border in at least one product category is 9 per cent. This means that for half of the Member States, the proportion is below 9 per cent and that for the other half it is above 9 per cent.

\textsuperscript{54} For the purpose of this section "contractual" restrictions cover also restrictions by indirect means, i.e. situations in which the manufacturer/ supplier limits the ability of the retailer to sell cross-border by means of warnings, threats, penalties, delay or suspension of deliveries or any other discouraging means, including financial incentives or disincentives, either in writing or orally, used to change the conduct of the retailer.
Figure 19 – Retailers that face contractual restrictions to sell cross-border per 2014 total turnover\textsuperscript{55}

![Bar chart showing the percentage of retailers facing contractual restrictions to sell cross-border per turnover category.]

Figure 20 – Retailers that face contractual restrictions to sell cross-border in at least one product category, by Member State\textsuperscript{56}

![Bar chart showing the percentage of retailers facing contractual restrictions to sell cross-border in at least one product category, by Member State.]

\textsuperscript{55} Proportions are calculated out of all respondents that replied to the questionnaire for a given turnover category.

\textsuperscript{56} Proportions are calculated out of all respondents that replied to the questionnaire and that are established in a said Member State.
Contractual territorial restrictions could be found in all product categories. The product category in which retailers mostly have contractual territorial restrictions is clothing, shoes and accessories followed by consumer electronics, and sports and outdoor equipment. The Figure below summarizes the proportion of respondents that reported that they have a contractual restriction to sell cross-border for each relevant product category.\footnote{Proportions are calculated out of all respondents that replied to the questionnaire and reported that they are active as retailers in a given product category. Note that a single respondent can be active in several product categories and was therefore able to provide a reply for each product category in which it is active. Therefore, as the basis for the calculation is different, these proportions are not directly comparable to the proportion of respondents (i.e. 12 per cent) that reported that they face contractual cross-border sales restrictions in at least one product category.}

Figure 21 – Respondents that have a contractual restriction to sell cross-border for each product category – EU 28

Contractual cross-border sales restrictions appear in multiple forms. The cross-border sales restrictions reported by respondents to the questionnaires range from outright bans to sell outside one or more EU Member State to less straightforward restrictions on the ability of retailers to sell their products cross-border.

The above mentioned restrictions are not always formulated as prohibitions, but sometimes as requirements, whereby approval by the manufacturer is needed, before sales into other Member States are permitted. The effect of such approval requirements will frequently be the same as an outright prohibition. Only an
explicit approval would allow retailers to sell cross-border. Frequently, retailers will not request such an approval and even if they request it a rejection of their request may follow.

(101) Based on the responses of the retailers, cross-border sales restrictions are not only included in distribution agreements, but also communicated orally. Some retailers state that they have experienced retaliatory measures by suppliers that stopped delivery to them because they sold cross-border.

(102) Based on observations by some retailers, requests by suppliers to retailers not to sell cross-border appear to be sometimes driven by a desire to keep prices in different Member States at a different level. Many suppliers work with different "recommended price lists" for different Member States. Some respondents reported ad hoc interventions by suppliers to stabilize retail prices in certain countries by asking the retailer not to sell products in certain Member States (or raise the price to a certain level) to not negatively affect the price level in this Member State.

(103) The initial findings of the sector inquiry suggest that a number of territorial restrictions may raise concerns regarding their compatibility with Article 101 TFEU.

(104) First, certain manufacturers/suppliers seem either to restrict in a general way the ability of retailers to sell to users outside their Member State of establishment or to restrict the ability of retailers to sell to users located in certain Member States.

(105) Second, certain manufacturers/suppliers appear to restrict active sales by retailers outside a designated territory, irrespective of whether other territories have been exclusively allocated to other retailers or reserved to the manufacturer/supplier.

(106) Third, certain manufacturers/suppliers seem to restrict both active and in particular passive sales into territories that have been exclusively allocated to other distributors or reserved for the manufacturer/supplier.

(107) Fourth, certain manufacturers/suppliers operating a selective distribution system across several Member States appear to limit the ability of authorised retailers to sell to all end users within those Member States.

(108) The Commission will further analyse such territorial restrictions, taking into account all relevant information, in order to evaluate whether any follow-up enforcement action is required to ensure that EU competition law is fully complied with.

(109) The Commission will also continue to analyse how prevalent territorial exclusive agreements are in the e-commerce sector and how important they are considered by market participants. 11 per cent of respondents to the retailer questionnaire
indicated that they concluded territorial exclusive distribution agreements\textsuperscript{58} with at least one supplier. The product category with the highest proportion\textsuperscript{59} of respondents that have at least one territorial exclusive distribution agreement is clothing shoes and accessories (10 per cent) followed by electrical household appliances with (8 per cent) and cosmetic and healthcare products (8 per cent). A smaller proportion of respondents use territorial exclusive distribution agreements in the product categories computer games and software (2 per cent) and media (5 per cent).

Figure 22 – Use of territorial exclusive distribution agreements per product category

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing and Shoes</td>
<td>10%</td>
</tr>
<tr>
<td>Household Appliances</td>
<td>8%</td>
</tr>
<tr>
<td>Cosmetics and Healthcare</td>
<td>8%</td>
</tr>
<tr>
<td>Others</td>
<td>8%</td>
</tr>
<tr>
<td>Sports and Outdoor</td>
<td>7%</td>
</tr>
<tr>
<td>House and Garden</td>
<td>7%</td>
</tr>
<tr>
<td>Consumer Electronics</td>
<td>6%</td>
</tr>
<tr>
<td>Toys and Childcare</td>
<td>5%</td>
</tr>
<tr>
<td>Media</td>
<td>5%</td>
</tr>
<tr>
<td>Computer Games</td>
<td>2%</td>
</tr>
</tbody>
</table>

(110) The review of the agreements provided by respondents shows that territorial exclusive distribution agreements can only partially explain the existence of restrictions on (active) cross-border sales and many cross-border sales restrictions appear to be unrelated to exclusive distribution agreements.

(111) Being asked whether they consider territorial exclusivity as a necessary or very important factor to expand and reach a viable scale of operations, enter a new market, launch a new product/brand or invest in advertising and promotion of certain brands or products, 18 per cent of the 663 retailers that responded to this question considered territorial exclusivity as a necessary or important factor, while 82 per cent did not consider it necessary or very important. Some respondents

\textsuperscript{58} For the purposes of the retailer questionnaire, territorial exclusive distribution agreements were defined as agreements with suppliers that grant the retailer in question the exclusive right to sell the supplier's products in a certain territory.

\textsuperscript{59} Proportions are calculated out of the total number of respondents active in each product category. Note that a single respondent can be active in several product categories.
explain that they consider territorial exclusivity important as an incentive to invest in promotion and marketing efforts.

5.2 Unilateral decisions not to sell cross-border and reasons for not doing so

(112) While there are indications that some manufacturers/suppliers agree with retailers to restrict the ability of these retailers to sell products cross-border within the EU, it seems that the majority of geo-blocking practices are based on unilateral business decisions of the retailers not to sell cross-border. These findings were confirmed by the fact that only a small proportion of retailers reported that they collect data on the user location fully or partly because of a request by suppliers to do so.

(113) Selling cross-border requires specific measures that come at a cost. The Figure below shows the percentage of retailers that either took or would take the mentioned measures in order to launch or increase online sales in other Member States.

Figure 23 – Proportion of respondents indicating that they took or would take certain steps in order to launch or increase online sales in other Member States

<table>
<thead>
<tr>
<th>Measure</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translation of website</td>
<td>71%</td>
</tr>
<tr>
<td>Targeted advertising and marketing</td>
<td>65%</td>
</tr>
<tr>
<td>Arrange payment system options</td>
<td>55%</td>
</tr>
<tr>
<td>Arrange for delivery options</td>
<td>53%</td>
</tr>
<tr>
<td>Purchasing national domain name</td>
<td>50%</td>
</tr>
<tr>
<td>Installing local customer service</td>
<td>44%</td>
</tr>
<tr>
<td>Selling on marketplaces to MS</td>
<td>35%</td>
</tr>
<tr>
<td>Adapting product choice / design</td>
<td>29%</td>
</tr>
<tr>
<td>Providing data to price comparison tools in MS</td>
<td>28%</td>
</tr>
<tr>
<td>Opening physical shop</td>
<td>12%</td>
</tr>
</tbody>
</table>

Note that each respondent was able to select several measures.

Proportions are calculated of the 872 respondents that answered the relevant question.
(114) The responses show that retailers consider a significant number of measures to be advisable in order to successfully sell online into a new geographic market.

(115) Retailers were also asked about the main categories of costs they incur when entering as an online retailer in a new Member State. In addition to costs which are related to the measures described in Figure 23 above, companies frequently face costs due to the need for local legal or tax advice as well as the need for specific IT to handle the processing of orders.

(116) The actual costs incurred are case specific and depend on the strategy of the retailer. They can range from a few thousands to several millions of Euros. Based on the responses by retailers, opening a new dedicated website in another country is generally considered to be more expensive than selling via marketplaces where the additional costs are typically limited to commissions to be paid to the marketplace.

(117) Retailers also incur additional costs when serving online users located in a Member State other than the one where their own website is established. Additional costs that were reported typically include higher costs for delivery and return handling as well as higher payment costs related to higher charges by some payment service providers for cross-border transactions or the need to introduce alternative payment systems.

(118) Often, the decision on whether to sell cross-border or not is a general business decision by a retailer and appears not to be related to specific suppliers or their products. Many retailers decide to sell to users in a certain Member State only and refrain from selling cross-border as it adds additional costs. Even if retailers decide to enter a new geographic market, many do so rather by setting-up a dedicated website with a country specific URL and support staff in the Member State than by selling cross-border from an established website. Based on the responses received, such newly established websites frequently target only users from that Member State without cross-border sales activity.
CHAPTER IV – INITIAL FINDINGS ON GEO-BLOCKING: DIGITAL CONTENT

(120) For the purposes of this issues paper, the term online digital content comprises audio-visual or music services delivered via the internet,\(^{61}\) regardless of the way they are accessed by users or made available by online digital content service providers.\(^{62}\)

(121) Digital content that is copyright-protected, similar to other copyright-protected works, does not enjoy unitary protection in the EU. Instead, a different national copyright law is applicable in each of the 28 Member States.\(^{63}\) Copyright is territorial in the sense that exclusive rights are enforced under the national laws of each Member State.

(122) In order to provide online digital content services to users, an online digital content provider must generally obtain a licence from the holders of the copyrights in the content, such as film producers or record labels or for related rights. Rights in broadcasts of sports events are licensed in a similar way.

(123) In the EU, certain rights holders licence the rights to distribute their content through exclusive agreements to one distributor in each Member State, and/or in relation to different technologies. Rights to the same content also tend to be "carved up" on the basis of, for example, the timing of the release (rights are typically sold through different "windows") or the distribution and/or access

---

61 For the purposes of this paper, online transmission is defined by reference to the use of packet switching protocol standard used to exchange information over the internet, known as TCP/IP. See Annex I for further details.

62 Digital content offered on physical supports such as CDs, DVDs and Blu-Ray Discs is excluded from this definition. Such content is included in the consumer goods section under the category "Media." As regards digital content distributed on physical supports, the right of distribution of the original or a copy thereof is exhausted once a copy of the physical support has been subject to a first sale or other transfer of ownership within the EU that was made by the right holder or with the right holder's consent (see Article 4(2) of Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society). The making available of electronic copies of digital content that can be accessed by the public e.g., through streaming or downloading, is governed by the rights of making available and of communication to the public. Those rights are not, in relation to the digital content that is dealt with in the present paper, subject to exhaustion.

technology used (often with separate rights being sold separately for different transmission technologies, such as cable and the internet). 64

1. GEO-BLOCKING IN ONLINE SALES OF DIGITAL CONTENT

1.1 Existence of geo-blocking

(124) In order to determine whether geo-blocking in relation to online digital content takes place, respondents were asked to specify whether they had put in place technical measures to monitor the user's location in order prevent access to their services. In particular, respondents were asked to indicate whether they made use of one or more types of technical measures aimed at the following:

(a) Measures aimed at managing access to the service or specific content offered depending on the location of the user, such as full service blocking or content filtering;

(b) Measures aimed at controlling the ability of potential users to sign up for an account or a subscription depending on their location; and

(c) Measures aimed at redirecting users on the basis of their location or residence.

(125) The responses to these questions were aggregated so that any respondent indicating the use of at least one technical measure was considered as carrying out geo-blocking, and the results were divided by the total number of respondents, providing the percentage of respondents that actively geo-block. Figure 24 provides the aggregate figure.

64 Retransmission rights are a partial exception to this business practice, mainly due to the possibility for terrestrial and satellite broadcasters to have their signal carried over cable networks, which is enshrined in the Satellite and Cable Directive (Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission, OJ L 248, 06.10.1993, p. 15).
An initial result emerging from the sector inquiry is that technical geo-blocking practices are widely used across the EU in order to limit access to online digital content services offered in one Member State by users located in a different Member State.

The most widespread purpose for geo-blocking appears to be preventing users located in other Member States from accessing the online digital content service, with almost two third of respondents implementing technical measures to achieve this objective. About a third of respondents do not allow users to sign up or subscribe to their online digital content service upon detection that the user is located in a Member State other than the one for which the service is intended.

Figure 25 provides a break-down of the purposes of geo-blocking given by respondents.\footnote{The percentage does not add up to 100 since respondents were allowed to provide more than one reason.}
1.2 Extent of geo-blocking

(129) The EU average result pointing to a large use of geo-blocking practices masks a relatively high degree of variation, both across Member States and across types of operators.

(130) In particular, it would appear that geo-blocking practices are used more widely in certain Member States. While no clear pattern seems to emerge from the data, only a minority of respondents in Member States such as Italy or Bulgaria use at least one type of geo-blocking, and less than the EU average do so in Member States such as Belgium, Austria and Germany. Figure 26 and Figure 27 present the results for Italy and Germany.
On the other hand, more than 80 per cent of respondents in Member States such as Denmark, the Czech Republic, Greece and the UK appear to implement at least one type of geo-blocking measure, and more than the EU average do so in Member States such as France and Portugal. Figure 28 and Figure 29 present the results for the Czech Republic and the UK.
The gathered data indicate a relatively wide degree of variation also across respondents, independently of their geographic establishment, as illustrated by Figure 30.
For example, online audio-visual operators and fixed telephony operators appear to make on average a more extensive use of geo-blocking than commercial broadcasters do. A high proportion of public service broadcasters seem to implement some form of geo-blocking.

Fixed line cable operators seem to resort less to geo-blocking than other fixed line communications providers, but this may be partly a result of the fact that subscribers typically need to be physically connected to the specific cable network to receive a complete service, in which case geo-blocking (as defined for the purposes of this issues paper) might be unnecessary.

Similarly, there is also high variation in the extent to which technical geo-blocking measures are deployed when looking at the different types of business models. Figure 31 presents data that indicate that the average majority of respondents offering pay services, regardless of whether they are offered pursuant to a transaction- or a subscription-based model, deploy technical measures aimed at limiting cross-border access.

Conversely, operators that adopt a business model centred on advertising sales, as well as those which earn most of their revenues from selling packaged content (possibly to retailers, rather than directly to users), seem to make on average less use of geo-blocking than other operators.
1.3 Technical implementation of geo-blocking

Respondents were asked about the technical means used to implement geo-blocking to prevent access to their offer by users located in Member States other than the one where the service provider is established.

As Figure 32 shows, most respondents use IP address verification which is the prevalent form of technical implementation by a wide margin.\textsuperscript{66}

\begin{center}
\begin{tabular}{lcc}

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction-based</td>
<td>90%</td>
</tr>
<tr>
<td>Publicly funded</td>
<td>82%</td>
</tr>
<tr>
<td>Subscription-based</td>
<td>77%</td>
</tr>
<tr>
<td>Hosting device</td>
<td>75%</td>
</tr>
<tr>
<td>Hosting online operator</td>
<td>67%</td>
</tr>
<tr>
<td>Packager of own channels/content</td>
<td>56%</td>
</tr>
<tr>
<td>Advertising-funded</td>
<td>53%</td>
</tr>
<tr>
<td>Other</td>
<td>43%</td>
</tr>
</tbody>
</table>
\end{tabular}
\end{center}

The relatively high proportion of respondents that answered “Other” seems due to two reasons. First, technical measures that were genuinely different from the options provided were specified by some respondents, together with the indication of such means, including for example the use of telephone area codes or the use of content encryption to enable geo-blocking. However the majority of the respondents specifying “Other” indicated that they use a combination of the methods listed, or that they provide more than one service and geo-blocking applies only to a sub-set, or did not specify what technical measure they use.
The same trend appears to be confirmed on a national basis, with small differences that do not appear significant. For example, respondents in certain Member States, such as Spain, France and Ireland seem to use the credit card address as a means to geo-block more than the average, while respondents in member States such as Denmark, Sweden, the Netherlands, Slovenia and Portugal make a wider than average use of blacklists of IP addresses.

In terms of type of respondents, it would appear that certain types of operators make a greater use of the geographic location in order to establish whether or not provision of their service to a given user should be geo-blocked. In particular, online audio-visual operators and some electronic communications operators (PSTN and mobile operators) seem to rely on the user's residential address as a means to verify whether they are entitled to service provision, to a much higher degree than the average. However this means of verification also seems to be used in conjunction with others, in particular with IP address verification, which is still the single most widely used technical means of implementing geo-blocking for these three types of operators.

---

67 PSTN stands for publicly switched telephone network, and is used to refer to traditional copper-based telephone networks (as opposed to, for example, cable networks or fibre-optic networks).
2. **INDICATIONS OF CONTRACTUAL RESTRICTIONS**

(141) Respondents were asked whether the agreements they have in place with their suppliers include the requirement to apply different technical geo-blocking practices to prevent access from users located in Member States other than those where the respondent was providing the service.

(142) In particular, the contractual agreements were sub-divided into seven categories and respondents were asked to include information on the 30 largest suppliers of content for each of these categories:

- **Films**: Feature films or motion pictures;
- **Sports**: Sports events and commentary;
- **Music**: Recorded music (but not music used in film or sports);
- **Fiction TV**: TV series, drama and comedy;
- **News**: Television news, current affairs programmes and series;
- **Children TV**: Television programmes aimed at children, excluding films; and
- **Non-Fiction TV**: Television programmes other than any of the above.

(143) As part of the sector inquiry, the Commission received information on more than 6,000 agreements between online digital content providers and their suppliers, which in most cases are owners of the rights to the digital content which is offered by providers.

(144) All agreements that included a requirement for digital content providers to geo-block their service were subsequently aggregated, regardless of the technical implementation of geo-blocking (e.g. industry standard, detailed technical measure, non-detailed, etc.). This allows observing the extent to which geo-blocking is required as a proportion of the total number of agreements which respondents referred to, and by category of digital content. Figure 33 provides the results.

---

68 Respondents were asked to provide the information per supplier. Therefore, while at the level of each individual respondent the information obtained is per supplier, over the whole sample, there may be a duplication of suppliers across respondents. One could in this case consider the above results as being based on the number of “contractual relations” or “agreements.”
For example, 66% of all agreements with suppliers of film content that were referred to by respondents require digital content service providers to geo-block.

The agreements to which respondents refer to typically have as their object the sale of licensing rights that allow online digital content providers to offer specific products for which suppliers own those online rights (e.g. films, TV series) in certain Member States.

Licensing agreements for TV drama and TV series, and films and sports events, appear to include requirements to geo-block more often than licensing agreements for other digital content categories.

However the average results mask a high degree of variation.

First, respondents in several Member States highlighted differences in the prevalence of contractual geo-blocking requirements compared to the average. Figure 34 to Figure 37 provide some of these results, pointing to a relatively large degree of variation between Member States.\(^69\)

---

\(^69\) The results presented at the national level exclude respondents that offer services to the specific Member State but are not legally established in that Member State, e.g. the large groups that have headquarters in one Member State but offer services in more Member States. Those respondents are included in the "Large Groups" category.
Figure 34 – Proportion of agreements requiring providers to geo-block by category – France

- Children TV: 65%
- Fiction TV: 65%
- Non-fiction TV: 64%
- Sports: 50%
- Films: 50%
- Music: 29%
- News: 2%

Figure 35 – Proportion of agreements requiring providers to geo-block by category – Spain

- Children TV: 93%
- Fiction TV: 65%
- Films: 32%
- Sports: 28%
- Non-fiction TV: 28%
- News: 17%
- Music: 0%
Figure 36 – Proportion of agreements requiring providers to geo-block by category – Poland

Non-fiction TV: 38%
Fiction TV: 36%
Films: 21%
Children TV: 20%
News: 17%

Figure 37 – Proportion of agreements requiring providers to geo-block by category – Czech Republic

Fiction TV: 81%
Sports: 70%
Non-fiction TV: 50%
Children TV: 47%
Films: 47%
News: 13%
Music: 11%
What the figures above appear to indicate is twofold. First, agreements on the licensing of content such as films, sports and TV series are not in every Member State the ones where the highest degree of geo-blocking is contractually required. For some Member States, less than half of the agreements concluded in relation to such content require geo-blocking.

Second, there seems to be a high degree of variation in the extent to which geo-blocking is agreed for the same category of content. This seems to point to the existence of different business models or different market characteristics.

Looking at the contractual restrictions for each type of operator (Figure 38) can shed further light on the differences.

A helpful way of taking into account national characteristics when interpreting these results is to look at the information provided by the large groups. These are companies that are active in four or more Member States, and that should therefore in principle have a greater interest in being able to put together, or be

---

70 The data on geo-blocking from the previous section cannot however be compared directly with the data presented here, since the proportions are based on different units of measure – see Figure 40 and the related discussion below.
better placed to offer, a more homogeneous offer across different Member States. Figure 39 provides the data.

**Figure 39** – Proportion of agreements requiring providers to geo-block by category – Large groups

<table>
<thead>
<tr>
<th>Category</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiction TV</td>
<td>78%</td>
</tr>
<tr>
<td>Films</td>
<td>77%</td>
</tr>
<tr>
<td>Music</td>
<td>70%</td>
</tr>
<tr>
<td>Sports</td>
<td>69%</td>
</tr>
<tr>
<td>Children TV</td>
<td>58%</td>
</tr>
<tr>
<td>Non-fiction TV</td>
<td>44%</td>
</tr>
<tr>
<td>News</td>
<td>20%</td>
</tr>
</tbody>
</table>

(154) Agreements with large groups seem to be broadly characterised by the same patterns, with two notable exceptions. First, geo-blocking seems to be required to a slightly greater extent on average for most product categories. Second, agreements on music content seem to include geo-blocking requirements to a higher degree for large groups. The results refer to the comparison between Figure 39 and Figure 33.

(155) The figures on the existence and extent of geo-blocking (e.g. Figure 24) cannot be directly compared to the figures presented in this section, given the different type of metrics used: whereas the former are expressed in terms of number of respondents, the latter are expressed in terms of number of agreements. Figure 40 shows data on geo-blocking measures that are contractually required, and is therefore comparable to the figures provided in Figure 24.

---

71 The results refer to the comparison between Figure 39 and Figure 33.
(156) The results above are directly comparable to the ones in Figure 24 in terms of the unit of measure and show that geo-blocking appears to be on average more widespread than it should be the case if it were only due to contractual obligations. Whereas 59 per cent of respondents have concluded agreements with suppliers that require them to geo-block their digital content services, 68 per cent of respondents seem to implement geo-blocking.

(157) There may be different reasons for this discrepancy. One explanation can be unilateral behaviour by online digital content providers, which may choose to geo-block independently of any contractual requirement. Another explanation can be that some digital content providers may be geo-blocking content for which they are also right holders (for example because they produced the content), and they may therefore wish to restrict access to it for business reasons.

(158) An assessment under EU competition law of licensing agreements that may restrict competition has to be done on a case-by-case basis.

3. **CROSS-BORDER AVAILABILITY OF DIGITAL CONTENT SERVICES**

3.1 **Reasons for non-availability**

(159) In order to understand why some providers of online content services make their services available only in one Member State or in a limited number of Member States.
States, respondents that replied that their services were not available in certain Member States, were asked to provide reasons.

(160) They were asked to rate eleven different reasons\textsuperscript{72} on a scale between 1 and 5, where 1 indicates that the reason has no influence at all, and 5 that the reason is decisive, for their choice not to enter certain national markets. In their reply, respondents could indicate more than one reason as having no influence at all respectively as being decisive for the decision to provide content services in a specific Member State.

(161) The respondents were also given the option to indicate if there were other reasons than the ones given that were relevant for their decision to make content available or not in other Member States. Some respondents provided explanations for their replies, of which examples are given below.

(162) Table 5 shows the proportion of respondents that considered the given factors to be of highest importance (i.e. they rated the factor with a 4 or a 5 on a scale of 1 to 5) when being asked to rank the reasons why they do not make their content services available in some Member States.

\textsuperscript{72} The reasons given in the questionnaire were the following: cost of obtaining information about consumer protection laws; costs of complying with consumer protection laws; other compliance costs (e.g. tax laws); cost of purchasing content for those territories; content is not available to purchase in those territories; appropriate language versions are not available for those territories; cost of preparing appropriate language versions for those territories; user interface translation costs; costs of adapting business model to obtain revenue from users in those territories (e.g. by seeking advertisers in those territories); inadequate infrastructure (e.g. broadband speed) in those territories and insufficient consumer demand.
Table 5 – The most important factors for a service provider not to make its services available from Member States other than those in which it currently operates

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>68.9%</td>
</tr>
<tr>
<td>Cost of purchasing content for those territories</td>
<td>67.1%</td>
</tr>
<tr>
<td>Content is not available to purchase in those territories</td>
<td>54.3%</td>
</tr>
<tr>
<td>Costs of adapting business model to obtain revenue from users in those territories</td>
<td>46.6%</td>
</tr>
<tr>
<td>Insufficient consumer demand</td>
<td>39.7%</td>
</tr>
<tr>
<td>Cost of preparing appropriate language versions for those territories</td>
<td>35.6%</td>
</tr>
<tr>
<td>Appropriate language versions are not available for those territories</td>
<td>31.1%</td>
</tr>
<tr>
<td>User interface translation costs</td>
<td>20.3%</td>
</tr>
<tr>
<td>Other compliance costs (eg tax laws)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Inadequate infrastructure (eg broadband speeds) in those territories</td>
<td>13.0%</td>
</tr>
<tr>
<td>Costs of complying with consumer protection laws</td>
<td>10.1%</td>
</tr>
<tr>
<td>Costs of obtaining information about consumer protection laws</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

(163) The highest proportion of respondents indicated that there are other reasons than those listed in the questionnaire for companies not to make their services accessible in other Member States. However, the replies show that some of the respondents failed to explain what these other reasons are or that they actually indicated one of the given reasons under "other" reasons", such as that the content is not available to purchase in some territories. Other respondents provided reasons linked to the specific business choices of the company in question, such as the size of the business and the focus of the business model on specific territories. A few respondents invoked the competitive landscape as a reason for not making their services available in certain Member States, as well as marketing and advertising costs.

(164) Besides the "other" category, a majority of the respondents indicated that the most important reason for not making content available in other Member States, out of the eleven reasons that were given in the questionnaire, is the cost of purchasing content for territories in which the service provider is not yet active. In particular, smaller operators or operators in smaller Member States have indicated that it would be too expensive to purchase the rights enabling them to make their services available in other Member States or to offer subscribers the possibility to access and use their services from other Member States.

(165) The second most important of the given reasons for not making content available in other Member States was that the content is not available for purchase for
(some or all) of the territories of those Member States. In this respect, respondents have stated that some right holders make the licensing of their content conditional upon the fact that the service provider undertakes to apply geo-blocking, or that the cost of making some content available without geo-blocking would be higher/too high. Respondents also explained that the business models of some right holders do not allow the service providers to offer portability of their services. Some respondents have moreover indicated that the rights in certain content are limited to specific language versions, which prevents the content from being marketed in other Member States.

(166) Some respondents have submitted that they may be interested in extending the reach of their digital content services, also by providing cross-border services, but they encounter difficulties in acquiring the necessary rights.

(167) Table 6 below shows which of the given factors were considered by the respondents to be of least importance (i.e., the respondents rated the factor with 1 or 2 on a scale of 1 to 5) when being asked to explain why they do not provide content services in some Member States.
Table 6 – The least important factors for a service provider not to make its services accessible from Member States other than those in which it currently operates

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of obtaining information about consumer protection laws</td>
<td>81.7%</td>
</tr>
<tr>
<td>Other compliance costs (e.g., tax laws)</td>
<td>80.6%</td>
</tr>
<tr>
<td>Costs of complying with consumer protection laws</td>
<td>78.3%</td>
</tr>
<tr>
<td>Inadequate infrastructure (e.g., broadband speeds) in those territories</td>
<td>69.6%</td>
</tr>
<tr>
<td>User interface translation costs</td>
<td>59.4%</td>
</tr>
<tr>
<td>Appropriate language versions are not available for those territories</td>
<td>56.8%</td>
</tr>
<tr>
<td>Cost of preparing appropriate language versions for those territories</td>
<td>50.7%</td>
</tr>
<tr>
<td>Insufficient consumer demand</td>
<td>43.8%</td>
</tr>
<tr>
<td>Costs of adapting business model to obtain revenue from users in those territories</td>
<td>34.2%</td>
</tr>
<tr>
<td>Content is not available to purchase in those territories</td>
<td>30.9%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>24.6%</td>
</tr>
<tr>
<td>Cost of purchasing content for those territories</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

(168) It follows from the table above that the costs for obtaining information in order to comply with the law, such as tax laws, as well as the costs for complying with consumer protection laws are the least important reasons for not making content services available in certain Member States. It is moreover interesting to note that the service providers that replied to the questionnaires also consider that infrastructure-related issues, such as the fact that the infrastructure in certain Member States is inadequate, for example, in terms of broadband speed, are not relevant for their choice of whether to make their content services accessible by users in those Member States.

3.2 Catalogue differences

(169) Providers of digital content services that make the services available in two or more Member States do not necessarily offer the same catalogue of content to users in each of those Member States. On the contrary, it is rather common that the content available to users in one Member State differs from that available to users in other Member States.

(170) In this respect, respondents were asked whether there are any differences in the catalogue of content that they offer to users in different Member States.
(171) Of the 123 respondents that have indicated that their service is available in at least two Member States, 116 respondents replied to the question whether they offer different catalogues of content in different Member States. 38 per cent of those 116 respondents indicated that there were differences in the catalogue of content offered in each Member States.

![Pie chart showing proportion of respondents offering same or different catalogues across Member States](image)

Figure 41 – Proportion of those respondents whose services are accessible in more than one Member State and whose catalogues of content services differ between the Member States

(172) Catalogue differences may have different reasons when it comes to different content categories. General reasons for catalogue differences appear to be differences in consumer taste and demand, as well as the relevance or not of certain content for certain territories. Some respondents also indicated that the need to negotiate with a multitude of right holders in order to be able to offer the same content in several Member States required too important financial investments and resources.

(173) As regards music content, it appears that the right holders may not offer the complete rights for the whole of Europe. Therefore, the service provider may have to negotiate with different right holders in order to try to offer the same catalogue in all Member States, but that it is sometimes impossible to obtain the rights to distribute the same content throughout the EU. In the film sector, respondents have indicated that catalogue differences depend on differences in consumer preferences and on whether consumer demand would match e.g., the costs for acquiring locally tailored content or of preparing different language versions.
4. **ACCESS TO AND PORTABILITY OF DIGITAL CONTENT SERVICES**

(174) Access and portability restrictions are for the purpose of this issues paper referred to as technical geo-blocking measures used to restrict a user's ability to access and use content in a given Member State from outside that Member State's territory.

(175) In order to analyse the scope of the access and portability restrictions in place, and how common they are, respondents were asked whether they use technical geo-blocking measures that would have an impact on users' abilities to access and use digital content in certain Member States.

(176) Respondents were more precisely asked whether the technical measures that they use to restrict the access to content services had any impact on:

(a) the user's ability to play previously downloaded content in certain territories;

(b) the catalogue of content and/or services available to a given user in different territories; and

(c) the ability of an existing user to access the service in different territories.

(177) The replies to that question indicate that access and portability restrictions were frequently used. 112 of the respondents, corresponding to 72 per cent, that answered this question indicated that they applied at least one of the three above-mentioned types of portability restrictions. 44 respondents, corresponding to 28 per cent, stated that they did not apply any of the three above-mentioned access and portability restrictions.

(178) Figure 42 shows that the most common restriction consists of a limitation in terms of the catalogue of content and services made accessible in different Member States. 35 per cent of the respondents indicated that geo-blocking practices were used to differentiate the content and services between Member States. A number of respondents also indicated that the restrictions in place affected the ability of an existing user to access the service from certain territories (around 27 per cent) or to play previously downloaded content in certain Member States (15 per cent).
5. **USE OF VPN AND IP ROUTING SERVICES**

(179) The Commission contacted several providers of VPN and IP routing services. These services are typically used by individuals and/or organisations that seek to achieve a higher level of privacy in their communications on the internet.

(180) VPN and IP routing services are in principle capable of masking, hiding or replacing the real IP address of the user that makes use of them. It is therefore possible that users may use these services to bypass geo-blocking by digital content providers. Many VPN or IP routing services are established outside of the EU and most of them make use of infrastructure (i.e. mainly servers and leased lines) that are located around the world.

(181) Virtually all respondents to the VPN questionnaire pointed out that they do not collect any type of information on the identity or location of users, nor do they monitor the content of the communications between the user and any other user or service provider.

(182) The 9 VPN and IP service providers that responded have between 20 000 and more than 100 000 regular users in the EU, a large majority of whom access their

---

73 Virtual Private Network, i.e. an encrypted communication channel that can be established between two computers or IP-based devices.
services regularly (between every day and three times a week). Most respondents pointed to substantial growth rates in the number of users.

Three respondents said that up to 20 per cent of the traffic generated by users on their service is likely to relate to video, audio or audio-visual streaming, while two said it was between 21 and 40 per cent and one between 61 per cent and 80 per cent. It is not possible, however, to determine the extent to which such traffic relates to accessing commercial digital content services.
CONCLUSIONS

(184) On 6 May 2015, the Commission launched a sector inquiry into e-commerce of consumer goods and digital content in the EU with a particular focus on possible competition concerns in relation to cross-border e-commerce.

(185) Based on the replies of more than 1 400 companies, seven broad themes emerge with regard to geo-blocking and geo-filtering practices. These seven themes are summarised below.

(186) A more detailed analysis of the findings of the e-commerce sector inquiry will be presented in the Preliminary Report that will be published in mid-2016 and followed by a public consultation as well as in the Final Report scheduled for early 2017.

1. CONSUMER GOODS

| Theme 1 – Many retailers do not sell consumer goods cross-border and apply geo-blocking practices. |

(187) The information gathered in relation to cross-border selling and geo-blocking confirms that geo-blocking in consumer goods is widespread across the EU and across all product categories investigated. The initial findings show that:

(a) 36 per cent of the retailers that responded indicated that they do not sell cross-border in at least one of the product categories covered by the sector inquiry; and

(b) 38 per cent of the retailers that responded collect information on the location of the user in order to apply geo-blocking.

(188) The responses indicate that retailers with a higher turnover are more likely to apply geo-blocking compared to smaller retailers. Geo-blocking most commonly takes place in the form of a refusal to deliver consumer goods to users in other Member States.

---

74 For the purposes of this issues paper, geo-blocking refers to commercial practices whereby online providers prevent users from accessing/purchasing consumer goods/digital content services offered on their website based on the location/place of residence of the user. Geo-filtering refers to commercial practices whereby online providers allow users to access and purchase consumer goods/digital content services online but offer different terms (in particular prices) depending on the location/place of residence of the user.

75 See paragraph 19 of this issues paper for more details on the product categories covered by the sector inquiry.
Geo-filtering appears to be less wide-spread. Approximately three quarters of retailers that responded and sell cross-border indicated that they do not charge different prices when selling cross-border to users in another Member State.

**Theme 2 – Most geo-blocking in relation to consumer goods is based on unilateral business decisions.**

(190) Most geo-blocking by retailers is based on unilateral business decisions not to sell cross-border, i.e. independently from agreements with or commercial pressure of any supplier. Geo-filtering is also mostly based on unilateral business decisions and only rarely required by suppliers.

(191) There may be a number of reasons for retailers not to sell cross-border (such as higher logistics and distribution costs for cross-border sales of consumer goods as well as compliance costs with different legal frameworks in Member States). The Commission has identified these obstacles and it is addressing step-by-step many of them in the implementation of the Digital Single Market Strategy. ⁷⁶

(192) Unilateral behaviour by non-dominant companies falls outside the scope of the EU competition rules.

**Theme 3 – Geo-blocking may be contractually agreed with suppliers.**

(193) 12 per cent of retailers that responded reported that they face at least one contractual restriction on their ability to sell cross-border which likely result in geo-blocking. Such restrictions are not necessarily included in the distribution agreements with suppliers, but are also communicated orally together with threats of sanctions in case of non-compliance.

(194) The product categories in which retailers were mostly confronted with at least one contractual territorial restriction are clothing, shoes and accessories followed by consumer electronics and sports and outdoor equipment.

(195) The Commission will further analyse such territorial restrictions, taking into account all relevant information in order to evaluate whether any follow-up enforcement action is required to ensure that EU competition law is fully complied with.

---

2. **Digital Content**

**Theme 4 – Geo-blocking in relation to online digital content is widely used by respondents across the EU. It is mainly implemented through IP address verification.**

(196) The vast majority of respondents (68 per cent) restrict access to their online digital content services from other Member States by means of geo-blocking.

(197) Most of the geo-blocking takes the form of denial of access to the online service and is implemented through the verification of the IP address of users.

**Theme 5 – There are relatively large differences in the extent to which geo-blocking is used both between different types of business models and between Member States.**

(198) The extent to which online digital content service providers from different Member States, resort to geo-blocking varies markedly. In some Member States (e.g. Italy) only a minority of respondents use geo-blocking to prevent access and use of their online digital content services. In other Member States (e.g. UK) the majority of respondents uses geo-blocking.

(199) Geo-blocking also appears to be more used by certain operators than others. In particular, subscription- and transaction-based services appear to make greater use of geo-blocking. Conversely, services which generate revenues from the sale of advertising to third parties rather than direct sales to users appear to use less geo-blocking.

**Theme 6 – Geo-blocking mostly results from contractual restrictions in agreements between digital content providers and right holders. Only a small proportion of respondents resort to it unilaterally.**

(200) 59 per cent of digital content providers that responded in the sector inquiry are contractually required by right holders to geo-block their online digital content services. In total 68 per cent of respondents geo-block.

(201) This suggests that the use of geo-blocking in relation to digital content services is predominantly based on contractual restrictions required by right holders. Only a minority of respondents (about 9 per cent) actively implement geo-blocking without being required to do so contractually.

(202) Geo-blocking is most prevalent in licensing agreements that include content such as films, sports and TV series.
Theme 7 – The extent to which agreements with right holders require geo-blocking varies between different content categories and Member States.

(203) There seems to be a degree of variation in the extent to which geo-blocking is required in licensing agreements with right holders. These initial findings of the sector inquiry suggest that geo-blocking might not be systematically required by all right holders in all Member States and also not to the same extent in relation to all categories of digital content.

(204) An assessment under EU competition law of licensing agreements that may restrict competition has to be done on a case-by-case basis.
ANNEX I – SELECTION AND CHARACTERISTICS OF ADDRESSEES

(1) This Annex summarises in more detail how the addressees of the questionnaires in the sector inquiry were selected and their main characteristics.

1. CONSUMER GOODS

(2) As a preliminary remark it should be pointed out that questionnaires to retailers, marketplace providers and price comparison tool providers had to be filled out on a per website basis, which means that some companies have received and responded to several questionnaires for each website they operate (in one or more Member States). These are counted separately as respondents.

1.1 Selection and characteristics of retailers

(3) There is no single data source covering the population of retailers selling online in the Member States. Therefore for the list of addressees to the retailer questionnaire, the Commission relied on a number of databases such as Amadeus 77, Euromonitor 78 and Veraart Research 79, information received from professional associations, as well as on desk research to verify the relevance of potential addressees and, ultimately, to refine the list of selected addressees.

(4) The starting point was a predefined number of approximately 1,500 addressees. In order to ensure that the list of addressees included companies of different sizes but also covered a large part of the market in terms of sales the Commission followed a two-step approach. First, all companies relevant for the purposes of the sector inquiry and for which contact details could be obtained, were selected among the very large and large companies included in the Amadeus database and the companies contained in the Euromonitor database, second, a number of smaller companies were randomly chosen for each Member State out of the Amadeus database (excluding the very large and large companies) and the data received from professional associations. For some Member States, a dataset from Veraart Research was also used to cross-check and complement the list of addressees. The information received so far from the sector inquiry indicates that the sample of

77 Amadeus (Bureau van Dijk).
79 Veraart Research (2015), Retail Index. Available at the following address: http://www.retail-index.com/
...retailers provides for an informative mix of companies in terms of size (though not statistically representative).

(5) The Commission also sought to achieve a broad geographic coverage with a minimum of 20 addressees per Member State. As no information on the distribution of companies selling online in general (or in the specific product categories) across Member States was available, the Commission relied on available Eurostat data to obtain a rough approximation of the distribution. Specifically, the datasets used contained, per Member State, the total number of companies with no less than 10 employees, as well as the percentage of companies having received orders via computer mediated networks, belonging to NACE G80 in 2012. On the basis of these data the Commission approximated the distribution of companies selling online across the Member States and calculated the weights for the 28 Member States. Applying these weights and imposing a minimum of 20 addressees per Member State led to a list of addressees containing around 1 645 companies in all Member States.

(6) The number of responses received per Member State was then affected by varying response rates in the Member States, the inclusion of additional websites that were reported by addressees to the Commission as well as by spontaneous requests for participation and de-activation of questionnaires for companies that were not or no longer active in e-commerce. Altogether 1 038 retailers responded to the questionnaire.

(7) The majority of respondents to the retailer questionnaire operate with less than 49 employees whereas 26 per cent of respondents have more than 500 employees.81

80 Wholesale and retail trade; repair of motor vehicles and motorcycles.
81 While responses were generally provided on a per website basis, information concerning the number of employees as well as the turnover generated was requested for the legal entity that was the addressee of the questionnaire.
22 per cent of respondents generated a turnover of less than EUR 500 000 in 2014 whereas 28 per cent of respondents had a turnover above EUR 100 million.
26 per cent of the respondents to the retailer questionnaire indicated that they are active both at the retail and wholesale level while 9 per cent are active at both retail and manufacturing.

The majority of respondents are selling both offline and online while a considerable proportion is only selling online without any brick-and-mortar shop.\textsuperscript{82}

Figure 45 – Proportion of retailers by sales channel, 2014

Approximately 90 per cent of respondents are selling via their own website. Around a third of respondents are also selling via a marketplace or supply data-feeds to price comparison tools in order to advertise their products. 38 respondents (representing approximately 4 per cent of respondents) were selling online only via marketplaces, i.e. without having their own website. 22 of these respondents were not selling offline. For these, marketplaces are the only sales channel they utilise.

\textsuperscript{82} One per cent of retailers were purely selling offline. This low figure stems from the fact that pure offline retailers were not targeted by the retailer questionnaire.
1.2  Selection and characteristics of marketplaces, price comparison tools and payment service providers

(12) Relevant marketplaces, price comparison tools and payment service providers were identified based on information received from professional associations as well as on desk research.

1.2.1 Marketplaces

(13) Marketplaces are websites/apps where (independent) sellers can offer products for sale and on which users can purchase those products. In total, 37 marketplaces provided information on their activities.

(14) More than 80 per cent of these respondents are active in all relevant product categories. In terms of turnover, the vast majority of marketplaces generated a turnover of more than EUR 500 000 in 2014. The respondents to the questionnaire operate marketplaces targeting altogether users in 14 Member States. The Member States which were targeted mostly by marketplaces are Germany and France.
1.2.2 Price comparison tools

Price comparison tools are websites/apps that allow users to search for products and compare their prices across the offers of several sellers, and provide links that lead directly or indirectly to the websites of the sellers. Price comparison tools generally do not offer the possibility to purchase the products directly through the price comparison website/app. In total, 88 price comparison tool websites replied to the relevant questionnaire. The respondents to the questionnaire operate price comparison tools targeting altogether users in 22 Member States. The Member States which are targeted mostly by price comparison tools are Germany, United Kingdom and France.

The majority of the price comparison tools generated revenues below EUR 500,000 in 2014. The product scope of those price comparison tools that responded to the questionnaire is generally wide. On average, a price comparison tool lists offerings in relation to 8 of the 9 selected product categories.

Figure 47 – Proportion of price comparison tools per total turnover in 2014
1.2.3 Payment service providers

(17) In total 17 online payment service providers replied to the relevant questionnaire. The respondents range from large multinationals with a turnover over EUR 1 billion to the smallest player that achieved a turnover of below EUR 2 million in the last financial year. Most payment service providers are established in several Member States.

(18) The main function of payment service providers is to facilitate payments between merchants and consumers. For this reason payment service providers tend to form partnerships with various financial entities in order to cover as many payment methods as possible. On average, there are approximately 20 different payment methods for e-commerce available via payment service providers, according to the replies received. Some payment service providers accept over 50 different payment methods.

(19) In terms of geographic coverage, the majority of payment service providers that responded to the relevant questionnaire provide services across the EU and only 3 respondents serve fewer than 10 Member States.

2. Digital content

(20) The starting point for selecting the addressee list with regard to the online distribution of digital content was a database comprising more than 2000 online audio-visual operators across the EU. The list was then narrowed down, with a view to ensuring that the final list of addressees would include (i) the most important operators in each Member State; (ii) potential disruptors/new entrants, if relevant; and (iii) a sufficient number of smaller/local operators in each Member State.

---

83 For example, payment methods such as different credit and debit cards, giropay and direct debit.
84 For the purpose of this issues paper a digital content service is considered as being offered online when it is transmitted using the packet switching protocol standard used on the internet, i.e. TCP/IP, in their delivery to users. This definition, while clearly open to ambiguities, allows the inquiry to delineate the scope of the targeted services. For example, services that include internet protocol transmission technologies at higher levels of the network but made use of non-packet-switched transmission at the point of delivery (e.g. DVB-C) were not included, while services delivered to users using internet protocol on networks which in principle could also support other transmission standards were included.
85 European Audio-visual Observatory, Mavise database. Providers of music content which are not audio-visual operators were subsequently added to the list of addressees.
The final addressee list includes a relatively limited number of operators in each Member State which however account for the majority of the audience/market. These operators are defined as digital **content providers** throughout the issues paper. They include, for example, public service broadcasters, commercial broadcasters and electronic communications companies.

Some of the operators contacted have a significant cross-border presence, either directly or via subsidiaries. These groups were identified separately and defined as those that have operations in at least four Member States. They are referred to as **large groups**.

A number of additional questionnaires were addressed to operators that host service providers’ online content within a “hosting environment”. This category is referred to throughout the issues paper as **hosting operator**. Respondents belonging to each of the three categories above were chosen on the basis that they offer a digital content service. The online digital content service did not need to be their exclusive or even main activity. However the questionnaires only refer to online digital content services and do not touch on any other aspect of the companies' offer.

A final set of questionnaires was sent to providers of **VPN ("virtual private network")** and **IP routing** services, which are often used by users to bypass geo-blocking. Many of these companies are not established in the EU, even though they might provide services to users located in the EU. Therefore the number of respondents was unsurprisingly low for this category.

---

86 IP addresses are unique identifiers of a user's connection to the internet and can be used, among other things, to determine its geographic location, which in turn may be used by digital content providers to determine whether the user is allowed to access their service. IP addresses can be masked, replaced or hidden through the use of VPN and IP routing services. Hence such techniques can be used to have access to a digital content service that would otherwise be inaccessible to users in specific locations due to geo-blocking.